

DCHC MPO Board Meeting Agenda

Wednesday, January 16, 2019 1:00 PM

City Council Chambers 1st Floor

Durham City Hall 101 City Hall Plaza

Durham, NC 27701

1. Roll Call

2. Ethics Reminder

It is the duty of every Board member to avoid conflicts of interest. Does any Board member have any known conflict of interest with respect to any matters coming before the Board today? If so, please identify the conflict and refrain from any participation in the particular matter involved.

Per state law, all MPO Board members and alternates are required to file a Statement of Economic Interest and a Real Estate Disclosure form (these have been incorporated into the same form for electronic filers for 2019) by April 16, 2019. The forms can be found on the web site of the North Carolina State Ethics Commission at https://ethics.ncsbe.gov/sei/blankForm.aspx?type=MPO RPO.

3. Adjustments to the Agenda

4. Public Comments

5. Directives to Staff

<u>19-100</u>

Attachments: 2019-01-16 (19-100) MPO Board Directives to Staff.pdf

CONSENT AGENDA

6. <u>December 12, 2018 Board Meeting Minutes</u>

<u>19-112</u>

A copy of the December 12, 2018 Board meeting minutes is enclosed.

Board Action: Approve the minutes of the December 12, 2018 Board meeting.

Attachments: 2019-01-16 (19-112) 12.12.18 MPO Board Meeting Minutes LPA2.pdf

ACTION ITEMS

7. <u>2045 Metropolitan Transportation Plan (MTP) -- Amendment #1 (10 minutes)</u>

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 most recent version of the resolution.

In terms of schedule, keep in mind that the AQ CDR needs to be adopted by February 16, 2019 to continue federal transportation actions in our area.

TC Action: Recommend that the DCHC MPO Board adopt Amendment #1 to the 2045 MTP and TRM version 6 (which includes the socioeconomic data) by resolution.

Board Action: Conduct a public hearing, and adopt Amendment #1 to the 2045 MTP and TRM version 6 (which includes the socioeconomic data) by resolution.

Attachments: 2019-01-16 (18-172) 2045MTP-Amendment#1-Projects.pdf

2019-01-16 (18-172) 2045MTP-Amendment#1-Resolution.pdf

8. Air Quality Conformity Determination Report (10 minutes)

18-175

Andy Henry, MPO Staff

John Hodges-Copple, TJCOG

Staff released the Air Quality Conformity Determination Report (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, keep in mind that the AQ CDR needs to be adopted by February 16, 2019 to continue federal transportation actions in our area.

- * 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.

Board Action: Conduct a public hearing, and adopt the Air Quality Conformity Determination Report by resolution.

Attachments: 2019-01-16 (18-175) AQConfomity-Resolution.pdf

9. 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.

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

Attachments: 2019-01-16 (18-214) Durham County Transit Plan FY18 Annual Report.pdf

2019-01-16 (18-214) Orange County Transit Plan FY18 Annual Report.pdf

10. DCHC MPO State of the Region 2018 Report (5 minutes)

18-205

Felix Nwoko, LPA Staff

Attached is a draft of the DCHC MPO State of the Region 2018 Report. LPA staff requests that MPO Board members review the draft and send comments to Felix Nwoko by January 30, 2019. The final report will be presented at the February DCHC MPO Board meeting.

Board Action: Review the DCHC MPO State of the Region 2018 Report and provide comment to staff by January 30, 2019.

<u>Attachments:</u> 2019-01-16 (18-205) DCHC MPO State of the Region Report.pdf

11. <u>Draft FY2020 Unified Planning Work Program (UPWP) (10 minutes)</u> Meg Scully, LPA Staff

18-213

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 16, 2019. The MPO Board will be asked to hold a public hearing and approve the plan on February 13, 2019.

TC Action: Reviewed the draft FY2020 UPWP and recommended the Board release the document for public comment.

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

Attachments: 2019-01-16 (18-213) FY20 UPWP Draft.pdf

2019-01-16 (18-213) FY20 UPWP Presentation.pdf

12. Overview of Transit-Oriented Development Guidebook for

19-114

<u>Durham-Orange Light Rail Transit (DOLRT) (30 minutes)</u>

Patrick McDonough, GoTriangle

In the fall of 2016, GoTriangle and Gateway Planning initiated a federal-grant-funded study of TOD opportunities for the neighborhoods around the stations along the Durham-Orange Light Rail Transit (D-O LRT) corridor. As the jurisdictions regulating land use in the corridor, the Town of Chapel Hill, the City of Durham, and Durham County staff were partners in the successful grant application and in the subsequent work, which was completed in December 2018. The primary output of this work is the TOD Guidebook, a document detailing "One Possible Future" for neighborhoods along the D-O LRT line, and a series of public policy recommendations and Action Steps for local governments to realize the outcomes in the concept plans for each station.

The TOD Guidebook is a series of light rail station area concept plans and associated public policy Action Step recommendations for:

- Zoning
- · Affordable Housing
- Station Area Infrastructure
- · Streets and Public Space
- Parking

The TOD Guidebook also focuses on Prioritization and Partnerships for how to link goals in these areas across multiple departments and agencies in Durham and Chapel Hill.

GoTriangle staff will present an overview of the recommendations in the TOD Guidebook. The entire TOD Guidebook can be viewed at https://gotriangle.org/sites/default/files/tod-guidebook full report with appendices.pdf>.

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

13. FY2020-2029 Draft STIP (20 minutes)

<u>19-115</u>

Aaron Cain, LPA Staff

On January 10, 2019, NCDOT released the initial draft FY2020-2029 State Transportation Improvement Program (STIP). Staff will present highlights of projects in the DCHC area, including which projects were funded and which were not, as well as project timing estimates.

The DCHC MPO draft FY2020-2029 STIP is attached.

Board Action: No action is required at this time, though staff welcomes any comments from Board members on the draft STIP.

<u>Attachments:</u> 2019-01-16 (19-115) Draft FY2020-2029 STIP January 2019.pdf

14. 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 four projects:

- EB-5721, Orange County Bicycle Route 1 (Fordham Boulevard)
- U-4724, Cornwallis Road Bike/Ped
- 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, and delay construction until FY20. U-4724 would add STBGDA funding for ROW, and adjust construction funding to meet recent cost estimates. 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 projects that the NCDOT Public Transportation Division has added to the STIP, several of which have already been approved in the DCHC MPO TIP.

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

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

Board Action: Approve Amendment #9 to the FY2018-27 TIP.

Attachments: 2019-01-16 (18-215) TIP Amendment #9 Summary Sheet.pdf

2019-01-16 (18-215) TIP Amendment #9 Full Report.pdf 2019-01-16 (18-215) TIP Amendment #9 Resolution.pdf

15. Amendment #10 to the FY2018-2027 TIP (5 minutes)

18-216

Aaron Cain, LPA Staff

Amendment #10 includes two requests from the City of Durham:

- Allocate an additional approximately \$2.2M of STBGDA funds to C-4928, Morreene Road Bike/Ped, primarily to address ROW costs; and
- Allocate an additional approximately \$1.5M of STBGDA funds to U-4726HN, Hillandale Road Bike/Ped, to address increases in ROW costs.

The City of Durham's local discretionary STBGDA funds is the source for these allocations.

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 summary sheet, full report, and resolution are attached.

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

Board Action: Release Amendment #10 to the FY2018-27 TIP for a 21-day public comment period.

Attachments: 2019-01-16 (18-216) TIP Amendment #10 Summary Sheet.pdf

2019-01-16 (18-216) TIP Amendment #10 Full Report.pdf 2019-01-16 (18-216) TIP Amendment #10 Resolution.pdf

REPORTS:

16. Report from the Board Chair

19-101

Damon Seils, Board Chair

Board Action: Receive the report from the Board Chair

17. Report from the Technical Committee Chair

19-102

Ellen Beckmann,TC Chair

Board Action: Receive the report from the TC Chair.

18. Report from LPA Staff

19-103

Felix Nwoko, LPA Manager

Board Action: Receive the report from LPA Staff.

Attachments: 2019-01-16 (19-103) LPA staff report.pdf

2019-01-16 (19-103) LPA Staff Report-MPO Board Listing 2019.pdf

19. NCDOT Report

19-104

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

John Grant, Traffic Operations - NCDOT

Board Action: Receive the reports from NCDOT.

Attachments: 2019-01-16 (19-104) NCDOT Progress Report.pdf

INFORMATIONAL ITEMS

20. Recent News Articles and Updates

19-105

Attachments: 2019-01-16 (19-105) news articles.pdf

21. <u>Vehicle Miles Traveled (VMT) Growth Trends</u>

19-113

Andy Henry, LPA Staff

This set of tables and graphs provides a summary of Vehicle Miles Traveled (VMT) growth trends in the MPO, Triangle and North Carolina since 2009.

Attachments: 2019-01-16 (19-113) VMT Growth Trends.pdf

Adjourn

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

Dates of Upcoming Transportation-Related Meetings: None

MPO Board Directives to Staff

12/01/15 – Present (Complete/Pending/In Progress)

Meeting		
Date	Directive	Status
12/9/2015	Quarterly updates on D-O LRT project.	On-going: GoTriangle will provide quarterly updates to MPO Board.
2/15/2016	Draft Letter of Support for D-O LRT project to advance to Engineering Phase for MPO Board Chair signature	<u>Complete:</u> 2/18/2016.
4/13/2016	Research and consider renaming DCHC MPO an acronym that would be easier remember and simple to say.	Complete. 6/8/2016. DCHC MPO staff and the Technical Committee researched and provided a recommendation to the MPO Board.
4/13/2016	Provide the MPO Board with a breakdown of funding for highway program and non-highway program in the MPO TIP.	Complete. DCHC MPO staff created a summary report and distributed it during May 11, 2016 Board meeting.
5/11/2016	Schedule presentation from NCDOT Division and City Public Works regarding flooding on Trenton Road.	Complete. DCHC MPO staff arranged to have an update at the June 8, 2016 Board meeting.
5/11/2016	Prepare a presentation on the breakdown of funding for highway program and non-highway program in the MPO TIP.	Complete. DCHC MPO staff presented the summary report at the June 8, 2016 Board meeting.
6/8/2016	Update the DCHC MPO's tagline on the MPO website to provide information to the public that explains the MPO does regional transportation planning for the western Triangle area.	<u>Underway.</u> DCHC MPO staff is still working on updating the tagline on the MPO website.
6/8/2016	Conduct background study on toll roads and how they are used and affect municipalities like DCHC MPO.	Complete. Consultants provided updates at joint MPO Board meeting on October 31, 2018
12/14/2016	Draft letter to NCDOT regarding citizen request for "Bicycles May Use Full Lane" signs on Old NC 86 north of Carrboro, and to reiterate interest in providing bike lanes or wider shoulders to accommodate bicyclists.	Complete. DCHC MPO staff sent letter to NCDOT on January 30, 2017; response received March 15, 2017.
1/11/2017	Draft letter to NCDOT requesting that issues of equity for low-income users be incorporated into planning for managed lanes on I-40 and NC-147.	Complete. Draft completed January 29, 2017.

Meeting		
Date	Directive	Status
4-28-17	Determine the number of distance signs on freeways within the MPO's jurisdiction. Investigate the options for increasing the number of signs with NCDOT, particularly on and around the East End Connector at its completion.	Complete. MPO staff has found seven distance signs on freeways within the MPO's jurisdiction: four on I-85, one on NC-147, one on US 15-501, and one on I-85/40 in western Orange County. MPO staff has followed up with NCDOT about the opportunity for additional signs along I-40 in Durham and/or Orange counties.
4-28-17	Work with Division 7 to amend the signage plan for the East End Connector to include signs warning motorists about construction before the I-85/40 split.	Complete. MPO staff has contacted Division 7 regarding this request. Once project is completed, signage plan will be finalized.
5-10-17	Have someone from NCDOT present to the MPO Board on synchronized/super streets.	Complete. Jim Dunlop of NCDOT's Congestion Management Division presented at the August 2017 MPO Board meeting.
9-13-17	Request for staff to give a presentation on the STI framework, focusing on what provisions are directly by federal legislation, by state legislation, and those that are department policy. Invite new Deputy Secretary Julie White to meet and discuss NCDOT policy regarding prioritization with the Board.	Complete. LPA staff presented at the November 8, 2017 Board meeting. Deputy Secretary Julie White presented at the March 14, 2018 Board meeting.
2-14-18	Work with local governments and partner agencies to identify additional funding streams for transit projects not being submitted through the SPOT 5.0 process. Report back on progress.	Underway. LPA staff is coordinating efforts with local transit providers and staff. Staff expects to present progress in early 2019.
4-11-18	Request for staff to arrange a presentation on Managed Motorways to inform new Board members of the concept and provide an update on efforts to incorporate these projects in the Triangle region.	Complete. Will Letchworth from WSP made a presentation on Managed Motorways at the May 9, 2018 MPO Board meeting.
8-12-18	Request for staff to develop a strategy to ensure that CMAQ and TAP-DA funds are assigned to projects that can obligate the funds before the federal rescission deadline of September 30, 2019.	Complete. The MPO Board approved reprogramming of CMAQ and TAP-DA funds at its October meeting.
10-10-18	Request for Division 5 to provide staff to present an update on the US 70 improvement project.	Complete. Elmo Vance of NCDOT, Drew Joyner of AECOM, and Mark Pierce of RKK will present at the December Board meeting.

Meeting		
Date	Directive	Status
11-14-18	Delay adoption of the NC 54 West Corridor Study in order to address concerns raised by the Board.	<u>Underway.</u> LPA staff is working with the consultant to address the
		concerns and provide an opportunity for additional public and elected board feedback. A revised version of the draft will be available in the first half of 2019.
12-12-18	Work with NCDOT and MPO Technical Committee to address policies and procedures for maintenance of roundabouts.	Underway. LPA staff is coordinating with various divisions and local staff to determine current policies and procedures.

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION BOARD

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2 **12 December 2018** 3 4 **MINUTES OF MEETING** 5 6 The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Board met on 7 December 12, 2018, at 9:00 a.m. in the City Council Committee Room, located on the second 8 floor of Durham City Hall. The following people were in attendance: 9 10 Damon Seils (MPO Board Chair) Town of Carrboro Wendy Jacobs (MPO Board Vice Chair) **Durham County** 11 Michael Parker (Member) Town of Chapel Hill 12 13 Renee Price (Member) **Orange County** Steve Schewel (Alternate) City of Durham 14 15 Ellen Reckhow (Member) GoTriangle Karen Howard (Member) **Chatham County** 16 Pam Hemminger (Alternate) Town of Chapel Hill 17 18 Heidi Carter (Alternate) **Durham County** Mark Bell (Alternate) Town of Hillsborough 19 20 Mike Fox (Alternate) **NC Board of Transportation** 21 Richard Hancock NCDOT, Division 5 22 Patrick Wilson NCDOT, Division 7 23 NCDOT, Division 8 24 Brvan Kluchar 25 Kathryn Vollner NCDOT, Division 8 Zach Hallock Town of Carrboro 26 27 Tina Moon Town of Carrboro Town of Chapel Hill 28 Bergen Watterson 29 Kayla Seibel Town of Chapel Hill Geoff Green GoTriangle 30 Patrick McDonough GoTriangle 31 Evan Tenenbaum **Durham County** 32 Nishith Trivedi Orange County/TC Vice Chair 33 34 Andy Henry DCHC MPO **DCHC MPO** 35 Aaron Cain 36 Robert Jahn DCHC MPO Ellen Beckmann City of Durham Transportation / TC Chair 37 Dale McKeel City of Durham/DCHC MPO 38 City of Durham Transportation 39 Bill Judge **Eddie Dancausse FHWA** 40 41 Jenny Halsey **TJCOG** TJCOG Lyndsay Gavin 42 **AECOM** 43 **Drew Joyner** 44 45 Quorum Count: 8 of 10 Voting Members

Chair Damon Seils called the meeting to order at 9:00 a.m. A roll call was performed. The Voting Members and Alternate Voting Members of the DCHC MPO Board were identified and are indicated above. Chair Damon Seils reminded everyone to sign-in using the sign-in sheet that was being circulated. Chair Damon Seils introduced and welcomed Mark Bell from the Town of Hillsborough and Chairman Mike Fox from the Board of Transportation to the MPO Board Meeting. Chair Damon Seils also announced that Michael Parker would now be the voting member for the Town of Chapel Hill and Pam Hemminger would be the alternate.

PRELIMINARIES:

2. Ethics Reminder

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

3. Adjustments to the Agenda

There were no adjustments to the agenda.

4. Public Comments

There were no public comments.

5. Directives to Staff

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

CONSENT AGENDA:

6. November 14, 2018 Board Meeting Minutes

7. Performance Management Agreement on Data Sharing

- 70 Aaron Cain, DCHC MPO
- 71 Julie Bogle, NCDOT

Ellen Reckhow made a motion to approve the November 14, 2018 Board Meeting Minutes and the Performance Management Agreement on Data Sharing. Mike Fox seconded the motion. The motion passed unanimously.

8. 2019 MPO Board and Technical Committee Meeting Schedule

Aaron Cain, LPA Staff

There was discussion about changing the date and time of the January MPO Board Meeting due to the North Carolina Transportation Summit occurring on the same day. Renee Price requested that the MPO Board be provided with registration information. It was decided that the meeting will be held at 1pm on January 16. It was later decided that the January MPO Board meeting would be held in City Council Chambers at Durham City Hall.

Michael Parker made a motion to approve the meeting schedule with the change of date and time for the January DCHC MPO Board Meeting to January 16, 2019; at 1pm. Renee Price seconded the motion. The motion passed unanimously.

85 ACTION ITEMS:

9. Update on US 70 Improvements

- 87 Elmo Vance, NCDOT
- 88 Mark Pierce, RK&K
- **Drew Joyner, AECOM**

Aaron Cain stated that representatives of the US 70 Improvement project would update the MPO Board. Elmo Vance stated that the purpose of the project was to convert US 70 into a freeway from the East End Connector in Durham County to I-540 in Wake County. Elmo Vance continued that speakers representing U-5518 and U-5720 will brief the MPO Board on their respective projects along US 70.

Drew Joyner stated that U-5518 represents the portion of US 70 that exists just north of I-540 to slightly south of Page Road. Drew Joyner noted that there were various public input meetings and joint meetings with adjoining projects. Drew Joyner noted that U-5518 is split into three sections. Drew

Joyner stated that by early 2019 the project will be advertised by NCDOT as a design-build project, and then in summer 2019 a design-build project team will be selected. Drew Joyner stated that there are three different design alternatives under consideration, known as Alternative 1, Alternative 2, and Alternative 2 Revised. Renee Price asked if the Brier Creek area is a high crash area. Drew Joyner affirmed that Brier Creek is an area of high accidents, and extensive redesign elements are being considered, including controlled access and an interchange. Vice Chair Wendy Jacobs and Drew Joyner discussed that there will be multiuse paths and sidewalks across US 70, but not along it. Michael Parker asked if the plan included accommodations for potential future mass transit. Drew Joyner responded that the scope of the plan did not include study of mass transit.

Mark Pierce stated that U-5720 is the portion of US 70 from Lynn Road to TW Alexander Drive, and he will present two different concept design options; the northern widening alternative and the southern widening alternative. Tony Houser, of RK&K, explained that it is not feasible to widen US 70 on its current alignment due to the vertical curvature of the existing road. Tony Houser stated that, with the northern alternative, there are various changes that need to be made, including but not limited to: interchange reconfigurations; increased and improved signalization; and road realignment. Vice Chair Wendy Jacobs and Tony Houser discussed that a new facility would be constructed next to the existing US 70 with either alternative. Tony Houser added that the existing US 70 could be used as a service road with pedestrian facilities. Tony Houser stated that there are options for the best use of that section of US 70, and input should be provided by community leadership. Tony Houser stated that there is vacant land surrounding US 70. Tony Houser stated that the only access to US 70 in this section will be at only one interchange. Ellen Reckhow reminded the MPO Board that the US 70 project was originally started to address the needs of a growing population that required an alternative to I-40. Tony Houser stated that there are design elements, such as farm land, that needed to be considered from public comments. Vice Chair Wendy Jacobs stated that the Leesville Road area near US 70 is under development and the

community of Carolina Arbors is growing. Ellen Beckmann stated that a lift station is planned to open in 2021 near to that area. Tony Houser stated that in the southern alternative, the plan calls for US 70 to travel over Pleasant Drive, whereas in the northern alternative, Pleasant Drive travels over US 70. Tony Houser added that the southern alternative leads to a traffic control issue during construction. Tony Houser added that Mineral Springs Road would be realigned, which would cause issues for that area. Ellen Beckmann proposed different design alternatives for Mineral Springs Road and environs. Andy Henry added that the East End Connector project progressed with unspecified knowledge about the US 70 improvements. Mark Pierce noted that the DCHC MPO and Capital Area Metropolitan Planning Organization (CAMPO) staff will be briefed on public comments to the presented alternatives on January 16. It was discussed that Felix Nwoko would be the signatory for the DCHC MPO. It was further discussed that there is no official role for the MPO Board, but Felix Nwoko will act in the MPO Board's interest. Ellen Reckhow requested that NCDOT keep the MPO Board apprised of ongoing development. There was no actioned required by the MPO Board.

10. Triangle Transportation Demand Management Program

Jenny Halsey, TJCOG

Jenny Halsey stated that the Triangle Transportation Demand Management (TDM) Program has been operating for 10 years. Jenny Halsey stated that North Carolina Department of Transportation (NCDOT) updated their TDM plan, and Triangle J Council of Government (TJCOG) plans to make updates to their TDM Program accordingly. Jenny Halsey explained that TJCOG applies for funds each year through NCDOT, and every two years through CAMPO and DCHC. Jenny Halsey stated that TJCOG administers a competitive grant program to regional and local service providers, as well as monitors and evaluates the program effectiveness. Jenny Halsey stated that TJCOG designated hotspots throughout the region, which are areas of high trip density and the areas for best TDM opportunities. Jenny Halsey stated that grant applicants describe which hotspot they will cover during the application process. Jenny Halsey stated that the services of the grant recipients cover education and outreach.

Jenny Halsey stated that the grant recipients are required to make a 50% match. Jenny Halsey also stated that surveys are a part of the monitoring and evaluation process, and they are given to grant recipients to then distribute to employees and students. Jenny Halsey stated that survey questions include mode of transportation to and from either work or school and reasons for their chosen mode of transportation, as well as changes that could be implemented to change their travel behavior.

Jenny Halsey stated that the result of the FY17 Triangle TDM Program was that 5.7M (Million) vehicle trips were avoided, and 51M pounds of carbon dioxide were prevented from entering the atmosphere. Michael Parker and Lyndsey Gavin, TJCOG, discussed using a denominator for the Triangle TDM Program, such as the total number of vehicle trips overall in the Triangle. Vice Chair Wendy Jacobs and Jenny Halsey discussed that the strategy for outreach and to grow the Triangle TDM Program is up to the discretion of the grant recipients. Michael Parker asked if changing work hours would be discussed as part of the Triangle TDM Program. Jenny Halsey responded that changing work hours is currently a strategy employed by grant recipients. Chair Damon Seils contrasted the high cost of building new highways to the relative low cost of \$0.5M of the Triangle TDM Program. Chair Damon Seils also suggested having a yearly Triangle TDM Program update presented to the MPO Board.

Ellen Reckhow, Vice Chair Wendy Jacobs, and Jenny Halsey discussed the status of Durham County as not currently being a grant recipient from the Triangle TDM Program, although Durham County may already have a TDM program in place. They planned to follow-up after the meeting.

This item is for informational purposes only, no action is necessary.

11. Discussion of Items from Joint DCHC-CAMPO Board Meeting

168 Aaron Cain, LPA Staff

John Hodges-Copple, TJCOG

Aaron Cain stated that the Board directed staff from the MPO and TJCOG to make edits to the two policy sheets, Active Transportation and Transportation Demand Management (TDM)/Technology, which were based on comments received from MPO Board members. Aaron Cain discussed making the

language friendlier to individuals unfamiliar with transportation specifics. Chair Damon Seils stated that legislative delegation meetings are scheduled for January 2019, and he added that having policy sheets would be helpful to distribute among legislators. Vice Chair Wendy Jacobs and Ellen Reckhow discussed the need for language advocating for allowance for funding of multiuse paths. Renee Price requested adding language to include Rural Transportation Planning Organizations (RPO). There was discussion about what audience this policy document hoped to reach and the formatting of information therein. There was a nonverbal consensus among attendees of allowing for MPO staff to make edits and then sending the revised document to MPO Board Members. Chair Damon Seils stated that it is useful for the DCHC MPO to be applicable to different audiences and that the document is able to be changed over time as needed.

No action is required for this item, it is for informational and discussion purposes only.

12. Commuter Rail Project Sponsorship

Aaron Cain, LPA Staff

Aaron Cain stated that, as part of its process for the Durham-Wake Commuter Rail Transit (CRT) project, Wake Transit and CAMPO undertook a formal process to name GoTriangle as the project sponsor for the CRT. Aaron Cain added that a similar memo for the DCHC MPO Board was drafted using the memo adopted by the CAMPO Executive Board in November as a template. Upon the DCHC MPO Board's approval, LPA Manager Felix Nwoko will send a letter to GoTriangle acknowledging their designation of GoTriangle as the project sponsor for the Durham-Wake CRT. The MPO Board requested updates every six months, or as needed.

Michael Parker made a motion to direct staff to draft a letter to GoTriangle approving of their designation as the project sponsor for Durham-Wake CRT. Renee Price seconded the motion. The motion passed unanimously.

13. Amendment #8 to the FY2018-2027 TIP

Aaron Cain, LPA Staff

Aaron Cain stated that Amendment 8 to the FY2018-2027 Transportation Improvement Plan (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 in DCHC. Aaron Cain and Andy Henry added that funding for the sub-projects in U-4726 have previously been approved. Michael Parker made a motion to recommend that the MPO Board approve Amendment 8 to the FY2018-2027 TIP. Ellen Reckhow seconded the motion. The motion passed unanimously. 14. Election of Officers for the DCHC MPO Board Damon Seils, Chair, DCHC MPO Board **Aaron Cain, LPA Staff** Mark Marcoplos read the decision from the nominating committee that recommended Damon Seils to remain as the Chair and Wendy Jacobs to remain as the Vice Chair of the DCHC MPO Board. Michael Parker made a motion to re-elect Damon Seils as he Chair and Wendy Jacobs as the Vice Chair for the 2019 term of the DCHC MPO Board. Ellen Reckhow seconded the motion. The motion passed unanimously. **REPORTS:** 15. Report from the Board Chair Damon Seils, Board Chair Chair Damon Seils reiterated Mike Fox's invitation to attend the North Carolina Transportation Summit on January 9-10 at the Raleigh Convention Center. 16. Report from the Technical Committee Chair Ellen Beckmann, TC Chair

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Ellen Beckmann stated that there were several public meetings for projects in Durham,

including: Cornwallis Road grade separation project, Fayetteville Road widening, Hillandale Road

bike/ped project, Carpenter Road/Fletcher Road bike/ped project, NC 54 sidewalk, and the Durham wayfinding project. Ellen Beckmann also stated that her term as TC Chair will end, and the Chair and Vice Chair will be elected in January 2019.

17. Report from LPA Staff

Andy Henry, LPA Staff

Andy Henry reported that the comment period for the 2045 Metropolitan Transportation Plan (MTP) and Air Quality Conformity Determination Report will end on January 8, 2019, and the MPO Board will be able to adopt it at their next meeting on January 16.

18. NCDOT Report

David Keilson, NCDOT Division 5, discussed that the on-ramp from Highway 98 to US 70 West is now open. David Keilson discussed the Alston Avenue project updates, including two road closures along Alston Avenue for six month periods each. David Keilson stated that the Chapel Hill Road bike/ped project (EB-4707B) is scheduled to finish in March 2019. David Keilson also stated that the roundabout at Hope Valley Road and University Road is scheduled to be let in January 2019. Ellen Reckhow discussed the unsightliness of certain roundabouts, and Ellen Beckmann stated that she will discuss the roundabout issue at the next TC meeting on January 23.

Patrick Wilson, NCDOT Division 7, stated that there were no additional updates. Pam Hemminger and Patrick Wilson discussed ongoing meetings with NCDOT about widening I-40.

Bryan Kluchar, Division 8, stated that there were no additional updates.

There was no comment from NCDOT Transportation Planning Division (TPD).

There was no report from NCDOT Traffic Operations.

INFORMATIONAL ITEMS:

17. Recent News, Articles, and Updates

No informational items were discussed.

249	ADJOURNMENT:
250	There being no further business before the DCHC MPO Board, the meeting was adjourned at
251	11:34 a.m.

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				Existing	Proposed	Improvement	Length	Estimated		Reg.	Exempt	
ID	Highway Project	From	То	Lanes	Lanes	Type(a)	(miles)	Cost	STI	Sig.(b)	(c)	TIP#
2025 I	MTP											
15	East End Connector (EEC)	NC 147	US 70 to north of NC 98 in Durham	-	4	New Location	3.6 3.2	35,175,000	St	Yes	No	U-0071
23	Fayetteville Rd	Barbee Rd	Cornwallis Rd	2	4	Widening	1	3,374,000	Div	No Yes	No	N/A
23.1	Fayetteville Rd	Woodcroft Pkwy	Barbee Rd	2	4	Widening	1.3 1.4	4,661,000	Div	No Yes	No	U-6021
111	Fordham Blvd (US 15-501)	I-40	Franklin St Ephesus Ch Rd	4	4	Modernization	1.6	2,052,000	St	Yes	No	U-5304B U-5304F
240	Fordham Blvd (US 15-501)	NC 54	Franklin Street Ephesus Ch Rd	4	4	Modernization	2.1	45,498,000	St	Yes	No	U-5304A U-5304D
73	Fordham Blvd (US 15-501)	NC 54	US 15-501 NC 86 (S Columbia St)	4	4	Modernization	2.2 2.3	49,832,000	St	Yes	No	U-5304A U-5304B
204	Fordham Blvd/Raleigh Rd	Interchange		-	-	Upgrade	N/A	14,800,000	St	Yes No	93.127	U-5774A
626	Fordham Blvd/S Columbia St	Interchange		-	-	Upgrade	N/A	35,000,000	St	Yes	No	U-5304E U-5304A
638	I-40/NC 86	Interchange		-	-	Upgrade Improvements	N/A	16,500,000	St	No Yes	No	I-3306AC
64.12	NC 147 (Operational Improvements)	East End Connector W Chapel Hill St	Swift Av Briggs Av	4	4	Modernization	1.7 3.0	58,400,000	ST	Yes	No	U-5937
64.13	NC 147 (possible Managed Lanes)	East End Conn	I-40	4	8	Widening	4.9 3.9	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	No Yes	No	R-5821A

MTP ID	Highway Project	From	То	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	1.5 0.4	(see #69.2)	Reg	Yes No	93.126	U-5774H
75.2	NC 55 (Alston Ave)	Main St	NC 98	2	2	Modernization	0.5 0.6	-	Reg	No	No	U-3308
87	S Churton St	US 70 Business Eno River in Hillsborough	I-40	2	4	Widening	2.4 2.2	31,825,000	Div	No	No	U-5845
485	US 70 (freeway conversion)	Pleasant Dr 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	0.2 0.0	2,219,000	Div	No	No	U-5823
2035 N	MTP								•	•	•	
43	I-40	US 15 501 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	7.0 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	U-5517 N/A
113	US 15-501 (expressway conversion)	US 15-501 Bypass	I-40	6	6	Expressway	2.2 2.0	195,300,000	St	Yes	No	U-6067
116	US 70 (freeway conversion)	S Miami Blvd	Northern Durham Parkway MPO Boundary	4	6	Freeway	2.5	173,469,000	St	Yes	No	U-5720C
2045 N	MTP											
364	Eno Mountain Rd realignment	Mayo St	Eno Mountain Rd	-0 2	2	New Location	0.3	2,015,000	Div	No	93.126	N/A
48	I-85	US 70 Mt Herman Ch Rd	I-40	4	6	Widening	7.1 6.0	197,378,000	St	Yes	No	I-5983 N/A
48.1	I-85	Sparger Rd Mt Herman Ch Rd	US 70 Durham County Line	4	6	Widening	3.0 2.5	39,118,000	St	Yes	No	I-5983

MTP ID	Highway Project	From	То	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	1-5984 N/A
81.1	Wake Forest Hwy (NC 98)	Nichols Farm Dr	Wake County Line	2	4	Widening	6.0	48,474,000	Reg	No Yes	No	N/A

These footnotes are to clarify the table data and will <u>not</u> 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 memb	er _				and sec	onded by M	ſΡΟ
Board member	for	the a	doption	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 State 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 16th day of January, 2019.

(continued)

(Continued – Resolution	on Adopting DCHC 2045 MTP)
	Damon Seils, DCHC MPO Board Chair
	Danion Sens, Deric Wi O Board Chan
Durham County, Nort	h Carolina
I certify that Damon S he signed the forgoing	Seils personally appeared before me this day acknowledging to me that g document.
Date: January 16, 201	9
	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 TA	AC Member		and seco	nded by TAC	C Member
	for the adoption	n of the following	g resolution, an	d upon being	g 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 16th day of January, 2018.

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.

Prederick Brian Rhodes, Notary Public
My commission expires: May 10, 2020



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/.

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

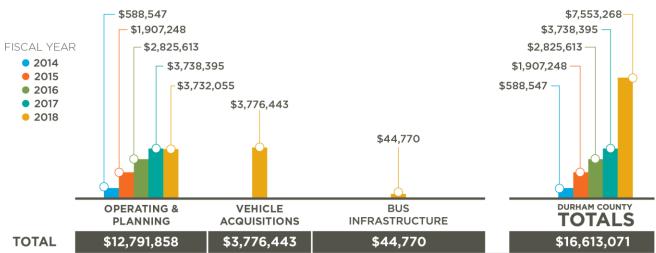
- In fiscal year 2019, GoDurham and GoTriangle will present the drafts of the short-range transit plans to the public. After receiving public input, both agencies plan to finalize those plans. Beginning in fiscal year 2020, the agencies will start implementing the service modifications proposed in the 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

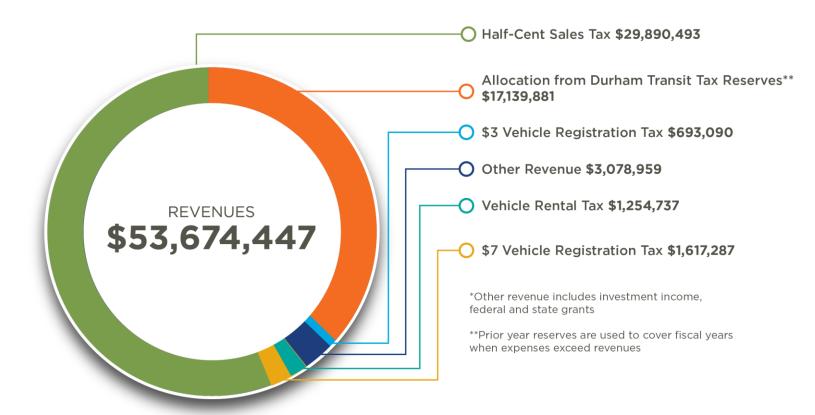
Capital projects

- 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.

DURHAM COUNTY TRANSIT PLAN OPERATING, PLANNING & CAPITAL EXPENSES SINCE INCEPTION *as of 6.30.18 (EXCLUDES LIGHT RAIL)



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.

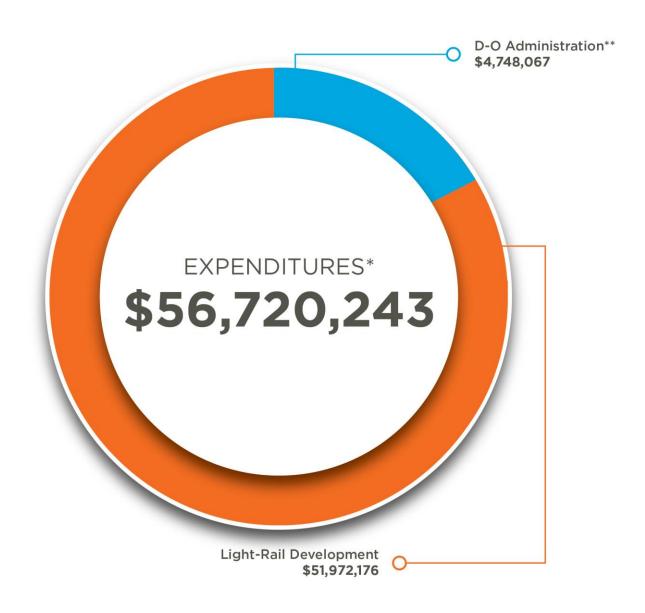
The light-rail project is currently in the grant program's New Starts Engineering phase, during which GoTriangle has been ironing out the details of the light-rail's design. As part of this work in fiscal year 2018, GoTriangle has progressed the project's design beyond the important 50 percent design 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 19th 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.

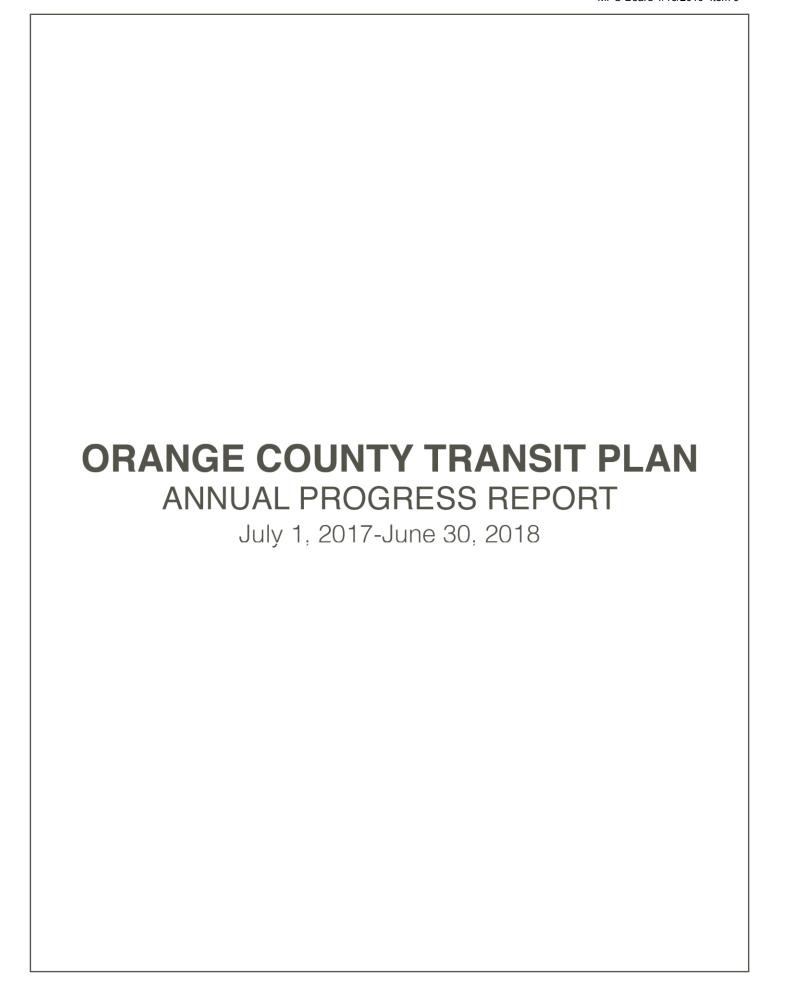
GoTriangle also continued the project's robust program of public involvement, which included public meetings, targeted outreach to key stakeholder groups, regular third-party coordination meetings and timely response to inquiries from property owners, residents and community members. Public meetings 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

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/.

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.

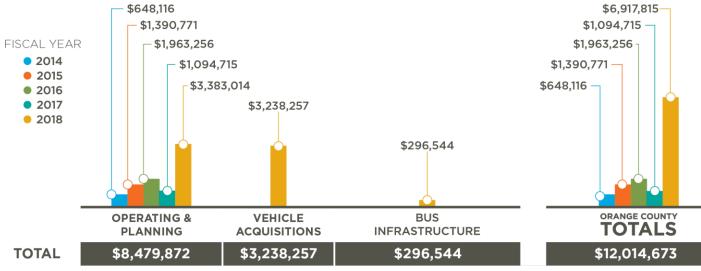
Hillsborough Train Station update

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.

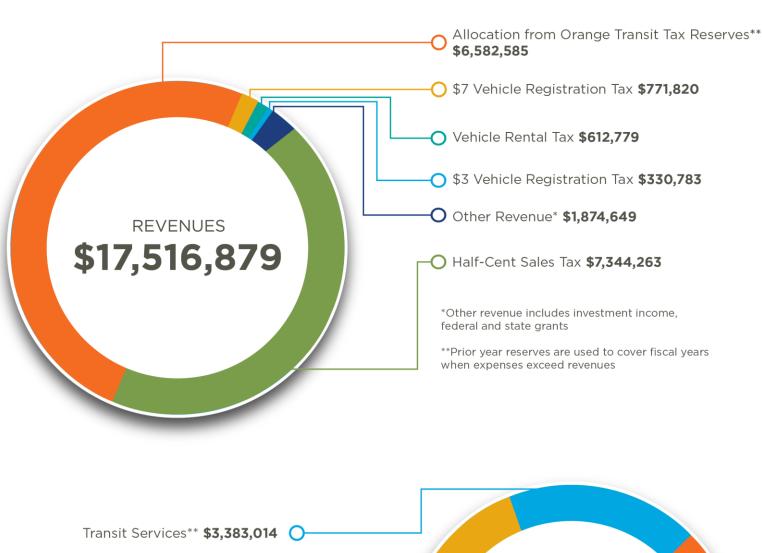
ORANGE COUNTY TRANSIT PLAN OPERATING, PLANNING & CAPITAL EXPENSES SINCE INCEPTION

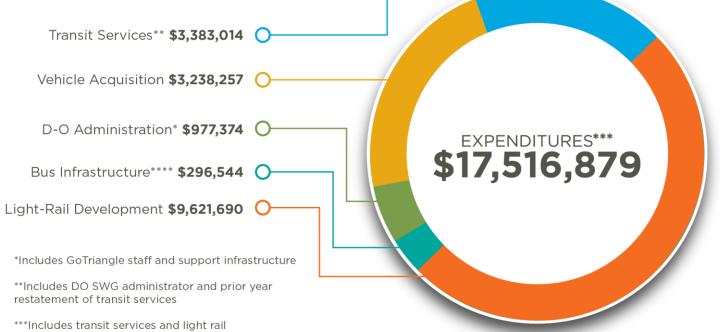
*as of 6.30.18 (EXCLUDES LIGHT RAIL)



TRANSIT PLAN EXPENDITURES BEGAN IN FY2014 (JULY 1, 2013)

FY18 ORANGE COUNTY oard 1/16/2019 Item 9 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.

