

*Draft* **FY2018-2027**

Metropolitan Transportation Improvement Program

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**CHAPTER 3: Financial Plan**

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## 1. INTRODUCTION

Federal regulations require that each MPO's MTIP include a financial plan that demonstrates how the MTIP can be implemented; indicates resources from public and private sources that are reasonably expected to be available to carry out the program; and identifies innovative financing techniques to finance projects, programs, and strategies (23 USC 134 j).

The NCDOT and the DCHC MPO prepared this financial plan for the first four years of the FY2018-2027 MTIP in coordination with the NCDOT's STIP process. Revenue and cost information for projects were provided by the NCDOT State Transportation Improvement Program Unit.

NCDOT has demonstrated fiscal constraint on the FY2018-27 STIP adopted by the North Carolina Board of Transportation on August 3, 2017. The DCHC MPO MTIP, being a subset of the STIP and under the fiscally restrained MTP, by extension therefore demonstrates fiscal constraint.

## 2. REVENUE INFORMATION ON STATE AND FEDERAL FUNDING

### 2.1 NCDOT PROGRAM BUDGETS Transportation Revenue Forecast: State Budget

State transportation revenues are derived primarily from user fees in the

form of Motor Fuel Tax (MFT), driver and vehicles fees collected by the NC Division of Motor Vehicles (DMV Fees), and a Highway Use Tax (HUT) on vehicle title transfers. Federal transportation revenues are derived from a federal MFT tax, vehicle fees (mostly on trucks), and transfers from the U.S. General Fund. North Carolina's transportation funding consists of roughly 75 percent state revenues and 25 percent federal.

State revenue projections are obtained from a consensus forecast by the Office of State Budget and Management (OSBM), the Legislative Fiscal Research Division, and NCDOT. Budget estimates developed for the Governor's biennial budget serves as a base from which NCDOT staff develops the forecast for the remaining years. Motor Fuel Tax revenues are forecasted based on crude oil prices and expected consumption, derived from information from the US Department of Energy and IHS Global Insight, a private financial forecasting company. DMV fee revenue forecasts are based on historical transactional information, vehicle registration, licensed driver numbers and Office of State Budget and Management projected population growth in the age range 19-84 years old. Highway Use Tax revenue is forecasted based on the number of vehicles purchased or traded in, vehicle price, and the statutory rate. The number of vehicles sold and the price depend on

economic conditions. Regarding DMV/ Title Fees, the two variables are statutory rates and the number of transactions, which are based on licensed drivers and vehicle registration. Generally, DMV fees correlate with projected changes in population. Title fees correlate closer to forecasted changes in car sales.

## **2.2 Federal Authorization and Funding**

The Fixing America's Surface Transportation Act (FAST Act) was signed into law by President Obama on December 4, 2015. The FAST Act continues many of the policies and programs of the previous authorizing legislation, MAP-21. Funding for surface transportation programs under the FAST Act is for \$226.3 billion for FY16-20.

While continuing many of MAP-21's programs and policies, the FAST Act did create several new initiatives, such as a new National Multimodal Freight Policy and a new discretionary grant program for Nationally Significant Freight and Highway Projects (FASTLANE). Federal transportation funding is distributed by Congress based on multi-year reauthorization bills and annual appropriations. The FAST Act authorizes \$43.1 billion for FY16, growing to \$47.1 billion in FY20; an additional \$1.1 is available subject to appropriation.

The primary source of both state and federal revenues for transportation are the motor fuel tax (MFT). The federal excise tax rate for motor fuel has remained at 18.4 cents/gallon (24.4 cents/gallon for diesel) since 1993 and is not indexed

to inflation. In addition, while revenues from MFT have decreased in real terms over the last two decades, miles per gallon on vehicles have been increasing, meaning less revenue per mile driven. These two factors are a major challenge for transportation funding.

Under state law, the state MFT rate is flexible and indexed to a formula tied to change in state population, the annual energy index percentage, and the Consumer Price Index. The most recent rate, as of January 1, 2017, is 34.3 cents/gallon.