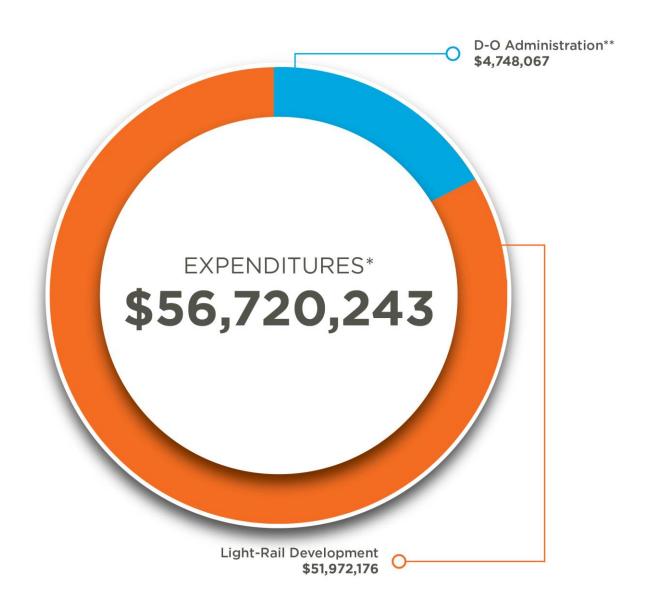
The light-rail project is currently in the grant program's New Starts Engineering phase, during which GoTriangle has been ironing out the details of the light-rail's design. As part of this work in fiscal year 2018, GoTriangle has progressed the project's design beyond the important 50 percent design 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 19th 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

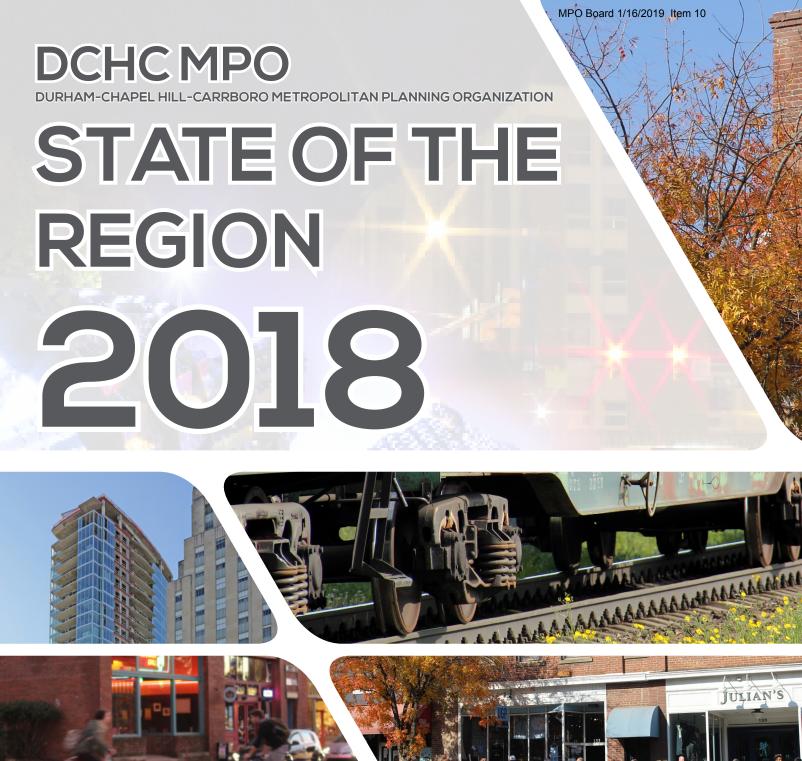








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EXECUTIVE SUMMARY

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



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.

JOBS

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.

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

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.



There are **68,778** PEOPLE in **CHATHAM**There are **15,745** JOBS in

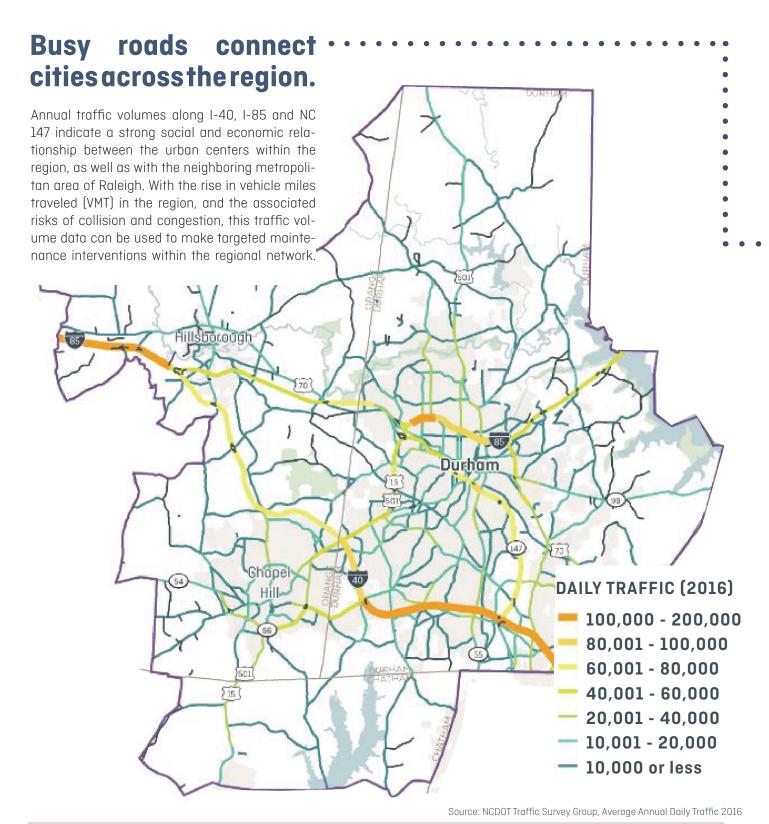


There are 1,786,119 PEOPLE in the TRI



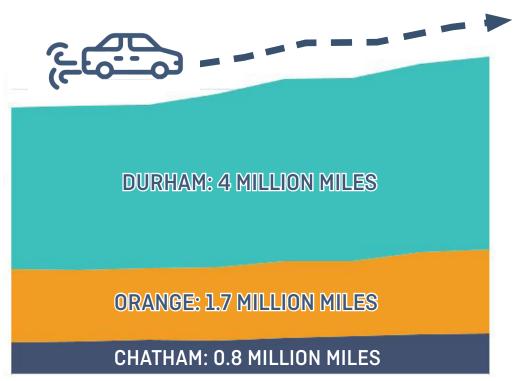
Source: 2012-2016 ACS 5-Year Estimate

OKEY FINDINGS



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%). Thy continued increase in vehicus lar travel, paired with popula tion increases, suggests that regional demand for travel 🖰 as high as ever. This can lea∉ to increased congestion and crashes, requiring the MPO to continue advancing policy investment solutions 2010



Source: Federal Highway Administration (FHWA) Annual VMT, 2010-2017, by county

The value and tonnage of freight cargo are

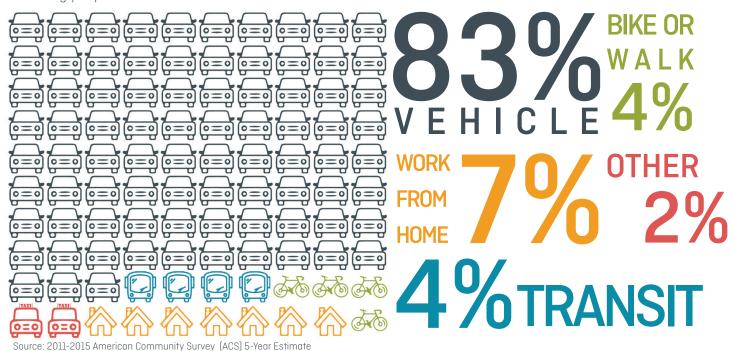


It's not just cars, it's trucks too.

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.

But not everyone uses a car.

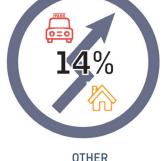
According to commuter data, the region is dominated by vehicular travel. In 2015, 83% of commuters opted for vehicular travel. Only 4% used public transit, and 4% cycled or walked. In addition, 7% of employees worked from home. The future of the region's transportation network will likely remain dominated by vehicles, but non-vehicular modes may play an increasingly important role.



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

Airtravel is also in creasing.

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



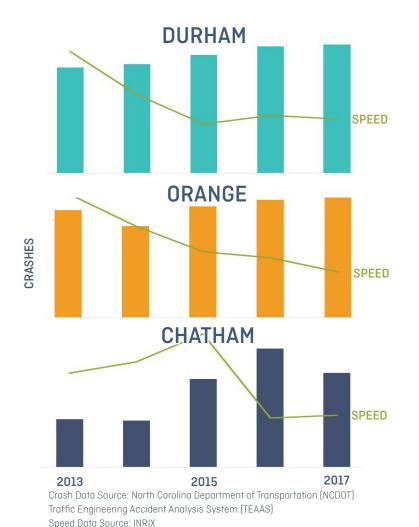
Source: Raleigh-Durham Airport Authority

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



...and it leads to safety concerns.

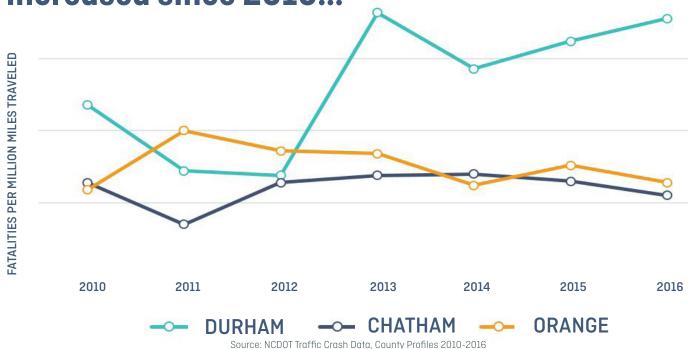
Average speed fell in all three counties between 2013 and 2017. In contrast, the number of crashes has generally increased. Reduced speeds that are accompanied by higher rates of vehicular crashes can be an indicator of increased congestion. This finding suggests that effective intervention will require improvements to safety infrastructure coupled with speed regulation.

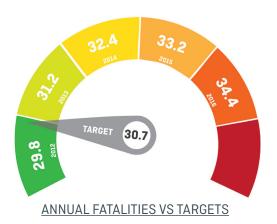
The region suffers from congestion.

Vehicular and pedestrian crash rates are on the rise.

Source: NCDOT TEAAS Crash Data, 2010-2016

The fatality rate in Durham County has increased since 2010...





75.0 79.2 2014 TARGET 10.6

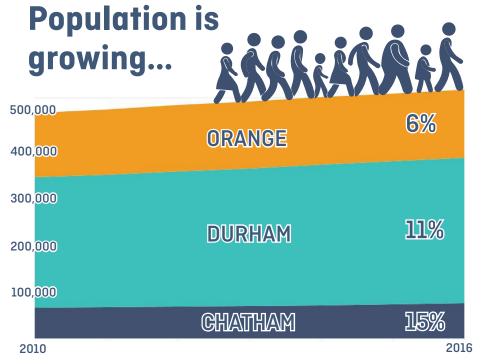
ANNUAL SERIOUS INJURIES VS TARGETS
Source: NCDOT Traffic Crash Data. County Profiles 2012-2016

...and fatalities and injuries are above desired targets throughout the region.

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.

ODRIVERS OF CHANGE



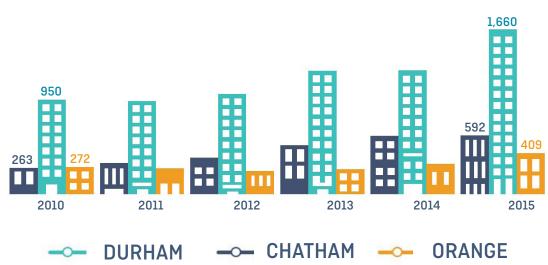
Since 2010, the population in the DCHC region has grown by 10%, reaching over 500,000 residents. The majority of these residents (almost 60%) live in Durham County. Population trends reflect land use trends, as evidenced by the age distribution. The presence of two major universities, as well as key 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.

Source: 2006-2010 and 2012-2016 ACS 5-Year Estimate

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 strona influence on the pattern of travel throughout the region.

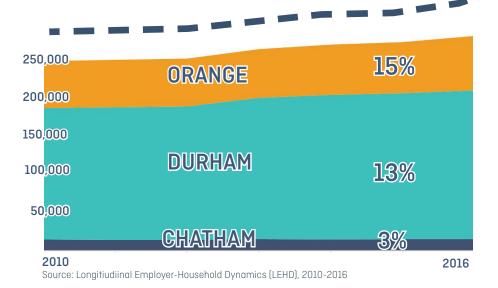
...and development is on the rise.

Residential Building Permits Increased Every Year Since 2010

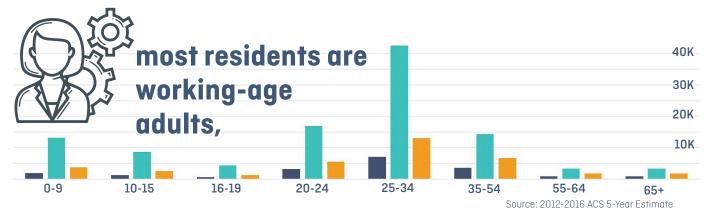


Source: U.S. Census Building Permit Survey, 2010-2015

Employment is growing,

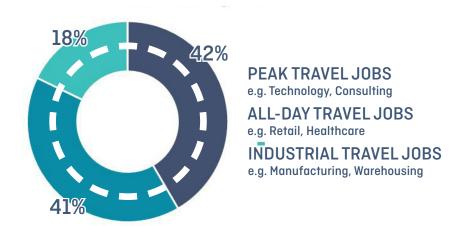


The DCHC region is growing steadily - adding roughly 30,000 new jobs since 2010 (the equivalent of 12 jobs per day). The majority of those jobs (70%) are located in Durham County, but Orange County is growing too - adding almost 10,000 new jobs since 2010. This growth - coupled with the concentration of working-age adults and the geographic distribution of key employment centers - may affect transportation patterns across the region.



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.



Source: Longitiudiinal Employer-Household Dynamics (LEHD), 2016



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.

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.



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 Hilsborough 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)

- 100,000 200,000
- 80,001 100,000
- 60,001 80,000
- 40,001 60,000
- 20,001 40,000
- 10,001 20,000
- 10,000 or less



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.



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).

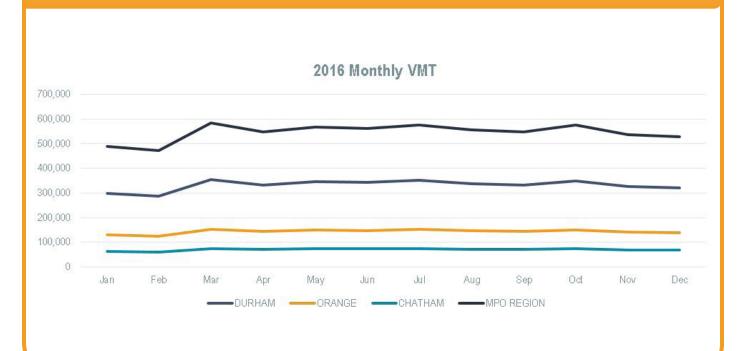
WHY THIS INDICATOR MATTERS

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.



WEHICULAR TRAWEL

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.



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.



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.

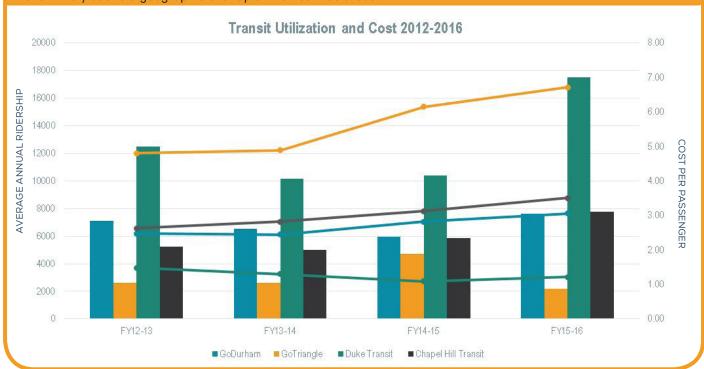
WHY THIS INDICATOR MATTERS

In a region dominated by vehicular and highway travel, residents withouts 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

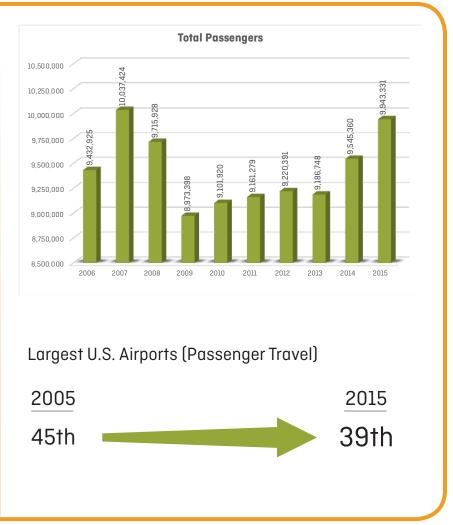
Air travel is a strong barometer for economic activity in a region, and can help spot trends in travel demand from visitors, businesses, and trucking.

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.



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.

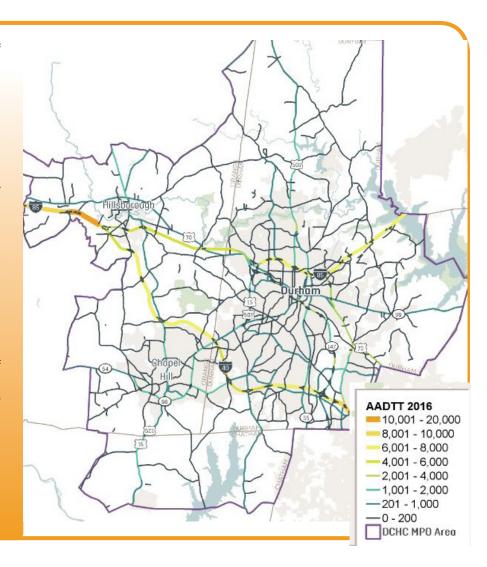
WHY THIS INDICATOR MATTERS

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 Between 4,000 and highways. 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 transnational 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.

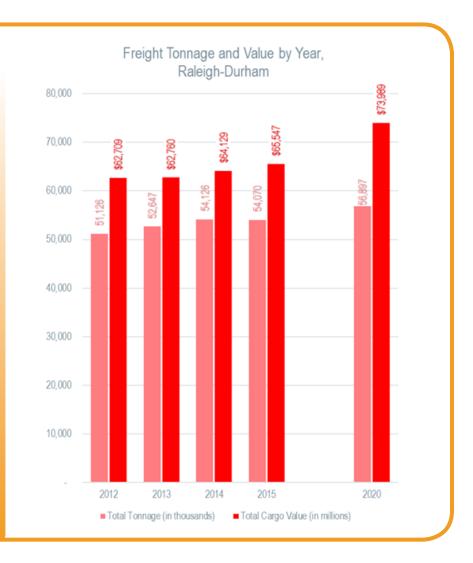
WHY THIS INDICATOR MATTERS

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 TRAVE

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.

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.









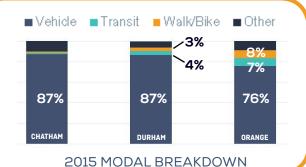
VEHICLE

WALK OR BIKE

OTHER

PERCENT CHANGE IN MODAL TRAVEL 2013 - 2015

Source: 2009-2013 and 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.

ource: 2011-2015 ACS 5-Year Estimate



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

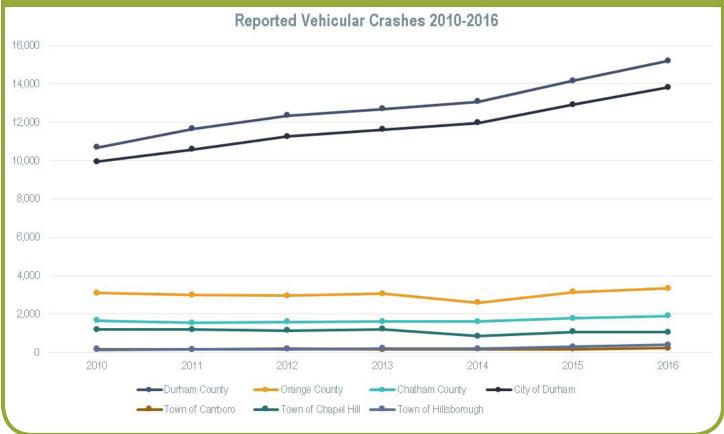
This indicator shows reported crashes involving vehicles from 2010 - 2016. It is provided for the three counties in the DCHC region and for four municipalities.

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.



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

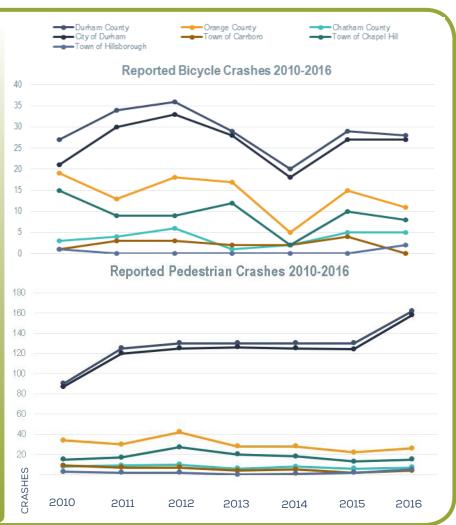
Crash rates, and trends in crash rates in particular, need to be monitored for traveler safety. Cyclists and pedestrians are particularly vulnerable during crashes, and upward trends in bicycle and pedestrian crashes can signify an urgent need for intervention.

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

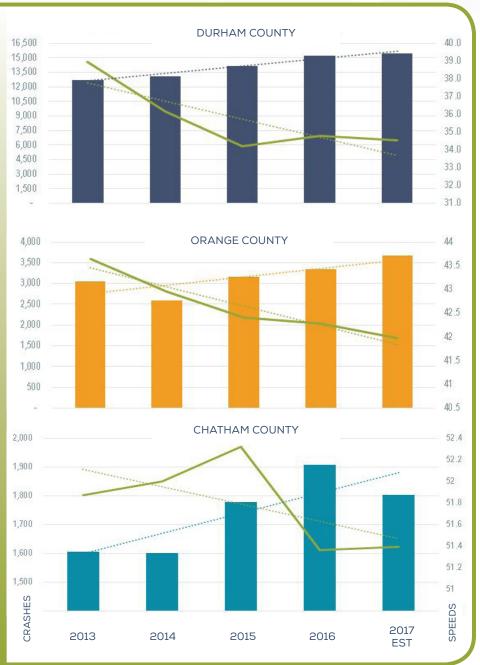
Understanding the relationship between vehicular crashes and speeds can help guide meaningful policy interventions that improve safety in region.

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 TEAAS 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.

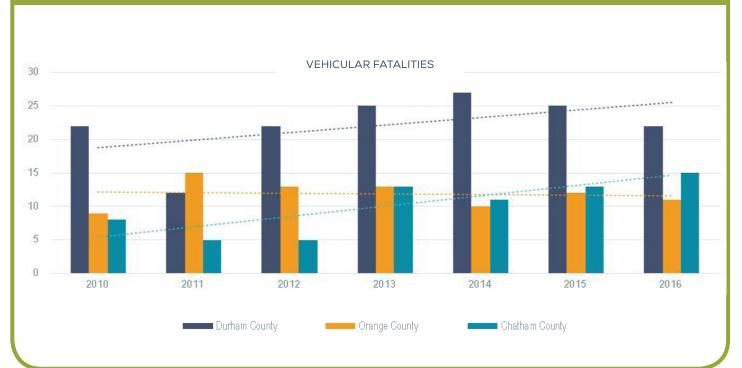
WHY THIS INDICATOR MATTERS

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.

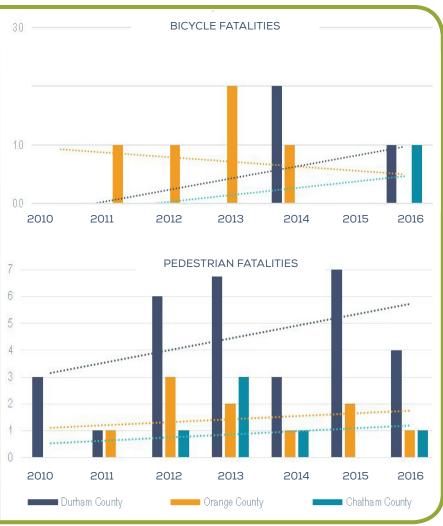
WHY THIS INDICATOR MATTERS

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.

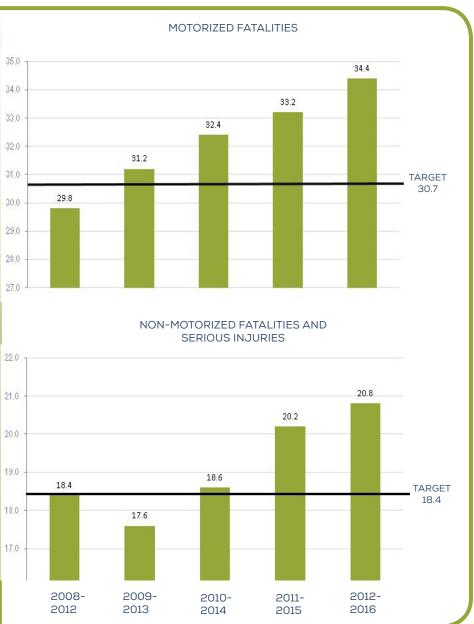
WHY THIS INDICATOR MATTERS

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.



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.



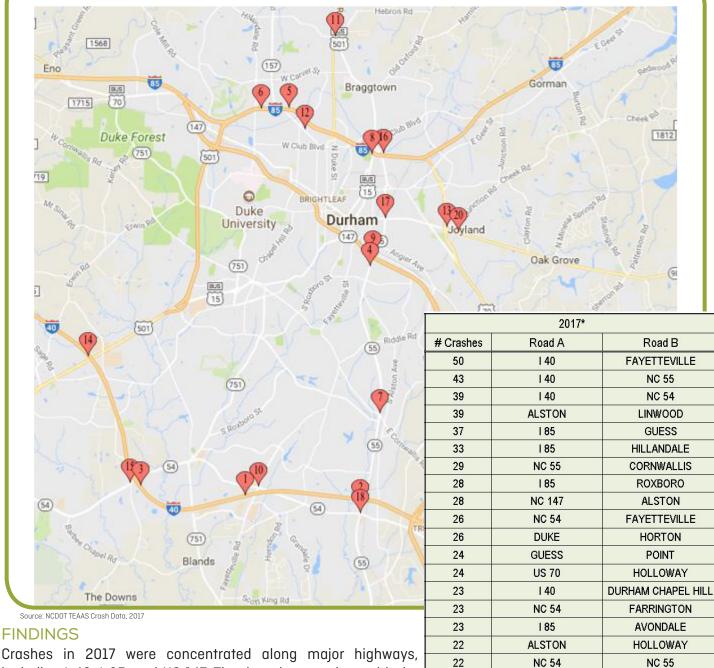
DURHAM COUNTY INTERSECTION ACCIDENT RANK-

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

WHAT'S HAPPENING

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.



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 *Estimated data from Jan to Oct for 2017 list.

140

HOLLOWAY

21

21

1540

JUNCTION



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.



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.

7

7

NC 86

US 15

140

PERKINS

OLD MASON FARM

SR 1114

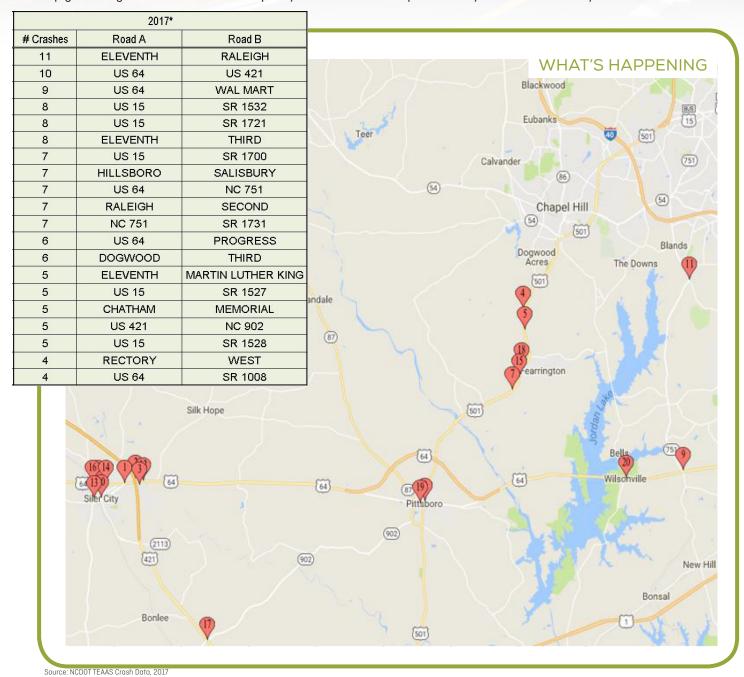


CHATHAM COUNTY INTERSECTION ACCIDENT

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.



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?

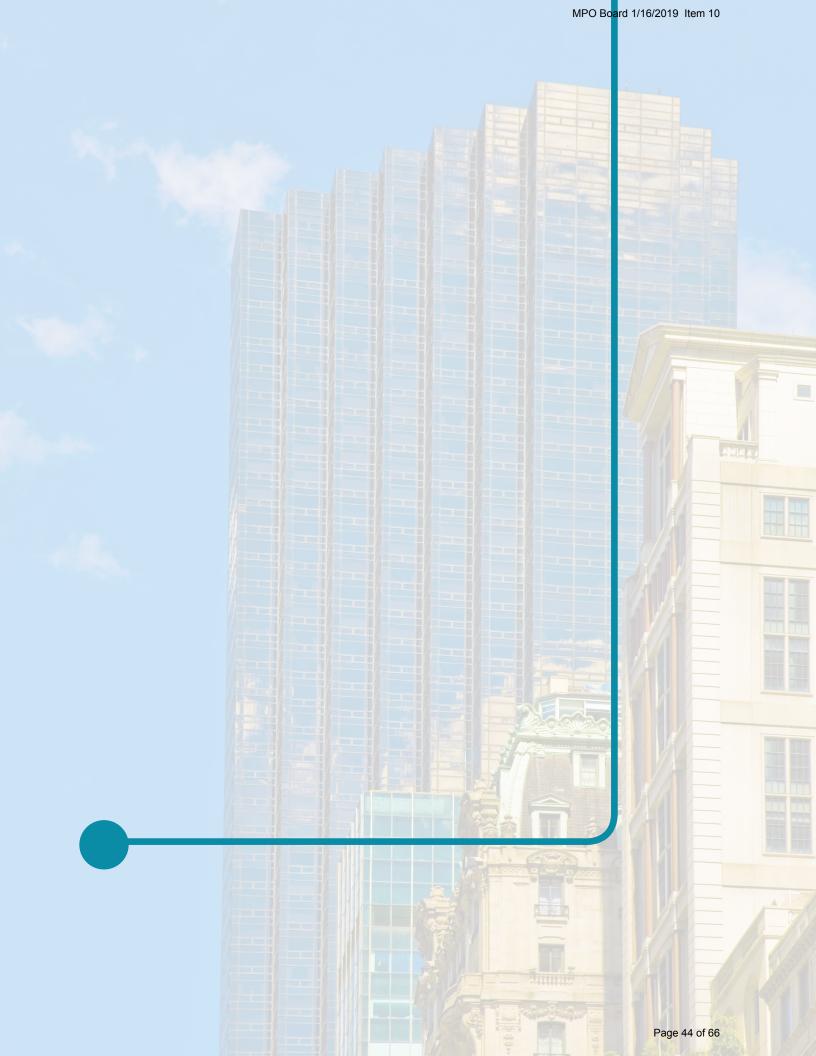
Economic development indicators are meant to inform the MPO about the economic trends and conditions that may influence transportation needs in the coming years. Relevant indicators include construction and private development trends (both residential and non-residential), which help to identify the 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.

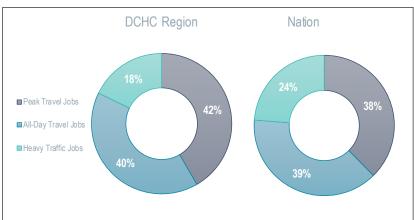
As stated earlier, different jobs use transportation differently. Jobs have been sorted by the type of traffic they generate: jobs that generate primarily worker arrival and departure trips and have few, if any, visitors or customers are considered 'Peak Hour Travel' jobs; jobs that rely on customers 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

	Job Trends		
Industry	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: Longitiudiinal Employer-Household Dynamics (LEHD), 2010-2015

Share of Total Jobs



Source: Longitiudiinal 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.



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

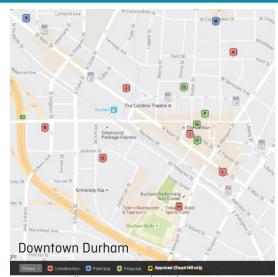
WHY THIS INDICATOR MATTERS

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.

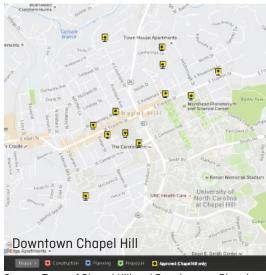
WHAT'S HAPPENING

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.











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.

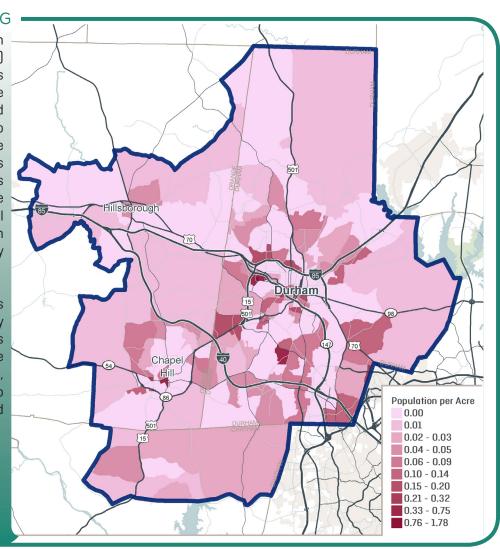
WHY THIS INDICATOR MATTERS

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 vear.

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

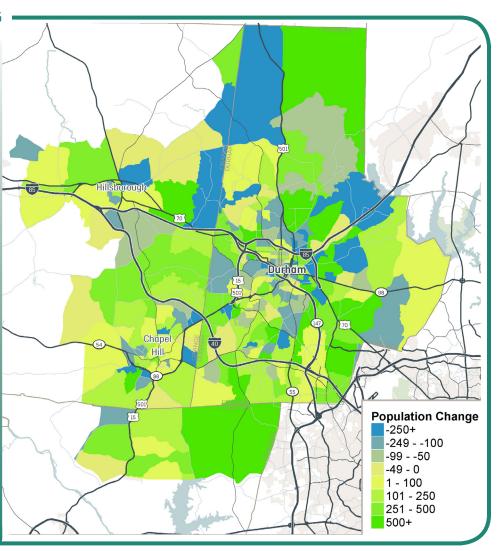
Population growth and contraction have strong impacts on the region's transportation network. Recent trends can provide insight into how the region may evolve in the future. However, transportation planners must take care when considering recent trends for investment decisions. Some population changes 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.

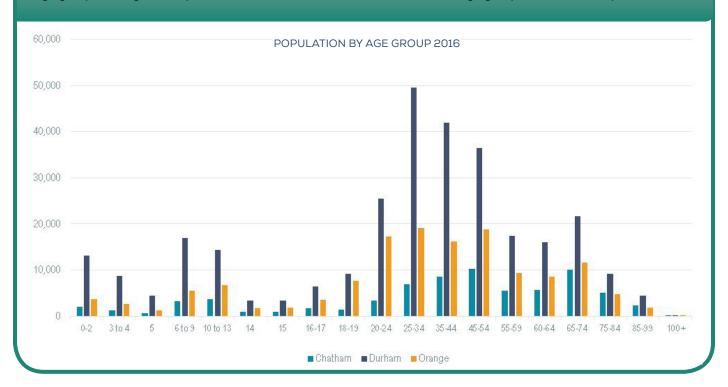
WHY THIS INDICATOR MATTERS

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.

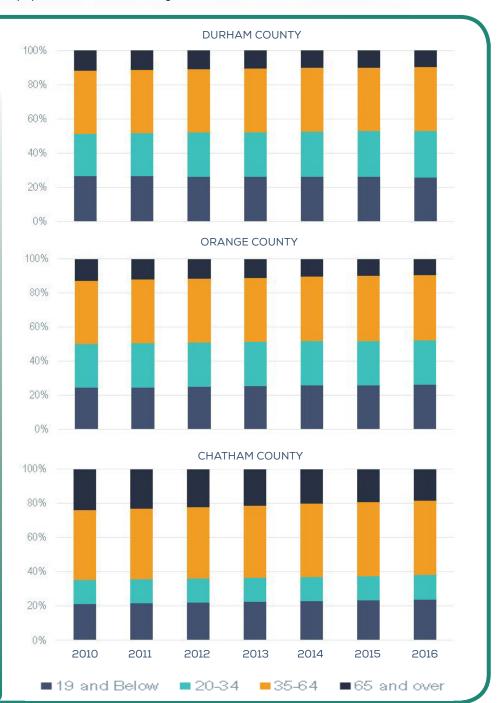
WHAT'S HAPPENING

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.

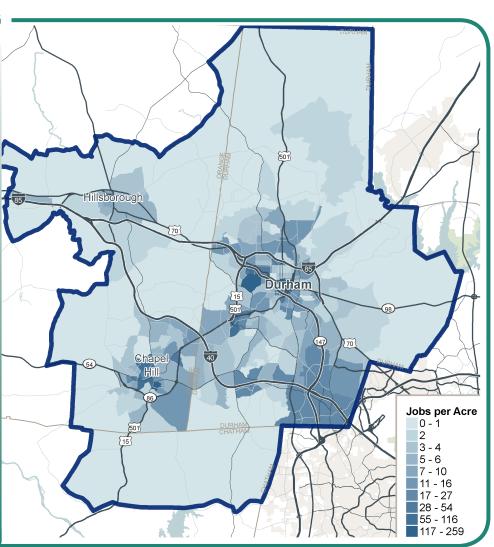
WHY THIS INDICATOR MATTERS

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

US The 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 vear.

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.

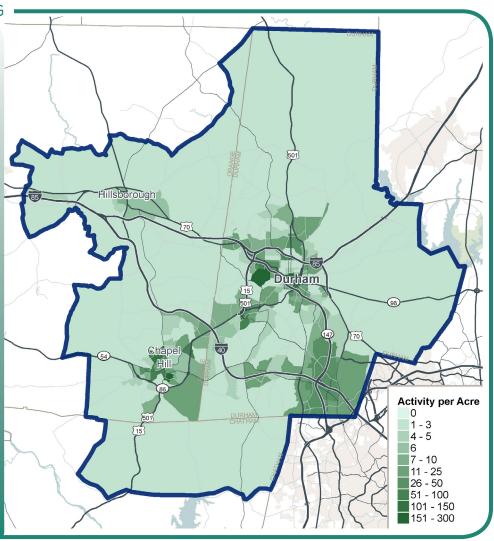
WHY THIS INDICATOR MATTERS

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

US American Census 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 vear.

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 intercity 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

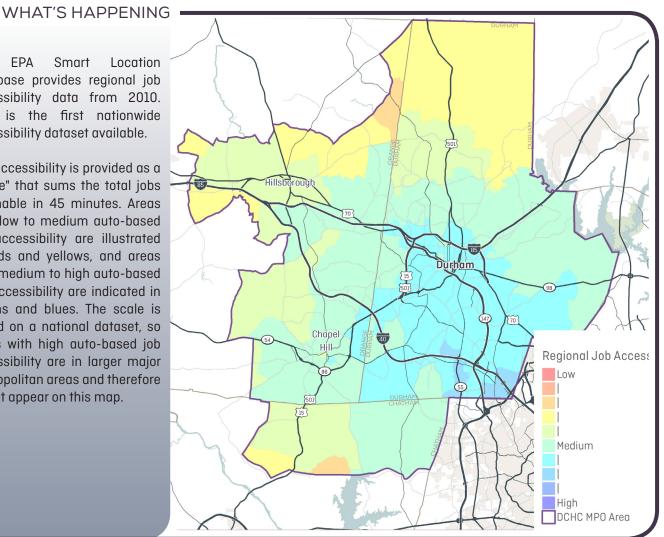
Only about one-sixth of all trips are commuting trips, but nearly all trips involve a work-related destination. Measuring regional job access within a 45-minute drive is a powerful indicator for identifying the likely destinations for any given origin. These accessibility indicators weigh the "value" of each job by the time it takes to reach it, which also helps to make predictions about travel behavior.

Smart Location Database provides regional job accessibility data from 2010. This is the first nationwide

accessibility dataset available.

The

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.

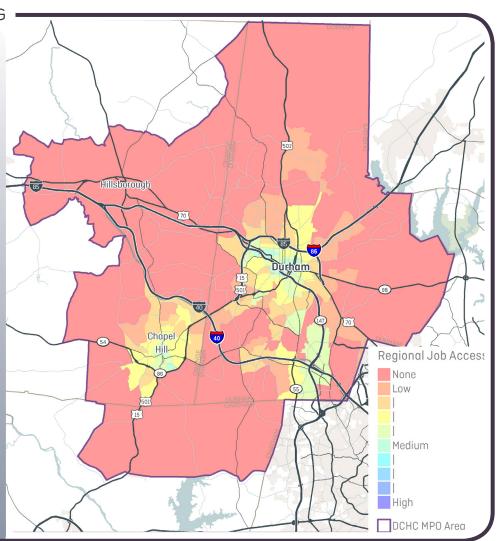
WHY THIS INDICATOR MATTERS

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.

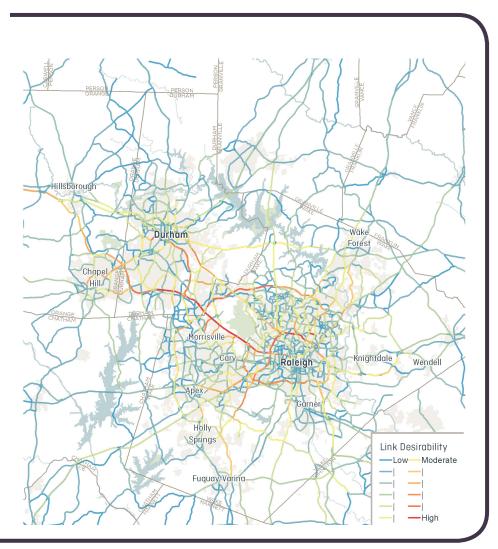
WHY THIS INDICATOR MATTERS

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

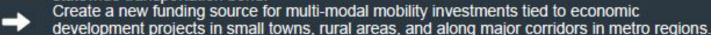
REGIONAL POLICY PRIORITIES

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.



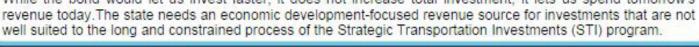
INVEST FOR SUCCESS

Enable critical transportation infrastructure across all modes to be addressed sooner with a statewide transportation bond.



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 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.

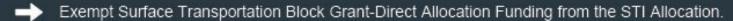
While the reasoning behind a cap is sound, its application can lead to inefficient, piece-meal spending which costs more in the long run and affects travelers throughout the state. The cap can also prevent investments on parallel reliever roadways that could be cost-effective and complimentary investments.



- 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



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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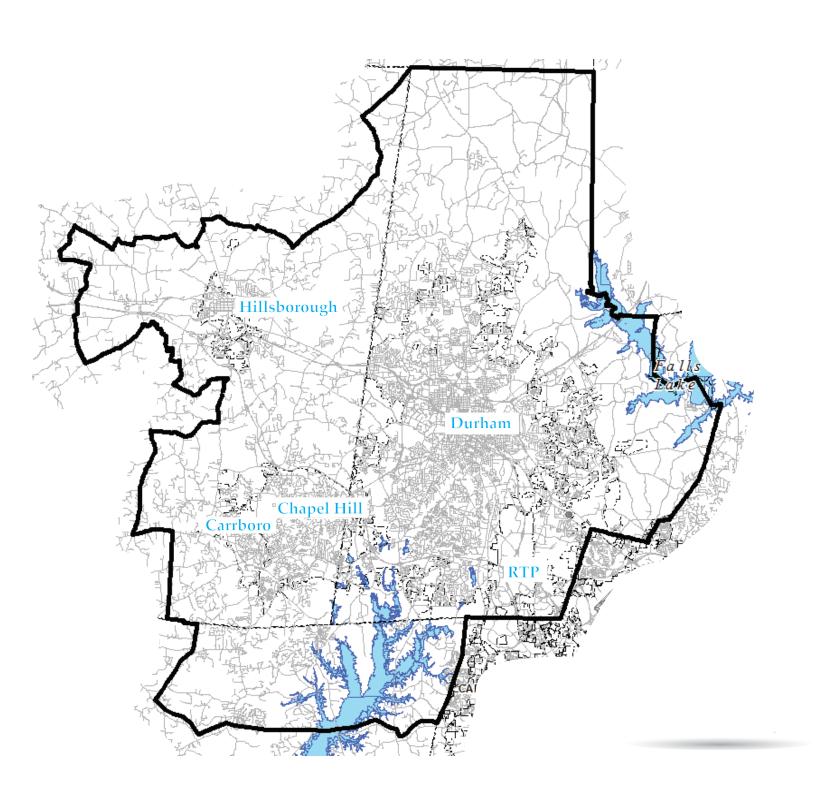
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Durham Chapel-Hill Carrboro Metropolitan Planning Organization

FY2020 Unified Planning Work Program

Draft 1.16.19



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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 being put to a vote was duly adopted.	for the adoption of the following resolution, and upon
	sportation planning program must be carried out ansportation projects are effectively allocated to the
Whereas, the City of Durham Department of Tr Federal Transit Administration (FTA) Metropol	ransportation has been designated as the recipient of itan Planning Program funds; and
Whereas , the City of Durham Department of Tr Section 104(f) Planning and Technical Studies I	ransportation has been designated as the recipient of Planning grant funds; and
Whereas , members of the DCHC MPO Board a effectively advance transportation planning for better the property of the DCHC MPO Board and a second sec	agree that the Unified Planning Work Program will FY2020.
Now therefore, be it resolved that the MPO B Work Program for the DCHC MPO Urban Are	Board hereby endorses the FY2020 Unified Planning ea.
I, Damon Seils, Chair of the MPO Board do her excerpt from the minutes of a meeting of the DC, 2019.	eby certify that the above is a true and correct copy of an CHC MPO Board, duly held on the day of
Damon Seils, MPO Board Chair	
Durham County, North Carolina	
I certify that Damon Seils personally appeared be forgoing document.	efore me this day acknowledging to me that he signed the
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,

w therefore, be it resolved that the DCHC Urban Area MPO Board certifies the					
sportation planning process for the DCHC Metropolitan Planning Organization on this \mathfrak{t} day of, 2019.					
_ uay or					
	Damon Seils,				
	Board Chair				
	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 CF R 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 sued 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.