## **2.3 Federal Aid Program**

The Federal Aid Construction Program consists of many funding categories. Funding in most of these individual categories is subject to overall federal budget constraints and Federal Obligation Limitation. The Obligation Limitation effectively limits the amount of federal funds that can be utilized in any one year.

North Carolina's availability of federal funds for the STIP in FFY 2018 is expected to be just less than \$1.1 billion, excluding CMAQ and State Planning and Research funds.

Virtually all Federal Aid projects require a local or state fund contribution. Most highway and transit programs require a 20 percent local or state share. The amount of state matching funds needed for the Federal Aid Program is expected to be \$290 million, which will be funded by the State Highway Trust Fund. The amount of local matching funds needed for FY2018-2021 is expected to be approximately

\$290 million. Local funding is discussed in more detail later in this chapter.

## **2.4 Public Transportation Project Funding**

The public transportation projects in the STIP are funded from several different FTA funds and state funds. In addition, many of the FTA funds require a non-federal match to the project.

Annually, the NCDOT Public Transportation Division conducts a call for projects to provide state funds to assist with part of the match requirements. The amount available for state match is limited to the amount provided in the approved state budget for that year. All of the FTA program funding amounts are published annually in the Federal Register and posted to the FTA website. NCDOT uses these apportionments to distribute the various funding sources overseen by the NCDOT.

Most of the funding for public transportation programs located in TMAs is managed directly by the MPOs. The MPOs develop projects to list in the STIP from the total apportioned amount received from FTA. NCDOT allocates federal funds to small urban areas (with population less than 200,000 people) and the rural areas. The small urban MPOs then develop projects for inclusion in the STIP within the constraints of the total allocated amount received from NCDOT and any prior year funding that is unspent. For the rural areas, the NCDOT applies directly to FTA for the funds. The NCDOT funds rural projects to match the total apportioned amount and any

available prior year funding. These rural projects are listed in the STIP.

Planning Funds (5303) are allocated by NCDOT to urbanized areas by a formula based on transit service hours. The allocated amounts are then provided by NCDOT to the urbanized areas and are programmed in the MPO Unified Planning Work Programs to match the allocation amount.

NCDOT applies to FTA for the 5303 funds for the urbanized areas. Section 5310 Funds are allocated for small urbanized and rural areas by NCDOT. A competitive call for projects is announced for specific projects and those projects must be included as an unmet need in the Locally Coordinated Plan for the area. Projects are selected and funded based on the total available budget for the funds. These projects are included in the STIP.

**Table 1. Federal Aid Construction Program - FFY 2018 (\$ in Millions)**

<b>CATEGORY</b>	<b>FEDERAL FUNDS</b>	<b>REQUIRED STATE MATCHING FUNDS</b>	<b>TOTAL</b>
National Highway Performance Program	606	152	758
Rail Hwy Crossing	7	2	9
Statewide Planning	17	4	21
TAP	23	6	29
Research Development	5	1	6
Metropolitan Planning	6	2	8
Congestion Mitigation	50	12	62
Surface Transportation Program	400	100	500
Highway Safety Improvement	61	7	68
Freight	29	7	36
Total Apportionment	1,204	293	1497
Obligation Limitation	1,160	290	1,450