 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
- Monitory 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, AO, 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 DCHC MPO, based on urbanized area population over 200,000 must also address the following: 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 must be developed and implemented that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan 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 attainment for the National Ambient Air Quality Standards (NAAQS). On February 16, 2018, there was a decision from the D.C. Circuit Court in the South Coast Air Quality Management District v. EPA. Per the Circuit Court decision, The Raleigh-Durham-Chapel Hill area is considered an orphan maintenance area and based on the EPA guidance of November 2018, the area will need to demonstrate transportation conformity for transportation plans and TIPs for the 1997 ozone NAAQS. This conformity can be demonstrated without a regional emissions analysis (REA) pursuant to 40 CFR 93.109(c). Though not required, the Triangle region air quality partners have decided to continue to implement activities including an air quality regional analysis on its MTP and TIP. NCDOT and TJCOG will assist the MPOs in performing this REA on MTP projects.

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

DCHC MPO will continue to review and analyze travel demand and air quality models to determine feasible enhancements to the procedures that are used in the TRM area. DCHC MPO will continue to perform regional travel demand, and micro simulation model runs for existing and future projects as needed. Upon completion of the TRM-V6, the TRM Service Bureau and regional stakeholders will commence revisions and enhancements to respond to the needs and policies of the DCHC MPO and other stakeholders. A first task will be to identify and select enhancements for implementation based on the needs of 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 85th 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.

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

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:

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

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).

5303	CHT	GoDurham	MPO Total
Federal (80%)	\$137,200	\$142,800	\$280,000
State (10%)	\$17,150	\$17,850	\$35,000
Local (10%)	\$17,150	\$17,850	\$35,000
Total Sect. 5303	\$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.

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

Summary of all Funding Sources

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

Summary of Federal Funding (80%) 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
Durham City	\$215,856			\$215,856
Durham County	\$46,630			\$46,630
TJCOG	\$65,000			\$65,000
GoDurham		\$142,800	\$247,856	\$390,656
Total	\$2,202,196	\$280,000	\$247,856	2,730,052

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.

Agency	Total FY2020
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. DCHCMPO 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.
- 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 8-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 webservers, 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

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.

Dates	DCHC MPO Activity Description
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 16, 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

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			Total	\$2,191,376	\$32,100	\$291,411)\$	\$758,140	\$58,288)\$)\$	\$81,250)\$)\$	\$3,412,565
	Funding Summary		Federal	 \$1,753,101	\$25,680	\$233,129	\$0	\$606,512	\$46,630	\$0	\$0	\$65,000	\$0	\$0	\$35,000 \$2,730,052
	Funding (NCDOT	 \$0	0\$	\$17,150	\$0	\$17,850	0\$	0\$	0\$	0\$	\$0	0\$	\$35,000
			Local	 \$438,275	\$6,420	\$41,133	0\$		\$11,658	0\$	0\$	\$16,250	0\$	0\$	\$647,514
		FTA	80%	\$0	0\$	0\$	0\$	\$247,856	0\$	0\$	0\$	0\$	0\$	0\$	\$247,856
Section 5307	Transit	NCDOT	%0	 \$0	\$0	0\$	\$0	\$0	0\$	\$0	\$0	0\$	\$0	\$0	0\$
		Local	%07	0\$	0\$	0\$	0\$	\$61,964	0\$	0\$	0\$	0\$	0\$	0\$	\$61,964
13	Highway/Transit	FTA	%08	\$0	0\$	\$137,200		\$142,800		\$0	\$0	\$0	\$0	\$0	\$280,000
Section 5303		NCDOT	70%	\$0	0\$	\$17,150	}	\$17,850		\$0	0\$	0\$	\$0	0\$	\$32,000
		Local	10%	0\$	\$0	\$17,150	0\$	\$17,850	0\$	0\$	\$0	\$0	\$0	0\$	\$35,000
104(f)	_	FHWA	%08	\$353,101	\$0	0\$	0\$	\$0	0\$	\$0	0\$	0\$	\$0	0\$	\$88,275 \$353,101
Section 104(f)	PL	Local	70%	\$88,275	0\$	0\$	0\$	0\$	0\$	0\$	0\$	0\$	0\$	0\$	
STBGP	(2)(3)(q)	FHWA	%08	\$350,000 \$1,400,000	\$25,680	\$95,929	0\$	\$215,856	\$46,630	0\$	0\$	\$65,000	0\$	0\$	\$1,849,095
STE	Sec. 133(b)(3)(7)	Local	50%	\$350,000	\$6,420	\$23,983	0\$	\$53,964	\$11,658	0\$	0\$	\$16,250	0\$	0\$	Totals \$462,275 \$1,849,095
		Receiving Agency		LPA	Carrboro	Chapel Hill/CHT	Chatham County	Durham/DATA	Durham County	Hillsborough	Orange County	TJCOG	GoTriangle	NCDOT	Totals

MPO Wide - Detail Funding Tables - All Funding Sources

	13 ° L	S S	STBGP	Sec. 104(f))4(f)	S :	Section 5303			Section 5307	Ì		Task Func	Task Funding Summary	
	Description	Local	FHWA	Local	. "	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
		20%	%08	20%	%08	10%	10%	%08	20%	0	%08				
	Surveillance of Change														
	Traffic Volume Counts	20,813	83,251	1,000	4,000	0	0 0	0 0	0 0	0	0			87,251	109,064
7 0	Venicle Miles of Travel	800	3,200	400	1,600	0 0	0 0	0	0 0	0 0	0 0			4,800	6,000
γ ·	Street system changes	1,100	l	1,120	4,480	0 0	0 0	0 (0 0	0 0	0 0			8,880	11,100
4 7	Trancit System Data	7,70	10,104	1 200	4,320	0 8 9/6	0 8 9.46	71 568	11 084	0 0	988 77	73 830	- 8 946	131 104	163 880
	Dwolling Hait Don 9. Emp Change	2,000	22,000	1,200	4,800	0+66	046,0	, 1,300	17,004	0	055,4		0,540	131,104	65 100
2 Z	Dwelling Ollie, 1 Op. & Chip. Change Air Travel	6,000	24,000	100	400	0 0	0	0 0	0	o	C	6.100		24.400	30.500
8	Vehicle Occupancy Bates	0	0	C	0	0	0	0	0	0	0	-		-	-
	Travel Time Studies	14.260	57.040	1.800	7,200	0	C	C	C	C	C	16.060		64.240	80.300
10 N	Mapping	18,219	72,874	4,800	19,200	3,410	3,410	27,280	0	0	0	26,429	3,410	119,354	149,193
11 C	Central Area Parking Inventory	2,649	10,597	400	1,600	0	0	0	0	0	0			12,197	15.246
	Bike & Ped. Facilities Inventory	2,124	8,495	1,000	4,000	1,052	1,052	8,416	0	0	0		1,052	20,911	26,139
	Bike & Ped. Counts	13,053	52,211	1,000	4,000	856	856	6,848	0	0	0	`	856	63,059	78,824
II-B	Long Range Transp. Plan (MTP)														
1	Collection of Base Year Data	6,540	26,160	0	0	0	0	0	0	0	0	6,540		26,160	32,700
2 C	Collection of Network Data	3,900	15,600	800	3,200	0	0	0	0	0	0	4,700		18,800	23,500
	Travel Model Updates	72,080	288,320	4,072	16,288	0	0	0	0	0	0	76,152		304,608	380,760
4 Tr	Travel Surveys	8,800	<u>. </u>	3,060	12,240	0	0	0	0	0	0	11,860		47,440	59,300
5 Fc	Forecast of Data to Horizon year	2,526	<u> </u>	240	096	0	0	0	0	0	0	2,766		11,064	13,830
9	Community Goals & Objectives	200	<u> </u>	1,330	5,320	0	0	0	0	0	0	1,530	-	6,120	7,650
7 F.	Forecast of Futurel Travel Patterns	1,920	7,680	1,100	4,400	0	0	0	0	0	0	3,020		12,080	15,100
∞	Capacity Deficiency Analysis	5,360	21,440	2,400	009'6	0	0	0	0	0	0	7,760		31,040	38,800
H 6	Highway Element of th MTP	8,029	32,116	3,800	15,200	0	0	0	0	0	0	11,829		47,316	59,145
10 Tr	Transit Element of the MTP	15,091	60,365	3,800	15,200	1,278	1,278	10,224	1,016	0	4,064	21,185	1,278	89,853	112,316
11 Bi	Bicycle & Ped. Element of the MTP	39,198	156,793	2,878	11,512	0	0	0	0	0	0	42,076	-	168,305	210,381
12 A	Airport/Air Travel Element of MTP	1,120	4,480	200	800	0	0	0	0	0	0	1,320		5,280	6,600
13 C	Collector Street Element of MTP	1,914	7,656	009	2,400	0	0	0	0	0	0	2,514		10,056	12,570
14 R	Rail, Water or other mode of MTP	7,420	29,680	0	0	0	0	0	0	0	0	7,420		29,680	37,100
15 Fr	Freight Movement/Mobility Planning	3,540	14,160	200	800	0	0	0	0	0	0	3,740		14,960	18,700
16 Fi	Financial Planning	2,206	8,822	480	1,920	979	979	7,832	19,668	0	78,672	23,333	979	97,246	121,558
17 C	Congestion Management Strategies	19,411	77,643	1,139	4,555	820	820	6,560	0	0	0	21,370	820	88,758	110,948
18	Air Qual. Planning/Conformity Anal.	1,360	5,440	1,600	6,400	0	0	0	0	0	0	2,960		11,840	14,800
בי א	Short Range Transit Planning	999	2 640	c	c	3 400	3 400	07076	21 124	0	901 18	75,27	3 490	115 056	1/12 820
F A-III	Planning Work Program	8	2,040			OC+'C	OC+'C	026,12	477,17		064'45	£17,C2	00+00	000,011	143,620
	Planning Work Program	8,784	35,134	4,006	16,024	760	760	6,080	0	0	0	13,550	260	57,238	71,548
III-B T	Transp. Improvement Plan			+										,	
	ПР	20,178	80,713	5,661	22,645	3,102	3,102	24,816	2,036	0	8,144	30,977	3,102	136,318	170,397
ن اااد	Cvl Rgts. Cmp./Otr .Reg. Reqs.														
	Title VI	2,654	10,616	1,000	4,000	326	326	2,608	736	0	2,944	4,716	326	20,168	25,210
2 Er	Environmental Justice	5,980	23,920	1,640	6,560	0 0	0 0	0 0	0 0	0 0	0 0	7,620		30,480	38,100
y 4	Planning for the Elderly & Disabled	1.840	7.360	400	1,600	240	240	1.920	0	0	0	2,780	240	10.880	13.600
5 5	Safety/Drug Control Planning	5,340	21,360	1,600	6,400	0	0	0	0	0	0	6,940		27,760	34,700
9 P	6 Public Involvement	29,506	118,025	3,769	15,077	814	814	6,512	1,972	0	7,888	(1)	814	147,502	184,377
7 Pı	Private Sector Participation	0	0	0	0	0	0	0	0	0	0	-	-	-	
		0	0	0	0	0	0	0	0	0	0				
<u>п</u>	Incidental Plng./Project Dev.														
	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0				
	Enviro. Analysis & Pre-TIP Plng.	10,361	41,444	2,600	10,400	236	236	1,888	0 0	0	0	13,197	236	53,732	67,165
20 0	Special Studies	12,313	49,254	4,600	18,400	820	870	0,560	0 0	0 0	0 0	17,733	1,040	120,040	92,767
III-F 4	Management & Operations	24,552	675'/6	ona's	14,400	T,U40	1,040	0,320	0	0	0	7/6'97	T,040	120,049	TON'OCT
1	1 Management & Operations	42,917	171,669	12,400	49,600	6,831	6,831	54,648	4,328	0	17,312	66,476	6,831	293,229	366,536
	Totals	Š	\$1,849,095	\$88,275	\$353,101	\$35,000	\$35,000	\$280,000	\$61,964	0\$	\$247,856	\$647,513	\$35,000	\$2,730,052	\$3,412,565

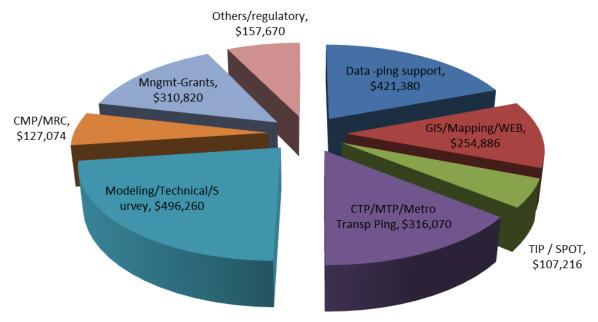
LPA

			ST	BGP	Sec. 1	04(f)	5	Section 530	13	5	Section 530	7		Task Fund	ling Summary	1
	Task			0)(3)(7)	P			ghway/Tra			Transit			N/OT OT		
		Description	Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
II .	4	Surveillance of Change	2070	0070	2070	0070	1070	1070	0070	10,0	1070	0070				
Ħ	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
П	_	Street System Changes	\$1,000	\$4,000	\$1,120	\$4,480	\$0					\$0	\$2,120	\$0	\$8,480	\$10,600
Ш	_	Traffic Crashes	\$4,776	\$19,104	\$1,080	\$4,320	\$0					\$0	\$5,856	\$0	\$23,424	\$29,280
Ш		Transit System Data	\$2,600	\$10,400	\$1,200	\$4,800	\$0					\$0	\$3,800	\$0	\$15,200	\$19,000
\Vdash		Dwelling Unit, Pop. & Emp. Change	\$7,700	\$30,800	\$5,000	\$20,000	\$0	\$0				\$0	\$12,700	\$0	\$50,800	\$63,500
Н	_	Air Travel	\$6,000	\$24,000	\$100	\$400	\$0					\$0	\$6,100	\$0	\$24,400	\$30,500
\mathbb{H}		Vehicle Occupancy Rates	\$0	\$0 \$57,040	\$0 \$1,800	\$0	\$0 \$0					\$0 \$0	\$0 \$16,060	\$0 \$0	\$0 \$64,240	\$0 \$80,300
H		Travel Time Studies Mapping	\$14,260 \$15,000	\$60,000	\$4,800	\$7,200 \$19,200	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$19,800	\$0	\$79,200	\$99,000
H		Central Area Parking Inventory	\$1,800	\$7,200	\$400	\$1,600	\$0	\$0		\$0		\$0	\$2,200	\$0	\$8,800	\$11,000
H		Bike & Ped. Facilities Inventory	\$400	\$1,600	\$1,000	\$4,000	\$0	\$0				\$0	\$1,400	\$0	\$5,600	\$7,000
H		Bike & Ped. Counts	\$11,640	\$46,560	\$1,000	\$4,000	\$0					\$0	\$12,640	\$0	\$50,560	\$63,200
			\$0	\$0	\$0	\$0										
II I	В	Long Range Transp. Plan (MTP)	\$0	\$0	\$0	\$0										
Ш	1	Collection of Base Year Data	\$6,540	\$26,160	\$0	\$0	\$0					\$0	\$6,540	\$0	\$26,160	\$32,700
Ш	2	Collection of Network Data	\$3,900	\$15,600	\$800	\$3,200	\$0	\$0				\$0	\$4,700	\$0	\$18,800	\$23,500
\mathbb{H}	3	Travel Model Updates	\$72,080	\$288,320	\$4,072	\$16,288	\$0					\$0	\$76,152	\$0	\$304,608	\$380,760
Н		Travel Surveys	\$8,800	\$35,200	\$3,060	\$12,240	\$0					\$0	\$11,860	\$0	\$47,440	\$59,300
\mathbb{H}		Forecast of Data to Horizon year Community Goals & Objectives	\$526 \$200	\$2,104 \$800	\$240 \$1,330	\$960 \$5,320	\$0 \$0					\$0 \$0	\$766 \$1,530	\$0 \$0	\$3,064 \$6,120	\$3,830 \$7,650
H		Forecast of Futurel Travel Patterns	\$1,920	\$7,680	\$1,330	\$4,400	\$0 \$0					\$0 \$0	\$3,020	\$0	\$12,080	\$15,100
H		Capacity Deficiency Analysis	\$5,360	\$21,440	\$2,400	\$9,600	\$0					\$0	\$7,760	\$0	\$31,040	\$38,800
H		Highway Element of th MTP	\$3,112	\$12,448	\$3,800	\$15,200	\$0	\$0				\$0	\$6,912	\$0	\$27,648	\$34,560
H		Transit Element of the MTP	\$10,134	\$40,536	\$3,800	\$15,200	\$0	\$0				\$0	\$13,934	\$0	\$55,736	\$69,670
H	11	Bicycle & Ped. Element of the MTP	\$7,200	\$28,800	\$2,878	\$11,512	\$0					\$0	\$10,078	\$0	\$40,312	\$50,390
П	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	\$2,394	\$0	\$9,576	\$11,970
Ш	_	Rail, Water or other mode of MTP	\$7,320	\$29,280	\$0	\$0	\$0					\$0	\$7,320	\$0	\$29,280	\$36,600
Ш		Freight Movement/Mobility Planning	\$3,540	\$14,160	\$200	\$800	\$0					\$0	\$3,740	\$0	\$14,960	\$18,700
Н		Financial Planning	\$1,000	\$4,000	\$480	\$1,920	\$0	\$0				\$0	\$1,480	\$0	\$5,920	\$7,400
\mathbb{H}	_	Congestion Management Strategies	\$17,336	\$69,344	\$1,139 \$1,600	\$4,555 \$6,400	\$0 \$0	\$0 \$0				\$0 \$0	\$18,475	\$0 \$0	\$73,899 \$11.840	\$92,374 \$14,800
Ш	18	Air Qual. Planning/Conformity Anal.	\$1,360 \$0	\$5,440 \$0	\$1,000	\$6,400 \$0		30	\$0	30	\$0	\$0	\$2,960	30	\$11,840	\$14,800
п	r	Short Range Transit Planning	\$0	\$0	\$0	\$0										
Ĥ	1	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		onore runge Trunse Trunsing	\$0	\$0	\$0	\$0	ΨΟ	ΨΟ	ΨΟ	Ψ0	Ψυ	Ψ0	Ψ	Ψ0	ΨΟ	ΨΟ
Ш	-A	Planning Work Program	\$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										
III	-B	Transp. Improvement Plan	\$0	\$0	\$0	\$0										
1		TIP	\$9,712	\$38,848	\$5,661	\$22,645		\$0	\$0	\$0	\$0	\$0	\$15,373	\$0	\$61,493	\$76,866
***	C	Cal Bata Cam (Ot - B - B -	\$0	\$0	\$0	\$0 \$0										
14	-C	Cvl Rgts. Cmp./Otr .Reg. Reqs. Title VI	\$0 \$2,654	\$0 \$10,616	\$0 \$1,000	\$0 \$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,654	\$0	\$14,616	¢10 270
\mathbb{H}	2	Environmental Justice	\$2,654	\$10,616	\$1,000	\$4,000 \$6,560	\$0 \$0	\$0 \$0		\$0 \$0		\$0 \$0	\$3,654	\$0 \$0	\$14,616	\$18,270 \$37,700
\mathbb{H}		Minority Business Enterprise	\$2,380	\$9,520	\$400	\$1,600	\$0 \$0					\$0	\$2,780	\$0	\$11,120	\$13,900
H	_	Planning for the Elderly & Disabled	\$1,760	\$7,040	\$400	\$1,600	\$0					\$0	\$2,760	\$0	\$8,640	\$10,800
H		Safety/Drug Control Planning	\$5,340	\$21,360	\$1,600	\$6,400						\$0			\$27,760	\$34,700
H	6	Public Involvement	\$27,408	\$109,632	\$3,769	\$15,077	\$0					\$0	\$31,177	\$0	\$124,709	\$155,886
П		Private Sector Participation	\$0	\$0	\$0	\$0	\$0					\$0		\$0		\$0
F			\$0	\$0	\$0	\$0										
Ш	-D	Incidental Plng./Project Dev.	\$0	\$0	\$0	\$0										
H	1	Transportation Enhancement Plng.	\$0	\$0	\$0	\$0							\$0	\$0		\$0
\mathbb{H}		Enviro. Analysis & Pre-TIP Plng.	\$3,470	\$13,880	\$2,600	\$10,400							\$6,070	\$0		\$30,350
\mathbb{H}		Special Studies	\$2,800	\$11,200	\$4,600 \$3,600	\$18,400						\$0 \$0	\$7,400	\$0	\$29,600	\$37,000
\mathbb{H}	4	Regional or Statewide Planning	\$4,400 \$0	\$17,600 \$0	\$3,600	\$14,400 \$0		\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$32,000	\$40,000
III	-E	Management & Operations	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0										
F		Management & Operations	\$39,800	\$159,200	\$12,400	\$49,600	\$0	\$0	\$0	\$0	\$0	\$0	\$52,200	\$0	\$208,800	\$261,000
H	1 1	Totals	\$350,000		\$88,275	\$353,101	\$0 \$0					\$0		\$0		
۳		10000		. ,,	,,=.0	, ,	+0		70	70	+0	70		40	. ,,-31	. , , , -,-,-

Summary of LPA Tasks and Funding by Broad Categories

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/Metropolitan Transportation Planning	\$316,070	14								
Modeling/Technical/Survey	\$496,260	23								
CMP/MRC	\$127,074	6								
Management-Grants	\$310,820	14								
Other/Regulatory	\$157,670	7								
Total	\$2,191,376	100								

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

Mike Bruff -Modeling/Technical

Technical support

Service Bureau

Demographic/behavioral

Staff support to the TRM

Modeling

Lead Modeling

Land use modeling

Air Quality Analysis

Performance Measures

KoSok Chae, CMP

Data monitoring Surveillance of change

Planning/Operations

Coordination (DynSmart)

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

Andy Henry - MTP/CTP

Involvement

Dale Mckeel – Bicycle & Pedestrian Planning & Programming

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

Brian Rhodes - Technician, Graphic & GIS

Support

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

Minutes preparation

Board/TC meeting support

Aaron Cain - MPO Board/TC

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

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 biannual 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), socioeconomic 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 geographicallybased 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 Community Viz. 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 landuse 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 metrics, graphics and reports. The MPO will continue to 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, 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

Currently, the DCHC MPO is designated as attainment for the National Ambient Air Quality Standards (NAAQS). On February 16, 2018, there was a decision from the D.C. Circuit Court in the South Coast Air Quality Management District v. EPA. Per the Circuit Court decision, The Raleigh-Durham-Chapel Hill area is considered an orphan maintenance area and based on the EPA guidance of November 2018, the area will need to demonstrate transportation conformity for transportation plans and TIPs for the 1997 ozone NAAQS. This conformity can be demonstrated without a regional emissions analysis (REA) pursuant to 40 CFR 93.109(c). Though not required, the Triangle region air quality partners have decided to continue to implement activities including an air quality regional analysis on its MTP and TIP. NCDOT and TJCOG will assist the MPOs in performing this REA on MTP projects.

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.

<u>Task III-B: Transportation Improvement Program (TIP)</u>

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.

	DCH		d Planning Work Prog June 30, 2024	gram		
	1	2	3	4	5	
FY	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	
Period	2019-20	2020-21	2021-22	2022-23	2023-24	
	July 1, 2019-June 30, 2020	July 1, 2020-June 30, 2021	July 1, 2021-June 30, 2022	July 1, 2022-June 30, 2023	July 1, 2023-June 30, 2024	
1	Surveillance of Change/	Surveillance of Change/	Surveillance of Change/	Surveillance of Change/	Surveillance of Change/	
-	Data monitoring	Data monitoring	Data monitoring	Data monitoring	Data monitoring	
	ADT count and TMC annual	ADT count and TMC annual	ADT count and TMC annual	ADT count and TMC annual	ADT count and TMC annual	
1.1	and seasonal, including update	and seasonal, including update				
	of count database system	of count database system	of count database system	of count database system	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	
1,2	Street System Changes update.	Street System Changes update.	Street System Changes update.	Street System Changes update.	Street System Changes update.	
1.3	Update of INRIX/HERE Street	Update of INRIX/HERE Street		Update of INRIX/HERE Street	Update of INRIX/HERE Street	
	layer	layer	layer	layer	layer	
	Traffic accidents data/ multi-	Traffic accidents data/ multi-	Traffic accidents data/ multi-	Traffic accidents data/ multi-	Traffic accidents data/ multi-	
1.4	modal safety data update and	modal safety data update and	modal safety data update and	modal safety data update and	modal safety data update and	
	analyses	analyses	analyses	analyses	analyses	
1.5	Transit system data/Continual	Transit system data/Continual	Transit system data/Continual	Transit system data/Continual	Transit system data/Continual	
	update of APC data Housing, POP, Emp.	update of APC data Housing, POP, Emp.	update of APC data Housing, POP, Emp.	update of APC data Housing, POP, Emp.	update of APC data Housing, POP, Emp.	
	Data, including development	Data,including development	Data,including development	Data,including development	Data,including development	
1.6	review/permits, CO, Census,	review/permits, CO, Census,	review/permits, CO, Census,	review/permits, CO, Census,	review/permits, CO, Census,	
1.0	INFOUSA (employment &	INFOUSA (employment &	INFOUSA (employment &	INFOUSA (employment &	INFOUSA (employment &	
	household data), etc	household data), etc	household data), etc	household data), etc	household data), etc	
	Air travel. Continual	Air travel. Continual	Air travel. Continual	Air travel. Continual	Air travel. Continual	
1.7	monitoring of RDU passenger	monitoring of RDU passenger	monitoring of RDU passenger	monitoring of RDU passenger	monitoring of RDU passenger	
1./	activities and ground	activities and ground	activities and ground	activities and ground	activities and ground	
	transportation	transportation	transportation	transportation	transportation	
1.8	VOC	VOC	VOC	VOC	VOC	
	Travel Time, including	Travel Time, including	Travel Time, including	Travel Time, including	Travel Time, including	
1.0	continual gathering and update of INRIX, HERE and Travel	of INRIX, HERE and Travel	continual gathering and update of INRIX, HERE and Travel	continual gathering and update of INRIX, HERE and Travel	continual gathering and update of INRIX, HERE and Travel	
1.9	Time database monitoring	Time database monitoring	Time database monitoring	Time database monitoring	Time database monitoring	
	system.	system.	system.	system.	system.	
	Mapping and	Mapping and	Mapping and	Mapping and	Mapping and	
	update/enhancement and	update/enhancement and	update/enhancement and	update/enhancement and	update/enhancement and	
1.10	maintenance of the MPO Geo-	maintenance of the MPO Geo-	maintenance of the MPO Geo-	maintenance of the MPO Geo-	maintenance of the MPO Geo-	
	spatial databse and GIS	spatial databse and GIS	spatial databse and GIS	spatial databse and GIS	spatial databse and GIS	
	enterprise	enterprise	enterprise	enterprise	enterprise	
1.11	Parking inventory Bike/Pedestrian. Facilities Inv	Parking inventory Bike/Pedestrian. Facilities Inv	Parking inventory Bike/Pedestrian. Facilities Inv	Parking inventory Bike/Pedestrian. Facilities Inv	Parking inventory Bike/Pedestrian. Facilities Inv	
1.12	Bike/Pedestrian. Facilities	Bike/Pedestrian. Facilities	Bike/Pedestrian. Facilities	Bike/Pedestrian. Facilities	Bike/Pedestrian. Facilities	
1.13	Counts	Counts	Counts	Counts	Counts	
	Unified Planning Work	Unified Planning Work	Unified Planning Work	Unified Planning Work	Unified Planning Work	
2	Program (UPWP)	Program (UPWP)	Program (UPWP)	Program (UPWP)	Program (UPWP)	
2.1	Process UPWP amendments	Process UPWP amendments				
2.1	as necessary	as necessary	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary	
2.2	• •	* *	Process quarterly invoices and	* *	* *	
	reports	reports	reports	reports	reports	
2.2	Prepare annual UPWP	Prepare annual UPWP	Prepare annual UPWP	Prepare annual UPWP	Prepare annual UPWP	
2.3	progress report and performance evaluation	progress report and performance evaluation	progress report and performance evaluation	progress report and performance evaluation	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	
	UPWP financial management	UPWP financial management	UPWP financial management	UPWP financial management	UPWP financial management	
2.5	and administration	and administration	and administration	and administration	and administration	
	Grant monitoring, oversight	Grant monitoring, oversight	Grant monitoring, oversight	Grant monitoring, oversight	Grant monitoring, oversight	
	and audit	and audit	and audit	and audit	and audit	
	Perform annual self-	Perform annual self-	Perform annual self-	Perform annual self-	Perform annual self-	
2.6	certification & On-Going	certification & On-Going	certification & On-Going	certification & On-Going	certification & On-Going	
	Process-Development LPA Local match Cost	Process-Development LPA Local match Cost	Process-Development LPA Local match Cost	Process-Development LPA Local match Cost	Process-Development LPA Local match Cost	
2.7	Sharing, including preparation	Sharing, including preparation	Sharing, including preparation	Sharing, including preparation	Sharing, including preparation	
2.7	of annual report.	of annual report.	of annual report.	of annual report.	of annual report.	
	Management and Operations	Management and Operations	Management and Operations	Management and Operations	Management and Operations	
2.8	of the 3-C Process.	of the 3-C Process.	of the 3-C Process.	of the 3-C Process.	of the 3-C Process.	
	Metropolitan	Metropolitan	Metropolitan	Metropolitan	Metropolitan	
	Transportation Plan	Transportation Plan	Transportation Plan	Transportation Plan	Transportation Plan	
3	(MTP)/Long-Range	(MTP)/Long-Range	(MTP)/Long-Range	(MTP)/Long-Range	(MTP)/Long-Range	
	Transportation	Transportation	Transportation	Transportation	Transportation	
	Planning/CTP	Planning/CTP	Planning/CTP	Planning/CTP	Planning/CTP	

	DCH		d Planning Work Prog	gram	
		July 1, 2019 to	June 30, 2024		
	1	2	3	4	5
FY	FY 2020 2019-20	FY 2021	FY 2022 2021-22	FY 2023	FY 2024
Period	July 1, 2019-June 30, 2020	2020-21 July 1, 2020-June 30, 2021	July 1, 2021-June 30, 2022	2022-23 July 1, 2022-June 30, 2023	2023-24 July 1, 2023-June 30, 2024
	July 1, 2019-Julie 30, 2020	Amendment of CTP and 2045	July 1, 2021-Julie 30, 2022	Amendment of CTP and 2045	July 1, 2023-Julie 30, 2024
	Adoption of the 2050 MTP	MTP as necessary or required.	Amendment of the 2045 MTP	MTP as necessary or required.	
3.1	development process and	Re-adoption of the CTP if	for AQ analysis and	Re-adoption of the CTP if	2050 MTP environmental
	schedule	need be.	conformity as necessary	need be.	analysis and considertaion
			Framework for incorporating		, , , , , , , , , , , , , , , , , , , ,
2.2	Refinement of SE forecast to		technolog and autonomus /	Work associated with Goals,	
3.2	Horizon and intermediate	Integration of resiliency	connecte vehiclles into the	Objectives and targets for	Model and technical analyses
	years.	planning.	2050 MTP	2050 MTP commences.	for the 2050 MTP
	Model Update and	CTP continual update and		Deficiency analysis and needs	
3.3	improvements for 2050 MTP	consistency and integration	Update of base year networks	assessment for 2050 MTP	Continue work on GIS and
	development commences	with CMP and SPOT	and their attributes	comtinue	mapping for MTP base maps
		Base year SE data collection, tabulation and analysis			
3.4		underway; and networks and	Update of modeling and	Public outreach for deficiency	
3.4	Inter-Agency Consultation	attributes development	technical tools for 2050 MTP	analysis, existing conditiond	Selection of Preferrred MTP
	process	continues	analyses.	snd need assessment	Option.
	r	Update methodology for			r
2.5		analyzing and assessing equity			
3.5	CTP continual update and	and health impacts on 2050	Continue work on GIS and	Generation of alternatives for	AQ analysis and conformity
	amendemnt as necessary.	MTP	mapping for MTP base maps	2050 MTP	determination process
		Adoption of the 2050 MTP			
3.6	2050 MTP Visioning process	development process and	Continue work on GIS and	Evaluation and analysis of	Inter-Agency Consultation
	and coordination kick-off	schedule	mapping for MTP base maps	alternatives	process
		Develop 2050 MTP Public Outreach and input process,			
3.7		including involvement and		Public outreach and input on	
3.1	Goals, Objectives and targets	input from MPO member	Base year SE data collection	the draft preferred plans	Public outreach and
	for 2045 MTP	agencies.	and analysis for 2050 MTP	(options).	involvement of the 2050 MTP.
	Work commences on MPO		·	` * ′	
	wide Community visioning.		Comm Viz Scenario planning		
		Update Title 6, EJ and LEP for	and selction of the preferrred	CTP continual update and	Adoption of 2050 MTP and
	Objectives development	2050 MTP	scenario	amendemnt as necessary.	AQ comformity report
			Socio-economic and demographic forecasts for		Initiation of 2055 MTP
	Dvelopment of networks and	2050 Goals, Objectives and	2050 MTP, including 2030	Incorporation of freight,	development and update
	update of base maps	Performance Measures	and 2040 intermediate years	airport, safety, EJ, etc.	process
	or continue	Initiate Community Viz 3.0			Freezes
	Existing conditiond analysis	model update and land-us	Existing conditions and	Amendment of the 2045 MTP	Amendment of the 2045 MTP
	commences	scenario building.	deficiency analyses continue	as necessary	as necessary
	Deficiency analysis	Public outreach and	Assessment of Need for the		
	commences	involvement for thr 2050 MTP	2050 MTP	Travel Demand Model	T 10 1M 11
4	Travel Demand Model Development and Update	Travel Demand Model Development and Update	Travel Demand Model Development and Update	Development and Update	Travel Demand Model Development and Update
	On-going model maintenance	On-going model maintenance	On-going model maintenance	On-going model maintenance	On-going model maintenance
4.1	and enhancement activities	and enhancement activities	and enhancement activities	and enhancement activities	and enhancement activities
	Collection of annual				
	continuous household and			Develop TRMv7: incorporate	
4.2	transit on board survey.	Support MPO 2045 MTP and	Develop TRMv7: continue	existing model components for	Develop TRMv7: complete
	Coordination of estimation	air quality conformity model	estimating models for tour	commercial vehicles &	model calibration and
	year data collection	applications	mode choice	external models	validation
	Commentate 1 d				
	Survey tabulation and analyses				Davidon TDM:/7: da1
4.3	winter/spring 2020. Analysis and tabulation of estimation			Davalan TPMv7: initial model	Develop TRMv7: develop
	year data (traffic counts, SE	Collection of network data and	Develon TRMv7· model	Develop TRMv7: initial model calibration and validation	application tools for plan evaluation & air quality
	data, PASA parking)	development of networks	applications completed	begins	analysis
	, <u> </u>				
4.4	* *				
	forecasts.	application	mode choice		2020 census TAZ delineation
		Develop TRMv7: begin			
		developing/adapting			
4.5	Maintain/enhance TRMv6.x:	application programs for			
	develop improved parking				
	model	activity scheduler/router			
4.4	Support MPO 2045 MTP model application and demand forecasts. Maintain/enhance TRMv6.x: develop improved parking	Maintain/enhance TRMv6: develop addional tools for application Develop TRMv7: begin developing/adapting	Develop TRMv7: continue estimating models for tour		,

	DCHC MPO 5-Year Unified Planning Work Program July 1, 2019 to June 30, 2024												
		July 1, 2019 to	· · · · · · · · · · · · · · · · · · ·	1 4									
F387	1 FY 2020	2 EX 2021	3 FY 2022	4 FY 2023	5 FY 2024								
FY	2019-20	FY 2021 2020-21	F Y 2022 2021-22	2022-23	F Y 2024 2023-24								
Period	July 1, 2019-June 30, 2020	July 1, 2020-June 30, 2021	July 1, 2021-June 30, 2022	July 1, 2022-June 30, 2023	July 1, 2023-June 30, 2024								
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	July 1, 2021-June 30, 2022	July 1, 2022-Julie 30, 2023	July 1, 2023-Julie 30, 2024								
	Develop TRMv7: begin preparing data for estimation Develop TRMv7: available data will be entered in selected data structure												
4.7													
5	Bicycle & Pedestrian Planning	Bicycle & Pedestrian Planning	Bicycle & Pedestrian Planning	Bicycle & Pedestrian Planning	Bicycle & Pedestrian Planning								
5.1	On-going bike and pedestrian	On-going bike and pedestrian	On-going bike and pedestrian	On-going bike and pedestrian	On-going bike and pedestrian								
3.1	advocacy	advocacy	advocacy	advocacy	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								
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	Short-Range Transit Plan	Short-Range Transit Plan	Short-Range Transit Plan	Short-Range Transit Plan	Short-Range Transit Plan								
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	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)								
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	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 incluence and congestion networks. Application & reevaluation of definition of congestion		Update of area of incluence 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	S	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	TIP	TIP	TIP	TIP	TIP								
	Develop 2020-2029 MTIP		Develop 2022-2031 MTIP		Develop 2024-2033 MTIP								
	including public input and comment process	Submit SPOT 6 Division Needs points assignment	including public input and comment process	Submit SPOT 7 Division Needs points assignment	including public input and comment process								

	DCH	C MPO 5-Year Unifie	d Planning Work Prog	gram			
		July 1, 2019 to	June 30, 2024				
	1	2	3	4	5		
FY	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
Period	2019-20	2020-21	2021-22	2022-23	2023-24		
	July 1, 2019-June 30, 2020	July 1, 2020-June 30, 2021	July 1, 2021-June 30, 2022	July 1, 2022-June 30, 2023	July 1, 2023-June 30, 2024		
	D SDOT ((2022 2021)	0	D SPOT 7 (2024 2022)	0	D: CDOT 8 (2026 2025)		
	Review SPOT 6 (2022-2031) project submissions and	One-on-one discussion between the MPO and	Review SPOT 7 (2024-2033) project submissions and	One-on-one discussion between the MPO and	Review SPOT 8 (2026-2035 project submissions and		
	project submissions and prepare comparative analysis	NCDOT	project submissions and prepare comparative analysis	NCDOT	project submissions and prepare comparative analysis		
	Develop & submit TIP Project	Nebol	Develop & submit TIP Project	Nebol	Develop & submit TIP Project		
	Priority List for SPOT 6 (2022-		Priority List for SPOT 7 (2024-		Priority List for SPOT 8 (2024-		
	2031 TIP)	Adopt 2022-2031 STIP	2033 TIP)	Adopt 2024-2033 STIP	2033 TIP)		
	Update TIP ranking & project	•	Update TIP ranking & project	•	Update TIP ranking & project		
	prioritization methodology as		prioritization methodology as		prioritization methodology as		
	necessary		necessary		necessary		
	Submit SPOT 6 Regional		Submit SPOT 7 Regional		Submit SPOT 8 Regional		
	Impact points assignment		Impact points assignment		Impact points assignment		
9	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ		
		Continuous update of Title VI	Continuous update of Title VI		Continuous update of Title VI		
	C C C T C C C C C C C C C C C C C C C C	programs, including	programs, including	II I CIDI IIED	programs, including		
	Continuous update of Title VI	Assurance Certification, EJ	Assurance Certification, EJ and LEP. Evaluate	Update EJ Plan and LEP	Assurance Certification, EJ and LEP. Evaluate		
	programs, including Assurance Certification, EJ	and LEP. Evaluate effectiveness of programs and	effectiveness of programs and	program, and evaluate effectiveness of program and	effectiveness of programs and		
	and LEP	outreach efforts	outreach efforts	outreach efforts	outreach efforts		
	Update EJ and LEP outreach	Update EJ and LEP outreach	Update EJ and LEP outreach	Update EJ and LEP outreach	Update EJ and LEP outreach		
	mailing list	mailing list	mailing list	mailing list	mailing list		
	Administer and monitor MPO	Administer and monitor MPO	Administer and monitor MPO	Administer and monitor MPO	Administer and monitor MPO		
	EJ/LEP program	EJ/LEP program	EJ/LEP program	EJ/LEP program	EJ/LEP program		
	Evaluate and Perform EJ	Evaluate and Perform EJ	Evaluate and Perform EJ	Evaluate and Perform EJ	Evaluate and Perform EJ		
	analysis, impacts as needed	analysis, impacts as needed	analysis, impacts as needed	analysis, impacts as needed	analysis, impacts as needed		
	Update EL/LEP demographic	Update EL/LEP demographic	Update EL/LEP demographic	Update EL/LEP demographic	Update EL/LEP demographic		
	profile and database	profile and database	profile and database	profile and database	profile and database		
4.0	Public	Public	Public	Public	Public		
10	Involvement/Participation Plan (PIP/PPP)	Involvement/Participation Plan (PIP/PPP)	Involvement/Participation Plan (PIP/PPP)	Involvement/Participation Plan (PIP/PPP)	Involvement/Participation Plan (PIP/PPP)		
	Review and evaluate	Review and evaluate	Review and evaluate	Review and evaluate	Review and evaluate		
	effectiveness of MPO Public	effectiveness of MPO Public	effectiveness of MPO Public	effectiveness of MPO Public	effectiveness of MPO Public		
	Involvement Process	Involvement Process	Involvement Process	Involvement Process	Involvement Process		
	Social media in MPO public	Social media in MPO public	Social media in MPO public	Social media in MPO public	Social media in MPO public		
	outreach and input process	outreach and input process	outreach and input process	outreach and input process	outreach and input process		
	On-going MPO website	On-going MPO website	On-going MPO website	On-going MPO website	On-going MPO website		
	update and content	update and content	update and content	update and content	update and content		
	management	management	management	management	management		
11	Project Development &	Project Development &	Project Development &	Project Development &	Project Development &		
11	Incidental Planning	Incidental Planning	Incidental Planning	Incidental Planning	Incidental Planning		
	Participation in project	Participation in project	Participation in project	Participation in project	Participation in project		
	development, environmental	development, environmental	development, environmental	development, environmental	development, environmental analysis, NEPA process and		
	analysis, NEPA process and	analysis, NEPA process and	analysis, NEPA process and studies	analysis, NEPA process and			
	studies Pre-TIP project planning and	studies Pre-TIP project planning and	Pre-TIP project planning and	studies Pre-TIP project planning and	studies Pre-TIP project planning and		
	coordination	coordination	coordination	coordination	coordination		
	Land-use & Transportation	Land-use & Transportation	Land-use & Transportation	Land-use & Transportation	Land-use & Transportation		
12	integration	integration	integration	integration	integration		
	Community Viz and UrbanSim	Community Viz and UrbanSim	Community Viz and UrbanSim	Community Viz and UrbanSim	Community Viz and UrbanSim		
	implementaion, maintenance	implementaion, maintenance	implementaion, maintenance	implementaion, maintenance	implementaion, maintenance		
	and update	and update	and update	and update	and update		
	Monitoring of land use	Monitoring of land use	Monitoring of land use	Monitoring of land use	Monitoring of land use		
	development and consistency	development and consistency	development and consistency	development and consistency	development and consistency		
	check with SE forecasts	check with SE forecasts	check with SE forecasts	check with SE forecasts	check with SE forecasts		
13	Intelligent Transportation	Intelligent Transportation	Intelligent Transportation	Intelligent Transportation	Intelligent Transportation		
	System Planning Turbo Architecture, IDAS and	System Planning Turbo Architecture, IDAS and	System Planning Turbo Architecture, IDAS and	System Planning Turbo Architecture, IDAS and	System Planning Turbo Architecture IDAS and		
	DynaSmart enhancement,	DynaSmart enhancement,	DynaSmart enhancement,	DynaSmart enhancement,	Turbo Architecture, IDAS and DynaSmart enhancement		
	update and maintenance	update and maintenance	update and maintenance	update and maintenance	DynaSmart enhancement, update and maintenance		
	ITS planning, operation and	ITS planning, operation and	ITS planning, operation and	ITS planning, operation and	ITS planning, operation and		
	monitoring	monitoring	monitoring	monitoring	monitoring		
14	Safety Planning	Safety Planning	Safety Planning	Safety Planning	Safety Planning		

	DCH	IC MPO 5-Year Unified	d Planning Work Prog	gram				
			June 30, 2024		_			
	1	2	3	4	5			
FY	FY 2020	FY 2021 2020-21	FY 2022 2021-22	FY 2023 2022-23	FY 2024 2023-24			
Period	2019-20 July 1, 2019-June 30, 2020	July 1, 2020-June 30, 2021	July 1, 2021-June 30, 2022	July 1, 2022-June 30, 2023	July 1, 2023-June 30, 2024			
	Safety data collection and	Safety data collection and	Safety data collection and	Safety data collection and	Safety data collection and			
	analysis, and coordination	analysis, and coordination	analysis, and coordination	analysis, and coordination	analysis, and coordination			
	with other agencies.	with other agencies.	with other agencies.	with other agencies.	with other agencies.			
	Development of the MPO	Update MPO Safety plan and	Update MPO Safety plan and	Update MPO Safety plan and	Update MPO Safety plan and			
14.1	Safety plan to reflect State	incorporate features of Vision	incorporate features of Vision	incorporate features of Vision	incorporate features of Vision			
14.1	Highway Safety initiatives	Plan.	Plan.	Plan.	Plan.			
	Ongoing integration of safety	Ongoing integration of safety	Ongoing integration of safety	Ongoing integration of safety	Ongoing integration of safety			
	in the MPO transportation	in the MPO transportation	in the MPO transportation	in the MPO transportation	in the MPO transportation			
	planning process	planning process	planning process	planning process	planning process			
15	Freight Planning	Freight Planning	Freight Planning	Freight Planning	Freight Planning			
13	1 reight 1 mining	1 Teight I minnig	11 Cight I mining	1 Teight Fianning	11 Cight I mining			
	Ongoing freight planning and	Ongoing freight planning and	Ongoing freight planning and	Ongoing freight planning and	Ongoing freight planning and			
	coordination	coordination	coordination	coordination	coordination			
	Outreach with freight and	Outreach with freight and	Outreach with freight and	Outreach with freight and	Outreach with freight and			
	logistic companies	logistic companies	logistic companies	logistic companies	logistic companies			
	Continuous update of truck	Continuous update of truck	Continuous update of truck	Continuous update of truck	Continuous update of truck			
	circulation maps	circulation maps	circulation maps	circulation maps	circulation maps			
	Transportation System	Transportation System	Transportation System	Transportation System	Transportation System			
16	Preservation	Preservation	Preservation	Preservation	Preservation			
	Transportation System	Transportation System	Transportation System	Transportation System	Transportation System			
	Preservation planning and	Preservation planning and	Preservation planning and	Preservation planning and	Preservation planning and			
	operation	operation	operation	operation	operation			
	TDM and TSM (ITS)	TDM and TSM (ITS)	TDM and TSM (ITS)	TDM and TSM (ITS)	TDM and TSM (ITS)			
	planning, programming,	planning, programming,	planning, programming,	planning, programming,	planning, programming,			
	implementation, monitoring	implementation, monitoring	implementation, monitoring	implementation, monitoring	implementation, monitoring			
	and evaluation	and evaluation	and evaluation	and evaluation	and evaluation			
17	GIS Development	GIS Development	GIS Development	GIS Development	GIS Development			
	Maintain Databases	Maintain Databases	Maintain Databases	Maintain Databases	Maintain Databases			
		Acquire and Maintain Data;	Acquire and Maintain Data;	Acquire and Maintain Data;	Acquire and Maintain Data;			
		maintain hardware and	maintain hardware and	maintain hardware and	maintain hardware and			
	Maintain Databases	software	software	software	software			
					Maintenance of MPO GIS and			
	data layers	data layers	data layers	data layers	data layers			
	Coordination with resource	Coordination with resource	Coordination with resource	Coordination with resource	Coordination with resource			
	agencies and linkages of	agencies and linkages of	agencies and linkages of	agencies and linkages of	agencies and linkages of			
	transportation data with	transportation data with	transportation data with	transportation data with	transportation data with			
	environmental data	environmental data	environmental data	environmental data	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.	Data development and update.	Data development and update.	Data development and update.	Data development and update.			
	Maintenance and update of spatial geodatabase	Maintenance and update of	Maintenance and update of spatial geodatabase	Maintenance and update of	Maintenance and update of			
	1 0	spatial geodatabase	1 0	spatial geodatabase	spatial geodatabase			
	applications and AGOL. Management and	applications and AGOL. Management and	applications and AGOL. Management and	applications and AGOL. Management and	applications and AGOL. Management and			
18	Operations	Operations	Operations	Operations	Operations			
	Management and Operations	Management and Operations	Management and Operations	Management and Operations	Management and Operations			
	of the MPO 3-C process	of the MPO 3-C process	of the MPO 3-C process	of the MPO 3-C process	of the MPO 3-C process			
	Board directives	Board directives	Board directives	Board directives	Board directives			
	Special Studies/State &	Special Studies/State &	Special Studies/State &	Special Studies/State &				
				Decial Studies/State &	Special Studies/State &			
19	Regional Planning	Regional Planning	Regional Planning	Regional Planning	Regional Planning			

Town of Carrboro

			STB	GP	Sec. 1	.04(f)	S	Section 53	03	S	ection 530	7		Task Fun	ding Summ	ary
		Task	133(b)	` / ` /	P			ghway/Tra			Transit					
		Description	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
Ļ		g	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
H		Surveillance of Change	¢500	¢2.000	60	¢o.	¢0	60	60	¢0	60	¢0	¢500	¢0	62.000	£2.500
₩		Traffic Volume Counts Vehicle Miles of Travel	\$500 \$0	\$2,000 \$0	\$0 \$0	L			4					\$0 \$0	\$2,000 \$0	\$2,500 \$0
Н		Street System Changes		\$400	\$0 \$0	\$0		\$0	/	20		\$0 \$0	\$100	\$0 \$0	\$400	
Н		Traffic Crashes	\$100 \$0	\$400 \$0	\$0 \$0	\$0	\$0 \$0	\$0	20	\$0 \$0	20	\$0 \$0	\$100	\$0 \$0	\$400 \$0	\$500 \$0
H		Transit System Data	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0	\$0 \$0	\$0	\$0
H		Dwelling Unit, Pop. & Emp. Change	\$120	\$480	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$120	\$0 \$0	\$480	\$600
H		Air Travel		\$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	90 02	\$0 \$0	\$120	\$0 \$0	\$0	\$000
H		Vehicle Occupancy Rates	\$0 \$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0 \$0			\$0 \$0	\$0	\$0	\$0	\$0
H	9	Travel Time Studies	\$0 \$0	\$0	\$0	\$0 \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0	\$0	\$0	\$0	\$0	\$0
H	10	Mapping Mapping	\$600	\$2,400	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$600	\$0	\$2,400	\$3,000
H		Central Area Parking Inventory	\$200	\$800	\$0	\$0			/				\$200	\$0	\$800	\$1,000
H		Bike & Ped. Facilities Inventory	\$240	\$960	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$240	\$0	\$960	\$1,200
Ħ	_	Bike & Ped. Counts	\$300	\$1,200	\$0	\$0	\$0	\$0					\$300	\$0	\$1,200	\$1,500
۳	-10	Diffe de l'ed. Counts	\$0	\$0	Ψ0	ΨΟ	Ψΰ	ΨΟ		40	Ψ0	Ψ0	Ψ500	Ψ0	φ1,200	Ψ1,500
I n	I-B	Long Range Transp. Plan (MTP)	\$0	\$0					 	 				İ		
ΙŤ		Collection of Base Year Data		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
卌	_	Collection of Network Data	\$0 \$0	\$0	\$0	\$0				\$0	\$0	\$0	\$0	\$0	\$0	\$0
m		Travel Model Updates	\$0	\$0	\$0	\$0 \$0	\$0 \$0 \$0	\$0 \$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
m	_	Travel Surveys	\$0		\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Ш	5	Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
П	_	Community Goals & Objectives		\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0			\$0	\$0	\$0
m		Forecast of Futurel Travel Patterns	\$0 \$0	\$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
П	8	Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0 \$0 \$0	\$0	\$0	\$0	\$0
П	9	Highway Element of th MTP	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0
П	10	Transit Element of the MTP	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$1,200	\$1,500
П		Bicycle & Ped. Element of the MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0	\$0	\$0	\$0
П	12	Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш	13	Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0
Ш	14	Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш		Freight Movement/Mobility Planning	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш		Financial Planning	\$0	\$0			\$0	\$0						\$0	\$0	\$0
Ш		Congestion Management Strategies	\$220	\$880	\$0	\$0	\$0	\$0				\$0		\$0	\$880	\$1,100
Ш	18	Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш			\$0	\$0												
II-		Short Range Transit Planning	\$0	\$0	,				ļ							
Ш	1	Short Range Transit Planning	\$660		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0		\$3,300
Щ			\$0	\$0									\$0	\$0	\$0	\$0
III	_	Planning Work Program	\$0	\$0											** ***	
₩		Planning Work Program	\$400		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$1,600	\$2,000
쁘	D.	T I	\$0	\$0					!	-			\$0	\$0	\$0	\$0
Ш	-В	Transp. Improvement Plan	\$0	\$0 \$4,000	60	Ф.	60	60	60	60	60	60	¢1 000	60	¢4.000	es 000
₩		TIP	\$1,000 \$0	\$4,000 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000 \$0	\$0 \$0	\$4,000	\$5,000
Ш	-C	Cvl Rgts. Cmp./Otr .Reg. Regs.	\$0 \$0	\$0 \$0									20	20		
##		Title VI	\$0 \$0	\$0 \$0	\$0	0.9	90	\$0	\$0	\$0	90	\$0	\$0	\$0	\$0	\$0
₩	_	Environmental Justice	\$80 \$80	\$320	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0					\$0 \$0		\$400
H	_	Minority Business Enterprise	\$0 \$0		L											
H		Planning for the Elderly & Disabled	\$80	\$320	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0	\$320	\$400
H	_	Safety/Drug Control Planning	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$320	\$400
H		Public Involvement	\$900		\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$900	\$0	\$3,600	\$4,500
HH		Private Sector Participation	\$0	\$0	\$0 \$0	\$0 \$0		\$0					\$0	\$0		\$0
HH			\$0	\$0	Ψ0	ΨΟ	Ψ.0	Ψ0	Ψ0	Ψ0	Ψ0	Ψ0	Ψ0	90	ΨΟ	ΨΟ
Ш	-D	Incidental Plng./Project Dev.	\$0	\$0					l					l		
m		Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
m		Enviro. Analysis & Pre-TIP Plng.	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ITT		Special Studies	\$400		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0	\$0	\$0 \$0 \$0	\$0 \$0	\$0	\$400	\$0	\$1,600	\$2,000
H		Regional or Statewide Planning			\$0									\$0	\$0	\$0
m			\$0 \$0	\$0												
Ш	-E	Management & Operations	\$0													
m	_	Management & Operations		\$1,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$320	\$0	\$1,280	\$1,600
_	tals	<u> </u>		\$25,680												
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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 4th 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

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.

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 well 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

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.

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.

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

- 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.

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.

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

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

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

	STBO		BGP				Section 530	3	,	Section 530	7	Task Funding Summary			y
	Task	` .	0)(3)(7)		L		ghway/Tra			Transit					
	Description	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
- ·	la in ear	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
II-A	Surveillance of Change Traffic Volume Counts	\$1,113	\$4,451	\$0	\$0	\$0	\$0	\$0	0.2	90	0.2	\$1,113	\$0	\$4,451	\$5,564
H 2	Vehicle Miles of Travel	\$1,113	\$4,431	\$0	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,113	\$0		\$5,504
1 3	Street System Changes	\$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	\$0
5	Transit System Data	\$0	\$0	\$0	\$0	\$870	\$870	\$6,960		\$0	\$0	\$870	\$870		\$8,700
6	Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0		\$0
7	Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0 \$0	\$0 \$0	\$0	\$0		\$0 \$0
1 6	Vehicle Occupancy Rates Travel Time Studies	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$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 \$0	\$5,729	\$3,410		\$45,693
	Central Area Parking Inventory	\$649	\$2,597	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$649	\$0		\$3,246
12	Bike & Ped. Facilities Inventory	\$1,484	\$5,935	\$0	\$0	\$1,052	\$1,052	\$8,416	\$0 \$0	\$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	\$1,969	\$856	\$11,299	\$14,124
	I	\$0	\$0			\$0	\$0	\$0							
II-B	Long Range Transp. Plan (MTP)	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0		¢0	¢0	\$0	\$0	\$0	\$0
HH -	Collection of Base Year Data Collection of Network Data	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			\$0 \$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0
H 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	\$0	\$0		\$0
	Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0
	Forecast of Futurel Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0 \$0	\$0 \$0	\$0			\$0
	Capacity Deficiency Analysis Highway Element of the MTP	\$0 \$2,040	\$0 \$8,161	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			\$0 \$0	\$0 \$2,040	\$0 \$0		\$0 \$10,201
	Transit Element of the MTP	\$2,040	\$0,101	\$0	\$0	\$952	\$952	\$7,616		\$0 \$0	\$0 \$0	\$952	\$952	\$7,616	\$9,520
	Bicycle & Ped. Element of the MTP	\$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
13	Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0
14		\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0 \$0	\$0	\$0		\$0
	Freight Movement/Mobility Plannin	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0 \$0	\$1,050	\$0		\$12.550
	Financial Planning Congestion Management Strategies	\$1,206 \$1,855	\$4,822 \$7,419	\$0 \$0	\$0 \$0	\$653 \$820	\$653 \$820	\$5,224 \$6,560		\$0 \$0	\$0 \$0	\$1,859 \$2,675	\$653 \$820	\$10,046 \$13,979	\$12,558 \$17,474
	Air Qual. Planning/Conformity Ana	\$0	\$0	\$0	\$0	\$0	\$0	\$0,500			\$0 \$0	\$2,073			\$17,474
11.	ran Quan ranning comorning rand	\$0	\$0	Ψ0	Ψ0	\$0	\$0	\$0		ų,	ΨΟ	ΨΟ	ΨΟ	ΨΟ	Ψ0
II-C	Short Range Transit Planning	\$0	\$0			\$0	\$0	\$0							
Ш	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$880	\$880	\$7,040		\$0	\$0	\$880	\$880	\$7,040	\$8,800
	I	\$0	\$0			\$0	\$0	\$0							
III-A		\$0 \$927	\$0 \$3,710	60	\$0	\$0	\$0 \$760	\$0		\$0	\$0	¢1.607	¢7.00	¢0.700	\$12,237
ш	Planning Work Program	\$927	\$3,710	\$0	20	\$760 \$0	\$760	\$6,080 \$0		20	20	\$1,687	\$760	\$9,790	\$12,237
III-B	Transp. Improvement Plan	\$0	\$0			\$0	\$0	\$0							
ШŤ	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							
III-C	Cvl Rgts. Cmp./Otr .Reg. Reqs.	\$0	\$0	4.0	1.	\$0	\$0	\$0							
	Title VI	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0	\$0 \$0	\$0	\$0 \$0		\$0
2	Environmental Justice Minority Business Enterprise	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0				\$0 \$0			\$0 \$0
	Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$240	\$240	\$1,920		\$0 \$0	\$0 \$0	\$240			\$2,400
	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0			\$0
	Public Involvement	\$0	\$0	\$0	\$0	\$488	\$488	\$3,904	\$0	\$0	\$0	\$488	\$488		\$4,880
7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
	I	\$0	\$0			\$0	\$0	\$0							
ш-р	Incidental Plng./Project Dev.	\$0	\$0	60	60	\$0	\$0	\$0		60	60	φn	60	60	60
	Transportation Enhancement Plng. Enviro. Analysis & Pre-TIP Plng.	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$236	\$0 \$236	\$0 \$1,888		\$0 \$0	\$0 \$0 \$0	\$0 \$236	\$0 \$236		\$0 \$2,360
H 3	Special Studies	\$3,122	\$12,490	\$0	\$0	\$820	\$820	\$6,560		\$0 \$0	\$0 \$0	\$3,942	\$820		\$2,360
	Regional or Statewide Planning	\$2,782	\$11,129	\$0	\$0	\$1,040	\$1,040	\$8,320				\$3,822	\$1,040		\$24,311
	- 5	\$0	\$0			\$0	\$0	\$0							
	Management & Operations	\$0	\$0			\$0	\$0	\$0							
1	Management & Operations	\$1,199	\$4,796	\$0	\$0	\$1,624	\$1,624	\$12,992				\$2,823	\$1,624		\$22,235
<u> </u>	Totals	\$23,983	\$95,929	\$0	\$0	\$17,150	\$17,150	\$137,200	\$0	\$0	\$0	\$41,133	\$17,150	\$233,129	\$291,411

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

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

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

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

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

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

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

- 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

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 & GoDurham

	STBGP		BGP	Sec. 1	.04(f)	Section 5303			S	Section 5307	Task Funding Summary			
	Task	133(b)(3)(7)	P	. ,		hway/Tra			Transit			<u> </u>	
	Description	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	FTA	Local	NCDOT	Federal	Total
		20%	80%	20%	80%	10%	10%	80%	20%	80%				
II-A	Surveillance of Change													
1	Traffic Volume Counts	\$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
3	Street System Changes	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
4	Traffic Crashes	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
	Transit System Data	\$0	\$0	\$0	\$0	\$8,076	\$8,076	\$64,608	\$11.084	\$44,336				\$136,180
	Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	. ,	\$0	\$0	\$0	. ,		\$0	\$0
7	Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
8	Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
Ç		\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
10	Mapping	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
	Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
	Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
_	Bike & Ped. Counts	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
1.0	Bille to Four County	\$0	\$0	ΨΟ	ΨΟ	\$0		\$0	\$0	\$0		Ψ	ΨΟ	Ψ
IJ-B	Long Range Transp. Plan (MTP)	\$0	\$0			\$0		\$0	\$0	\$0				
	Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
H -	Collection of Network Data	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
3		\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
	Travel Surveys	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
_	Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0		\$0		\$0			\$0	\$0
_	Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
_	Forecast of Futurel Travel Patterns	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
_	Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
_	Highway Element of the MTP	\$1,198	\$4,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$4,793	\$5,991
	Transit Element of the MTP	\$1,198	\$4,793	\$0	\$0	\$326	\$326	\$2,608	\$1,016	\$4,064	\$2,540		\$11,465	\$14,331
	Bicycle & Ped. Element of the MTP	\$31,198	\$124,793	\$0	\$0	\$320	\$320	\$2,008	\$1,010	\$4,004			\$124,793	\$155,991
	Airport/Air Travel Element of MTP	\$0	\$124,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0	. ,		\$124,793	\$133,331
	Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
	Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
	Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0			\$0	\$0
	Financial Planning	\$0	\$0	\$0	\$0	\$326	\$326			\$78,672			\$81,280	\$101,600
17	Ĕ	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$76,672			\$0	\$101,000
	Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0
H	Zami z maning Conformity rindi.	\$0	\$0	ΨΟ	ΨΟ	\$0		\$0	\$0	\$0		ΨΟ	ΨΟ	ψΟ
II-C	Short Range Transit Planning	\$0	\$0			\$0	\$0	\$0	\$0	\$0		†		
1	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$2,610		\$20,880	\$21,124	\$84,496		\$2,610	\$105,376	\$131,720
H - '	onor range transit training	\$0	\$0	ΨΟ	ΨΟ	\$2,010	\$2,010	\$20,880	\$0	\$04,490		Ψ2,010	Ψ100,070	Ψ131,720
III-A	Planning Work Program	\$0	\$0			\$0		\$0	\$0	\$0		†		
	Planning Work Program	\$1,198	\$4,793	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$4,793	\$5,991
Н	- manaing 11 Olk 1 logitum	\$1,198	\$0	ΨΟ	ΨΟ	\$0		\$0	\$0	\$0		ΨΟ	φτ,173	ψυ,791
III-B	Transp. Improvement Plan	\$0	\$0			\$0	\$0	\$0	\$0	\$0		†		
H	TIP	\$4,793	\$19,171	\$0	\$0	\$653	\$653	\$5,224	\$2,036	\$8,144		\$653	\$32,539	\$40,674
H		\$4,793	\$19,171	φυ	φυ	\$033	\$033	\$3,224	\$2,030	\$0,144		φυυυ	Ψυ2,υυ9	φτυ,074
III-C	Cvl Rgts. Cmp./Otr .Reg. Reqs.	\$0	\$0			\$0	\$0	\$0	\$0	\$0		 		
1	Title VI	\$0	\$0	\$0	\$0	\$326	\$326	\$2,608	\$736	\$2,944		\$326	\$5,552	\$6,940
H -	Environmental Justice	\$0	\$0	\$0	\$0	\$320		\$2,008	\$730	\$2,944			\$5,552	\$0,540
H - 3	Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0				\$0
_	Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0				\$0
	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0		\$0		\$0				\$0
	Public Involvement	\$1,198	\$4,793	\$0	\$0	\$326	\$326	\$2,608	\$1,972	\$7,888			\$15,289	\$19,111
	Private Sector Participation	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$7,888			\$0	\$0
Н	Seetor I acceptation	\$0	\$0	ΨΟ	ΨΟ	\$0		\$0	\$0	\$0		ΨΟ	ΨΟ	ψΟ
	Incidental Plng./Project Dev.	\$0	\$0			\$0		\$0		\$0				
	Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0				\$0		\$0	\$0	\$0
	Enviro. Analysis & Pre-TIP Plng.	\$5,991	\$23,964	\$0	\$0	\$0		\$0		\$0		\$0		\$29,955
	Special Studies	\$5,991	\$23,964	\$0	\$0	\$0		\$0	\$0	\$0		\$0		\$29,955
	Regional or Statewide Planning	\$0	\$0	\$0	\$0	\$0		\$0		\$0				\$0
Ш		\$0	\$0	ΨΟ	ΨΟ	\$0		\$0		\$0		ΨΟ	ΨΟ	ΨΟ
III-E	Management & Operations	\$0	\$0			\$0				\$0		†		
1	Management & Operations Management & Operations	\$1,198	\$4,793	\$0	\$0	\$5,207					\$10,733	\$5,207	\$63,761	\$79,701
Totals			\$215,856					\$142,800					\$606,512	
Louis	•	Ψυυ,νοτ	Ψ=15,050	ΨΟ	ΨΟ	¥17,050	Ψ17,050	⇒1.2,000	201,701	Ψ2-1,030		417,000	4000,012	. 4.50,140

City of Durham TASK DESCRIPTIONS & NARRATIVES FY 2020 UPWP

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,

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

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;
- 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

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

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.

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.

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 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

			STB	GP	Sec. 1	04(f)	5	Section 53	03	S	ection 530	7		Task Fun	ding Summ	ary
		Task	133(b)	(-/(/	P		_	ghway/Tra			Transit					
		Description	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
-		C	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
II-	_	Surveillance of Change 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
₩	3	Street System Changes	\$0	\$0		\$0 \$0				\$0 \$0		\$0 \$0	\$0		\$0	\$0
H	4	Traffic Crashes	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
m		Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0
m		Dwelling Unit, Pop. & Emp. Change	\$200	\$800	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$0	\$800	\$1,000
Ш	7	Air Travel	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш		Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш		Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0
ш		Mapping	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0		\$0		\$0	\$1,200	\$1,500
		Central Area Parking Inventory	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0			\$0
		Bike & Ped. Facilities Inventory	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			\$0	\$0	\$0
۳	13	Bike & Ped. Counts	\$0 \$0	\$0 \$0	20	20	20	20	20	20	20	20	\$0	\$0	\$0	\$0
TT.	$_{ m R}$	Long Range Transp. Plan (MTP)	\$0	\$0												
H	_	Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
H	_	Collection of Network Data	\$0	\$0	\$0	\$0			\$0	\$0	\$0	\$0	\$0		\$0	\$0
世	_	Travel Model Updates	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0
Ш		Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш	_	Forecast of Data to Horizon year	\$2,000	\$8,000			\$0	\$0	\$0					\$0	\$8,000	\$10,000
Щ	_	Community Goals & Objectives	\$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0		\$0	\$0	\$0	\$0
ш	_	Forecast of Futurel Travel Patterns	\$0	\$0	\$0	\$0					\$0	\$0		\$0	\$0	\$0
₩		Capacity Deficiency Analysis	\$0	\$0	\$0 \$0 \$0 \$0	\$0	\$0					\$0	\$0	\$0	\$0	\$0
₩	_	Highway Element of th MTP Transit Element of the MTP	\$1,679 \$3,459	\$6,714 \$13,836	20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	20	\$0 \$0	\$1,679 \$3,459	\$0 \$0	\$6,714 \$13,836	\$8,393 \$17,295
H		Bicycle & Ped. Element of the MTP	\$800	\$3,200	\$0 \$0	\$0 \$0				\$0 \$0			\$3,439	\$0 \$0	\$3,200	\$4,000
₩		Airport/Air Travel Element of MTP	\$000	\$3,200	\$0 \$0	\$0 \$0								\$0		\$4,000
		Collector Street Element of MTP	\$120	\$480	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$120	\$0	\$480	\$600
m		Rail, Water or other mode of MTP	\$100	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100	\$0	\$400	\$500
m	15	Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш	16	Financial Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0
		Congestion Management Strategies	\$0	\$0	\$0	\$0	\$0		\$0	\$0		\$0		\$0	\$0	\$0
ш	18	Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш			\$0	\$0												
II-(Short Range Transit Planning	\$0	\$0	0.0	Φ.Ο.				60			40	Φ0	0.0	0.0
ш	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
III-		Planning Work Program	\$0 \$0	\$0 \$0									\$0	\$0	\$0	\$0
 	-	Planning Work Program	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$1,200	\$1,500
m		Tiddining Work Frogram	\$0	\$0	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	\$0	\$0	\$0	\$0
III-	В	Transp. Improvement Plan	\$0	\$0									7.0	7.0	7.0	7.0
Ш		TIP	\$500	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$2,000	\$2,500
Ш			\$0	\$0									\$0	\$0		
III-		Cvl Rgts. Cmp./Otr .Reg. Reqs.	\$0	\$0												
Щ		Title VI	\$0	\$0	\$0	\$0			\$0	\$0			\$0		\$0	\$0
₩	_	Environmental Justice	\$0	\$0	\$0										\$0	\$0
₩		Minority Business Enterprise	\$0	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0		\$0 \$0	\$0
₩		Planning for the Elderly & Disabled Safety/Drug Control Planning	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0			\$0 \$0
₩		Public Involvement	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0			\$0
H		Private Sector Participation	\$0	\$0		\$0 \$0				\$0		\$0 \$0				\$0
H	Ť		\$0	\$0	Ψ0	ΨΟ	Ψ0	Ψ0	ψ0	Ψ0	ΨO	Ψ0	Ψ0	Ψ0	Ψ	ΨΟ
III-	D	Incidental Plng./Project Dev.	\$0	\$0												
厂		Transportation Enhancement Plng.	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш		Enviro. Analysis & Pre-TIP Plng.	\$900	\$3,600	\$0 \$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0 \$0	\$0		\$0	\$3,600	\$4,500
Ш		Special Studies	\$0	\$0						\$0					\$0	\$0
Щ	4	Regional or Statewide Planning	\$900	\$3,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900	\$0	\$3,600	\$4,500
Щ	_	100	\$0	\$0												
III-	E.	Management & Operations	\$0	\$0		* ^		ļ <u>-</u> -			* -		A 100	**	d1 500	# 2 000
Tota	l de	Management & Operations	\$400 \$11,658	\$1,600									\$400 \$11,658			\$2,000 \$58,288
10[ais		\$11,038	φ 4 υ,030	2 0	\$0	\$0	\$0	90	20	\$0	\$0	\$11,038	\$0	φ 4 0,030	φ38,288

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

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

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)

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)

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)

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 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.

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

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

II T				STI	BGP	Sec. 1	04(f)	S	Section 530)3	S	ection 53	07	Ta	sk Fundin	g Summa	ry
			Task)(3)(7)		L	_	hway/Tra	_		Transit					
			Description	Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
II	Δ	-	Surveillance of Change	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
H	Ť	_	Traffic Volume Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
H	Ť	_	Vehicle Miles of Travel	\$0										\$0			
		3	Street System Changes	\$0	\$0	\$0	\$0 \$0	\$0 \$0 \$0	\$0	\$0 \$0	\$0	\$0	\$0 \$0 \$0	\$0	\$0	\$0	\$0
		4	Traffic Crashes	\$0						\$0	\$0			\$0	\$0	\$0	\$0
			Transit System Data	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0			\$0
Ш	4		Dwelling Unit, Pop. & Emp. Change	\$0							(— — — — — — — ·		\$0	\$0			\$0
Н	4		Air Travel	\$0				\$0 \$0	\$0					\$0			
H	+		Vehicle Occupancy Rates Travel Time Studies	\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	\$0 \$0			\$0 \$0		\$0 \$0	\$0 \$0
H	+		Mapping Mapping	\$0 \$0						\$0 \$0	!			\$0 \$0			\$0
H	t		Central Area Parking Inventory	\$0 \$0				\$0		• —— — — — — — ·			\$0 \$0	\$0		\$0	\$0
H	t	_	Bike & Ped. Facilities Inventory	\$0					4	\$	{ — — — — — — — ·			\$0			\$0
	Ť	_	Bike & Ped. Counts	\$0	 			\$0	+	•	()		\$0	\$0		
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II :	В		Long Range Transp. Plan (MTP)	\$0													
Щ	4		Collection of Base Year Data	\$0										\$0			\$0
H	+	_	Collection of Network Data	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0			\$0
H	+	_	Travel Model Updates Travel Surveys	\$0 \$0			\$0	\$0	\$0 \$0	\$0 \$0	l		\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0
H	+		Forecast of Data to Horizon year	\$0 \$0			\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0		\$0 \$0	\$0
H	1		Community Goals & Objectives	\$0 \$0				\$0	\$0	4			\$0	\$0		\$0	
	Ť		Forecast of Futurel Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0
		8	Capacity Deficiency Analysis	\$0						\$0	\$0		\$0	\$0	\$0	\$0	\$0
		_	Highway Element of the MTP	\$0		\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$0		\$0 \$0	\$0			\$0
	4	_	Transit Element of the MTP	\$0								\$0	\$0	\$0			\$0
Н	4		Bicycle & Ped. Element of the MTP	\$0	 				\$0		{ — — — — — — — ·)		\$0		\$0	\$0
\mathbb{H}	+	_	Airport/Air Travel Element of MTP Collector Street Element of MTP	\$0 \$0			\$0 \$0	\$0 \$0	\$0 \$0				\$0 \$0	\$0 \$0		\$0 \$0	
H	+	_	Rail, Water or other mode of MTP	\$0 \$0			\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0				\$0			\$0
H	t		Freight Movement/Mobility Planning	\$0 \$0		\$0 \$0					i — — — — — — — .		\$0 \$0	\$0			\$0
H	Ť	_	Financial Planning	\$0			\$0	\$0 \$0	\$0	\$0				\$0			\$0
			Congestion Management Strategies	\$0	9	\$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
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III-	- 1	-	Planning Work Program	\$0 \$0													
	T		Planning Work Program	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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III-	В		Transp. Improvement Plan	\$0	\$0												
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Ш			<u> </u>	\$0							ļ						
III-	<u>-C</u>		Cvl Rgts. Cmp./Otr .Reg. Reqs.	\$0		Φ0	Φ0	Φ0	Φ0	Φ0	Φ0	0.0	00	60	0.0	40	00
H	+		Title VI Environmental Justice	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			
H	+		Minority Business Enterprise	\$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			
H	+		Planning for the Elderly & Disabled	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0			
H	†		Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
口	1	6	Public Involvement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0			\$0
Ш		7	Private Sector Participation	\$0	\$0			\$0	\$0					\$0	\$0	\$0	\$0
<u> </u>	_	Ţ		\$0													
III-	·D		Incidental Plng./Project Dev.	\$0		40	Δ.	Φ.0	40			4.0	AC	4.0	*~	**	**
\mathbb{H}	+		Transportation Enhancement Plng. Enviro. Analysis & Pre-TIP Plng.	\$0 \$0									\$0 \$0	\$0 \$0			
H	+	_	Special Studies	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			
H	+		Regional or Statewide Planning	\$16.250	\$65,000	\$0 \$0				\$0 \$0			\$0 \$0	\$16,250	\$0		\$81,250
Н		\dashv		\$0		ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	Ψ0	ΨΟ	ΨΟ	Ψ10,230	ΨΟ	Ψ05,000	201,230
ΠI	Е	1	Management & Operations	\$0							<u> </u>						
			Management & Operations	\$0										\$0			
Tot	als			\$16,250	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,250	\$0	\$65,000	\$81,250

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 reparation, 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**

Task Code - Title	Local 20%	FHWA 80%	Total
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

		ST	BGP	Sec. 1	.04(f)		Section 530	3	,	Section 530	7	1	Task Fundii	ng Summar	y
	Task	` .	0)(3)(7)		L		ghway/Tra			Transit					
	Description	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
- ·	la in ear	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
II-A	Surveillance of Change Traffic Volume Counts	\$1,113	\$4,451	\$0	\$0	\$0	\$0	\$0	0.2	90	\$0	\$1,113	\$0	\$4,451	\$5,564
H 2	Vehicle Miles of Travel	\$1,113	\$4,431	\$0	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,113	\$0		\$5,504
1 3	Street System Changes	\$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	\$0
5	Transit System Data	\$0	\$0	\$0	\$0	\$870	\$870	\$6,960		\$0	\$0	\$870	\$870		\$8,700
6	Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0		\$0
7	Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0 \$0	\$0 \$0	\$0	\$0		\$0 \$0
1 6	Vehicle Occupancy Rates Travel Time Studies	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$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 \$0	\$5,729	\$3,410		\$45,693
	Central Area Parking Inventory	\$649	\$2,597	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$649	\$0		\$3,246
12	Bike & Ped. Facilities Inventory	\$1,484	\$5,935	\$0	\$0	\$1,052	\$1,052	\$8,416	\$0 \$0	\$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	\$1,969	\$856	\$11,299	\$14,124
TT "	I D D D D	\$0	\$0			\$0	\$0	\$0							
II-B	Long Range Transp. Plan (MTP) Collection of Base Year Data	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0		¢0	¢0	\$0	\$0	\$0	\$0
HH -	Collection of Network Data	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			\$0 \$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0
H 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
5	Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0 \$0	\$0	\$0		\$0
	Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0
	Forecast of Futurel Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0 \$0	\$0 \$0	\$0			\$0
	Capacity Deficiency Analysis Highway Element of the MTP	\$0 \$2,040	\$0 \$8,161	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			\$0 \$0	\$0 \$2,040	\$0 \$0		\$0 \$10,201
	Transit Element of the MTP	\$2,040	\$6,101	\$0	\$0 \$0	\$952	\$952	\$7,616		\$0 \$0	\$0 \$0	\$2,040	\$952	\$7,616	\$9,520
	Bicycle & Ped. Element of the MTP	\$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
13	Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0
14		\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0 \$0	\$0	\$0		\$0
	Freight Movement/Mobility Plannin	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0 \$0	\$0	\$0		\$0
	Financial Planning Congestion Management Strategies	\$1,206 \$1,855	\$4,822 \$7,419	\$0 \$0	\$0 \$0	\$653 \$820	\$653 \$820	\$5,224 \$6,560		\$0 \$0	\$0 \$0	\$1,859 \$2,675	\$653 \$820	\$10,046 \$13,979	\$12,558 \$17,474
	Air Qual. Planning/Conformity Ana	\$0	\$0	\$0	\$0	\$0	\$0	\$0,500			\$0 \$0	\$2,073			\$17,474
110	7 in Qua. 1 idining Comorning 7 ind	\$0	\$0	ΨΟ	ΨΟ	\$0	\$0	\$0		ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ
II-C	Short Range Transit Planning	\$0	\$0			\$0	\$0	\$0							
Ш	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$880	\$880	\$7,040		\$0	\$0	\$880	\$880	\$7,040	\$8,800
	I	\$0	\$0			\$0	\$0	\$0							
III-A		\$0 \$927	\$0 \$3,710	60	\$0	\$0	\$0 \$760	\$0		\$0	\$0	¢1.607	¢7.00	¢0.700	\$12,237
ш	Planning Work Program	\$927	\$3,710	\$0	20	\$760 \$0	\$760	\$6,080 \$0		20	20	\$1,687	\$760	\$9,790	\$12,237
III-B	Transp. Improvement Plan	\$0	\$0			\$0	\$0	\$0							
ШŤ	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							
III-C	Cvl Rgts. Cmp./Otr .Reg. Reqs.	\$0	\$0	4.0	1.	\$0	\$0	\$0							
	Title VI	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0	\$0 \$0	\$0	\$0 \$0		\$0
2	Environmental Justice Minority Business Enterprise	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0				\$0 \$0			\$0 \$0
	Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$240	\$240	\$1,920		\$0 \$0	\$0 \$0	\$240			\$2,400
	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$0	\$0			\$0
	Public Involvement	\$0	\$0	\$0	\$0	\$488	\$488	\$3,904	\$0	\$0	\$0	\$488	\$488		\$4,880
7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
	I	\$0	\$0			\$0	\$0	\$0							
ш-р	Incidental Plng./Project Dev.	\$0	\$0	60	60	\$0	\$0	\$0		60	60	φn	60	60	60
	Transportation Enhancement Plng. Enviro. Analysis & Pre-TIP Plng.	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$236	\$0 \$236	\$0 \$1,888		\$0 \$0	\$0 \$0 \$0	\$0 \$236	\$0 \$236		\$0 \$2,360
H 3	Special Studies	\$3,122	\$12,490	\$0	\$0	\$820	\$820	\$6,560		\$0 \$0	\$0 \$0	\$3,942	\$820		\$2,360
	Regional or Statewide Planning	\$2,782	\$11,129	\$0	\$0	\$1,040	\$1,040	\$8,320				\$3,822	\$1,040		\$24,311
	- 5	\$0	\$0			\$0	\$0	\$0							
	Management & Operations	\$0	\$0			\$0	\$0	\$0							
1	Management & Operations	\$1,199	\$4,796	\$0	\$0	\$1,624	\$1,624	\$12,992				\$2,823	\$1,624		\$22,235
<u> </u>	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

 \underline{x} Check here if no anticipated DBE Name of MPO: _Durham-Chapel Hill-Carrboro MPO: Town of Chapel Hill opportunities

Total Funds to be Contracted Out 919-969-5064 Federal Funds to be Contracted Out Telephone Number: Type of Contracting (Consultant, etc.) Opportunity Person Completing Form: _Bergen Watterson/Town of Chapel Hill Name of Agency Contracting Out Description **Prospectus** Prospectus Task Sample Entry: Code

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.

\$60,000

\$48,000

Consultant

Big City Planning

Transit Plan

II-C-11

Evaluation

Department

TOWN OF CHAPEL HILL FTA TASK NARRATIVE TABLE FY2020 UPWP

		I	I	ı		I	ſ	I	ı	I	I	ſ	
1- MPO	DCHC-IMPO (Chapel	DCHC-MPO (Chapel	DCHC-MPO (Cnapel Hill)	DCHC-MPO (Chapel	DCHC-MPO (Chapel	DCHC-MPO (Chapel	DCHC-MPO (Chapel	DCHC-MPO (Chapel L	DCHC-IMPO (Chapel D	DCHC-MPO (chapel	DCHC-MPO (Chapel	DCHC-MPO (Chapel	DCHC-MPO (Chapel
2- FTA Code	442400		442302			02		1 1		00	100	00	142400
ask Looe Title of Planning Task	II-A-5 Transit System Data	II-A-10 Mapping	II-A-12 Bicycle and Pedestrian Facility Intentory	II-A-13 Bicyde and Pedestrian Counts	II-B-10 Transit Element of the 1 MTP	II-B-10 Financial Planning		II-C-1 Short Range Transit P Planning P	III-A-1 Planning Work T. Program	III-5-1 Transportation Improvement Program	III-C-4 Planning for the Elderly and Disabled	III-C-b Public Involvement	II-D-Z Environmental Analysis and Pre TIP
5- Task Objective	Collect dally, weekly and monthly ridership counts; compile service related information by route. Assemble transit system characteristics. Provide annual TAM and State of Good Repair target inventories	Participate with MPO in further development of regional GiS database; prepare mapping to support local and regional activities	nd tries to vity ansit	}	# e t 3	ge ja	JG _ 9 7 B			o at		but	Planting and
- Jangible Product Expected 26 92	Ridership counts, routes/service assessment, traffic signal assessment, amnual Taxa and and SeR inventories and targets	MPO Regional GIS database and CMS database.	Data on existing blycle in and pedestrian facilities.	Data on existing blycle and pedestrian activity.	K-aluation of transit preferred options, preferred options, produce 2045 transit tables and attributes, undate geodatabase of transit perferred option and final 2045 projects	on of transit, frefinements to the Preparation of droptions, 2045 MP financial and attributes, and annual work plan Development and attributes, and annual work plan Development geodatabase of for the OC Transit Program, before and final 2045, and workplans for appropriate and final 2045, transit projects initigation initigation.	of DCHC nd Mobilityt of TDM ts with traffic	transit ort, routes anges	Draft and final FY21 P Invoices and reports, p Invoices and reports, p amendment of UpWP to a serecessny, a serecessny, tensmittal of documentation, work documentation, work highlighted elsewhere to the LPA	Preliminary SPOT 60 Annual asse projects, budgers and updated AD progress reports for planfactiviti origoing TIP projects, maps showl amendments as needed larget areas	ssment, A es, route ng ADA	ic //tries	Feasibility and environmental studies for STIP, BRT, and other local transportation projects
7- Expected Completion Date of Product(s)	6/30/2020	2020		,				_		•			6/30/2020
8- Previous Work	Data Collection	Support for development of geo spatial database. Maintained current transit GIS data	Collection of bike and Tollection of bike and pedestrian facility data pedestrian count data	,	Development of 2045 MTP transit projects, Grange County Transit Plan inputs, BRT alternatives analysis	2045 Financial Plan and CHT's Financial Sustainability Plan	2016 Mobility Report Card, previous years' TDM programs and reports	2040/2045 MTP, Connge County Transit In Plan, CHT Financial p Sustainability Plan, N-5 L Corridor Study	Development and Simanagement of Siprevious years' Topweys	SPOT 4.0/5.0 project of submissions, current of TIP/STIP, monitoring and implementing past TIP projects	Ongoing monitoring, CHT bus stop facility inventory	Public meetings for 2045 MTP and CTP, meetings and surveys for SRTP and BRT	SPOT 4.0/5.0 project submittals, N-S Corridor Study Alternatives Analysis
9- Prior FTA Funds										1			
10- Relationship To Other Activities	Supports Implementation of MTP and Orange County Transit Plan. Input to Short-Range Transit Plan and TDM activities	Supports development and implementation of MTP, Orange County Transit Plan, and other MPO-related activities	Supports development Supports development and implementation of Man Dimplementation of Man Dimplement Man		Supports development Supports development Supports development and implementation of CMS. Supports AMP. Orange County of MP. Orange implementation of Transit Plan, regional TDM MPO-related activities and other County Transit Plan, regional TDM related activities and other AMPO-related activities	Supports development and implementation of MTP, Orange County Transit Plan, and orther MPO- related activities		ent n of y ner ner es	am	ط		pu L	Supports all MPO and Town transportation planning activities
11- Agency Responsible for Task Completion	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill T	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill
12- HPR- Highway - NCDOT 20% 13- HPR- Highway - FHWA 80% 14- Segrion 104 (I) P. Lucal 20% 15- Sertion 104 (f) Ple way 80%													
Section 5303 Local 10% 17. Section 5303 Local 10% Section 5303 FTA 80% Section 5307 Transit - Local 10% Section 5307 Transit - NCDOT 10% Section 5307 Transit - NCDOT 10%	\$870 \$870 \$6,960	53.410 0 53.410 0 527.280	\$1,052 \$1,052 \$8,416	\$8.56 \$8.56 \$6.848	2962 2962 57,616	\$653 \$653 \$5,224	005 <u>,08</u> 0088	\$880 \$880 \$7,040	\$760 \$760 \$6,080	\$2,449 \$2,449 \$19,592	\$240 \$240 \$1,920	\$488 \$488 \$3,904	\$236 \$236 \$1,888
Section 5307 Transit - FTA 80% Section 5309 Transit - Local 10% Section 5309 Transit - NCDOT 10%													
24- Section 5309 Transit - FTA 80%			• • • • • • • • • • • • • • • • • • •							 			
	\$8,700	0 \$34,100	\$10,520	\$8,560	\$9,520	\$6,530	\$8,200	\$8,800	\$7,600	\$24,490	\$2,400	\$4,880	\$2,360
	\$8,700	0 \$34,100	\$10,520	\$8,560	\$9,520	\$6,530	\$8,200	\$8,800	\$7,600	\$24,490	\$2,400	\$4,880	\$2,360

TOWN OF CHAPEL HILL FTA TASK NARRATIVE TABLE FY2020 UPWP

[МРО	DCHC-MPO (Chapel	DCHC-MPO (Chapel	DCHC-MPO (Chapel	
T	FTA Code	442700	442200	442100	
1	Title of Planning Task	Special Studies	Regional or Statewide Planning	Management and Operations	TOTALS
	Task Objective	Prepare special studies, to support organic protections that operations conduct station area infrastructure inventory evaluation.	Support regional and statements planning projects, including Do-LRT, 15-501 Cornidor Carlon, 15-501 Carlon, 15-	Support various transit, planning activities	
	Tangible Product Expected	Participation in Region Feed Station area infrastructure infrastructure infrastructure of the station of the contraction of the special studies as needed	LRT station area plans, practication in NCDOT US 15-500 Footbam Bivd. corridor study, 12-500 Feesibility Study, NC 54 design/NEP A	LRT station area plans, Ongoing transit participation in NCDOT activities and reporting 18 15-501/Fordham requirements Blvd. cornidor study, 15-501 reactility 15-501 reactility Study, NC 54 design/NEPA	
1	Expected Completion Date of	6/30/2020	6/30/2020	6/30/2020	
!	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 planning activities	
6	Prior FTA Funds				
	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	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	
1.1.1.1	. Completion 12- HPR - Hghway - NCDOT 20% 13- HPR - Hghway - HWA 80% 14- Section 104 (f) Pt. Local 20%				0\$
	Section 104 (f) PL FHWA 80%	0000			
1.1	Section 5303 Local 10% Section 5303 NCDOT 10%	\$820	\$1,040	\$1,624	\$17,150
TT	Section 5307 Transit - Local 10% Section 5307 Transit - NCDOT 10%	nac'ac			
21- 22- 23-	21. Section 5307 Transit - FTA 80% 22. Section 5309 Transit - Local 10% 23. Section 5309 Transit - NCDOT 10%				0\$ 0\$
	Section 5309 Transit - FTA 80%				\$0
П					
		\$8,200	\$10,400	\$16,240	\$171,500
П		\$8,200	\$10,400	\$16,240	

City of Durham & GoDurham

			ST	BGP	Sec. 1	04(f)	S	ection 53	03	S	Section 5307		Task Fun	ding Sumn	ary
		Task	133(1	b)(3)(7)	P	L	Hig	hway/Tra	ansit		Transit				
		Description	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	FTA	Local	NCDOT	Federal	Total
		•	20%	80%	20%	80%	10%	10%	80%	20%	80%				
II	-A	Surveillance of Change													
Ш	1	Traffic Volume Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш	2	Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ш	3	Street System Changes	\$0	\$0	\$0	\$0	\$0				\$0			\$0	\$0
Ш	4	Traffic Crashes	\$0	\$0	\$0	\$0	\$0				\$0			\$0	\$0
IH	_	Transit System Data	\$0	\$0	\$0	\$0	\$8,076				\$44,336			\$108,944	\$136,180
IH		Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	. ,	\$0	\$0			\$0	\$0
ш		Air Travel	\$0	\$0	\$0	\$0	\$0				\$0			\$0	\$0
ш	_	Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0							\$0	\$0
ш		Travel Time Studies	\$0	\$0	\$0	\$0	\$0							\$0	\$0
ш		Mapping	\$0	\$0	\$0	\$0	\$0							\$0	\$0
ш		Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0			\$0			\$0	\$0
ш	_	Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$0	\$0	\$0			\$0			\$0	\$0
ш	_	Bike & Ped. Counts	\$0	\$0	\$0	\$0	\$0				\$0			\$0	\$0
۳	13	DIRC & I Cu. Counts	\$0	\$0	φU	φU	\$0				\$0		Φ U	\$0	\$0
,,	_в Н	Long Range Transp. Plan (MTP)	\$0	\$0			\$0				\$0		1	 	1
H		Collection of Base Year Data	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0						\$0	\$0	\$0
₩		Collection of Base Year Data Collection of Network Data	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0				\$0			\$0 \$0	\$0 \$0
III	_		\$0 \$0	\$0 \$0											
H		Travel Model Updates	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0				\$0 \$0			\$0 \$0	\$0
H		Travel Surveys													\$0
H	_	Forecast of Data to Horizon year	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0							\$0	\$0
H		Community Goals & Objectives Forecast of Futurel Travel Patterns	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0				\$0 \$0			\$0 \$0	\$0 \$0
ш					\$0 \$0	\$0 \$0	\$0 \$0								\$0 \$0
ш		Capacity Deficiency Analysis Highway Element of the MTP	\$0	\$0			\$0 \$0	\$0 \$0			\$0			\$0	
ш	_	8	\$1,198	\$4,793	\$0	\$0								\$4,793	\$5,991
ш		Transit Element of the MTP	\$1,198	\$4,793 \$124,793	\$0	\$0	\$326	\$326	\$2,608	\$1,016	\$4,064	\$2,540		\$11,465	\$14,331
ш		Bicycle & Ped. Element of the MTP	\$31,198	, ,	\$0	\$0	\$0			\$0					\$155,991
ш		Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0			\$0	\$0			\$0	\$0
ш	_	Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0			\$0			\$0	\$0
ш	_	Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0			\$0			\$0	\$0
ш		Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$0			\$0	\$0			\$0	\$0
ш	_	Financial Planning	\$0	\$0	\$0	\$0	\$326	\$326	. ,		\$78,672			\$81,280	\$101,600
ш		Congestion Management Strategies	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0			\$0	\$0
ш	18	Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0			\$0		\$0	\$0	\$0
Ш			\$0	\$0			\$0				\$0				
II-		Short Range Transit Planning	\$0	\$0			\$0	\$0		\$0					
ш	1	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$2,610				\$84,496		\$2,610	\$105,376	\$131,720
Щ	_		\$0	\$0			\$0	\$0		\$0	\$0				
Ш		Planning Work Program	\$0	\$0			\$0				\$0				
Ш		Planning Work Program	\$1,198	\$4,793	\$0	\$0	\$0				\$0		\$0	\$4,793	\$5,991
Щ	_		\$0	\$0			\$0	\$0			\$0				
Ш	_	Transp. Improvement Plan	\$0	\$0	4.	4 -	\$0	\$0					4	407 77	A. 10 - 11
Ш	_	ΓΙΡ	\$4,793	\$19,171	\$0	\$0	\$653	\$653		\$2,036	\$8,144		\$653	\$32,539	\$40,674
Щ	_	G I B + G + 10+ B - B	\$0	\$0			\$0	\$0		\$0	\$0		-		
Ш		Cvl Rgts. Cmp./Otr .Reg. Reqs.	\$0	\$0	4.	4 -	\$0	\$0		\$0	\$0			6	
Ш	_	Title VI	\$0	\$0	\$0	\$0	\$326	\$326		\$736	\$2,944		\$326	\$5,552	\$6,940
111		Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0			\$0	\$0
Щ		Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0							\$0	\$0
Щ		Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0					-			\$0
Щ		Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0								\$0
Щ		Public Involvement	\$1,198	\$4,793	\$0	\$0	\$326	\$326			\$7,888	-			\$19,111
Щ	7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0						\$0	\$0	\$0
Ш			\$0	\$0			\$0								
Ш		Incidental Plng./Project Dev.	\$0	\$0			\$0				\$0				
Щ		Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0							\$0	\$0
Щ	_	Enviro. Analysis & Pre-TIP Plng.	\$5,991	\$23,964	\$0	\$0	\$0						\$0	\$23,964	\$29,955
Щ		Special Studies	\$5,991	\$23,964	\$0	\$0	\$0				\$0		\$0		\$29,955
Ш	4	Regional or Statewide Planning	\$0	\$0	\$0	\$0	\$0					-	\$0	\$0	\$0
Ш			\$0	\$0			\$0								
		Management & Operations	\$0	\$0			\$0]
	1	Management & Operations	\$1,198	\$4,793	\$0	\$0	\$5,207					\$10,733		\$63,761	\$79,701
To	als		\$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:opportunities Person Completing Prospectus Task Code	Name of MPO:Durham Chapel Hill Carrboro MPO_(GoDurham)_ opportunities Person Completing Form:Neeton Nichols Prospectus Task	Name of Agency Contracting Out	e of Contra ortunity nsultant, et	ber: 919 560-4366 Contracted Out Co	Total Funds to be Contracted Out
Sample Entry:					
II-C-11	Transit Plan Evaluation	Big City Planning Department	Consultant	\$48,000	\$60,000

Note: This form must be submitted to NCDOT-PTD even if you anticipate no DBE Contracting Opportunities. Note "No contracting opportunities" on the table if you do not anticipate having any contracting opportunities.

GoDurham (formerly DATA) FTA TASK NARRATIVE TABLE FY2020 UPWP

1	МРО	рснс-мро (рата)	DCHC-MPO (DATA)	DCHC-MPO (DATA)	O (DATA)	рснс-мро (рата)	рснс-мро (рата)	рснс-мро (рата)	рснс-мро (рата)	
2-	FTACode	442400	442302	442302	442400	442500	442100	442400	442100	
ψ 4	Task Code Title of Planning Task	II-A-5 Transit System Data	II-B-10 Transit Element of the LRTP	II-B-16 Financial Planning	nge Transit Planning	ŧ	III-C1 Title VI	III-C-6 Public Involvement	III-E-1 Management and Operations	TOTALS
ú	Task Objective	This element is essentially about transit performance measures star are obtained through the compilation and analysis of FTA and NCDOT required service data obtained from the through crute and paratransit systems. Conduct system-wide surveys while, providing on-going monothing of the systems. These performance measures are compared with historical value sto gauge the overal service delivery and consuption with historical values to gauge the overal service. Fronde oversight of passenger amentites including AVD and related monthly ridership data and reports for all agencies. Fronde organic support to MPO in long rarge transit, UPWP and TIP development, Key objectives include integrating AVD data in to the transit G1 system through routes and stops and appass that are segmented at TAZ levels, improving the geodatabase of transit crutes and stops and updating the inventory of all such transit	·]	No prepare and Monitor the City's Fiscal programs including FFA and administer grants in TEAM and also incly's Munis system. Monitor and ensure complete compliance with all financial procedures. Track all outcasts with thirt party providers ensuring prompt payment and compliance of all purhcases with state, federal and local laws.	To provide system-wide planning oversight of oboth the fived route and pararansis services including the monitoring of AVL project, Zona (per-trip inspection device) Automatic Bassenger contents (AVL) On-board camera and video systems and GFI farebox input and output. Aso, this task would include the conduct of The mandated to The survey for fixed output. Aso, this task would include the conduct of The mandated Include the conduct of The mandated and also the grating APC data in to the transit GIS, summariting and tabulating gathered AVL data, and updating the inventory of transit stops shelters and related ementies and also this task would prepare and monitor the CRy's Fixed Incograms including Fra and NOOT grants. Apply for and administer grants in TEAM and also in CRy's Munic system. Monitor and ensure complete compliance with all financial procedures. Tack all contracts with third party providers ensuring prompt payment and compliance of all purchases with state, federal and total laws	To continue the program of for continue the program of mperioring transits envices well as local area transportation as a whole. This would be advewed by identifying area of the City needing transit service and also improving transit service and also improved through on-going surveys. Additional tasks would include by Additional tasks would include coordinated fransportation Plan.key objectives include integrating APC data in to the transit city. Summarizing and tabulating the summarizing and tabulating the inventory of transit stops shelters and related amenities and also the development of geo-spatial mapping.	To provide ongoing education, service monitoring and system analysis and data compliation related to service changes in line with anticipation of Title VI Civil Rights mandates. This review would be floore related to the DBBS program for the FTA in order to ensure that all service hanges over and above 10% are done with Title VI mandates in mind to ensure equity and fairness in the delivery of current fixed foute transit service. This task will also include a netacklist of permitting ADA clientel, ADA service quality provided, ADA certification reviews, ADA service efficiency and effectiveness.	To seek out untapped patrons of the transit service through the transit service through the use of agerssive public involvement and sustained marketing for the system. Also to enagege the Public in all matters related to proposed service changes, to respond to the concerns of the public and to seek their input as it relates to all The VI matters.		
6 6	Tangible Product Expected from the Transis system will include but not limited to the following:	Monthly and annual statistical data completed as part of the congoing service data collection. They include supth epositions as monthly ridership, monthly safety data, monthly service supplied information, AVL and APC data. This information is aggregated into OPSTATS report for the state, Monthly and annual WOrkplan data for city Management staff as well as the MPO staff for use in the LRTP efforts.	Transit Maps, GIS Overlays, cooleconomic data compliation associated with the transit operations such as OPStATS report, NTD Monthly and Annual reports. Transit Budget summaries, Passenger amenities use and operation, short, and long term plans and all others specific reports and analysis that the MPO desires as part of this overall on-going transportation planning program transportation planning program transportation planning program	Grants, budget documents, the contrase order size documents ledgers, Fund balances and maintenance of asset and related maintenance or asset and related inventory.	Weekly, Monthly, and annual system-wide ideaship montoring reports. APC and AVI. reports, NID survey outcome, Grants, Budget documents, Purchase orders, Bid documents Ledges, Yund balances and mantenance of asset and related inventory including geospatial maps and overlays.	Maps of service changes, Public Input process and outcomes, Public hearings, CITY Council reports, service implementation plans and related processes.	Title VI doucment related to all service changes that require that we provide such analysis for review and approval by the FTA. Mailing list of all ADA clients for the purpose of reviews, approved and denied frings, wait time list, No Show Ist, No Show Ist, No Show Ist, No Show landling, suspensions and wait-time compilation catalogue.	Public meeting agenda, outcome and reports. Vublic hearing notices and summary reports. meetig attendance and related Council reports.	Budget outlay, monthly and annual operational and ridership reports, service planning information, safety and traning reports, service marketing and outleach programs personnel matters Asset Management and inventory reports.	
-2	Expected Completion Date of Product(s)	6/30/2019	6/30/2019	6/30/2019	6/30/2019	6/30/2019	6/30/2019	6/30/2019	6/30/2019	
		These activities are on-going and were completed in previous years as part of 5303 and 5307 funded task element	2016 Planning Work Program	Same as above. This is also an ongoing task element conducted by (the fiscal program accountant.	On-going	On-going on an annual basis.	Same as above	On-going	Same as above	
-01	es	SS2,780 Related to task III-E	S4,880 This program is intended to support Availous MPO planning efforts related on the LRTP updates	\$93,640	5100,580 Data retrieved would be used to disseminate service delivery and patronage information to transit management, City Council, FTA, NCDOT	These activities outlined also the MPO:s overall FY18 Unified Work Program.	Related to task III-E	This effort relates to and supports the MPOs overall FY18 unified Work Program of enhancing transportation	Related to task III-E	\$295,000
11- 12- 13-	Agency Responsible for Task Completion HPR - Highway - INCDOT 20% HPR - Highway - INCO 30% Cordion 404 ft bit local 30%	GoDurham		Goburham	GoDurham/GoTriangle	GoDurham/GoTriangle	GoDurham/GoTriangle		GoDurham	
15- 16- 18- 19- 20-	Section 104 (f) Pt. HWA 80% Section 503 local 10% Section 5303 local 10% Section 5303 HVB 80% Section 5303 Transit - Local 10% Section 5307 Transit - Local 10%	205.828 202.828 202.828 203.848 203.848	928.5 928.8 928.8 928.8	P88/65	08,000 00	81015 91015 872755 87395 87395 87395	8985 1805 CS 1905 CS 1905 CS	32.5. 32.6.0 30.5.2. 30.5.2. 30.9.2.2.	\$5,207 \$5,207 \$41,656 \$21,666	\$17.850 \$17.850 \$142.800 \$41.544 \$20,420
21-	Section 5307 Transit - FTA 80%	\$44,336	\$4,064	\$78,672	\$84,496	\$8,144	\$2,944	\$7,888	\$17,312	\$247,856

DRAFT FY 2020 UNIFIED PLANNING WORK PROGRAM (UPWP) FOR THE DCHC MPO

MPO Board Meeting January 16, 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 is 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, the 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 Program
- 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

Summary of all funding sources (p 16)

	Federal	State	Local	Total
PL/STBG-DA (FHWA)	\$2,202,196		\$550,550	\$2,752,746
FTA 5303	\$280,000	\$35,000	\$35,000	\$350,000
FTA 5307	\$247,856		\$61,964	\$309,820
Total	\$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

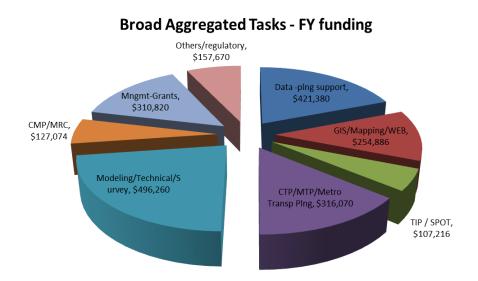
Summary of federal funding by agency

	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.

FY20 UPWP Overview of LPA Budget by Tasks

Summary of LPA Ta	sks and Fu	nding by
Broad Ca	ategories	
Broad Aggregated	FY	
Tasks	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%



FY2020 UPWP 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
October 2018-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 16, 2019	MPO Board reviews draft of FY2020 UPWP and releases 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 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 (1/16/19):

Authorize release of the Draft FY2020 UPWP for public comment. Hold public hearing and approve UPWP in February.

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST ID COST **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION LENGTH (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 INTERSTATE PROJECTS DURHAM US 15 / US 501 TO EAST OF NC 147. BRIDGE 10 NHPIM CG I-40 REHABILITATION - MULTIPLE STRUCTURES. SW COORDINATE WITH I-5993; GARVEE BOND FUNDING: \$5 MILLION FOR CONSTRUCTION - PAYBACK 2019-2033 NC 55 (ALSTON AVENUE) TO NC 147 DURHAM I-40 I-5707 1.2 5330 500 NHP 1225 (DURHAM FREEWAY / TRIANGLE EXPRESSWAY) IN DURHAM. CONSTRUCT NHFP WESTBOUND AUXILIARY LANE. SW WEST OF SR 1114 (BUCKHORN ROAD) TO WEST OF SR 1006 (ORANGE GROVE ROAD). ORANGE I-40 / I-85 150 NHPIM 7.1 C 8690 I-5958 SW PAVEMENT REHABILITATION. C 2450 C 2450 DURHAM I-40 US 15 / US 501 TO EAST OF NC 147. 9.5 4910 I-5993 10 NHPIM PAVEMENT REHABILITATION. SW **COORDINATE WITH I-5994** DURHAM I-40 I-6006 NC 54 (EXIT 273) TO SR 1728 (WADE 15.8 54560 10 CMAQ AVENUE). CONVERT FACILITY TO A CMAQ WAKE MANAGED FREEWAY WITH RAMP METERING AND OTHER ATM / ITS COMPONENTS. SW DURHAM I-40 I-3306 I-85 IN ORANGE COUNTY TO NC 147 20.7 204983 88683 NHP (DURHAM FREEWAY / TRIANGLE NHP 250 AA ORANGE EXPRESSWAY) IN DURHAM COUNTY. WIDEN NHP 12350 AA C 12350 AA C 12350 AA TO SIX LANES AND INSTALL ITS. NHP 250 AB NHP 250 AB 12350 AB 12350 AB 12350 AB 12350 AB NHP R 1225 AC R 3675 AC U 150 AC U 450 AC C 11000 AC SW AA I-85 TO NC 86 SW AB NC 86 TO DURHAM COUNTY LINE REG AC NC 86 INTERCHANGE IMPROVEMENTS ORANGE COUNTY LINE TO NC 147 (DURHAM FREEWAY / TRIANGLE EXPRESSWAY) IN DURHAM - COMPLETE DURHAM I-40 EAST OF NC 147 TO SR 3015 (AIRPORT 1-5995 6488 BOULEVARD). PAVEMENT REHABILITATION. WAKE SW GARVEE BOND FUNDING: \$4 MILLION FOR CONSTRUCTION - PAYBACK 2019-2033 ORANGE I-85 I-5967 SR 1009 (SOUTH CHURTON STREET) IN 21700 2475 HILLSBOROUGH. INTERCHANGE IMPROVEMENTS. SW DURHAM I-85 I-5729 US 15 / US 501 TO EAST OF SR 1827 5.3 11315 11315 (MIDLAND TERRACE ROAD) IN DURHAM. PAVEMENT REHABILITATION.

UNDER CONSTRUCTION

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI) REG - Regional Category
SW - Statewide Category TRN - Transition Project

19 Item 13

					DURHAN	/I-CHAPEL HIL	L-CARRBC	RO MET	ROPOL	ITAN PL	ANNIN														MPO	Board 1/16/2019
					TOTAL								F WORK / ES			in thol	JSANDS /	PROJEC								
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		SW																								
						COORDINA	ATE WITH I-305																			
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						COORDINA	ATE WITH I-5967	AND U-5845	5																	
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		SW	ADD LANES.			INTP	<u> </u>	_		-11						11	<u> </u>		+		-		33000	C 3	5000	C 86000
						COORDINA	ATE WITH I-5967	, I-5984 AND	U-5845																	
DURHAM	I-85 / US 15	I-6010	EAST OF SR 1827 (MIDLAND TERRACE) TO SR 1632 (RED MILL ROAD) IN DURHAM. ADD	3.2	108652	10 NHP		コロ												H	R 7500		\blacksquare			
			LANES.			NHP NHP	+	┪┝╅		1				+++		+		+		 	U 6742	4	+-+	++	+	C 94400
		SW																								
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GRANVILLE			DURHAM COUNTY TO NORTH OF NC 56 IN GRANVILLE COUNTY. PAVEMENT																							
		SW	REHABILITATION.																							
DURHAM	I-85	I-5941	ORANGE COUNTY LINE TO US 15 / US 501 IN	2.4	4276	10 NHPIM		–		1 1			<u> </u>		C 2133	3	C 2	133		$\overline{}$	1	1 1	$\overline{}$			
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		SW																								
							ATE WITH I-5999	AND I-6000																		
DURHAM WAKE	I-540	I-6000	I-40 IN DURHAM TO US 1 IN RALEIGH. BRIDGE PRESERVATION / REHABILITATION.	16.3	4551	10 NHPIM						C 4541														
WAKE		SW																								
						COORDINA	ATE WITH I-5998	AND I-5999																		
RURAL PRO	JECTS					0001121111	112 1111111 0770	10777																		
ORANGE	NC 54	R-5821	SR 1006 (ORANGE GROVE ROAD) TO SR 1107 / SR 1937 (OLD FAYETTEVILLE ROAD).	7 6.1	5709	1785 T		R	630 A											oxdot			$\overline{+}$			
			CONSTRUCT OPERATIONAL			T			100 A			C 3194 A								世			\pm			
			IMPROVEMENTS, INCLUDING BICYCLE/PEDESTRIAN ACCOMMODATIONS,				SR 1006 (ORAI									ATIONAI	L IMPROVE	MENTS, IN	ICLUDING E	BICYCLE	/PEDESTI	RIAN ACC	OMMODAT	IONS		
			AND IMPROVE SR 1006 INTERSECTION.			DIV B	SR 1006 (ORAI	NGE GROVE	ROAD). IN	NTERSECTIO	ON IMPRO	VEMENTS U	JNDER CONST	ructio	N											
						<u>, </u>							<u> </u>		•				•							
CHATHAM	NC 751	R-5825	SR 1731 (O'KELLY CHAPEL ROAD). UPGRADE AND REALIGN INTERSECTION.		759	369 T	C 390													$\perp \perp$		1				
		DIV	The state of the s																							

RIGHT OF WAY IN PROGRESS

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI)
SW - Statewide Category TRN - Transition Project

TOTAL PRIOR
PROJ YEARS
STATE TRANSPORTATION IMPROVEMENT PROGRAM

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

DEVELOPMENTAL PROGRAM
UNFUNDED

					PROJ	YEARS			STATE TRA	NSPORTATI	ON IMPROV	VEMENT PRO	GRAM				D	EVELOF	MENTAL P	ROGRAM			UNFUND)ED
COUNTY	ROUTE/CITY	ID Number	LOCATION / DESCRIPTION	LENGTH	COST (THOU)	COST (THOU) FUN	IDS FY 2019	FY 2020) FY 20	21 F	Y 2022	FY 2023	F	Y 2024		FY 2025	FY 202	26	FY 2027	FY 20	28	FY 2029	FUTURE Y	EARS
RURAL PROJECT CHATHAM HOKE LEE MONTGOMERY MOORE RANDOLPH RICHMOND SCOTLAND	: <u>TS</u> Various	R-5788	DIVISION 8 PROGRAM TO UPGRADE INTERSECTIONS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) USING TRANSPORTATION ALTERNATIVES (TA) FUNDS.		5632	1632 TA O	C 3200 C 800								Ē									$\overline{\exists}$
SCOTLAND		DIV																						
						LINDE	R CONSTRUCTION - 01	THED FLINDS AD	DE STATE HIGHW	VAV FIINDS														
DURHAM FRANKLIN GRANVILLE PERSON VANCE WAKE WARREN	VARIOUS	R-5785	DIVISION 5 PROGRAM TO UPGRADE INTERSECTIONS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) USING TRANSPORTATION ALTERNATIVES (TA) FUNDS.		4585	585 TA O	C 3200 C 800			1 1														\square
		DIV																						
						UNDE	R CONSTRUCTION - 01	THER FUNDS AR	RE STATE HIGHW	VAY FUNDS														
ALAMANCE CASWELL GUILFORD ORANGE ROCKINGHAM	VARIOUS	R-5787	DIVISION 7 PROGRAM TO UPGRADE INTERSECTIONS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) USING TRANSPORTATION ALTERNATIVES (TA) FUNDS.		3089	3089																		_
						UNDE	R CONSTRUCTION - 01	THER FUNDS AR	RE STATE HIGHW	VAY FUNDS														
URBAN PROJEC	:TS														_									
DURHAM	US 15 / US 501	U-5717 SW	SR 1116 (GARRETT ROAD) IN DURHAM. CONVERT AT-GRADE INTERSECTION TO INTERCHANGE.		39925	2400 T T CMAC	R 2281 U 700	R 6844 C 9234	C 92	33 C	9233		#											
						COOF	RDINATE WITH TE-5205	AND U-6067																
DURHAM	US 15 / US 501	U-6067 SW	I-40, SR (MOUNT MORIAH ROAD), AND SOUTHWEST DURHAM PARKWAY IN DURHAM. IMPROVE INTERCHANGE / INTERSECTION AREA.	2.0	195310	10 T T T									R	16667 1667	R 1666 U 166		R 16666 U 1666	C 3507	75 C	35075	C 70150)
								AND 11 5747																
CHATHAM ORANGE	US 15 / US 501	U-6192 DIV	US 64 BYPASS TO SR 1919 (SMITH LEVEL ROAD). CONVERT REMAINING NON- SYNCHRONIZED SECTIONS OF FACILITY TO SYNCHRONIZED STREET.	10.5	45640	T T T T	RDINATE WITH TE-5205	AND U-5/1/							R	4400 550	R 440	0 C	B 1716 C 3334	CB 171			CB 20592	2
						BUILI	NC BOND: \$20 MILLIC	ON FOR CONSTR	RUCTION - PAYB	ACK 2027-204	11													
															_									

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI) REG - Regional Category
SW - Statewide Category TRN - Transition Project

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION LENGTH (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 **URBAN PROJECTS** DURHAM LYNN ROAD IN DURHAM TO WEST OF 5.0 281312 R 14450 A R 14450 A US 70 U-5720 ALEXANDER DRIVE IN RALEIGH. UPGRADE 650 A WAKE (MIAMI BOULEVARD) TO CONTROLLED-ACCESS FACILITY AND 8125 A 8125 A 8125 CONVERT AT-GRADE INTERSECTION WITH R 21400 B R 21400 B SR 1811 (SHERRON ROAD) / SR 1959 (SOUTH 700 B U 700 B MIAMI BOULEVARD) TO INTERCHANGE. R 25200 C 1300 41600 R 30223 D U 3627 D C 41462 D SW A LYNN ROAD TO SR 1959 (SOUTH MIAMI BOULEVARD) / SR 1811 (SHERRON ROAD). SR 1959 (SOUTH MIAMI BOULEVARD) / SR 1811 (SHERRON ROAD) INTERSECTION. CONVERT AT-GRADE INTERSECTION TO INTERCHANGE SR 1959 (SOUTH MIAMI BOULEVARD) / SR 1811 (SHERRON ROAD) TO SR 2095 (PAGE ROAD EXTENSION). SR 2095 (PAGE ROAD EXTENSION) IN DURHAM COUNTY TO WEST OF ALEXANDER DRIVE IN WAKE COUNTY. DURHAM U-5516 SR 1448 (LATTA ROAD) / SR 1639 (INFINITY 0.5 12911 US 501 ROAD) INTERSECTION IN DURHAM. (ROXBORO ROAD) 2000 INTERSECTION IMPROVEMENTS. REG RIGHT OF WAY PARTICIPATION \$2 MILLION BY CITY OF DURHAM DURHAM NC 54 U-5774 US 15 / US 501 IN CHAPEL HILL TO NC 55 IN 297035 1735 T 8.2 2800 DURHAM LIPGRADE ROADWAY CORRIDOR ORANGE 1000 A 11000 A U 1000 B 1000 C 7900 C C 7900 C 7900 C 18000 18000 F 18000 NHP 800 F 9825 F C 29475 F 1800 G 800 G C 29400 G R 5900 H 2500 H C 13200 H R 2500 I 10700 C 20400 I R 3200 J U 12600 J 14800 . A US 15 / US 501. UPGRADE INTERCHANGE US 15 / US 501 IN ORANGE COUNTY TO SR 1110 (BARBEE CHAPEL ROAD) IN DURHAM COUNTY, UPGRADE ROADWAY CORRIDOR AND CONVERT AT-GRADE INTERSECTION WITH SR 1110 TO REG B REG C SR1110 (BARBEE CHAPEL ROAD) TO I-40. UPGRADE ROADWAY CORRIDOR. FALCONBBRIDGE ROAD. CONVERT AT-GRADE INTERSECTION TO INTERCHANGE. - SCOPE INCLUDED IN U-5774F SR 1110 (FARRINGTON ROAD). CONVERT AT-GRADE INTERSECTION TO GRADE SEPARATION. - SCOPE INCLUDED IN U-5774F I-40 / NC 54 INTERCHANGE IMPROVEMENTS G I-40 TO NC 751. UPGRADE ROADWAY CORRIDOR

H NC 751 TO SR 1118 (FAYETTEVILLE ROAD). UPGRADE ROADWAY CORRIDOR.

SR 1118 (FAYETTEVILLE ROAD) TO SR 1106 (BARBEE ROAD). UPGRADE ROADWAY CORRIDOR.

J SR 1106 (BARBEE ROAD) TO NC 55. UPGRADE ROADWAY CORRIDOR.

PARTS A THROUGH F ON EXPANDED NHS - COORDINATE WITH TE-5205

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST ID COST **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 **URBAN PROJECTS** DURHAM NC 55 U-6118 MERIDIAN PARKWAY TO I-40 INTERCHANGE 2.0 12010 IN DURHAM. ADD THIRD SOUTHBOUND LANE AND UPGRADE RAMP TERMINALS. REG DURHAM NC 147 U-5934 I-40 TO FUTURE I-885 (EAST END 3.9 179548 CONNECTOR) IN DURHAM. ADD LANES AND 1323 REHABILITATE PAVEMENT SW **DESIGN-BUILD PROJECT** ORANGE SR 1006 U-5848 EXISTING SR 1006 (ORANGE GROVE ROAD) 0.4 5826 TO US 70 BUSINESS) IN HILLSBOROUGH. (ORANGE GROVE EXTEND ORANGE GROVE ROAD ON NEW ROAD) LOCATION WITH SIDEWALKS AND BICYCLE DIV COORDINATE WITH P-5701 AND U-5845 SR 1913 (BENNETT ROAD) IN CHAPEL HILL. CONSTRUCT ROUNDABOUT AND RELATED ORANGE SR 1008 U-5854 1957 1957 (MT. CARMEL SAFETY IMPROVEMENTS. CHURCH ROAD) DIV UNDER CONSTRUCTION ORANGE SR 1771 / SR 1927 (MERRITT MILL ROAD) / SR 1010 U-5847 1025 250 7 BREWER LANE INTERSECTION IN CHAPEL (WEST FRANKLIN HILL AND CARRBORO. INTERSECTION STREET / IMPROVEMENTS. EAST MAIN STREET) DIV DURHAM SR 1118 U-6021 WOODCROFT PARKWAY TO BARBEE ROAD 1.4 22909 IN DURHAM. WIDEN TO 4-LANE DIVIDED (FAYETTEVILLE FACILITY WITH BICYCLE / PEDESTRIAN ROAD) ACCOMMODATIONS. DIV BUILD NC BONDS: \$10 MILLION FOR CONSTRUCTION - PAYBACK 2023-2037 ORANGE SR 1772 U-5846 SR 1780 (ESTES DRIVE) IN CARRBORO. 3185 3185 (GREENSBORO CONSTRUCT ROUNDABOUT. STREET) DIV UNDER CONSTRUCTION DURHAM **NEW ROUTE** U-0071 EAST END CONNECTOR, NC 147 (DURHAM 211217 211217 FREEWAY) TO NORTH OF NC 98 IN DURHAM. TRN FOUR-LANE DIVIDED FREEWAY WITH AUXILIARY LANES, PART ON NEW LOCATION. UNDER CONSTRUCTION CHATHAM VARIOUS U-4727 DURHAM-CHAPEL HILL-CARRBORO 13856 BGDA PE 2025 METROPOLITAN PLANNING ORGANIZATION DURHAM (DCHCMPO) PLANNING ALLOCATION AND ORANGE UNIFIED WORK PROGRAM. DIV PRIOR YEAR AMOUNT INCLUDES \$223K FEDERAL TIGER GRANT

DIV - Division Category
HF - State Dollars (Non STI)
SW - Statewide Category
TRN - Transition Project

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST ID COST FUTURE YEARS COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 **URBAN PROJECTS** CHATHAM VARIOUS U-6219 DURHAM-CHAPEL HILL-CARRBORO TADA 545 C 800 C 800 C 800 METROPOLITAN PLANNING ORGANIZATION DURHAM (DCHCMPO) TRANSPORTATION ORANGE ALTERNATIVES DIRECT ATTRIBUTABLE (DA) DIV FUNDS - RESERVED FOR FUTURE PROGRAMMING. CHATHAM VARIOUS DURHAM-CHAPEL HILL-CARRBORO C 1377 C 11200 C 11200 C 11200 U-5023 46177 METROPOLITAN PLANNING ORGANIZATION DURHAM (DCHCMPO) SURFACE TRANSPORTATION ORANGE BLOCK GRANT DIRECT ATTRIBUTABLE (DA) DIV FUNDS - RESERVED FOR FUTURE PROGRAMMING. INCLUDES \$137K TO BE ALLOCATED TO TG-5235; \$1548K ALLOCATED TO U-4726. VARIABLE MESSAGE SIGNS FOR TRAFFIC DURHAM VARIOUS U-5543 94 BGDA 1077 MANAGEMENT ON MAJOR CORRIDORS IN ORANGE CHAPEL HILL. EX CITY OF DURHAM. UPGRADE ITS / SIGNAL DURHAM VARIOUS 3947 BGANY U U-5968 26562 585 SYSTEM. 142 BGANY C 5685 1384 1385 1385 С С 438 REG ORANGE VARIOUS U-5549 DOWNTOWN ACCESS IMPROVEMENTS IN 156 156 HILLSBOROUGH. CONSTRUCT CURB DIV RELOCATIONS AND ADA-COMPLIANT INTERSECTION IMPROVEMENTS, AND REMOVE ON-STREET PARKING. UNDER CONSTRUCTION BY TOWN OF HILLSBOROUGH DURHAM NC 147 (DURHAM FREEWAY) TO US 70 NC 55 U-3308 1.0 41348 41348 BUSINESS / NC 98 (HOLLOWAY STREET) IN (ALSTON AVENUE) DURHAM. WIDEN TO FOUR-LANE DIVIDED TRN FACILITY FROM NC 147 TO MAIN STREET AND REPLACE NORFOLK SOUTHERN RAILROAD BRIDGES. MODERNIZE FROM MAIN STREET TO US 70 BUSINESS / NC 98 (HOLLOWAY STREET) INCLUDING ADDITION OF ON-STREET PARKING, BICYCLE LANES, TURN LANES, MEDIAN AND ACCESS UNDER CONSTRUCTION DURHAM NC 147 U-5937 SR 1127 (WEST CHAPEL HILL STREET) TO 3.0 57316 200 T BRIGGS AVENUE IN DURHAM. CONSTRUCT (DURHAM FREEWAY) AUXILIARY LANES AND OPERATIONAL IMPROVEMENTS. SW ORANGE US 15 / US 501 U-5550 SR 1742 (EPHESUS CHURCH ROAD) IN 2170 2170 CHAPEL HILL. INTERSECTION (FORDHAM IMPROVEMENTS. BOULEVARD) SW

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI) REG - Regional Category
SW - Statewide Category TRN - Transition Project

UNDER CONSTRUCTION BY TOWN OF CHAPEL HILL

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION LENGTH (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 **URBAN PROJECTS** DURHAM SR 1938 (JUNCTION ROAD) TO SR 1919 0.8 U-6120 18290 (LYNN ROAD) IN DURHAM. CONSTRUCT (HOLLOWAY STREET) SAFETY IMPROVEMENTS AND WIDEN TO ADD MEDIAN, BICYCLE LANES, SIDEWALKS, TRANSIT STOP IMPROVEMENTS, AND DIV TRAFFIC SIGNALS WHERE NEEDED. BUILD NC BONDS: \$8 MILLION FOR CONSTRUCTION - PAYBACK 2028-2042 DURHAM 86 CB 86 CB 86 CB 86 CB NC 751 U-5745 SR 1183 (UNIVERSITY DRIVE) INTERSECTION 86 CB 86 CB 86 CB IN DURHAM. CONSTRUCT ROUNDABOUT. (HOPE VALLEY ROAD) REG UNDER CONSTRUCTION; BUILD NC BONDS: \$1 MILLION FOR CONSTRUCTION - PAYBACK 2019-2033 DURHAM SR 2220 US 15 / US 501 IN ORANGE COUNTY TO SR 2.7 13348 13348 1116 (GARRETT ROAD) IN DURHAM ORANGE (OLD CHAPEL HILL COUNTY. BICYCLE, PEDESTRIAN, AND ROAD) TRANSIT IMPROVEMENTS: AND SR 1838 CONSTRUCTION OF ROUNDABOUT. (OLD DURHAM ROAD) TRN TRN A US 15 / US 501 IN ORANGE COUNTY TO SR 1113 (POPE ROAD) IN DURHAM COUNTY - UNDER CONSTRUCTION TRN B SR 1113 (POPE ROAD) TO SR 1116 (GARRETT ROAD) - UNDER CONSTRUCTION ORANGE SR 1009 U-5845 I-40 TO ENO RIVER IN HILLSBOROUGH. 2.2 56556 2500 T 4626 WIDEN TO MULTILANES. (SOUTH CHURTON 555 555 STREET) DIV BUILD NC BONDS: \$15 MILLION FOR CONSTRUCTION - PAYBACK 2025-2039 DURHAM NC 86 (SOUTH COLUMBIA STREET) TO I-40 IN 6.0 170010 US 15 / US 501 U-5304 5000 A 5000 A CHAPEL HILL. UPGRADE CORRIDOR. 650 A ORANGE (FORDHAM 650 A C 11000 A **BOULEVARD)** 3000 B 3000 B 300 B 300 E 400 D 400 I 7500 D 15000 D 400 E 6250 E C 12500 E 3000 F 750 F SW A NC 86 (SOUTH COLUMBIA STREET). INTERCHANGE IMPROVEMENTS. B NC 86 (SOUTH COLUMBIA STREET) TO NC 54 (RALEIGH ROAD). CAPACITY IMPROVEMENTS, WITH SIDEWALKS, WIDE OUTSIDE LANES AND TRANSIT ACCOMMODATIONS. SR 1742 (EPHESUS CHURCH ROAD). INTERSECTION IMPROVEMENTS. - WORK COMPLETED UNDER U-5550. NC 54 (RALEIGH ROAD). TO SR 1742 (EPHESUS CHURCH ROAD). CAPACITY IMPROVEMENTS, WITH SIDEWALKS, WIDE OUTSIDE LANES AND TRANSIT ACCOMMODATIONS. SR 1902 (MANNING DRIVE). CONVERT AT-GRADE INTERSECTION TO INTERCHANGE. SW SR 1742 (EPHESUS CHURCH ROAD) TO I-40. CORRIDOR CAPACITY IMPROVEMENTS. COORDINATE WITH EB-5998, TE-5205 AND U-5774 DURHAM SR 1116 (GARRETT ROAD) TO NC 751 (HOPE 595 BGANY WOODCROFT U-5823 2814 VALLEY ROAD) IN DURHAM. CONSTRUCT PARKWAY ROADWAY ON NEW ALIGNMENT. **EXTENSION** BGANY BGANY DIV

NON-STATE SYSTEM FACILITY - LOCAL MATCH BY CITY OF DURHAM

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI) REG - Regional Category
SW - Statewide Category TRN - Transition Project

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DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID FUTURE YEARS COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 BRIDGE PROJECTS ORANGE B-6037 REPLACE BRIDGE 670049 OVER NORTH 100 NHPB CAROLINA RAILROAD / NORFOLK SOUTHERN RAILROAD. REG DURHAM SR 1616 B-4943 REPLACE BRIDGE 310020 OVER DIAL 2276 2276 CREEK (LAKE MICHIE). (BAHAMA ROAD) DIV UNDER CONSTRUCTION DURHAM US 15 / US 501 REPLACE BRIDGE 310080 OVER SR 1308 2419 B-5674 100 NHPB R (CORNWALLIS ROAD) IN DURHAM. NHPB NORTHBOUND REG ORANGE SR 1005 B-5348 REPLACE BRIDGE 670085 OVER PHIL'S 1345 1345 CREEK. (OLD GREENSBORO ROAD) HF UNDER CONSTRUCTION MITIGATION PROJECTS ECOSYSTEM ENHANCEMENT PROGRAM 29709 29709 FOR DIVISION 8 PROJECT MITIGATION. HOKE LEE MONTGOMERY MOORE RANDOLPH RICHMOND SCOTLAND IN PROGRESS DURHAM VARIOUS EE-4905 ECOSYSTEM ENHANCEMENT PROGRAM 20302 20302 FOR DIVISION 5 PROJECT MITIGATION. FRANKLIN GRANVILLE PERSON VANCE WAKE WARREN IN PROGRESS ALAMANCE VARIOUS ECOSYSTEM ENHANCEMENT PROGRAM 18169 18169 FOR DIVISION 7 PROJECT MITIGATION. CASWELL GUILFORD ORANGE

IN PROGRESS

DIV - Division Category EX - Exempt Category HF - State Dollars (Non STI) REG - Regional Category TRN - Transition Project SW - Statewide Category

ROCKINGHAM

TYPE OF WORK / FSTIMATED COST IN THOUSANDS / PRO IECT BREAKS

ID COCT COCT						TOTAL D	DIOD				TYPE OF	WORK / ESTIMA	TED COST IN TH	OUSANDS / PROJE	CT BREAKS			MP	O Board 1/16/2019
Market						PROJ Y	EARS		S	TATE TRANSPO	RTATION IMPRO	VEMENT PROGI	RAM		DEVEL	OPMENTAL PRO	OGRAM		UNFUNDED
Commonweight Comm	COUNTY	ROUTE/CITY		LOCATION / DESCRIPTION	LENGTH			FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FUTURE YEARS
NOTICE N	DURHAM FRANKLIN GRANVILLE PERSON VANCE WAKE		W-5705			4301													
DRIVER VANOUS V							REG REG	SAFETY IMPROVE	EMENTS AT VARIOU	JS LOCATIONS.									
MANUAL CONTINUE WAS PART OF THE PROPORTION OF TH							IN PROGR	ESS											
ALAMANOCE CASMILL COLONING MANUAL STATES CHARGINS IN UNISSON 7. UNISON 7. MANUAL STATES CHARGINS CHARGINS CHARGINS AT VARIOUS DOCATIONS. ALAMANOCE CASMILL CHARGINS CHARGINS W 5017 MANUAL STATES CHARGINS	FRANKLIN GRANVILLE PERSON VANCE WAKE	VARIOUS	W-5205	SAFETY AND LIGHTING IMPROVEMENTS AT	Г	10184	10184												
ALAMMIC VARIOUS W5707 SAVETY RIPROPLEMENTS AT VARIOUS 1280 TXM TO CATOKS IN DIVISION 7 TO CATOKS IN DI										, -									
MAMMICT VARIOUS W 500 LOCATIONS IN DIVISION 7. CLEANING CONSIDER OF THE PROPORTINATIS AT VARIOUS 1350 LOCATIONS IN DIVISION 7. ALAMMICE VARIOUS W 520 DIVISION TRUMBLE STRYS, GUARDORALL SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS SW 5W SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS SW 5W SW SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS SW 5W SW SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS SW 5W 5W SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS SW 5W 5W SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS SW 5W 5W 5W SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS SW 5W									0, 00,		2.011.110		20125 20071110110		. 0.11200111				
DIV DIV SAFETY MAPROVIDENTS AT VARIOUS LOCATIONS. W SAFETY MAPROVIDENT LOCATIONS. W SAFETY MAPROVIDENT LOCATIONS. W SAFETY MAPROVIDENT LOCATIONS. W SAFE	CASWELL GUILFORD ORANGE	VARIOUS	W-5707			1350		DNSTRUCTION											
ALAMANCE VARIOUS CASWELL SAFETY AND LIGHTING IMPROVEMENTS AT SELECTED LOCATIONS. UNDER CONSTRUCTION CHATHAM VARIOUS HORSE SELECTED LOCATIONS. CHATHAM VARIOUS HORSE SELECTED LOCATIONS. CHATHAM VARIOUS SELECTED LOCATIONS. CHATHAM SELECTED LOCATIONS. UNDER CONSTRUCTION UNDER CONSTRUCTION CHATHAM SELECTED LOCATIONS. FIG. 843 5463 FIG. 8463 FIG	ROCKINGTAW						REG REG SW SW	SAFETY IMPROVE SAFETY IMPROVE	EMENTS AT VARIOU	JS LOCATIONS.									
CHATHAM VARIOUS W-5208 HOKE LEE KONTGOMERY MOORE RANDOLPH RICHMOND SCOTLAND REG MA NC 144 INTERSECTION. CONSTRUCT ROUNDABOUT - UNDER CONSTRUCTION	CASWELL GUILFORD ORANGE	VARIOUS	W-5207	SAFETY AND LIGHTING IMPROVEMENTS AT		5636		ESS											
CHATHAM VARIOUS W-5208 HOKE LEE KONTGOMERY MOORE RANDOLPH RICHMOND SCOTLAND REG MA NC 144 INTERSECTION. CONSTRUCT ROUNDABOUT - UNDER CONSTRUCTION							LINDER CO	ONSTRUCTION											
	HOKE LEE MONTGOMERY MOORE RANDOLPH RICHMOND	VARIOUS	W-5208	SAFETY AND LIGHTING IMPROVEMENTS AT	Г	5463													
UNDER CONSTRUCTION							REG MA	NC 144 INTERSEC	CTION. CONSTRUC	T ROUNDABOUT -	UNDER CONSTRU	CTION							
							UNDER CO	ONSTRUCTION											

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI) REG - Regional Category
SW - Statewide Category TRN - Transition Project

TOTAL PRIOR
PROJ YEARS
COST COST

TOTAL PRIOR
STATE TRANSPORTATION IMPROVEMENT PROGRAM

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

O BOSIG 17/0/20

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		ID			PROJ Y COST			STATE TRANSPOR	RIATION IMPRO	OVEMENT PROC	RAM	<u> </u>	DEV	ELOPMENTAL P	RUGRAM		UNFUNDED
COUNTY	ROUTE/CITY	NUMBER	LOCATION / DESCRIPTION	LENGTH		THOU) FUNDS FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FUTURE YEARS
HIGHWAY SAFI CHATHAM HOKE LEE MONTGOMERY MOORE RANDOLPH RICHMOND SCOTLAND	ETY PROJECTS VARIOUS	W-5708	SAFETY IMPROVEMENTS AT VARIOUS LOCATIONS IN DIVISION 8.		5688	5688	THENTS AT VADIO	DUCLOCATIONS									
						DIV DIV SAFETY IMPROVI REG REG SAFETY IMPROVI SW SW SAFETY IMPROVI IN PROGRESS	MENTS AT VARI	OUS LOCATIONS.									
CONGESTION	MITIGATION PROJECT	TS										_					
ORANGE	SR 1750 (NORTH ESTES DRIVE)	C-5179 EX	NC 86 (MARTIN LUTHER KING, JR. BOULEVARD) TO CASWELL DRIVE IN CHAPEL HILL. CONSTRUCT FIVE FOOT SIDEWALKS AND FIVE FOOT BIKE LANES. NC 86 (MARTIN LUTHER KING, JR. BOULEVARD) TO ELLIOTT ROAD IN CHAPEI HILL. CONSTRUCT TEN FOOT MULTIUSE PATH.	-	4221	912 CMAQ C 2647 L C 662											
						RIGHT OF WAY IN PROGRESS	BY TOWN OF C	HAPEL HILL									
ORANGE	SR 1919 (SMITH LEVEL ROAE S. GREENSBORO ST		PUBLIC WORKS DRIVE TO N. END OF OLD PITTSBORO ROAD IN CARRBORO. CONSTRUCT 3,100 LF SIDEWALK ON ONE SIDE.	0.6	1948	BGDA PE 84 L PE 21 BGDA L BGDA L CMAQ L	R 100 R 25	C 530 C 132 C 440 C 110 C 506									
DURHAM	VARIOUS	C-5178 EX	CAMPUS WALK AVENUE, MORREENE ROAL TO LASALLE STREET AND LASALLE)	336	336											
		LX	STREET, KANGAROO DRIVE TO ERWIN ROAD IN DURHAM. CONSTRUCT SIDEWALKS.			UNDER CONSTRUCTION BY (CITY OF DURHAM										
DURHAM	VARIOUS	C-5183	CONSTRUCT SIDEWALKS IN DURHAM.		815	10 CMAQ R 79 B L R 20 B CMAQ C 565 B L C 141 B											
		EX				EX B SR 1171 (RIDDLE	RD.) TO CAPPS S	Т.									
CHATHAM DURHAM ORANGE	VARIOUS	C-5605	PROJECTS TO IMPROVE CONGESTION AND AIR QUALITY IN THE DURHAM / CHAPEL HILL / CARRBORO MPO.		4788	271 CMAQ PE 242 L PE 61 CMAQ R 242 L R 61 CMAQ C 1453 L C 363 CMAQ O 242 L O 61 CMAQ I 242 L I 61	PE 119 PE 30 R 119 R 30 C 714 C 179 O 119 O 30 I 119 I 30										
						IN PROGRESS											
						III NOONEGO											

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI)
SW - Statewide Category TRN - Transition Project

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 CONGESTION MITIGATION PROJECTS DURHAM SR 1317 NEAL ROAD TO SR 1320 (ERWIN ROAD) IN 994 BGDA C-4928 DURHAM. CONSTRUCT BIKE LANES AND (MORREENE ROAD) CMAQ C 2331 BGDA C 2140 1312 DIV TRIANGLE J COUNCIL OF GOVERNMENTS (COG). TRANSPORTATION DEMAND MANAGEMENT PROGRAM FOR DURHAM TRIANGLE J C-4924 8400 8400 ORANGE COUNCIL OF WAKE GOVERNMENTS ORGANIZATIONS IN TRIANGLE OZONE NON-EX ATTAINMENT AREA. EX A TRANSPORTATION DEMAND MANAGEMENT PROGRAM FOR ORGANIZATIONS IN CAPITAL AREA MPO (CAMPO) - IN PROGRESS EX B TRANSPORTATION DEMAND MANAGEMENT PROGRAM FOR ORGANIZATIONS IN DURHAM-CHAPEL HILL-CARRBORO (DCHC) - IN PROGRESS ORANGE 100 CMAQ 523 JONES CREEK C-5181 CONSTRUCT A 100 FOOT BRIDGE AND 650 **GREENWAY** FOOT PAVED TRAIL IN CARRBORO TO FILL GAP BETWEEN THE UPPER BOLIN TRAIL AND TWIN CREEKS GREENWAY AND IMPLEMENT PROGRAM TO SUPPORT NON-EX VEHICLE TRIPS TO MORRIS GROVE ELEMENTARY SCHOOL. ORANGE RIVERWALK TRAIL C-5184 RIVERWALK TRAIL, PHASE III IN 610 610 HILLSBOROUGH. CONSTRUCT A PAVED EX OFF-ROAD TAIL ALONG ENO RIVER CONNECTING RIVER PARK, GOLD PARK AND THE OCCONEECHEE MOUNTAIN STATE NATURAL AREA, AND CONSTRUCT SIDEWALK TO PROVIDE PEDESTRIAN AND BICYCLE CONNECTIONS TO THE GREENWAY. UNDER CONSTRUCTION BY TOWN OF HILLSBOROUGH DURHAM PHASE II, WESTOVER PARK TO STADIUM WEST ELLERBE C-5572 1.9 1800 DRIVE TRAIL IN DURHAM. CONSTRUCT CREEK GREENWAY MULTI-USE PATH. EX UNDER CONSTRUCTION BY CITY OF DURHAM BICYCLE AND PEDESTRIAN PROJECTS US 15 / US 501 WILLOW DRIVE TO SR 1741 / SR 1838 (OLD 2248 DURHAM-CHAPEL HILL ROAD) IN CHAPEL HILL. CONSTRUCT MULTIUSE PATHS. TAANY 1635 DIV COORDINATE WITH U-5304 ORANGE NC 54 ANDERSON PARK TO JAMES STREET IN 1469 TAANY 190 0.7 CARRBORO. CONSTRUCT MULTIUSE PATH PE 48 ON NORTH SIDE OF NC 54. TAANY 34 TAANY DIV DURHAM NC 54 NC 55 TO RESEARCH TRIANGLE PARK 0.6 99 SRTS C WESTERN LIMIT IN DURHAM. CONSTRUCT DIV SECTIONS OF SIDEWALK ON SOUTH SIDE.

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TOTAL PRIOR TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

					TOTAL PROJ				S	TATE TRA	INSPORTA		VEMENT PRO	GRAM	JOANNO 7 1 KC			MENTAL PRO	OGRAM		UNFUNDED
COUNTY	ROUTE/CITY	ID NUMBER	LOCATION / DESCRIPTION	LENGTH	COST (THOU)	COST (THOU) FUNDS	FY 2019		FY 2020	FY 20	021	FY 2022	FY 2023	FY 2024	 FY 2025	FY 202	26	FY 2027	FY 2028	FY 2029	FUTURE YEARS
	D PEDESTRIAN PROJECT NC 55 (ALSTON AVENUE)	<u>ΓS</u>	SR 1171 (RIDDLE ROAD) TO CECIL STREET IN DURHAM. CONSTRUCT SIDEWALK ON EAST SIDE TO FILL IN MISSING GAPS.		680	TAANY L TAANY L TAANY L TAANY		PE PE	84		R	40	C 420 C 105								
DURHAM	NC 157 / SR 1322 (GUESS ROAD)	EB-5834	HILLCREST DRIVE TO SR 1407 (WEST CARVER STREET) IN DURHAM. CONSTRUC SIDEWALKS ON BOTH SIDES.	1.1 CT	911	TAANY L TAANY L TAANY L	PE 94 PE 24				163 41 C										
DURHAM	SR 1158 (CORNWALLIS ROAD)	U-4724 TRN	SR 2295 (SOUTH ROXBORO STREET) TO SF 1127 (CHAPEL HILL ROAD) IN DURHAM. BICYCLE AND PEDESTRIAN FEATURES.	R 1.2	5834	856 BGDA L		C	3854 1124	H											
ORANGE	SR 1780 (ESTES DRIVE)		SR 1772 (NORTH GREENSBORO STREET) IN CARRBORO TO NC 86 (MARTIN LUTHER KING, JR. BOULEVARD) IN CHAPEL HILL. CONSTRUCT MULTIUSE PATH, SIDEWALKS AND BICYCLE LANES.		3878	TAANY L TAANY L TAANY L TAANY L TAANY L TAANY L TAANY		PE PE R R	117 B 29 B	R C 21	37 A 9 A C C C	170 A									
		DIV				DIV B	ADMINISTRATIO	ON BY DI RFOLK-SO	V. 7. Duthern Rr	TRACKS T				(S IN CARRBORO						CTION	
CHATHAM DURHAM ORANGE	VARIOUS	U-4726 DIV	DURHAM-CHAPEL HILL-CARRBORO (DCHC MPO. BICYCLE, PEDESTRIAN, AND TRANSPORTATION ALTERNATIVES PROGRAM (TAP)-ELIGIBLE PROJECTS.	·)	13242	12187 TADA	C 655	C	400												
ORANGE	SR 1005 (JONES FERRY ROAD	EB-5880)	DAVIE ROAD TO SR 1010 (WEST MAIN STREET) IN CARREORO. CONSTRUCT SIDEWALK ON NORTH SIDE.	0.5	561	TAANY L TAANY L TAANY					PE PE		R 25	C 353 C 88							

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS COST COST STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED ID FUTURE YEARS COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION LENGTH (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029

BICYCLE AND F	PEDESTRIAN PROJECT	s						
DURHAM	NC 751 / SR 1183 / SR 2220 / NON-SYSTEM (UNIVERSITY DRIVE)	EB-5514	SR 1116 (GARRETT ROAD) TO SR 1158 (CORNWALLIS ROAD) IN DURHAM. ADD BICYCLE LANES AND PEDESTRIAN IMPROVEMENTS.	3.1	1025	1025		
						UNDER CONSTRUCTION BY C		
ORANGE	BARNES STREET	EB-5890	KING STREET TO SR 1005 (JONES FERRY ROAD) IN CARRBORO. CONSTRUCT SIDEWALK.	0.2	292	TAANY L TAANY L TAANY L TAANY L	PE 37	
		DIV						
DURHAM	BRYANT BRIDGE NORTH / GOOSE CREEK WEST TRAIL	EB-5720	NC 55 TO TO DREW-GRANBY PARK IN DURHAM. CONSTRUCT SHARED-USE PATH AND CONNECTING SIDEWALKS.	3.0	5316	870 TAANY L TAANY L	R 3	
							33 PROJECT IS COMBINED WITH EB-5720	
DURHAM	DUKE BELTLINE TRAII	EB-5904	PETTIGREW STREET TO AVONDALE DRIVE IN DURHAM. CONSTRUCT MULTIUSE TRAIL ON FORMER RAIL CORRIDOR.	1.8	14250	10500 TAANY L	C 120 C 930 C 2700	
						DICHT OF WAY IN DDOCDESS	S BY CITY OF DURHAM; "O" FUNDING REFLECTS PUBLIC-PRIVATE PARTNERSHIP PARTICIPATION	
DURHAM	LASALLE STREET	EB-5703 DIV	KANGAROO DRIVE TO SPRUNT AVENUE IN DURHAM. CONSTRUCT SIDEWALKS ON BOTH SIDES FROM KANGAROO DRIVE TO US 70 BUSINESS (HILLSBOROUGH ROAD) AND ON ONE SIDE FROM HILLSBOROUGH ROAD TO SPRUNT AVENUE.	0.7	780	202 TAANY C 462 L C 116	S DI CHT OF BORDING REFLECTST BOLICH RIVATE FARTHERSHILL FARTHER ATOM	
							. <u> </u>	
ORANGE	MORGAN CREEK GREENWAY	EL-4828 TRN	WESTERN SECTION, SR 1919 (SMITH LEVEL ROAD) TO UNIVERSITY LAKE IN CARRBORO. CONSTRUCT GREENWAY AND CONNECTIONS.		1027	655 BGDA C 298 A L C 74 A TRN A PHASE 1 TRN B PHASE 2 - PROJE	ECT DELETED	
						DI ANNING DESIGN DIGHT OF	DF WAY AND CONSTRUCTION BY TOWN OF CARRBORO - IN PROGRESS	
ORANGE	ORANGE COUNTY BICYCLE ROUTE 1	EB-5721 DIV	CLELAND DRIVE TO WILLOW DRIVE IN CHAPEL HILL. UPGRADE EXISTING OFF-ROAD PATH AND CONSTRUCT NEW SECTION OF PATH.	0.7	1089	120 TAANY L	C 775	\blacksquare
DURHAM	RAYNOR STREET	EB-5704 DIV	NORTH MIAMI BOULEVARD TO NORTH HARDEE STREET IN DURHAM. CONSTRUCT SIDEWALK ON ONE SIDE OF STREET.	0.4	374	99 TAANY C 220 L C 55		
DURHAM	US 501 BYPASS (NORTH DUKE STREET)	EB-5715 DIV	MURRAY AVENUE TO US 501 BUSINESS (NORTH ROXBORO ROAD) IN DURHAM. CONSTRUCT SIDEWALK ON EAST SIDE TO FILL IN EXISTING GAPS.	1.8	1706	437 TAANY C 1015 L C 254		

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TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR

		ID			PROJ COST			517	ATE TRANSF	ORTATION	I IMPROVE	MENI PR	OGRAM	1	ᆜᆫ				DEVELO	OPMENTA	IL PRO	OGRAM	· · · · · · · · · · · · · · · · · · ·				UNFUNDED
COUNTY	ROUTE/CITY	NUMBER	LOCATION / DESCRIPTION	LENGTH		THOU) FUNDS FY 2019	ı	FY 2020	FY 2021	FY:	2022	FY 2023	3	FY 2024		FY 202	25	FY 2	026	FY 20	27	FY	2028	F	Y 2029	FU	TURE YEARS
BICYCLE AND DURHAM	PEDESTRIAN PROJECT THIRD FORK CREEK TRAIL		SOUTHERN BOUNDARIES PARK TO AMERICAN TOBACCO TRAIL IN DURHAM. CONSTRUCT SHARED USE PATH AND	1.6	3602	370 TAANY L TAANY	R R	14 3	C 2544																#	 	
		DIV	SIDEWALKS, AND INSTALL BEACON AT SR 1158 (CORNWALLIS ROAD) CROSSING.			L			C 636 C 35																	3 E	
PUBLIC TRAN	SPORTATION PROJECT	s																									
ORANGE			REPLACEMENT - PARATRANSIT VEHICLE		4421	3436 FUZ CP 197	СР		CP 197	СР	197 (CP 197															
ORANGE	CHAPEL HILL TRANSI	TA-5200	BUS REPLACEMENT PROJECT (C-5605C)		1400	FUNDS AUTHORIZED IN PRO	GRESS				П						П								耳	⊐ F	\Box
		HF				<u>L </u>									L												
ORANGE	CHAPEL HILL TRANSI	TA-4979 HF	REPLACEMENT VAN		4061	2477 FUZ CP 792						CP 792															
						FUNDS AUTHORIZED IN PRO	GRESS																				
ORANGE	CHAPEL HILL TRANSI	TA-6695 HF	BUS REPLACEMENT PROJECT- CMAQ		1368	1368 CMAQ L									╛╘											<u> </u>	
ORANGE	CHAPEL HILL TRANSI	TA-5143	PURCHASE SUPPORT AND PARATRANSIT VEHICLES		200	200 FBUS L S									7										丰] [Ħ
		HF																•					•				
ORANGE	CHAPEL HILL TRANSI	TA-4726	REPLACEMENT BUSES		51141	39026 FBUS FUZ CP 1939 L CP 242 S CP 242	CP CP CP	242	CP 1939 CP 242 CP 242	CP	242 (CP 1939 CP 242 CP 242													#		
		HF				FUNDS AUTHORIZED IN PRO			01 212	I or I	212	212				I							L _	l l			
ORANGE	CHAPEL HILL TRANSI		3 REPLACEMENT BUSES		3407	3407 L STPDA									\exists										\pm	$\exists E$	
		DIV				FUNDS AUTHORIZED IN PRO	GRESS																				
ORANGE	CHAPEL HILL TRANSI	TD-5271 HF	RENOVATE BUS RELATED FACILITIES		50	50 FBUS																					
ORANGE	CHAPEL HILL TRANSI	TD-4710B HF	FACILITY - PARK & RIDE		878	878 <mark>FUZ</mark>																					
ORANGE	CHAPEL HILL TRANSI	TG-6785 HF	PURCHASE 2 BUSES		917	917 L STBGDA									\exists										\equiv	3 E	
ORANGE	CHAPEL HILL TRANSI	TG-5249	ROUTINE CAPITAL - RESURFACE PARK & RIDE LOTS		70	70 FUZ																			\equiv	3 E	

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TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID FUTURE YEARS COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 PUBLIC TRANSPORTATION PROJECTS CHAPEL HILL TRANSI^{*} TG-5248 SURFACE PARK & RIDE LOTS HF ORANGE CHAPEL HILL TRANSI TG-5247 ROUTINE CAPITAL - RESURFACE PARK & 71 HF ORANGE ROUTINE CAPITAL - PURCHASE BUS STOP CHAPEL HILL TRANSI TG-5227 329 SHELTERS, BENCHES, SHOP EQUIPMENT, SPARE PARTS, ENGINES, FAREBOX, HF SUPPORT VEHICLES, REPLACE/REPAIR ORANGE CHAPEL HILL TRANSI[®] TG-4732A ROUTINE CAPITAL - BUS STOP SHELTERS, 3920 2840 FUZ BENCHES, SHOP EQUIPMENT, SPARE PARTS, ENGINES, FAREBOX, SERVICE VEHICLES, ETC FUNDS AUTHORIZED IN PROGRESS ORANGE CHAPEL HILL TRANSI' TG-4732B ROUTINE CAPITAL - SERVICE VEHICLE 888 692 FUZ HF FUNDS AUTHORIZED IN PROGRESS ORANGE CHAPEL HILL TRANSI' TG-4731B PREVENTIVE MAINTENANCE 28557 19504 FUZ O 2945 1074 1074 0 269 0 0 736 HF FUNDS AUTHORIZED IN PROGRESS ORANGE CHAPEL HILL TRANSI TM-5306 OPERATING ASSISTANCE - CONTINUATION 144 OF SERVICE HOUR EXTENSIONA ORANGE CHAPEL HILL TRANSI TM-5305 OPERATING - NIGHT SERVICE 136 HF ORANGE CHAPEL HILL TRANSI' TM-5132 OPERATING ASSISTANCE 414 HF ORANGE CHAPEL HILL TRANSI' TO-5133 OPERATING ASSISTANCE 50081 32231 SMAP O 3570 O 3570 O 3570 O 3570 O 3570 HF FUNDS AUTHORIZED IN PROGRESS ORANGE CHAPEL HILL TRANSI^{*} TP-5158 ADA BUS STOP REVIEW AND DESIGN 40 HF ORANGE EASY RIDER SENIOR SHUTTLE 240 FEPD CHAPEL HILL TRANSI TQ-6104 240 HF

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TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID FUTURE YEARS COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 PUBLIC TRANSPORTATION PROJECTS CHAPEL HILL TRANSI^{*} TQ-5104 EZ RIDER SENIOR SHUTLE HF **FUNDS AUTHORIZED IN PROGRESS** 294 FUZ CP 0 CP ORANGE CHAPEL HILL TRANSI' TS-5106 SAFETY & SECURITY - MIN. 1% SET ASIDE 294 HF **FUNDS AUTHORIZED IN PROGRESS** ORANGE CHAPEL HILL TRANSI' TT-6107 PURCHASE MOBILE DATA TERMINALS DIV ORANGE CHAPEL HILL TRANSI U-5119A ALTERNATIVE ANALYSIS - ENVIRONMENTAL 4220 ASSESSMENT, DESIGN, AND ENGINEERING CHAPEL HILL TRANSI HF **FUNDS AUTHORIZED IN PROGRESS** CHATHAM CHATHAM TRANSIT TG-6189 BUS SHELTER 44 NETWORK HF DURHAM CITY OF DURHAM TA-6715 ELECTRIC BUS REPLACEMENT 2500 FBUS CP 2125 HF DURHAM CITY OF DURHAM TA-6696 BUS REPLACEMENT 1500 500 CMAQ CP HF DURHAM CITY OF DURHAM TA-6710 REPLACEMENT VEHICLES 500 HF DURHAM CITY OF DURHAM PLANNING AND PROGRAM CITY OF DURHAM TM-5307 ADMINISTRATION OF 5316 JARC PROJECTS HF DURHAM CITY OF DURHAM TN-5134 CITY OF DURHAM PLANNING AND PROGRAM ADMINISTRATION OF 5317 NEW FREEDOM HF TQ-7002 ADMINISTRATION OF SECTION 5310 DURHAM CITY OF DURHAM 119 76 FEPD AD **PROGRAM** HF DURHAM DURHAM AREA TA-4923 REPLACEMENT OF BATTERIES, BUS 4923 4923 REFURBISHMENT, PURCHASE TRANSIT AUTHORITY REPLACEMENT PARATRANSIT VEHICLES DIV AND PURCHASE OF REPLACEMENT BUSES DURHAM DURHAM AREA BUS REPLACEMENT PROJECT (C-5605B) TA-5199 2800 TRANSIT AUTHORITY

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FUNDS AUTHORIZED IN PROGRESS

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 PUBLIC TRANSPORTATION PROJECTS DURHAM DURHAM AREA TA-5144 PURCHASE REPLACEMENT BUSES TRANSIT AUTHORITY HF DURHAM DURHAM AREA PURCHASE REPLACEMENT BUSES AND TA-5145 424 424 FBUS TRANSIT AUTHORITY REPLACEMENT PARATRANSIT VEHICLES DURHAM **DURHAM AREA** TA-5146 BUS REPOWER - 3 354 TRANSIT AUTHORITY **FUNDS AUTHORIZED IN PROGRESS** DURHAM AREA DURHAM TA-5147 BUS REFURBISHMENT - 3 102 TRANSIT AUTHORITY HF **FUNDS AUTHORIZED IN PROGRESS** TA-5019A PURCHASE OF REPLACEMENT AND EXPANSION PARATRANSIT VEHICLES, BUS DURHAM AREA DURHAM 691 TRANSIT AUTHORITY REFURBISHMENT, AND PURCHASE OF BUS DIV SHELTERS ROUTINE CAPITAL - BUS STOP SHELTERS, 6095 CMAQ FBUS DURHAM DURHAM AREA TG-4738 9065 TRANSIT AUTHORITY BENCHES, SHOP EQUIPMENT, SPARE PARTS, ENGINES, SERVICE VEHICLES, ETC. HF FUNDS AUTHORIZED IN PROGRESS DURHAM DURHAM AREA PASSENGER AMENITIES - BUS STOP TG-4958 379 379 FUZ SHELTERS, BENCHES, SHOP EQUIPMENT, SPARE PARTS, ENGINES, SERVICE TRANSIT AUTHORITY VEHICLES, ETC. DIV 33110 FUZ DURHAM DURHAM AREA TG-4738A PREVENTIVE MAINTENANCE 51860 3000 3000 TRANSIT AUTHORITY FUNDS AUTHORIZED IN PROGRESS DURHAM AREA DURHAM TG-6178A PURCHASE OF SERVICE 250 125 FEPD TRANSIT AUTHORITY HF DURHAM DURHAM AREA TG-5255E ESTABLISH NEIGHBORHOOD TRANSIT 660 660 FED TRANSIT AUTHORITY CENTER IN SOUTHWEST DURHAM IN CONNECTION WITH PATTERSON PLACE PARK-AND-RIDE FACILITY REG DURHAM **DURHAM AREA** TM-5310 EXPANDED SERVICE TO BRIER CREEK 462 TRANSIT AUTHORITY HF

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DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 PUBLIC TRANSPORTATION PROJECTS DURHAM DURHAM AREA TM-5304 CAPITAL - TRAVEL TRAINING TRANSIT AUTHORITY HF DURHAM DURHAM AREA OPERATING ASSISTANCE - NEW FREEDOM -TN-5102 1764 1134 FNF TRANSIT AUTHORITY ORANGE FUNDS AUTHORIZED IN PROGRESS DURHAM CAPITAL- MEMBERSHIP IN GOTRIANGLE DURHAM AREA TN-5132 131 FNF 131 TRANSIT AUTHORITY REGIONAL CALL CENTER HF DURHAM DURHAM AREA TO-5203 PARATRANSIT OPERATING (CAPITAL) 499 FUZ TRANSIT AUTHORITY HF DURHAM DURHAM AREA TO-5202 5307 OPERATING ASSISTANCE 524 524 FUZ TRANSIT AUTHORITY DURHAM DURHAM AREA TO-5130 OPERATING ASSISTANCE 39184 25154 SMAP O 2806 O 2806 O 2806 O 2806 O 2806 TRANSIT AUTHORITY HF FUNDS AUTHORIZED IN PROGRESS **DURHAM AREA** TO-5130B OPERATING ASSISTANCE - NEW ROUTE 3749 CMAQ DURHAM 3749 TRANSIT AUTHORITY HF DURHAM DURHAM AREA 1960 1260 FMPL TP-5108 PLANNING ASSISTANCE - 5303 TRANSIT AUTHORITY FUNDS AUTHORIZED IN PROGRESS 3862 FUZ DURHAM DURHAM AREA TP-5109 PLANNING ASSISTANCE - 5307 6262 TRANSIT AUTHORITY HF FUNDS AUTHORIZED IN PROGRESS RESERVATION, SCHEDULING SY AND DURHAM DURHAM AREA TQ-3000 136 136 FEPD TRANSIT AUTHORITY MOBILITY SERVICES HF DURHAM DURHAM AREA TS-5108 SAFETY & SECURITY - MIN. 1% SET ASIDE 575 TRANSIT AUTHORITY HF FUNDS AUTHORIZED IN PROGRESS DURHAM DURHAM CENTER FOF TN-5133 CAPITAL-CONTINUATION OF TRAVEL 30 30 FNF SENIOR LIFE TRAINING

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DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID FUTURE YEARS COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 PUBLIC TRANSPORTATION PROJECTS DURHAM DURHAM COUNTY TA-6246 CAPITAL 200 FNU ACCESS HF TK-6126 ADMINISTRATION 768 FNU FNU DURHAM DURHAM COUNTY 1083 ACCESS HF FUNDS AUTHORIZED IN PROGRESS DURHAM DURHAM COUNTY ONBOARD ACCESS - PURCHASE OF 250 FEPD TQ-3001 375 **ACCESS** DEMAND RESPONSE SERVICE HF FUNDS AUTHORIZED IN PROGRESS DURHAM DURHAM COUNTY TQ-6158 OPERATING ASSISTANCE - PURCHASE OF 463 463 FEPD ACCESS SERVICE HF NC 98 (HOLLOWAY STREET) TRANSIT CORRIDOR. CONSTRUCT ACCESS AND BUS DURHAM GO TRIANGLE TD-5294 1166 STOP IMPROVEMENTS. REG ORANGE GO TRIANGLE TD-5295 TOWN OF HILLSBOROUGH. CONSTRUCT 1200 PARK-AND-RIDE LOT. REG ORANGE COUNTY DEPARTMENT OF ORANGE TA-6526 CAPITAL AGING HF ORANGE ORANGE COUNTY SENIOR TRANSPORTATION EXPANSION. TQ-3002 439 301 FEPD ASSESSMENT AND MOBILITY MANAGER
INCLUDING PURCHASE OF SERVICE DEPARTMENT OF AGING HF FUNDS AUTHORIZED IN PROGRESS ORANGE COUNTY DEPARTMENT OF ORANGE TQ-6165 MOBILITY MANAGEMENT 150 150 FEPD AGING HF

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TA-6721

TA-5226

DIV

VEHICLES

NCDOT

ORANGE PUBLIC TRANSIT ADDITIONAL

CAPITAL FOR ORANGE PUBLIC

VEHICLES/ PURCHASE TWO LIGHT TRANSIT

TRANSPORTATION IN THE DURHAM CHAPEL

HILL CARRBORO URBAN AREA - THROUGH

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DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID FUTURE YEARS COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 PUBLIC TRANSPORTATION PROJECTS ALAMANCE ORANGE PUBLIC TD-5155 1 REPLACEMENT LTV AND ASSOCIATED TRANSIT **ROUTINE CAPITAL** ORANGE DIV FUNDS AUTHORIZED IN PROGRESS ORANGE ORANGE PUBLIC TO-5220 OPERATING ASSISTANCE FOR ORANGE 130 TRANSIT PUBLIC TRANSPORTATION FOR SERVICE IN THE DURHAM CHAPEL HILL CARRBORO HF URBAN AREA - THROUGH NCDOT 18 STBGDA ORANGE CAPITAL ITEMS: SOFTWARE AND ORANGE PUBLIC TP-5151 TECHNOLOGY EQUIPMENT (AUTOMATED TRANSIT PASSENGER COUNTERS) HF TA-5135 DURHAM TRIANGLE TRANSIT **BUS REHABILITATION** 277 277 FBUS **AUTHORITY** HF DURHAM TRIANGLE TRANSIT TA-5154 REPLACEMENT PARATRANSIT VEHICLES 269 **AUTHORITY** ORANGE HF DURHAM TRIANGLE TRANSIT TA-5148 VANPOOL VANS - REPLACEMENT (8) 224 224 FBUS AUTHORITY ORANGE WAKE HF DURHAM TRIANGLE TRANSIT TA-6668 EXPANSION VEHICLE FOR DRX ROUTE 2431 AUTHORITY WAKE REG DURHAM TRIANGLE TRANSIT TA-5218 PURCHASE OF REPLACEMENT 282 PARATRANSIT VEHICLES (3) AND RELATED AUTHORITY WAKE EQUIPMENT (CAMPO) HF DURHAM TRIANGLE TRANSIT TA-5219 PURCHASE OF REPLACEMENT BUSES (5) 2350 2350 FUZ **AUTHORITY** WAKE HF DURHAM TRIANGLE TRANSIT TA-5225 PURCHASE OF REPLACEMENT BUS (1) AND 628 FBUS 628 AUTHORITY VANPOOL VEHICLES (5) (CAMPO) WAKE

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				TOTAL	PRIOR					TYPE (OF WORK /	/ ESTIMATE	D COST IN T	HOUS	ANDS / PROJ	CT BREAKS					MPO Board 1/16/2019
				PROJ	YEARS			STATE	TRANSPOR	TATION IMPI	ROVEMEN	T PROGRA	М	$\Box \Box$		DE	VELOPMEN	TAL PRO	GRAM		UNFUNDED
COUNTY	ROUTE/CITY	ID Number	LOCATION / DESCRIPTION LENGTI	COST H (THOU)	COST (THOU) FUNDS	FY 2019	FY 2	2020	FY 2021	FY 2022	FY	2023	FY 2024		FY 2025	FY 2026	FY	2027	FY 2028	FY 202	FUTURE YEARS
PUBLIC TRA	NSPORTATION PROJEC TRIANGLE TRANSIT AUTHORITY		EXPANSION VEHICLE FOR CRX ROUTE	2431	2431 FUZ L T																
DURHAM ORANGE	TRIANGLE TRANSIT AUTHORITY	TA-4818B HF	REPLACEMENT BUS	6491	5529 FUZ L S			CP CP CP	96] [
DURHAM ORANGE	TRIANGLE TRANSIT AUTHORITY	TA-5123B HF	EXPANSION BUS	19546	16304 <mark>FUZ</mark> L S		СР	351 135 135		CP 1351 CP 135 CP 135				3 [
					FUNDS AU	THORIZED IN PR	OGRESS														
DURHAM	TRIANGLE TRANSIT AUTHORITY	TD-5267 HF	MAINTENANCE FACILITY RENOVATION	94	94 FBUS L									\exists							
ORANGE	TRIANGLE TRANSIT AUTHORITY	TD-5284	TRANSIT CENTER TRANSFER STATION CONSTRUCTION AT UNC HOSPITAL	360	FUZ L T									3 [C 288 C 36 C 36
					Under Con	struction by Go T	riangle														
DURHAM	TRIANGLE TRANSIT AUTHORITY	TD-5273 REG	ROUGEMENT PARK & RIDE - PROFESSIONAL SERVICES AND PROPERTY ACQUISITION	297	297 L STPDA									3 6							
ORANGE	TRIANGLE TRANSIT AUTHORITY	TD-5260 DIV	HILLSBOROUGH PARK AND RIDE - PLANNING/DESIGN/PE	237	237 L STPDA									3 6							
					FUNDS AU	THORIZED IN PR	OGRESS														
DURHAM	TRIANGLE TRANSIT AUTHORITY	TD-5286 REG	IMPROVEMENT OF ROXBORO TRANSIT CORRIDOR FROM DENFIELD TO PETTIGREW ST., DURHAM STATION ACCESS, STOP IMPROVEMENTS AND SHELTERS	1590	FUZ L T			C	1272 159 159												
DURHAM ORANGE	TRIANGLE TRANSIT AUTHORITY	TE-5205	HOSPITALS IN CHAPEL HILL TO NC 55,	797598	37598 FEDT T								C 16000 C 8000		C 76000 C 38000	C 76000 C 38000		0000	C 76000 C 38000	C 60000	
		REG	(ALSTON AVENUE) IN DURHAM COUNTY CONSTRUCT LIGHT RAIL SYSTEM		<u>L</u>] [C 8000		C 38000	C 38000	C 3	8000	C 38000	C 30000	
DURHAM	TRIANGLE TRANSIT AUTHORITY	TG-5250 HF	SHOP EQUIPMENT	87	87 FBUS L									3 6							
																					<u> </u>

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI)
SW - Statewide Category TRN - Transition Project

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					TOTAL	DDIOD					TYPE O	F WORK	: / ESTIMATI	ED COST I	IN THOU	JSANDS	/ PROJE	CT BREAK	S					MPO	Board 1/16/2019
					TOTAL PROJ	YEARS			STATE 1	RANSPORT	ATION IMPR	ROVEME	NT PROGRA	a <i>M</i>				D	EVELO	PMENTAL	. PROGRA	М			UNFUNDED
COUNTY	ROUTE/CITY	ID Number	LOCATION / DESCRIPTION	LENGTH	COST (THOU) (2019	FY 202	0 F	/ 2021	FY 2022	F	Y 2023	FY 202	4	FY	2025	FY 202	26	FY 202	7 I	Y 2028	FY 2	2029	FUTURE YEARS
PUBLIC TRAI DURHAM ORANGE	NSPORTATION PROJECT TRIANGLE TRANSIT AUTHORITY		ROUTINE CAPITAL		277	277 FBUS																			
WAKE		HF											•									•			
WAKE	TRIANGLE TRANSIT AUTHORITY	TG-5235 DIV	SAFETY AND SECURITY- CAMERAS		171	171 L STPDA									\blacksquare										
DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	TG-4821B HF	ROUTINE CAPITAL - BUS STOP SHELTERS, BENCHES, SHOP EQUIPMENT, SPARE PARTS, ENGINES, FAREBOX, SERVICE VEHICLES, ETC INCLUDES ADA, PM AND SERVICE VEHICLES		24490	14645 FUZ CP L CP	1575 394	CP 157 CP 39	5 CP 4 CP	1575 C	P 1575 P 394	CP CP	1575 394											\blacksquare	
						FUNDS AUTHORIZ	ED IN PRO	GRESS												T					
Durham Orange Wake	TRIANGLE TRANSIT AUTHORITY	TM-5311 HF	SUNDAY ROUTES (400, 700, & 800)		470	470 JARC									Н										
DURHAM ORANGE	TRIANGLE TRANSIT AUTHORITY	TP-4732A HF	PLANNING ASSISTANCE		8429	4739 FUZ PL L PL S PL	590 74 74	PL 59/ PL 7/ PL 7/	4 PL	590 F 74 F 74 F	PL 74	PL PL PL	590 74 74												
						FUNDS AUTHORIZ	ED IN PRO	GRESS																	
DURHAM ORANGE	TRIANGLE TRANSIT AUTHORITY	TS-5119 HF	SAFETY & SECURITY - MIN. 1% SET ASIDE		404	309 FUZ CP L CP	17 2	CP 1	7 CP		P 17 P 2	CP CP	17 2												
						FUNDS AUTHORIZ	ED IN PRO	GRESS																	
FREIGHT RAI DURHAM	IL PROJECTS NORFOLK SOUTHERN H LINE	P-5717 REG	CROSSING 734742W AT SR 1121 (CORNWALLIS ROAD) IN DURHAM. CONSTRUCT GRADE SEPARATION.		21678	1200 T R T U T O	125 94	R 237 U 178 C 520 C 50	4 C	5200	C 5200														
						"O" FUNDING REF	LECTS PAI	RTICIPATION B	Y NORFOLK	SOUTHERN C	ORPORATION	N													
DURHAM	NORFOLK SOUTHERN H LINE	P-5706 SW	EAST DURHAM RAILROAD SAFETY PROJECT. PROJECT WILL STRAIGHTEN EXISTING RAILROAD CURVATURE BETWEI CP NELSON AND CP EAST DURHAM AND INCLUDES A COMBINATION OF GRADE SEPARATIONS AND CLOSURES AT ELLIS ROAD SOUTH END (734737A), GLOVER RO/ (734735L), AND WRENN ROAD (734736T) IN DURHAM.	AD	47428	4928 T T O		R 932	7									C 1089 C 16		C 1089°C 16		10891 166			
						"O" FUNDING REF	LECTS PAI	RTICIPATION B	Y NORFOLK	SOUTHERN C	ORPORATION	N													
															_										<u></u>

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI)
SW - Statewide Category TRN - Transition Project

DUNTIAM-CHAFTE HILL-CARROUND METROPOLITAIN FLAMMING ORGANIZATION

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS TOTAL PRIOR PROJ YEARS STATE TRANSPORTATION IMPROVEMENT PROGRAM DEVELOPMENTAL PROGRAM UNFUNDED COST COST ID **FUTURE YEARS** COUNTY ROUTE/CITY NUMBER LOCATION / DESCRIPTION LENGTH (THOU) (THOU) FUNDS FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 2029 PASSENGER RAIL PROJECTS ALAMANCE VARIOUS P-4405 PRIVATE CROSSING SAFETY INITIATIVE TO 10291 10291 CLOSE OR ENHANCE PROTECTION AT CABARRUS RAILROAD CROSSINGS BETWEEN RALEIGH DAVIDSON DURHAM GUILFORD MECKLENBURG ORANGE ROWAN WAKE TRN IN PROGRESS ORANGE MILEPOST 41.7 IN HILLSBOROUGH. NORFOLK SOUTHERN P-5701 8010 CONSTRUCT PLATFORM, PASSENGER RAIL H LINE STATION BUILDING, SITE ACCESS, UTILITIES AND PARKING. COORDINATE WITH U-5848; "OTHER" FUNDING REFLECTS PARTICIPATION BY TRIANGLE TRANSIT ALAMANCE NCRR PURCHASE AND REFURBISH RAIL CARS 45277 45277 FOR PIEDMONT SERVICE EXPANSION. CABARRUS DAVIDSON DURHAM **GUILFORD** MECKLENBURG ORANGE RANDOLPH ROWAN WAKE EX A ACQUIRE AND REBUILD 2 ADDITIONAL LOCOMOTIVES - IN PROGRESS EX B ACQUIRE AND REFURBISH 2 COACH AND 1 LOUNGE/BAGGAGE RAIL CARS - IN PROGRESS REG C ACQUIRE AND REFURBISH 8 RAIL CARS - IN PROGRESS ALAMANCE PIEDMONT CORRIDOR P-2918 TRAIN 74 / 75 OPERATIONS BETWEEN 174422 174422 CHARLOTTE AND RALEIGH, EQUIPMENT **CABARRUS** AND CAPITAL YARD MAINTENANCE DAVIDSON DURHAM GUILFORD MECKLENBURG ORANGE RANDOLPH ROWAN WAKE EX EQUIPMENT REBUILD - 2 F59PHI LOCOMOTIVES - IN PROGRESS PURCHASE 2 USED LOCOMOTIVES - COMPLETE EQUIPMENT REHABILITATION - 3 LOCOMOTIVES - IN PROGRESS EQUIPMENT REHABILITATION - 3 PASSENGER CARS - COMPLETE PASSENGER TRAIN SECURITY SYSTEM, CCTV DATA NETWORK AND GENERATORS - IN PROGRESS CRISP CHARLOTTE MAINTENANCE FACILITY - TRACK EXTENSION AND SHOP BUILDING - IN PROGRESS G PURCHASE 4 USED PASSENGER CARS AND REHABILITATE 7 PASSENGER CARS - IN PROGRESS CAPITAL YARD PHASE 1 IMPROVEMENTS - EXTEND TRACKS 1 AND 2, MAJOR WORK TRACK 3 - IN PROGRESS EQUIP 9 STATIONS AND PLATFORMS WITH ADA/FRA PIDS - IN PROGRESS

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DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI) REG - Regional Category
SW - Statewide Category TRN - Transition Project

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

MPO Board 1/16/2019 Item 13

					TOTAL PRIOR				TYPE OI	WORK / ESTIM	ATED COST IN THO	USANDS / PROJ	ECT BREAKS			IVII C	5 Board 1/10/2019
					PROJ YEARS			STATE TRANSPO	RTATION IMPR	OVEMENT PROC	GRAM		DEVE	LOPMENTAL PRO	OGRAM		UNFUNDED
COUNTY	ROUTE/CITY	ID Number	LOCATION / DESCRIPTION	LENGTH	COST COST (THOU) (THOU) FUNDS	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FUTURE YEARS
PASSENGER F DURHAM WAKE	RAIL PROJECTS VARIOUS PIEDMONT CORRIDOR	U-4716	VARIOUS ROUTES AND NORFOLK SOUTHERN RAILROAD-NORTH CAROLINA RAILROAD IN DURHAM AND MORRISVILLE, SOUTH OF I-40 TO NORTH OF MCCRIMMON PARKWAY. CONSTRUCT A GRADE SEPARATION AT SR 1978 (HOPSON ROAD), EXTEND CHURCH STREET TO HOPSON ROAD, CLOSE CHURCH STREET TO ROSSING 734 748M OF THE NORFOLK SOUTHERNNORTH CAROLINA RAILROAD, CONSTRUCT SECOND TRACK, AND WIDEN HOPSON ROAI FROM EAST OF SR 1999 (DAVIS DRIVE) TO NC 54.)	TRN B		ERN RAILROAD / ETE N. CONSTRUCT I	NC RAILROAD TO	SR 1978 (HOPSON JNDER CONSTRU	ROAD) REALIGN A	O GRADE SEPARATION AND CLOSE CROSSIN NES				DLINA RAILROAD -		R 1126 D C 3160 D

DIV - Division Category EX - Exempt Category
HF - State Dollars (Non STI)
SW - Statewide Category TRN - Transition Project



Durham - Chapel Hill - Carrboro Metropolitan Planning Organization Board January 16, 2019

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 in FY19 and Construction in FY20.
- **U-4724 Cornwallis Road Bike/Ped:** Add STBGDA funds for ROW in FY19 and for Construction in FY20.
- **U-4726 DCHC Bike/Ped:** Adjust STBGDA funding for ROW and Construction.
- 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.



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.

Amendment Requested By: Town of Chapel Hill Date: 12-11-18

Existing Project Details

Project Name: Orange County Bicycle Route 1 (Fordham Boulevard)

Jurisdiction/Agency: Chapel Hill STIP/TIP #: EB-5721

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

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

Use the MPO database: bitly.com/mpoprojects

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
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.

		Proposed rable to re	epresent FULL pro	ject imormation	1.	
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
2020	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 Page 1 of 13 Cost



Project Details - Continued

Please provi	de previous	STIP/TIP	# or new STIF	P/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. Add TAP funding for Construction and move Construction to FY20.

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



Amendment Request Details

TIP Amendment (change in funding greater than \$1M) \odot

TIP Modification (change in funding less than \$1M) Th an

There <u>are</u> previous amendments to this project.

Date: 12-17-18 Amendment Requested By: City of Durham

Existing Project Details

Project Name: Cornwallis Road Bike/Ped

STIP/TIP #: U-4724 Jurisdiction/Agency: City of Durham

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

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

Use the MPO database: bitly.com/mpoprojects

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2020	Construction	STBGDA	\$3,854,000	\$0	\$1,124,000	\$4,978,000
			\$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:	\$3,854,000	\$0	\$1,124,000	\$4,978,000

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
2019	ROW	STBGDA	\$1,785,295	\$0	\$446,324	\$2,231,619
2020	Construction	STBGDA	\$2,674,315	\$0	\$668,579	\$3,342,894
			\$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:	\$4,459,610	\$0	\$1,114,903	\$5,574,513

Total Project Page 3 of 13 Cost



Project Details - Continued

Please provide	previous	STIP/TIP#	or new STIP	/TIP#	(if app	olicable	:(؛
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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 a ROW phase in FY19 using STBGDA local discretionary funds. Reduce Construction funding in FY20 to match recent estimate.

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



Amendment Request Details

TIP Amendment (change in funding greater than \$1M)

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

Date: 12-5-18 Amendment Requested By: Town of Chapel Hill

Existing Project Details

Project Name: Homestead Road Sidewalks

STIP/TIP #: U-4726IK 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

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.

	1	Proposed Lable to re		<u>-</u>	i	
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



Project Details - Continued

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



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.

Amendment Requested By: Town of Chapel Hill Date: 12-5-18

Existing Project Details

Project Name: Variable Message Signs in Chapel Hill

Jurisdiction/Agency: Chapel Hill STIP/TIP #: U-5543

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

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

Use the MPO database: bitly.com/mpoprojects

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
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.

		Proposed rable to re	epresent FULL pro	ject imormation	1.	
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 Page 7 of 13 Cost



Project Details - Continued

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

JAMES H. TROGDON, III

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	МАТСН	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	DESCRIPTIO N	MATC H	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 Managemen t			110				
			Local	L	28				
TQ- 7008	Western Piedmont Regional Transit Authority	Program Administration	FEDP	5310	23				
TG- 6797	Western Piedmont Regional Transit Authority	Preventive Maintanence	FUZ	STBGDA	334				
			L	Local	83				

Administrative Modifications to the Transit 2018-2027 STIP

STIP #	TRANSIT PARTNER	DESCRIPTION	МАТСН	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, <u>ajwimmer@ncdot.gov</u>, 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,

Pettie Collins

Debbie Collins, Director NCDOT Public Transportation Division

4

Date: November 28, 2018

Endorsement:		
	Data	
Keith Melton	Date	
	ogram Development Federal T	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 Box	ard Member		ano	d seconded by	MPO B	Board
Member	for the adoptio	n of the follow	ving resolut	tion, and upon	being p	out 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.

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

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



Durham - Chapel Hill - Carrboro Metropolitan Planning Organization Board January 16, 2019

FY 2018-2027 TIP Amendment #10 Summary Sheet

See full report for additional information on each project.

- C-4928 Morreene Road Bike/Ped: Add STBGDA funds for ROW in FY19 and adjust funds for Construction in FY20.
- **U-4726 DCHC Bike/Ped:** Adjust STBGDA funding for ROW and Construction.
- I-5994 I-40 Bridge Rehabilitation in Durham County: Adjust funding to utilize GARVEE bonds.
- I-5995 I-40 Pavement Rehabilitation in Durham and Wake Counties: Adjust funding to utilize Build NC bonds.
- **P-5706 Eastern Durham Rail Grade Separation and Siding:** Move ROW funding from FY23 to FY20.



Amendment Request Details

lacksquare

TIP Amendment (change in funding greater than \$1M)



TIP Modification (change in funding less than \$1M)



There <u>are</u> previous amendments to this project.

Date: 12-17-18 Amendment Requested By: City of Durham

Existing Project Details

Project Name: Morreene Road Bike/Ped

STIP/TIP #: C-4928 Jurisdiction/Agency: City of Durham

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

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

Use the MPO database: bitly.com/mpoprojects

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2019	ROW	STBGDA	\$5,600	\$0	\$1,400	\$7,000
2020	Construction	CMAQ	\$2,331,000	\$0	\$583,000	\$2,914,000
2020	Construction	STBGDA	\$2,140,000	\$0	\$535,000	\$2,675,000
2020	Construction	LOCAL	\$0	\$0	\$194,000	\$194,000
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
	•	Funding Totals:	\$4,476,600	\$0	\$1,313,400	\$5,790,000

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.

	Proposed Table to represent FULL project information.											
FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total						
2019	ROW	STBGDA	\$2,447,823	\$0	\$611,956	\$3,059,779						
2020	Construction	CMAQ	\$2,331,000	\$0	\$582,750	\$2,913,750						
2020	Construction	STBGDA	\$1,876,152	\$0	\$469,038	\$2,345,190						
2020	Construction	LOCAL	\$0	\$0	\$194,000	\$194,000						
			\$0	\$0	\$0	\$0						
			\$0	\$0	\$0	\$0						
			\$0	\$0	\$0	\$0						
			\$0	\$0	\$0	\$0						
			\$0	\$0	\$0	\$0						
			\$0	\$0	\$0	\$0						
	•	Funding Totals:	\$6,654,975	\$0	\$1,857,744	\$8,512,719						

Page 1 of 6 Cost



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 local discretionary funds to ROW in FY19. Reduce STBGDA funding for Construction in FY20 to match recent construction estimates.

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



Amendment Request Details

lacksquare

TIP Amendment (change in funding greater than \$1M)



TIP Modification (change in funding less than \$1M)



There <u>are</u> previous amendments to this project.

Date: 12-17-18 Amendment Requested By: City of Durham

Existing Project Details

Project Name: Hillandale Road Bike/Ped

STIP/TIP #: U-4726HN Jurisdiction/Agency: City of Durham

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

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

Use the MPO database: bitly.com/mpoprojects

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2019	ROW	STP-DA	\$26,225	\$0	\$6,556	\$32,781
2020	Construction	STP-DA	\$2,066,903	\$0	\$761,543	\$2,828,446
			\$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:	\$2,093,128	\$0	\$768,099	\$2,861,227

Total Project Cost

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

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

	Proposed rable to represent FOLL project information.											
FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total						
2019	ROW	STBGDA	\$1,504,817	\$0	\$376,204	\$1,881,021						
2020	Construction	STBGDA	\$2,068,518	\$0	\$517,130	\$2,585,648						
			\$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:	\$3,573,335	\$0	\$893,334	\$4,466,669						

Page 3 of 6 Cost



Project Details - Continued

Please provide previo	us STIP/TIP # or nev	w 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 local discretionary funding for ROW 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.

REVISIONS TO THE 2018-2027 STIP HIGHWAY PROGRAM

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

DURHAM METROPOLITAN PLANNING ORGANIZATION REHABILITATION - MULTIPLE STRUCTURES. PROJ.CATEGORY STATEWIDE METROPOLITAN PLANNING ORGANIZATION REHABILITATION - MULTIPLE STRUCTURES. FY PROJECT WILL UTILIZE GARVEE BOND FUNDING FY	ARVEE CONSTR Y 2020 -FY 2021 -F Y 2023 -FY 2024 -F Y 2026 -FY 2027 -F Y 2029 -	FY 2022 - FY 2025 -	\$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000 \$429,000	(NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM) (NHPIM)
CC		FY 2019	\$1,667,000 \$8,102,000	(S(M))

REVISIONS TO THE 2018-2027 STIP HIGHWAY PROGRAM

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

		STIP MODIFICATIONS				
* I-5995 DURHAM WAKE PROJ.CATEGORY STATEWIDE	CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION	I-40, EAST OF NC 147 TO SR 3015 (AIRPORT BOULEVARD). PAVEMENT REHABILITATION. PROJECT TO UTILIZE BUILD NC BONDS	GARVEE CONSTR	FY 2019 - FY 2020 - FY 2021 - FY 2022 - FY 2024 - FY 2025 - FY 2026 - FY 2027 - FY 2028 - FY 2029 - POST YR- FY 2019 -	. , ,	(NHPIM)
* P-5706 DURHAM PROJ.CATEGORY STATEWIDE	- DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION	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 (734737A), GLOVER ROAD (734735L), AND WRENN ROAD (734736T) IN DURHAM. ACCELERATE RIGHT OF WAY FROM FY 23 TO FY 20 AT THE REQUEST OF RAIL DIVISION.	RIGHT-OF-WAY CONSTRUCTION	FY 2020 - FY 2026 - FY 2027 - FY 2027 - FY 2028 - FY 2028 -	\$167,000 \$10,891,000 \$167,000 \$10,891,000	(T) (T) (O) (T) (O) (T) (O)

^{*} INDICATES FEDERAL AMENDMENT

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

AMENDMENT #10 February 13, 2019

A motion was made by MPO Box	ard Member			and seco	onded by	MPO B	oard
Member	for the adoptio	n of the foll	owing reso	olution, a	and upon	being p	ut 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 #10 to the FY 2018-2027 Transportation Improvement Program of the Durham-Chapel Hill-Carrboro Urban Area, as approved by the Board on February 13, 2019, and as described in the "FY 2018-2027 TIP Amendment #10 Summary Sheet" on this, the 13th day of February, 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: February 13, 2019

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

MEMORANDUM

To: DCHC MPO Board

From: DCHC MPO Lead Planning Agency

Date: January 16, 2019

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

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

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

<u>Major UPWP – Projects</u>

Comprehensive Transportation Plan (CTP)

- ✓ Completed
- 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



MPO Board Members

2019

Name	Affiliation	Member/Alternate
Damon Seils	Town Of Carrboro	Member – Chair
Wendy Jacobs	Durham County	Member – Vice Chair
Vernetta Alston	City of Durham	Member
Karen Howard	Chatham County	Member
Michael Parker	Town Of Chapel Hill	Member
Renee Price	Orange County	Member
Ellen Reckhow	GoTriangle	Member
Charlie Reece	City Of Durham	Member
Nina Szlosberg-Landis	NC Board of Transportation	Member
Jenn Weaver	Town Of Hillsborough	Member
Mark Bell	Town Of Hillsborough	Alternate
James G. Crawford	Chatham County	Alternate
Mike Fox	NC Board of Transportation	Alternate
Pam Hemminger	Town of Chapel Hill	Alternate
Lydia Lavelle	Town Of Carrboro	Alternate
Penny Rich	Orange County	Alternate
Steve Schewel	City of Durham	Alternate
John Sullivan	Federal Highway Administration	Non-Voting Member

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

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

Length: 4.009 miles Federal Aid Number:

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

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

Contractor Name: DRAGADOS USA INC

Contract Amount: \$141,949,500.00 Cost Overrun/Underrun: 10.14% Letting Date: 11/18/2014 Work Began: 02/26/2015

Original Completion Date: 05/10/2020 **Revised Completion Date:**

Latest Payment Thru: 12/22/2018 Scheduled Progress: 75.23% Latest Payment Date: 12/28/2018 Actual Progress: 73.02%

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

TIP Number: EB-4707B

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

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

Contractor Name: FSC II LLC DBA FRED SMITH COMPANY

Contract Amount: \$7,295,544.75 Cost Overrun/Underrun: 7.16% Work Began: 06/26/2017 Letting Date: 05/16/2017

Original Completion Date: 05/14/2019 **Revised Completion Date:** Latest Payment Thru: 12/31/2018 Scheduled Progress: 100% Latest Payment Date: 01/08/2019 Actual Progress: 81.64%

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

TIP Number: U-3308

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

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

Contractor Name: ZACHRY CONSTRUCTION CORPORATION

Contract Amount: \$39,756,916.81 Cost Overrun/Underrun: 3.1% Work Began: 10/05/2016 Letting Date: 07/19/2016 Original Completion Date: 03/30/2020 Revised Completion Date: 02/11/2021 Latest Payment Thru: 12/15/2018 Scheduled Progress: 52.1% Latest Payment Date: 12/31/2018 Actual Progress: 38.91%

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

TIP Number:

Length: 44.124 miles Federal Aid Number:

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

Contractor Name: CAROLINA SUNROCK LLC

Contract Amount: \$7,054,264.20 Cost Overrun/Underrun: 34.49% Work Began: 01/16/2018 Letting Date: 09/19/2017

Original Completion Date: 11/15/2018 **Revised Completion Date:** Latest Payment Thru: 12/31/2018 Scheduled Progress: 98% Latest Payment Date: 01/08/2019 Actual Progress: 75.59%

Contract Number: C204167 Route: SR-1118, SR-1407, SR-1648

SR-1794, SR-1811, SR-1906 SR-1966, SR-1973, SR-2095

Division: 5 County: Durham

TIP Number:

Federal Aid Number: STATE FUNDED Length: 24.77 miles NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: 51 SECTIONS OF SECONDARY ROADS.

Contractor Name: CAROLINA SUNROCK LLC

Contract Amount: \$4,355,108.47 Cost Overrun/Underrun: 0.38% Work Began: 08/01/2018 Letting Date: 05/15/2018

Revised Completion Date: Original Completion Date: 11/30/2019

Latest Payment Thru: 12/31/2018 Scheduled Progress: 9% Latest Payment Date: 01/08/2019 Actual Progress: 10.59%

Contract Number: C204168 Route: -Division: 5 County: Durham

TIP Number:

Length: 15.188 miles Federal Aid Number: STATE FUNDED NCDOT Contact: Cameron D. Richards NCDOT Contact No: (919)835-8200

Location Description: 14 SECTIONS OF SECONDARY ROADS.

Contractor Name: CAROLINA SUNROCK LLC

Contract Amount: \$5,334,770.46 Cost Overrun/Underrun: 0.9% Work Began: 07/02/2018 Letting Date: 05/15/2018

Original Completion Date: 11/30/2019 **Revised Completion Date:** Scheduled Progress: 21% Latest Payment Thru: 10/31/2018 Latest Payment Date: 11/07/2018 Actual Progress: 20.85%

Contract Number: C204256 Route: -, NC-98, SR-1800

SR-1811, US-70

Division: 5 County: Durham

TIP Number:

Length: 15.89 miles Federal Aid Number: STATE FUNDED NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: 1 SECTION OF US-70, 1 SECTION OF NC-98, AND 3 SECTIONS OF SECONDARY ROADS.

Contractor Name: CAROLINA SUNROCK LLC

Contract Amount: \$0.00 Cost Overrun/Underrun: 0% Work Began: 03/15/2019 Letting Date: 10/16/2018

Original Completion Date: 11/30/2019 **Revised Completion Date:** Latest Payment Thru: Scheduled Progress: 0% **Latest Payment Date:** Actual Progress: 0%

Contract Number: DE00228 Route: I-85 Division: 5 County: Durham

TIP Number: I-5729

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

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

Contractor Name: INTERSTATE IMPROVEMENT INC

Contract Amount: \$4,168,265.78 Cost Overrun/Underrun: 57.41% Work Began: 03/13/2018 Letting Date: 10/11/2017

Original Completion Date: 11/01/2018 **Revised Completion Date:** Latest Payment Thru: 11/22/2018 Scheduled Progress: 100% Latest Payment Date: 12/03/2018 Actual Progress: 86.93%

Contract Number: DE00253 Route: -Division: 5 County: Durham

TIP Number: W-5705K

Length: 0 miles Federal Aid Number: HSIP-1327(006) NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: SR 1327 (GREGSON ST) AND LAMOND AVE

Contractor Name: TRAFFIC CONTROL DEVICES INC

Contract Amount: \$0.00 Cost Overrun/Underrun: 0% Work Began: 09/01/2018 Letting Date: 07/25/2018

Original Completion Date: 02/28/2019 **Revised Completion Date:** Latest Payment Thru: Scheduled Progress: 0%

Latest Payment Date: Actual Progress: 0%

Contract Number: DE00255 Route: US-501 Division: 5 County: Durham TIP Number: W-5705C

Federal Aid Number: HSIP-0501(046) Length: 0 miles NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680 Location Description: US 15-501 AT SR 1116 (GARRETT RD) US 15-501 BUS AT WESTGATE DR

Contractor Name: ALS OF NORTH CAROLINA LLC

Contract Amount: \$540,904.71 Cost Overrun/Underrun: 0.99% Work Began: 08/06/2018 Letting Date: 05/23/2018

Original Completion Date: 12/21/2018 **Revised Completion Date:** Latest Payment Thru: 11/07/2018 Scheduled Progress: 64.3% Latest Payment Date: 11/14/2018 Actual Progress: 16.38%

		R/W Plans	R/W Aca						
Project ID	Description	Complete		Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
17BP.5.R.116				Division POC Let (DPOC)	2/22/2023	Lisa Gilchrist			
7BP.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 SINGLE9'- 11", 6' x 8" ALUMINUM BOX DURHAM COUNTY			Division Design Raleigh Let (DDRL)	1/15/2019	Lisa Gilchrist			
l-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)
-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	

		R/W Plans	R/W Acq						
Project ID	Description	Complete	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 INCLUES A COMBINATION OFGRADE SEPARATIONS AND CLOSURES AT ELLIS ROAD SOUTH END CROSSING (734737A), GLOVER ROAD (734735L), AND WRENN ROAD (734736		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 COMPONETS.			Design Build Let (DBL)	1/21/2025	PAM R. WILLIAMS	\$20,000.00		

Project ID	Description	R/W Plans Complete		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	
J-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	
J-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	
-5941	I-85 FROM ORANGE COUNTY LINE TO US 15 /US 501 IN DURHAM PAVEMENT REHABILITATION			Division Design Raleigh Let (DDRL)	12/19/2023	DOUGLAS R. MCNEAL	-	\$2,973,000.00	
-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.	SIGILOLO	6/20/2022	NON - DOT LET (LAP)	9/20/2023	RAYMOND JOSEPH H			
J-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	

		- nu -	- nu						
Project ID	Description	R/W Plans Complete		Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
TO JOSE ID	Description	Complete	Dogino	251 1960	Lot Date	1 Tojest Mariager	KW Estimate(200)	CONOT \$	O I I I I I I I I I I I I I I I I I I I
	SR 1118 (FAYETTEVILLE ROAD),FROM WOODCROFT PARKWAY TO BARBEE ROAD IN DURHAM. WIDEN TO 4-LANE DIVIDED FACILITY WITH BICYCLE / PEDESTRIAN								Public meeting held in
U-6021	ACCOMMODATIONS.	2/19/2021	2/19/2021	Division Design Raleigh Let (DDRL)	2/21/2023	BENJAMIN J. UPSHAV	\$5,769,000.00	\$13,770,000.00	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 DRIVETO SR 1407(WEST CARVER STREET) IN DURHAM. CONSTRUCT SIDEWALKS ON BOTHSIDES.		6/30/2021	NON - DOT LET (LAP)	9/20/2022	RAYMOND JOSEPH H	\$204,000.00	\$589,000.00	
LD 000+	2011161226.		0/00/2021	NON BOT EET (EM)	3/20/2022	TOTTIMONE GOOD!	φ204,000.00	φοσο,σσσ.σσ	,
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	
5-01200	TOTAL JINTEROLOTION		3/13/2022	Design Build Let (DBL)	0/10/2022	I AWI IX. WILLIAWIS	φ17,321,000.00	φ23,300,000.00	
U-5720C	US 70 (MIAMI BLVD) FROM SR 1959 (SOUTH MIAMI BLVD)/SR 1811 (SHERRON ROAD) TO SR 2095 (PAGE ROAD EXTENSIONS). UPGRADE TOCONTROLLED 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		Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
J-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	
-6000	I-540 - DURHAM/WAKE COUNTIES FROM I-40 IN DURHAM TO US 1 INRALEIGH. BRIDGE PRESERVATION/REHABILIT ATION. COORDINATE WITH I-5998 & I-5999.	10/22/2021		Division POC Let (DPOC)	1/26/2022	DOUGLAS R. MCNEAL		\$4,541,000.00	
-0000	10000 0 10000.	10/22/2021		DIVISION FOC Let (DFOC)	1/20/2022	DOUGLAS IX. IVIONEAL	-	\$4,541,000.00	
EB-5720	BRYANT BRIDGE NORTH/GOOSE CREEK WEST TRAIL, NC 55 TO DREW-GRANBY PARK IN DURHAM. CONSTRUCT SHARED-USE PAHT AND CONNECTING SIDEWALKS.	9/30/2020	9/30/2020	NON - DOT LET (LAP)	9/30/2021	RAYMOND JOSEPH H	\$14,000.00	\$4,432,000.00	
J-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.			NON - DOT LET (LAP)	6/30/2021	RAYMOND JOSEPH H			
	SR 1815/1917 (MINERAL SPRINGS ROAD) AT PLEASANT DRIVE CONSTRUCT								
N-5705T	ROUNDABOUT	4/1/2020	4/1/2020	Division POC Let (DPOC)	4/21/2021	JOHN EDWARD SAND	\$85,000.00	\$800,000.00	
3-5674	REPLACE BRIDGE 80 OVER SR 1308 IN DURHAM ON US 15-501 NORTHBOUND		9/16/2019	Raleigh Letting (LET)	12/15/2020	KEVIN FISCHER	\$110,000.00	\$2,209,000.00	

		R/W Plans	P/W Aca						
Project ID	Description	Complete		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 SAND	DOR	\$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 H	ł/ \$7,100,000.00	\$3,750,000.00	
	US 501 BYPASS (NORTH DUKE STREET) FROM MURRAY AVENUE TO US 501 BUSINESS (NORTH ROXBORO ROAD) IN DURHAM CONSTRUCT SIDEWALK ON EAST SIDE	0/30/2010	3/30/2010	· ·					
EB-5715	TO FILL IN EXISTING GAPS 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)	7/15/2020	RAYMOND JOSEPH H		\$1,269,000.00	
U-4724	NORFOLK SOUTHER H LINE CROSSING 734742W AT SR 1121 (CORNWALLIS ROAD) IN DURHAM. CONSTRUCT			NON - DOT LET (LAP)	6/30/2020	RAYMOND JOSEPH F	AYES	\$4,978,000.00	
P-5717	GRADE SEPARATION. I-40 - FROM NC 55 (ALSTON AVENUE) TO NC 147 (DURHAM		6/30/2019	Raleigh Letting (LET)	6/23/2020	KUMAR TRIVEDI	\$4,377,600.00	\$16,100,000.00	
I-5707	FREEWAY/TRIANGLE EXPRESSWAY) IN DURHAM AT US 501 (ROXBORO ROAD) TO SR 1448 (LATTA ROAD) / SR 1639 (INFINITY ROAD) INTERSECTION IN	6/18/2019	6/18/2019	Raleigh Letting (LET)	6/16/2020	PAM R. WILLIAMS	\$323,000.00	\$3,550,000.00	
U-5516	DURHAM. INTERSECTION IMPROVEMENTS.	5/17/2019	5/17/2019	Division Design Raleigh Let (DDRL)	5/20/2020	BENJAMIN J. UPSHAV	۶6,501,430.00 \$6	\$5,500,000.00	Quadrant alternative selected. Final design work to begin.

Project ID	Description	R/W Plans Complete		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		Division Design Raleigh Let (DDRL)	4/21/2020	BENJAMIN J. UPSHAV			Design work and coordination with Go Triangle ongoing.
C-4928	SR 1317 (MORREENE ROAD) FROM NEAL ROAD TO SR 1320 (ERWIN ROAD) IN DURHAM. CONSTRUCT BIKE LANES AND SIDEWALKS.			NON - DOT LET (LAP)	4/15/2020	RAYMOND JOSEPH H			
EB-5708	NC 54 FROM NC 55 TO RESEARCH TRIANGLE PARK WESTERN LIMIT INDURHAM CONSTRUCT SECTIONS OF SIDEWALK ON SOUTH SIDE			NON - DOT LET (LAP)	4/15/2020	RAYMOND JOSEPH H		\$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 H			
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 H	AYES	\$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 SIDEFROM HILLSBOROUGH ROAD TO SPRUNT AVENUE.			NON - DOT LET (LAP)	9/29/2019	RAYMOND JOSEPH H	AYES	\$578,000.00	

		R/W Plans	R/W Aca						
Project ID	Description	Complete		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. MCNEA	L	\$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. MCNEA	L	\$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 F	l/ \$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 F	IAYES	\$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)			NON - DOT LET (LAP)	6/30/2019	RAYMOND JOSEPH F			
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 F	IAYES	\$540,883.00	

Positive IP	Building	R/W Plans Complete		Let Type	Libia	B	DW E. (1) (200)	20107.4	COMMENTS
Project ID EB-4707A	Description 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	Division Design Raleigh Let (DDRL)	2/19/2019	Project Manager BENJAMIN J. UPSHA	RW Estimate(200)	\$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 SAN	DOR	\$80,000.00	
W-5705U	US 70 BUSINESS (MORGAN STREET) AT CAROLINA THREATRE			Division POC Let (DPOC)	1/16/2019	JOHN EDWARD SAN	DOR	\$20,000.00	
W-5705V	NC 54 AT HUNTINGRIDGE ROAD			Division POC Let (DPOC)	1/16/2019	JOHN EDWARD SAN	DOR	\$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 DAV	IDSON	\$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 SAN	DOR	\$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 Mebane .	5/31/2017	Mar.2019	\$40,500 R/W \$43,200 CON	Utility relocations complete, Right of entry rescinded, R/W acquisition pending	Dawn McPherson
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 and received no bids	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 Hillsborough	1/17/2019	Jun. 2019	\$189,000	Planning and design activities complete, R/W certified 9/18/18, signal work complete, widening scheduled Jan. 2019	Derek Dixon
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 Carrboro .	Mar. 2019	FY2021	\$775,000	1st bid opening received no bids, Re-let 9/6/18 bids exceeded engineers estimate, project cost evaluation being performed, Re-let pending	Chad Reimakoski
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 - 40% complete	Kevin Fischer
W-5707K 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 Chapel Hill and Carrboro	5/31/2019	Sept. 2019	\$350,000	Funds approved 9/6/18, Construction May 2019	Chris Smitherman
U-5847 50238.1.1 50238.2.1 50238.3.1	Intersection improvements at SR 1010 (West Franklin St.) and SR 1771 (Merritt Mill Rd)/SR1927 (Brewer Lane) in Chapel Hill / Carrboro.	5/31/2019	Sept. 2019	\$775,000	Planning and design activities underway, bike/ped improvements to be completed under project 48283	Chris Smitherman

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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 34718.2.2 34178.3.3	Widening 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 Hillsborough	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 Hillsborough .	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 Chapel Hill	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 Hillsborough	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 Hillsborough	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 Hillsborough	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 Carrboro	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.

Contract Number	<u>TIP</u> Number	Location Description	Contractor Name	Resident Engineer	Contract Bid Amount	Availability Date	Completion Date	Work Start Date	Estimated Completion	Progress Schedule	Completion Percent
C203640		REPLACEMENT OF 4 BRIDGES IN GUILFORD COUNTY AND 3 BRIDGES IN ORANGE COUNTY.	HAYMES BROTHERS, INC.	Lorenz, PE, Kris	\$3,124,500.00	06/01/2015	11/01/2017	09/02/2015	12/31/2018	100.00	89.46
C203946	B-5348	REPLACE BRIDGE #85 OVER PHILS CRK ON SR-1005(OLD G'BORO RD)	DANE CONSTRUCTION INC	l 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 REHAB ON I-40/I-85 FROM EAST OF NC-54 IN GRAHAM IN ALAM. CO. TO WEST OF SR-1114 (BUCKHORN RD) IN ORANGE CO.		Kirkman, PE, Christopher D	\$9,699,053.68						
DG00321	W-5143	SR 1004 (EFLAND-CEDAR GROVE RD) ROADWAY IMPROVEMENTS	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,711,133.05	04/02/2018	04/02/2019	04/02/2018	04/02/2019	100.00	98.20
DG00372	R-5787B	ADA CURB RAMPS IN BURLINGTON, GIBSONVILLE, GRAHAM, MEBANE IN ALAM. CO.,CARRBORO & CHAPEL HILL IN ORANGE CO.	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	12/07/2018	100.00	99.97
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		Kirkman, PE, Christopher D	\$3,562,232.66	05/28/2018	11/01/2019	05/29/2018	11/01/2019	38.00	53.71
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	23.45
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	100.00	98.48
DG00435		AST RETREATMENT ON22 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	99.00	72.29
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
	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		P:	age 16 of 18	



Contract

DG00461

Number

<u>TIP</u>

Number

Location Description

BRIDGE REHAB. FOR BRIDGE #031 M & J CONSTRUCTION Robinson,

ON SR 1010 (E. FRANKLIN ST.) OVER CO OF PINELLAS

BOLIN CREEK & BOLIN CREEK TRAIL COUNTY INC

North Carolina Department of Transportation

Active Projects Under Construction - Orange Co.

Stephen J

\$2,456,272.12

Contractor Name	<u>Resident</u>	Contract Bid	Availability	Completion	Work Start	Estimated	Progress	Completion
	<u>Engineer</u>	Amount	Date	Date	Date	Completion	Schedule	Percent

11/12/2018 07/15/2019

Chatham County - DCHC MPO - Upcoming Projects - Division 8January 2019									
Contract # or	Route	Description	Let Date	Completion	Contractor	Proiect Admin.	Proiect Cost	Notes	
WBS # or TIP #	Noute	Description	Let Date	Date	Contractor	Project Aumin.	Project Cost	Notes	
R-5825	NC 751 at SR 1731	Upgrade and Realign Intersection	4/9/2019	TBD	TBD	Greg Davis	TBD	Right of Way in progress	
	(O'Kelly Chapel Road)					(910) 773-8022			

Hillsborough, NCDOT have plan to move more people along South Churton Street

The Herald-Sun By Tammy Grubb January 4, 2018

HILLSBOROUGH – Big changes could transform the town's critical South Churton Street corridor over the next decade, giving people more ways to get around, visit and live in Hillsborough — instead of sitting in traffic.

The town has been working with the N.C. Department of Transportation for years on a plan for improving Churton Street, which connects the town's commercial strip and its historic downtown. Traffic slows to a crawl at least twice a day during the week, as commuters drive north to rural homes or south to Chapel Hill and Carrboro.

The plan would expand South Churton Street to four lanes with center turn lanes, and add bike lanes and sidewalks from Interstate 40 to Orange Grove Road. A separate project would update the Interstate 85 interchange at South Churton Street.

The road widening won't fix problems downtown, but it and other projects will help bring changes envisioned in a 2006 plan for the town's commercial strip, said Margaret Hauth, planning director and assistant town manager.

"We want it to be a commercial corridor, but we also want it where people can safely walk and bike if they choose to," Hauth said.

Planners have acknowledged traffic still could bottleneck at the Eno River Bridge, but historic homes and buildings only leave enough room for two lanes through downtown. (A plan to build a bypass around downtown using Elizabeth Brady Road was dropped in 2010.)

"You're not going to see the buildings come right up to the edge of Churton Street," Hauth said, noting it won't look like the East 54 development in Chapel Hill. "We want a little bit more green space, push the buildings back a little bit, get people onto the site, and then the sites themselves will look more urban and be more interconnected."

The public will get its first look at the plan Tuesday, Jan. 8, during a drop-in meeting at Hillsborough's Town Hall Annex board room on East Corbin Street. Materials also are at www.ncdot.gov/news/public-meetings, although Hauth said the information is very preliminary.

Amtrak station

Also this month, the Hillsborough Town Board could begin the process of designing and building an \$8.1 million Amtrak station at South Churton and Orange Grove streets.

The Amtrak station is a long-awaited part of the Orange County Bus and Rail Plan that would bring riders on the Charlotte-to-Raleigh passenger rail line to Hillsborough and to other parts of the county via local buses.

Meanwhile, a project at Orange Grove Road would create a new entrance for the future 1,126-unit Collins Ridge subdivision and provide access to the station.

The new Orange Grove Street Extension also would divert some traffic that now turns onto U.S. 70A from Churton Street. It would route traffic back onto U.S. 70A between Sports Endeavors and Wilmore Electronics.

Traffic heading east from the Churton Street-U.S. 70A intersection would be diverted briefly onto the new road before reconnecting with U.S. 70A. Affected residents would retain access to their homes via a limited-access road.

The goal, Hauth said, is to get people on U.S. 70A to use the new route and reduce the number of cars waiting to turn downtown at the Churton Street stoplight.

"It's not perfect, and at the end of the day, we may say it's not worth it, but we're trying to improve some of the connections and make a more grid-like road network south of the river to give people more travel options," Hauth said. "If there's only one way to go, then everybody has to go that way."

Meanwhile, work is underway at the future Collins Ridge subdivision and the site of the Amtrak station. The station would replace the HYAA ballfields just off South Churton Street.

The Town Board signed an agreement in October for how the \$8.1 million station would be funded, built and managed. NCDOT has agreed pay most of the cost, with GoTriangle picking up \$686,000 for engineering and project work — from Orange County Bus and Rail Investment Plan money — and the town paying \$34,000, plus any cost overruns.

The town has five years to plan and build the station, which it also would manage and maintain. The town board could start discussing the future of the 20-acre station area in January, Hauth said. A 2015 conceptual design that includes civic, commercial and residential uses, including police and fire stations, could start that discussion, she said.

"I really want it to be the main topic for the workshop," Hauth said. "Now that we have the funding agreement in place, and we can actually start, what is it that we want to do and how do we want to do it?"

Collins Ridge and Daniel Boone Village

Whatever is built will come long after people move into the 138-acre Collins Ridge development behind the Daniel Boone Village. Crews already have started ground work and could begin construction once the town staff finishes reviewing first-phase plans: 326 apartments, 152 townhouses and 196 single-family homes, plus a community center and a publicly accessible walking trail on 100 acres.

The developer would like to start building as early as July, but that depends on the weather, Hauth said.

Property owner Collins Ridge Landco LLC could add another 364 homes, parks and more green space later, and also has set aside land for nonprofit housing provider CASA to build 88 affordable-housing units.

A second entrance to Collins Ridge is planned at the Daniel Boone Village.

The Collins Ridge partners bought the village in September. Owners of the 23-acre Boone Square shopping center — once part of the Daniel Boone Village — did not return a call seeking comment about that parcel's future.

The village, built in the 1960s, once offered a pioneer-themed amusement park, train rides, a skating rink and camping. Over the years, that was replaced by antique stores, shops and restaurants. The village's new owners have not shared their plans for the roughly 57-acre property, but they have given the remaining tenants until March 4 to move.

Mexican restaurant Pueblo Viejo is moving across Churton Street to the former Jimmy's Famous Hot Dogs, which closed in December. Pueblo Viejo's owners are renovating the new space but have not decided whether to close before the move, an employee said. The new restaurant would be beside the Hardee's restaurant at the corner of I-85 and Churton Street.

The Churton Street corridor is wide enough to add travel lanes, bike lanes and sidewalks in most places, but construction could affect some businesses, including Capital Ford, Triangle Visions Optometry and the Gro-Smart store.

An NCDOT map also shows the widened road encroaching on Pueblo Viejo's future front lawn and on the Hardee's parking lot and lawn next door. A retaining wall is proposed in front of both businesses and a neighboring AutoZone store.

Hardee's franchise operator Boddie-Noell Enterprises doesn't have much information yet about proposed engineering work or future construction involving the Hillsborough location, spokesman Rick Rountree said.

"However, we've found that until a project has gone through competing DOT priorities, is funded and the necessary property is acquired, there's not much point to make specific plans," Rountree said.

Once the street is expanded, NCDOT plans to update the Interstate 85 interchange at N.C. 86 near Walmart. The long-term plan is to widen I-85 to six lanes from the Orange Grove Road overpass to the Durham County line.

What's next

The N.C. Department of Transportation and the town of Hillsborough will hold a public meeting from 4 to 7 p.m. Tuesday, Jan. 8, at the Town Hall Annex board room, 105 E. Corbin St. in Hillsborough.

The meeting addresses two pending road projects: widening South Churton Street from Interstate 40 to Orange Grove Road and extending Orange Grove Street to U.S. 70A.

Auxiliary aids and other disability services can be arranged in advance with Samantha Borges, NCDOT environmental analysis unit, at 919-707-6115 or smborges@ncdot.gov. Interpretive services also are available for those who do not speak English, or have a limited ability to read, speak or understand English, by calling 800-481-6494.

Comments about the projects also can be made via phone, email or mail by Jan. 25. Contact NCDOT project manager Gene Tarascio at 1582 Mail Service Center, Raleigh, NC 27699-1582, 919-707-6046, or gtarascio@ncdot.gov; or project consultant Teresa Gresham at 421 Fayetteville St., Suite 600, Raleigh, NC 27601, 919-677-2194, or teresa.gresham@kimley-horn.com.

More criticism of GoTriangle, despite light-rail tunnel planned for downtown Durham

The Herald-Sun By Dawn Baumgartner Vaughan December 20, 2018

DURHAM — GoTriangle is getting more criticism from a Durham business leader even after making a major change to plans for light-rail tracks downtown.

After leaders of the Durham Performing Arts Center and American Tobacco Campus balked at closing Blackwell Street to traffic for the project, a private meeting of downtown stakeholders was held to come up with an alternative — even though GoTriangle told DPAC months ago it was too late for any major changes.

The proposed underground tunnel was a late change to the \$2.47 billion Durham-Orange Light Rail Transit project, a 19-stop, 18-mile project now in its engineering phase.

The planned line runs from UNC Hospitals in Chapel Hill to N.C. Central University in Durham. A plan this fall to close Blackwell Street to pedestrian and vehicle traffic drew criticism from DPAC and Capitol Broadcasting, which owns the American Tobacco Campus and the Durham Bulls. DPAC general manager Bob Klaus told city leaders it was "a mistake."

On Wednesday, Klaus wrote city leaders another letter, saying that DPAC supports the tunnel plan, but still isn't happy with GoTriangle.

"You listened. The same cannot be said for GoTriangle, however," Klaus wrote.

"We met with GoTriangle twice in October. We discovered that its attitude was that there was not enough time and not enough money to change anything about its plan," the letter continued. "As the future unfolds, please continue to impress upon GoTriangle that it must take the concerns that you have heard from us and other downtown businesses seriously, which means that GoTriangle must modify the design to account for those concerns as the design process unfolds."

The tunnel — and now two bridges — are the solution GoTriangle has now submitted to the Federal Transit Administration to solve the Blackwell Street closing issue, as well as make sure the light rail and railroad are not at the same level as five rail crossings downtown.

But nobody knows how much that tunnel could cost, or who will pay for it.

And that doesn't count the cost of possibly placing the route's proposed 19th stop, at Blackwell and Mangum streets, underground, too.

The private meeting

GoTriangle's initial plan to close Blackwell Street prompted the chairman and another member of the light-rail fundraising board to resign. Michael Goodmon, senior vice president of Capitol Broadcasting Co., and Brad Brinegar, chairman of the advertising agency McKinney, both quit the GoTransit Partners Board of Directors last month.

Then, last week a private meeting of downtown stakeholders and elected officials was held to talk about Blackwell Street. Durham County Commissioners Chair Wendy Jacobs told The Herald-Sun and News & Observer the meeting would be taking place, but not the time or location.

In an interview Thursday, Mayor Steve Schewel said the Dec. 13 meeting wasn't public because there was not a quorum of elected officials and that "we needed a frank discussion outside the news media."

At the meeting were representatives of GoTriangle, the Durham City Council, the Durham County Board of Commissioners, Downtown Durham Inc., DPAC, N.C. Department of Transportation, Capitol Broadcasting and the Greater Durham Chamber of Commerce, he said.

The next day, Dec 14, GoTriangle submitted the proposed downtown tunnel to the Federal Transit Administration.

The tunnel would run under Pettigrew Street, Schewel said, and could include part of the planned station between Blackwell and Mangum streets, which he called the DPAC Station. "The DPAC station will probably start underground, but that's unclear," he said.

Schewel said he was meeting with railroad officials Thursday. North Carolina Railroad owns the tracks and Norfolk Southern Railroad is its tenant. Schewel said they planned to discuss the rail design that separates the two modes of transit.

The grade separations also would require building a new bridge downtown at Fayetteville and Dillard streets, with light rail running on the bridge and cars traveling beneath it. At Duke Street, the road would be on a new bridge and light rail below.

Where's the money?

So how would GoTriangle pay for the tunnel?

Schewel said the price GoTriangle submitted to the FTA for the grade separations, including the tunnel, is \$65 million in current dollars, so that could be \$80 million by the time it is built, he said.

"We don't know the amount," he said.

According to Smart Cities Dive, underground light rail tunnels can cost more than \$100 million per mile.

There are several ways the tunnel and other crossing could be funded, the mayor said, including a private fundraising campaign and from \$179 million of unallocated contingency money in the overall budget. GoTriangle staff and consultants will work in early January to figure out the grade separations design and funding, he said.

There are already utility tunnels under downtown Durham. "I feel confident we will be able to build the tunnel," Schewel said, but "you never know what's underground," including rock.

John Tallmadge, who is leading the light-rail project for GoTriangle, told The Herald-Sun and The News & Observer that it is "not yet known where the additional funds would come from for the change [in the plan] to a tunnel in downtown Durham."

"It is important to note that this is Durham and Orange counties' light-rail project and elected officials in those two counties, along with the GoTriangle Board of Trustees, will determine how to proceed," Talmadge said in an email.

Schewel said if private fundraising falls short, it is too soon to say how the funding might come together and how taxpayers might be affected.

"That is what we will be looking at," he said.

Pettigrew Street

In Klaus' letter Wednesday to city leaders, he said he supports the tunnel solution but remains concerned about GoTriangle's plan to make Pettigrew Street one-way.

"The decision to convert the only two-way street south of the railroad tracks into a one-way, eastbound street is ill-considered," he wrote.

DPAC wants the city to insist on keeping Pettigrew a two-way street. It is also worried about how light-rail construction will impact DPAC and other downtown businesses, especially with the addition of a tunnel.

Klaus declined to comment beyond the letter on Thursday.

Schewel emailed Klaus back, saying he appreciated "hearing your continuing important concerns, and I can assure you that the City and GoTriangle will take them very seriously."

"I will give my personal attention to that as the project moves forward," Schewel told Klaus.

The city "would prefer to keep Pettigrew two-way, but we don't know yet," Schewel said in an interview Thursday. "It's certainly important."

Is a tunnel the solution to getting light-rail trains through downtown Durham?

The Herald-Sun By Tammy Grubb December 14, 2018

DURHAM – A tunnel may be the solution for running the Durham-Orange light-rail trains through downtown Durham without closing a critical railroad crossing, GoTriangle officials said Friday evening.

Few details were available immediately, including the cost of building the tunnel and how far it would run underground. The tunnel has to meet environmental and railroad requirements, GoTriangle spokesman Mike Charbonneau said in a news release.

Project staff also must find funding to build the tunnel in the project's \$2.47 billion construction budget.

The Blackwell Street tunnel would be the line's second underground section. A revised plan also calls for a tunnel under the intersection of Shannon Road and University Drive, near the South Square Station, to avoid conflicts with heavy traffic there.

"I am excited that we have all come together — community stakeholders and GoTriangle staff — with a solution that addresses the needs for a vibrant downtown and ensures that we are moving forward with the successful implementation of the transformational Durham Orange Light Rail Project," Durham County Commissioners Chair Wendy Jacobs said.

The new plan has been submitted to the Federal Transit Administration for its evaluation of the light-rail project, Charbonneau said. He noted the public, Durham leaders and downtown business owners will help shape the tunnel's design.

GoTriangle and Durham leaders have been working with downtown stakeholders to find an alternative to closing the rail crossing. The tunnel was presented to the stakeholders group on Thursday, Durham Mayor Steve Schewel said.

"We gathered 50 downtown stakeholders together on Thursday, and there was strong support in the group for the tunnel taking the light rail under Blackwell and Mangum streets," he said. "We'll be incurring significant costs with this solution, but it will allow us to get the light rail built, and that's crucial for our region over the next 100 years."

The change is expected to resolve concerns that downtown business owners and boosters expressed after learning this fall that a revised light-rail plan could close the N.C. Railroad crossing at Blackwell, Corcoran and Pettigrew streets.

Downtown boosters are concerned that closing the central link between the downtown core and the American Tobacco campus and other destinations to the south could stall or harm decades of work to revive the downtown area.

Two members of the GoTransit Partners, a nonprofit fundraising group for the light rail project, resigned their board seats in November over the planned closing.

Michael Goodmon, senior vice president of Capitol Broadcasting Co., and Brad Brinegar, chairman of the advertising agency McKinney also joined Bob Klaus, general manager of the Durham Performing Arts Center, in asking the Durham City Council to delay the light rail until another solution was found.

Norfolk Southern also expressed concerns about its railroad operations, Charbonneau said. The tunnel will keep Blackwell Street open, minimize potential impacts to the historic Old Bull buildiing at Blackwell and Pettigrew streets, and remove conflicts between cars and rail traffic, he said.

It also will allow a 19th light-rail station near DPAC to remain part of the plan. The additional station would be located between a stop at the Durham Station, where riders could connect with other transit options, and a stop at Dillard Street.

"This appears to be an excellent solution that not only maintains the existing street network in the area but minimizes the impact on the appearance of the Old Bull building at a design pinch point," Durham County Commissioner and GoTriangle Board Chair Ellen Reckhow said.

It was not clear whether the plan for a tunnel would affect related plans to change some downtown streets. Durham City Council members voted last week that they are open to making some streets one-way or two-way. Other

potential changes include making part of Pettigrew Street one-way, making part of Ramseur Street two-way and making part of Dillard Street one-way.

Still outstanding is the path that light rail could take on Erwin Road. The latest plan elevates the rail tracks through that corridor, but Duke University officials have said they are not convinced the rail line won't have negative effects on Duke's medical and research buildings.

The 17.7-mile light-rail line would link UNC Hospitals in Chapel Hill with Duke and N.C. Central universities in Durham, and points in between. With interest on construction debt, the project's costs are expected to grow to over \$3 billion.

The Federal Transit Administration could pay up to \$1.23 billion toward construction, with another \$190 million coming from the state. Durham and Orange counties would be responsible for the remaining \$988 million in construction costs, plus interest on debt.

Staff writer Dawn Baumgartner Vaughan contributed to this story.

Read more here: https://www.newsobserver.com/news/local/article223133340.html#storylink=cpy

Potential closure of this downtown Durham street casts cloud over light rail plan

The Herald-Sun By Dawn Baumgartner Vaughan December 11, 2018

DURHAM – Blackwell Street is at the center of downtown Durham talks about the Durham-Orange Light Rail Transit plan.

The project is a proposed 17.7-mile light-rail line connecting UNC Hospitals in Chapel Hill to Duke University to N.C. Central University, with stops in between, including downtown Durham. But the potential closing of Blackwell Street, which connects the American Tobacco Campus and the Durham Performing Arts Center with the rest of downtown Durham, has been met with umbrage from DPAC and American Tobacco leaders.

The head of DPAC, which is city-owned, called the potential closure "a mistake" last week in a six-page letter to city leaders.

City leaders past and present are listening, but a decision hasn't been made yet.

What a former NCDOT leader and mayor thinks

Former N.C. Department of Transportation Secretary Nick Tennyson knows about transit and Durham, and remembers downtown before revitalization took off.

"People directly affected certainly have an opinion that's got to be considered," Tennyson said. "We shouldn't put at risk things we worked so hard [to achieve]." He was mayor of Durham from 1997 to 2001.

Tennyson said that many cities have the advantage of being built on a river or a bay. "We were built on a railroad, and did our best to turn our back on it," he said.

Railroad tracks run through downtown Durham along Pettigrew Street. Tracks that were once a practical matter should now be developed as an asset in a more public sense, Tennyson said. The light-rail route follows much of the railroad tracks downtown, running parallel along Pettigrew Street.

Blackwell Street potentially closing is not the only downtown road change on the table.

Durham City Council members voted last week that they are open to changing downtown streets with closures and making some one-way or two-way. Other potential changes include making part of Pettigrew Street one-way, making part of Ramseur Street two-way and making part of Dillard Street one-way.

"I think the fewer one-way streets we have, the better," Tennyson said.

Shelly Green, director of Discover Durham, formerly the Durham Convention and Visitors Bureau, said it is very concerned about the potential closing of Blackwell Street.

"We know that a signature civic plaza [that goes over the street] is on the table, but we don't know what that looks like," Green said.

Green said that another worry is the direction that light-rail doors will open — either the North side or South side of the tracks

Blackwell/Mangum Station

A 19th stop on the 18-stop Durham Orange Light Rail Transit plan is still pending. It would be at Blackwell and Mangum streets downtown, between a stop at Durham Station and another on Dillard Street. A Blackwell/Mangum stop would be mid-downtown and close to DPAC, the Durham Bulls Athletic Park, the jail and the courthouse.

Blackwell Street was named for W.T. Blackwell of the Blackwell Durham Tobacco Company, according to the Museum of Durham History. Blackwell Durham made Bull Durham tobacco.

Durham County Commissioners Chair Wendy Jacobs, who serves on the GoTriangle Board of Trustees, said that the Blackwell/Mangum station is still at the proposal stage.

Commissioner Ellen Reckhow, who is chair of the GoTriangle board, said that station is part of the supplemental environmental statement.

"We're in the process of finalizing it," Reckhow said. She would like the 19th stop.

"Oh, definitely. The addition of a stop has not been controversial — it's the closing of Blackwell that's controversial," Reckhow said.

According to GoTriangle, the Blackwell/Mangum station would not have worked until the latest design plan refinement that makes station platforms long enough for two-car trains instead of three-car trains. The recommendation came in an engineering review that said two-car station platforms are cheaper than three-car platforms and can still meet ridership capacity through 2040. The three-car platform was not possible for Blackwell/Mangum because of nearby historic buildings, according to GoTriangle.

The \$2.47 billion project is in the engineering phase, with GoTriangle scheduled to apply for federal funding in the spring. Construction would begin in 2020, with light-trail operations starting in 2028.

Two weeks ago, Capitol Broadcasting executive Michael Goodmon quit the light-rail fundraising board over the street-closing plan. Capitol Broadcasting owns the Durham Bulls and the American Tobacco Campus. And last week, DPAC General Manager Bob Klaus wrote a letter to Mayor Steve Schewel and City Manager Tom Bonfield that "problems that this plan will create for the general public, the DPAC, the DBAP, and downtown Durham businesses far outweigh any benefits the GoTriangle Plan might provide."

Reckhow said that if Blackwell Street is closed to cars, it could still be open to bikes and pedestrians. Keeping it open to all traffic "would be optimal because it keeps the current street fabric unchanged."

She said there is \$20 million designated for accessibility in the project that could be used toward a pedestrian and bicycle bridge over the Blackwell Street crossing, and more resources would be needed. She said they could possibly look to the city for it.

"We want to keep Blackwell open to as many modes as possible," Reckhow said.

Jacobs says the light-rail project is about jobs and population growth.

"This is just so much bigger than any one road," Jacobs said.

But she would like Blackwell Street to remain open for mobility, though she thinks it is unsafe.

"Right now it is very dangerous walking over the railroad tracks," Jacobs said. "It's not safe. We need some longer term solutions. We need to have that big picture mobility."

Durham City Council member Mark-Anthony Middleton said Blackwell Street is "a major artery" and that the letter from DPAC is important.

"I cross Blackwell Street. I realize how important and vital that connector is by as many modes of transportation possible," Middleton said. "It's going to cost money."

He said that when the city dedicated the public art on the Corcoran Street garage nearby, the whole point was for people to be able to walk through that area along a "SmART" corridor.

"We have to come up with a design to keep Blackwell open," he said.

Jacobs said that Durham's light-rail stakeholders will meet later this week to address concerns around the stops.

Green called it a complicated issue.

"We have concerns, but at the end of the day we have faith in our elected officials to make the right decision," Green said.

She said she doesn't know what that right decision is yet.

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End of the line for light-rail yard opponents. 'I hate it for you,' says council member

The Herald-Sun By Dawn Baumgartner Vaughan December 4, 2018

DURHAM – After more than three hours of public comments, the Durham City Council voted unanimously Monday night to rezone a suburban area of southwest Durham for the Durham-Orange Light Rail Transit project's rail yard.

The light-rail operations and maintenance facility will be built on 25 acres off Farrington Road near Interstate 40, several neighborhoods and Creekside Elementary School.

The planned 17.7-mile light-rail line will connect UNC Hospitals in Chapel Hill to Duke and N.C. Central universities in Durham, with stops in between.

Council member Mark-Anthony Middleton called the vote "right for the city."

He also questioned, however, whether GoTriangle was listening to southwest Durham residents as much as Duke University, the Durham Performing Arts Center and the Durham Bulls Athletic Park. Leaders at Duke, DPAC and Capitol Broadcasting Co., which owns the DBAP and American Tobacco Campus, have all spoken against parts of GoTriangle's light-rail pan.

And the latest city move on Monday may mean some streets downtown will become one-way, two-way or closed entirely to cars.

The rail yard would be open all the time and house administration offices, rail car maintenance and storage space. The Farrington Road site was one of five considered, and was chosen by GoTriangle after public meetings in 2015 for having the least environmental impact.

But residents of the Culp Arbor neighborhood, Creekside parents and others spent weeks lobbying council members to deny the rezoning. The Durham Planning Commission split 4-4, and did not recommend the rezoning.

"This is the best location, even with its problems," Mayor Pro Tem Jillian Johnson said before voting Monday night for the rezoning. "I think this project is really important for our community."

Rail-yard opponents

Almost three times as many rail-yard opponents as supporters spoke at the public hearing — 52 people. They are worried about noise, and don't think plans to mitigate the sound like tree and berm buffers, are enough. Many speakers said they supported light-rail transit, but not the rail-yard plan.

Dave Charters, GoTriangle manager of design and engineering, said the noise level related to "wheel squeal" will be below Federal Transit Administration guidelines and that GoTriangle is working on a policy to mitigate noise all along the 17.7-mile route. He said one of the reasons the Farrington Road site was chosen is because it is on a straight area of track.

B.R. Hoffman, a resident of Culp Arbor, which is across the street from the site, said she visited Charlotte with council members to see the Charlotte light-rail yard and building.

"We were hoping we'd like the ROMF [rail operations and maintenance facility], but instead we left Charlotte more concerned than when we went." Hoffman said.

Jeff Prather, a retired Air Force engineer living in Culp Arbor, said GoTriangle's environmental assessment isn't clear about the noise level.

Another Culp Arbor neighbor, Linda Spallone, said noises will seem even louder at night.

Some speakers said GoTriangle is placing the rail yard near a school serving many low-income students and also taking land through eminent domain from African-American property owners.

Creekside Elementary School is a Title I school, meaning that at least 40 percent of the students are from low-income households.

Cheza Hinds, parent of two Creekside students, said fourth and fifth graders in trailers at the school won't be as protected from the noise.

A Change.org petition against the ROMF had 1,181 signatures as of Monday afternoon.

Isaac Woods, who is descended from a formerly enslaved man, told the council that GoTriangle acquired land from his family through eminent domain.

John Tallmadge, interim director of the light-rail project, acknowledged that African-American landowners did lose their property through eminent domain for the rail yard.

"Did any white people get their property taken?" Middleton asked. Tallmadge said yes, they did, too.

Culp Arbor resident Ruth Ann McKinney said she wanted a neutral noise study about the impact on residents and the school.

Charters, of GoTriangle, said the noise "is going to dissipate significantly" before reaching Creekside Elementary.

"We would suggest the noise from the school buses there are as loud or louder than the noise from the maintenance facility," he said.

Before voting in favor of the rezoning, Mayor Steve Schewel said he visited the rail yard in Charlotte several times and did not think light-rail noise would be significant for Creekside Elementary.

Rail yard supporters

Community groups and former elected officials spoke in favor of the rail yard. Durham CAN (Congregations, Associations and Neighborhoods), the People's Alliance and the Coalition for Affordable Housing and Transit were all in favor.

Former City Council member Diane Catotti, who lives in southwest Durham, said the Farrington Road location was the most appropriate of the options. Former Mayor Wib Gulley said groups in favor of the rezoning like the Coalition for Affordable Housing and Transit "have a voice not just for themselves but for hundreds and hundreds of folks across Durham."

Council member DeDreana Freeman told rail-yard opponents who moved into southwest Durham in the past few years that they were outmatched by supporters from Durham CAN, the People's Alliance and Coalition for Affordable Housing and Transit.

"These folks have been organizing for 20 years. You are kind of at the end of this conversation, and I hate it for you," Freeman said.

If the light-rail project stays on schedule, light rail construction is set to start in 2020, with estimated completion in 2028.

Downtown streets could change with light rail

In other light-rail developments, the city is looking at closing and reconfiguring some downtown streets for light rail.

City Attorney Patrick Baker sent council members a memo Monday that adjusted language in the city's proposed agreement with GoTriangle to reflect that the downtown light rail plan is not final. The city will advise GoTriangle about the plan, which will need final approval by the GoTriangle Board of Trustees.

Also Monday, DPAC General Manager Bob Klaus wrote a letter to the mayor and city manager opposing GoTriangle's plan to close Blackwell Street to cars.

Baker wrote that the city agreement with GoTriangle could authorize these road reconfigurations if needed for light=rail construction:

- One-way West Pettigrew Street eastbound from East Chapel Hill Street to South Dillard Street;
- Two-way Ramseur Street from South Dillard Street to East Chapel Hill Street;
- Raising West Pettigrew Street's profile as required to provide safe rail crossings;

- Closing Blackwell Street at the North Carolina Railroad rail crossing;
- One-way South Dillard Street southbound at the North Carolina Railroad rail crossing;
- Alter intersections including Gregson Street, Duke Street, Blackwell Street, South Mangum Street, Vivian Street, South Dillard Street, and Grant Street, as required to allow for safe rail crossings.

Johnson told a resident in an email Monday that the council had not received a formal request to close Blackwell Street, and called it a subject of "ongoing negotiation."

The council has not yet approved the cooperation agreement with GoTriangle.

More opposition to Durham-Orange Light Rail street closing. See who's unhappy now

The Herald-Sun By Dawn Baumgartner Vaughan December 3, 2018

DURHAM – The head of the Durham Performing Arts Center, a city-owned building that brings in millions of dollars, is calling on city leaders to reject a light-rail plan that would close Blackwell Street to traffic, calling it "a mistake."

DPAC General Manager Bob Klaus said the closing would negatively affect the 500,000 people who visit DPAC and nearby restaurants downtown every year.

The Durham-Orange Light Rail Transit project is a proposed 17.7-mile light-rail line connecting UNC Hospitals in Chapel Hill to Duke University to N.C. Central University, with stops in between, including downtown Durham.

The \$2.47 billion project is in the engineering phase, with GoTriangle scheduled to apply for federal funding in the spring. Construction would begin in 2020, with light-trail operations starting in 2028, according to GoTriangle's plan.

GoTriangle's plan calls for closing the Blackwell Street railroad crossing to vehicular and pedestrian traffic. The street connects DPAC and the Durham Bulls Athletic Park will the rest of downtown.

Last week, Capitol Broadcasting executive Michael Goodmon quit the light-rail fundraising board over the streetclosing plan. Capitol Broadcasting owns the Durham Bulls and the American Tobacco Campus.

On Monday afternoon, Klaus emailed Durham Mayor Steve Schewel and City Manager Tom Bonfield a letter calling GoTriangle's plan "a mistake" and saying "problems that this plan will create for the general public, the DPAC, the DBAP, and downtown Durham businesses far outweigh any benefits the GoTriangle Plan might provide."

Klaus wrote that neither DPAC nor Bulls management thinks visitors will use a park and ride and then take light rail the rest of the way to their venues. "Either they will continue to downtown Durham in their own vehicle or they will stop coming," Klaus said.

GoTriangle has offered to work with downtown stakeholders on a "signature civic space" with an alternate pedestrian connection on Blackwell Street. John Tallmadge, GoTriangle's interim project director, said the agency has \$20 million, plus \$2 million for design and engineering, budgeted for the final design.

Duke University President Vincent Price also doesn't want the Blackwell Street crossing closed. Duke has its own concerns about the light-rail plan along Erwin Road.

The DPAC letter comes as the City Council takes a key vote Monday night on the light-rail project's operations and maintenance facility planned for southwest Durham. Nearby homeowners and parents of Creekside Elementary School want the council to reject the rezoning that would allow the rail yard.

However, the People's Alliance political group, whose PAC endorsed most of council, and Durham CAN (Congregations, Associations and Neighborhoods) want the council to vote yes on the rezoning to move the project forward.

These Southwest Durham parents don't want a light-rail yard by their school, homes

The Herald-Sun By Dawn Baumgartner Vaughan November 28, 2018

DURHAM –A group of Durham elementary school parents are "greatly troubled" about GoTriangle's plans for a light-rail yard near their homes and school in southwest Durham.

They plan to ask the Durham City Council to deny a rezoning of 25 acres Monday night that would let the light-rail operations and maintenance facility be built along Farrington Road near Interstate 40.

When the planned 17.7-mile light rail project is built in Durham and Chapel Hill, it will need a place where train cars can be worked on and parked. The planned location is in the city of Durham, just across the line from Chapel Hill and near Interstate 40, neighborhoods and Creekside Elementary School. The council is scheduled to vote on the rezoning at its meeting at 7 p.m. Monday (Dec. 3) at City Hall.

"I'm greatly troubled, as are many Creekside folks," said Andrew Johnson, a father of three. Two of his children are Creekside students and a third will start kindergarten there next year.

"I understand it's right in between Durham and Orange, but putting an industrial rail yard within a quarter-mile of a school is just unacceptable," he said. "Durham has plenty of industrial zones — this is not one of them for a reason."

Mayor Steve Schewel has said opponents of the rail operations and maintenance facilitylocation will have at least 30 minutes to tell council members what they think about it.

The Durham Planning Commission, an advisory board appointed by the council and county commissioners, did not recommend the rezoning, splitting 4-4.

The facility would be open all the time and have light-rail administration offices, rail car maintenance and storage space.

The rail-yard opposition comes as Federal Transit Administration officials were in Durham this week, and as Duke University has raised renewed concern about the project's route along Erwin Road, in front of Duke University Hospital..

For Johnson, who lives in Prescott Place off Farrington Road, the issue is more than just the planned rail yard's location near a school.

He doesn't want to hear the noises coming from a facility that operates 24 hours a day, seven days a week. And he wonders about potential hazardous materials at the site. He thinks property values will drop, too.

What Creekside Elementary parents are saying

Kelly Reilly said she can't think of a benefit to living near a maintenance facility.

"I think it's fair to say that a ROMF [rail operations and maintenance facility] does not work for any residential community," Reilly said.

"We are one of the families who will get hit by a double-whammy if the ROMF is built on Farrington Road. Our children attend Creekside Elementary, and our home backs up to Farrington Road. My husband and I are concerned that [we] would never get a return on the investment in our house, which is our only real asset," she said.

Opponents started a Change.org petition against the ROMF. More than 160 people had signed it as of noon Wednesday.

Chip Sudderth, spokesman for Durham Public Schools, said the school system was not deeply involved in the site selection process for light rail or the railyard.

"Transit planners have been in touch with us with technical questions since the decision was made and we are confident that if concerns arise we will have open lines of communication with them," Sudderth said.

What GoTriangle says

GoTriangle released an 8-page question and answer list about the ROMF rezoning this month.

It said because the facility would be open 24/7, staff would arrive and leave at various times preventing heavy traffic at peak times.

The project would add a turning lane on Farrington Road into the facility and two exit lanes. The main entrance would be on Farrington Road at Ephesus Church Road. Farrington Road will also be widened to add a five-foot bike lane.

The facility's schedule would bring many light-rail cars to the site around 7:30 p.m. to be cleaned and repaired if needed, with repairs inside the building, according to GoTriangle. Light-rail cars would begin to leave the facility around 4 a.m., according to GoTriangle.

Farrington Road was chosen from five potention ROMF sites in February 2016 as having the least environmental impact. Others were at Leigh Village, Patterson Place, Cornwallis Road and Alston Avenue.

Rhonda Woodell lives in Prescott Place, one of the neighborhoods, along with Culp Arbor and Trenton, close to the rail yard site. Woodell's daughter, who has sensory integration disorder, goes to Creekside Elementary, "so she would never get a break from the noise," she said.

"The thought of Durham allowing the ROMF to be built on Farrington Road makes me sick," Woodell said. "When we moved into this house, we had planned on staying here until we needed to downsize. I am so concerned about the effects of the ROMF on the value of my largest asset. My husband and I have discussed the fact that we would have to move, but we are so concerned about how much we would lose." she said.

Woodell said the rail yard does not support Durham Public Schools' strategic plan goal to "provide a safe school environment that supports the whole child."

Another Creekside parent, Nikki Lowe, said she wants City Council members to think about how they would feel if it were near their homes.

"While I appreciate leadership supporting the light rail, I think they have been neglectful in realizing the impact that putting the maintenance facility near Creekside would be," Lowe said.

Lowe said when they moved into their house four years ago, it was everything she wanted — on a cul-de-sac with lots of kids and easy access to all their favorite spots. She worries the council will approve the rezoning.

Capitol Broadcasting exec quits light-rail fundraising board over downtown Durham concern

The Herald-Sun By Tammy Grubb November 30, 2018

DURHAM –The chairman and a member of the Durham-Orange light-rail project fundraising board have resigned over the project's possible impact on a key downtown Durham corridor.

Michael Goodmon, senior vice president of Capitol Broadcasting Co., resigned from the GoTransit Partners Board of Directors on Tuesday, after meeting with Durham Mayor Steve Schewel, GoTriangle leaders and others about a plan to close the downtown railroad crossing at Blackwell, Corcoran and Pettigrew streets to pedestrian and vehicle traffic.

Brad Brinegar, chairman of the advertising agency McKinney, resigned from his seat on the seven-member board in a Nov. 5 letter.

The plan was proposed in October, alarming downtown stakeholders, including American Tobacco, Durham Bulls and DPAC, who fear it will split the city's core from their properties to the south and harm years of work to create a thriving downtown. In a letter, they asked the Durham City Council to delay light-rail construction until there's a better solution.

Goodmon, the board's chairman, said in an email Wednesday there has been "no substantive movement" to avoid closing the crossing and that public transparency about the issue is inadequate.

Capitol Broadcasting will "oppose any project, either now or in the future, that results in the closing of this vital artery," he said, while noting the support that downtown partners have given to transit planning.

Capitol Broadcasting owns the American Tobacco Campus, WRAL and the Durham Bulls. In 2016 it paid nearly \$29 million for additional property west of the American Tobacco Campus, according to Durham County property records.

'Tremendous advocate'

John Tallmadge, GoTriangle's interim project manager, said in an email that GoTriangle respects the decisions and appreciates the time and work both men have put into the project.

"Michael especially has been a tremendous advocate for the light rail, understanding what an opportunity it will provide to our communities," Tallmadge said. "Without him, the progress we have achieved so far would not have been possible. We cannot thank Michael enough for his outstanding leadership and his commitment to our community."

The resignations come as the Federal Transit Administration is completing a final light-rail project risk assessment. GoTriangle must submit a project application to the FTA by April for \$1.24 billion in federal funding — half of the project's \$2.47 billion construction cost.

It also comes as GoTriangle and Durham leaders are working with Duke University and its medical center to resolve concerns about the downtown crossing and a planned elevated section of the light-rail line on Erwin Road, and at a crucial time for the GoTransit Partners.

GoTriangle formed the nonprofit GoTransit Partners last year to raise roughly \$102.5 million in land and financial donations toward construction. Only \$14.5 million worth of land has been committed — by UNC-Chapel Hill and N.C. Central University.

American Tobacco could rethink any anticipated cash or land donations if the corridor is closed, Goodmon said.

Raising Pettigrew Street

The current light-rail route runs 17.7 miles from UNC Hospitals in Chapel Hill to Duke and N.C. Central universities in Durham. It would parallel an existing freight line from roughly Brightleaf Square in downtown Durham to Alston Avenue.

Engineers finalizing the plan, however, found Pettigrew Street would have to be raised by several feet at Blackwell Street. The change would create an awkward height difference between the downtown core and properties to the south, particularly affecting a historic building at the corner, GoTriangle officials said.

While the existing railroad crossing long has been identified as a barrier between the city core and the American Tobacco Campus, plans for downtown Durham have advocated improving the corridor.

GoTriangle has offered to work with downtown stakeholders on a "signature civic space" with an alternate pedestrian connection. Goodmon said they have been asked to serve on an advisory panel to look at design options, but that panel has not met, and they are concerned the objections aren't being taken seriously.

A bigger barrier blocking the view of downtown, created by elevating the tracks, still would be better than losing the connection altogether, he said.

"The dismemberment of downtown Durham is a significant issue that has dire long-term implications and simply cannot be settled in the amount of time provided, regardless of the intent of the parties," Goodmon said.

He also noted that conversations with GoTriangle's engineers revealed a pedestrian bridge could span several hundred feet and be almost 50 feet tall at its peak to meet the topographical changes on either side of the tracks.

Tallmadge acknowledged the "civic space" has not been designed, but GoTriangle has \$20 million, plus \$2 million for design and engineering, budgeted for the final design.

He noted that work on crossing alternatives is ongoing, including meetings with NCDOT Rail Division, NC Railroad and Durham city staff. Other partners will be included in those discussions, he said.

DDI, Chamber of Commerce weigh in

Downtown Durham Inc. officials offered a way forward in an Oct. 22 letter to Tallmadge.

The letter, from DDI Chief Executive Officer Nicole Thompson and board Chairwoman Jessica Brock, outlines multiple concerns with how the project could affect at-grade crossings, traffic, parking and downtown connections. Chief among them, they said, is the Blackwell Street rail crossing, which also is part of the Maine-to-Florida East Coast Greenway, the American Tobacco Trail and the future Durham Beltline Trail.

"It is also part of Durham's smART corridor, the outgrowth of a community process to create a walkable, art-filled corridor linking neighborhoods south of downtown with neighborhoods to the north of downtown," the women said.

If the crossing must be closed, DDI's board and staff "strongly believe" the signature civic space that replaces it must provide a high-quality, high-capacity pedestrian and bike crossing, they added. The letter proposes a schedule for drafting a design that meets the April deadline for submitting the project to the FTA.

The Greater Durham Chamber of Commerce also has weighed in, sending a memo Tuesday to its members about the proposed Blackwell Street closing. The memo reiterates the chamber's commitment to the value of transit but encourages members to say "whether it's time to re-envision the whole project."

A grassroots conversation among restaurants and businesses in the corridor also is growing, Goodmon said.

Duke, GoTriangle having 'constructive' talks about light-rail concerns, official says

The Herald-Sun By Tammy Grubb November 27, 2018

DURHAM –Durham Mayor Steve Schewel said Tuesday local leaders are confident that Duke University and GoTriangle will resolve concerns about the \$2.47 billion Durham-Orange Light Rail Transit Project.

GoTriangle's interim project manager, John Tallmadge, met Monday with Tallman Trask, Duke's executive vice president, and staff to talk about issues Duke President Vincent Price raised in two letters last week, Schewel said.

The meeting came as Federal Transit Administration officials arrived Tuesday for a final assessment of the 17.7-mile light-rail project's budget, risks and details. The rail system would link UNC Hospitals in Chapel Hill with Duke and N.C. Central universities in Durham, and points in between.

A final federal funding application could be submitted early next year.

No issues are insurmountable, Schewel said, and Duke officials know the project's importance to the community and the region.

They "had a very successful meeting dealing with a lot of very specific issues," he said. "It went extremely well, and we're very encouraged. Duke has really come to the table in a very, very constructive way."

Durham County Commissioners Chairwoman Wendy Jacobs called the talks "encouraging" and praised Duke for appointing Trask as the main liaison for the project. She noted Trask also serves on the board of the nonprofit GoTransit Partners, which is raising donations for the light-rail project.

Duke can't support Durham-Orange light rail without changes, president says in letter

U.S. Reps. David Price and G.K. Butterfield also wrote to Duke's president last week, urging him and the Board of Trustees to donate land needed for the project. Duke's Board of Trustees could consider its options Friday.

Tallmadge and Trask declined to comment for this story.

GoTriangle needs Duke to commit to right-of-way land donations by Dec. 31, but several concerns remain, including the light-rail route across Cameron Boulevard and up Erwin Road, past its medical and research facilities, Duke President Price said.

While the Board of Trustees meeting Friday will be Duke's last official trustees meeting this year, Schewel said the board could vote during a special meeting at a later date.

What are Duke's concerns?

Preserving safe, emergency access to Duke's Level 1 trauma center

- Potentially negative effects of light-rail noise and vibration on sensitive medical and research operations
- Preserving a required, 100-foot buffer around the Global Health Research Building at Research Drive and Erwin Road
- Maintaining a safe pedestrian entrance to the Duke Eye Center during and after construction
- Closing Trent Drive for weeks over years of construction, which Price said could cost Duke patients, revenues and potentially jobs
- Guarantees that a critical electricity line won't be affected
- A safer light-rail crossing that won't affect heavy traffic at Erwin Road and Cameron Boulevard
- How closing the Blackwell/Corcoran Street railroad crossing could negatively affect downtown revitalization and growth, and create a disconnect between the city's core and American Tobacco and other destinations to the south

Why does Duke matter?

The light-rail project cannot advance without Duke's partnership. GoTriangle documents note seven of the 19 proposed stations will serve Duke's campus and medical facilities, generating about 37 percent of the train's riders — nearly 9,000 daily boardings.

The Duke/VA station on Erwin Road is expected to be the second-most popular stop, according to GoTriangle documents, with about 2,500 boardings a day. The most popular stop is expected to be UNC Hospitals in Chapel Hill.

Why is this an issue now?

Most of the concerns are not new. Duke, GoTriangle and local officials have been working to resolve them for a few years, leading to the addition to the plan last summer of a \$90 million elevated track on Erwin Road. Duke previously expressed concerns about a street-level track.

Other concerns, such as noise and vibrations, were examined as part of the project development studies, which wrapped up last year.

FTA officials said it is not uncommon for transportation projects to encounter challenges during the planning process.

Q. What is GoTriangle's response?

GoTriangle officials addressed each concern in a Nov. 20 memo to President Price, noting that:

- The elevated track will be built in phases, leaving two travel lanes and additional room in each direction for ambulances. GPS-based Emergency Vehicle Pre-emption technology also will be installed, giving ambulances priority access at traffic signals. Durham County EMS has been involved in those conversations.
- Previous analysis has found that the soil in that corridor suppresses vibrations and the noise is primarily from traffic. The light-rail train is expected to be quieter than existing traffic, GoTriangle officials said.
- Electrical guarantees must be worked out with Duke Energy, which has approved the elevated track's location.
- GoTriangle officials offered to work closely with Duke on issues of construction and patient and emergency access. They did not address Duke's concerns about the downtown railroad crossing. Those talks are continuing with several downtown stakeholders.
- Q. How are we paying for light rail?

A final application for \$1.24 billion in federal funding — half of the project's \$2.47 billion construction cost — is due to the Federal Transit Administration by April. The state could pay another \$190 million.

Duke's donation would be part of \$102.5 million in public and private donations, including over \$15 million in land donated by UNC-Chapel Hill, N.C. Central University and the Durham VA Medical Center.

That leaves the counties to pay roughly \$945 million, plus another \$847 million to \$908 million in anticipated interest on short- and long-term loans. The local money is being raised through a half-cent sales tax and car rental and registration fees.

General Manager Jeff Mann has said GoTriangle is spending roughly \$4.8 million a month on project engineering. That adds up to roughly \$121 million by the end of November, including \$33 million for a required environmental impact study. The FTA could reimburse half of the money if the project gets a federal grant.

Q. What happens next?

Federal Transit Administration officials will review the project's readiness how much local, state, public and private money is committed.

The project only needs a "medium" overall rating to seek federal money, but many previous projects have scored higher. FTA officials gave the project a "medium" overall rating last year, with lower ratings for GoTriangle's financial estimates and the money committed at that point.

What happens after the project is submitted to FTA?

GoTriangle expects to get an answer about federal funding by September 2019, which would meet a state deadline of November 2019 to have all non-state funding in place. The money would be paid in \$100 million installments over the next 12 years, starting with the 2019-2020 federal budget.

The light-rail system could transport its first passengers in 2028.

A few quick slides on growth in vehicle miles traveled (VMT) in North Carolina and the DCHC MPO area

Source: North Carolina Department of Transportation annual VMT report

Of the 37 MPOs and RPOs in North Carolina, the DCHC MPO is among the top five in terms of vehicle miles traveled growth since 2009.

MPO Fayetteville Area MPO 3,192,840 3,695,031 MPO French Broad River MPO 4,392,128 5,132,884 MPO Gaston-Cleveland-Lincoln MPO 3,784,967 4,385,647 MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Wilmington Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,697,569 2,077,139	h
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MPO Cabarrus Rowan MPO 3,511,710 3,792,659 MPO Capital Area MPO 10,794,087 13,236,903 MPO Charlotte Regional Transportation Planning Organization 14,713,767 18,104,456 MPO Durham Chapel Hill Carrboro MPO 4,608,909 5,616,889 MPO Fayetteville Area MPO 3,192,840 3,695,031 MPO French Broad River MPO 4,392,128 5,132,884 MPO Gaston-Cleveland-Lincoln MPO 3,784,967 4,385,647 MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,308,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO Rocky Mount Urban Area MPO 1,002,356	17
MPO Capital Area MPO 10,794,087 13,236,903 MPO Charlotte Regional Transportation Planning Organization 14,713,767 18,104,456 MPO Durham Chapel Hill Carrboro MPO 4,608,909 5,616,889 MPO Fayetteville Area MPO 3,192,840 3,695,031 MPO French Broad River MPO 4,392,128 5,132,884 MPO Gaston-Cleveland-Lincoln MPO 3,784,967 4,385,647 MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 4,556,121	16%
MPO Charlotte Regional Transportation Planning Organization 14,713,767 18,104,456 MPO Durham Chapel Hill Carrboro MPO 4,608,909 5,616,889 MPO Fayetteville Area MPO 3,192,840 3,695,031 MPO French Broad River MPO 4,392,128 5,132,884 MPO Gaston-Cleveland-Lincoln MPO 3,784,967 4,385,647 MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121<	8%
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MPO Fayetteville Area MPO 3,192,840 3,695,031 MPO French Broad River MPO 4,392,128 5,132,884 MPO Gaston-Cleveland-Lincoln MPO 3,784,967 4,385,647 MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Wilmington Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,697,569 2,077,139	23%
MPO French Broad River MPO 4,392,128 5,132,884 MPO Gaston-Cleveland-Lincoln MPO 3,784,967 4,385,647 MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	22%
MPO Gaston-Cleveland-Lincoln MPO 3,784,967 4,385,647 MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	16%
MPO Goldsboro Urban Area MPO 761,029 858,623 MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	17%
MPO Grand Strand Transportation Study Area 424,204 504,234 MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	16%
MPO Greater Hickory MPO 3,762,448 4,276,497 MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	13%
MPO Greensboro Urban Area MPO 4,311,756 5,091,125 MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	19%
MPO Greenville Urban Area MPO 962,277 1,063,643 MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	14%
MPO High Point Urban Area MPO 3,008,087 3,342,075 MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	18%
MPO Jacksonville Urban MPO 1,375,919 1,405,387 MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	11%
MPO New Bern MPO 537,660 570,629 MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	11%
MPO Rocky Mount Urban Area MPO 1,002,356 1,106,275 MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	2%
MPO Wilmington Urban Area MPO 2,239,336 2,634,220 MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	6%
MPO Winston Salem Urban Area MPO 4,556,121 5,258,802 RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	10%
RPO Albemarle RPO 1,904,586 2,140,426 RPO Cape Fear RPO 1,697,569 2,077,139	18%
RPO Cape Fear RPO 1,697,569 2,077,139	15%
	12%
	22%
RPO Down East RPO 1,790,531 1,986,945	11%
RPO East Carolina RPO 1,810,590 2,073,965	15%
RPO High Country RPO 1,946,556 2,100,347	8%
RPO Isothermal RPO 1,535,667 1,789,155	17%
RPO Kerr-Tar RPO 1,629,207 1,786,073	10%
RPO Land-of-Sky RPO 702,299 837,167	19%
RPO Lumber River RPO 2,451,227 2,908,818	19%
RPO Mid-Carolina RPO 2,221,549 2,518,523	13%
RPO Mid-East RPO 1,209,237 1,266,911	5%
RPO Northwest Piedmont RPO 2,119,600 2,315,908	9%
RPO Peanut Belt RPO 1,546,613 1,646,371	6%
RPO Piedmont Triad RPO 2,419,930 2,605,668	8%
RPO Rocky River RPO 937,790 1,069,098	14%
RPO Southwestern RPO 1,692,951 1,720,414	2%
RPO Triangle Area RPO 2,119,111 2,576,277	22%
RPO Upper Coastal Plain RPO 3,147,733 3,560,094	13%
TOTAL 102,589,775 119,103,880	16%

Key
High Growth
Low Growth

North Carolina County Annual Vehicle Miles Traveled (AVMT) in 1000s

Of the 15 North Carolina counties that grew the fastest in terms of vehicle miles traveled, four are from the Triangle area.

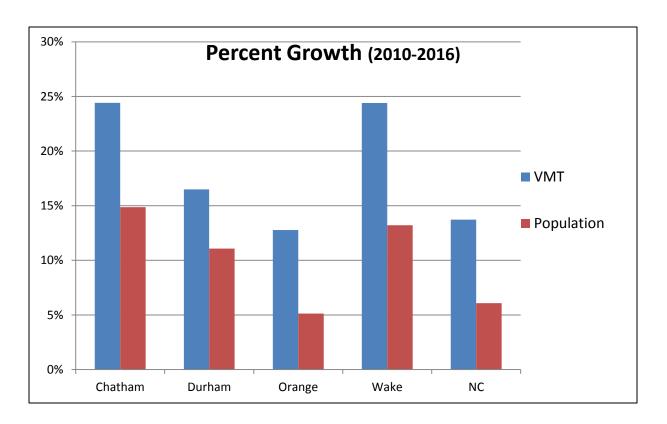
Rank	County/AVMT	2009	2017	Growth '09-'17
1	CHATHAM	622,453	894,474	44%
2	GREENE	201,022	257,184	28%
3	PENDER	681,549	869,298	28%
4	DARE	477,586	602,498	26%
5	MECKLENBURG	11,371,071	14,334,914	26%
6	POLK	314,798	395,246	26%
7	DURHAM	3,214,773	4,024,280	25%
8	CURRITUCK	314,372	388,110	23%
9	LINCOLN	683,784	843,020	23%
10	WAKE	9,270,290	11,402,079	23%
11	ROBESON	1,522,502	1,872,178	23%
12	LEE	560,287	688,722	23%
13	ANSON	277,722	339,118	22%
14	JOHNSTON	1,976,710	2,412,304	22%
15	COLUMBUS	726,615	885,886	22%

However, these four counties and Orange County are <u>all</u> on track for 2018 VMT to be <u>less</u> than 2017 VMT.

VMT growth rates not shown:

- Orange County, 12%
- North Carolina, 16%

VMT growth outpaces population growth in Triangle counties and North Carolina



Source: Population estimates from N.C. Office of State Budget and Management