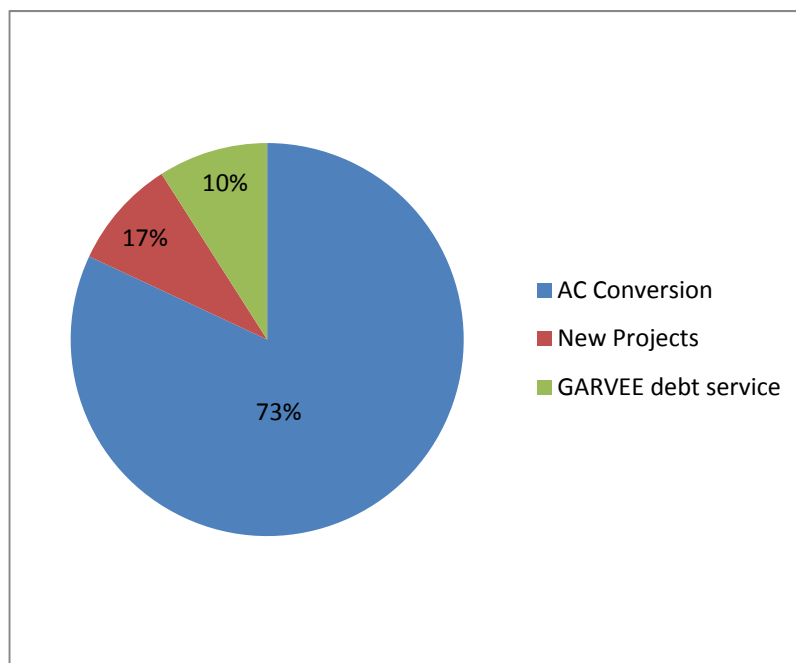


### 3. PROPOSED USE OF FFY 2016 OBLIGATION AUTHORITY

The program is fiscally constrained to the amount of funds projected to be available each year in order to prevent the Department from over committing future revenues. “Advance Construction” (AC) allows states to begin a project even in the absence of sufficient Federal-aid obligation authority to cover the Federal share of project costs. It is codified in Title 23, Section 115. Advance construction eliminates the need to set aside full obligational authority before starting projects. As a result, a state can undertake

a greater number of concurrent projects than would otherwise be possible. In addition, advance construction helps facilitate construction of large projects, while maintaining obligational authority for smaller ones. At some future date when the state does have sufficient obligation authority, it may convert an advance-constructed project to a Federal-aid project by obligating the permissible share of its Federal-aid funds and receiving subsequent reimbursements. Advance construction allows a state to conserve obligation authority and maintain flexibility in its transportation funding program. NCDOT uses AC both to support its GARVEE Bond program and to assist in its cash management.

**Figure 1. Proposed Use of FFY 2018 Obligation Authority**



### 3.1 GARVEE Bonds

In 2005, House Bill 254 authorized NCDOT to issue Grant Anticipation Revenue Vehicles (GARVEE bonds) to finance federal aid highway projects. All funds derived from GARVEE bonds are backed by the receipt of future

federal funds and no state funds may be committed to the debt service. In October 2007, the Department received \$287.6

million in GARVEE bond proceeds, \$242.5 million in 2009, \$145.5 million in 2011, and \$179.5 million in 2012 and \$264.9 million in 2015.

**Table 2. GARVEE Bond Program (\$ in Millions)**

STATE FISCAL YEAR	PROCEEDS INCLUDING PREMIUM (\$ IN MILLIONS)	DEBT SERVICE (\$ IN MILLIONS)
2008	299.80	5.06
2009		59.33
2010	263.14	67.17
2011		82.00
2012	364.90	59.84
2013		86.33
2014		86.33
2015	300.54	86.32
2016		100.00
2017		99.39
2018		99.39
2019		99.39
2020		78.00
2021		78.00
2022		78.00
2023		78.00
2024		38.29
2025		38.29
2026		38.29
2027		38.29
2028		38.29
2029		38.29
2030		38.29

### 3.2 State Highway Trust Fund

Revenues for the Trust Fund are generated from 29% of the state motor fuels tax, the 3 percent use tax on the transfer of motor vehicle titles, DMV titles and other fees, and interest income. \$49 million of Trust Fund revenues are transferred each year to the NCTA for project funding.

The STIP budget is based on a consensus forecast by the OSBM, Legislative Fiscal Research Division, and NCDOT. These estimates were used to develop the draft program and are the basis for air quality and fiscal constraint tests. The Trust Fund revenues are projected to be about \$1,547.7 million for FY 2018 and \$16.9 billion during the 10-year period. Of this \$16.9 billion in revenue, \$490 million goes to NCTA, \$573 million is used for debt service on previous GO bonds and Administration, and \$4 million is transferred to the Highway Fund for Visitor Centers. The remaining \$15.8 billion is available for STIP purposes. Federal aid of \$11.1 billion is also available. After preliminary engineering, a reserve for construction cost overruns, inflation, and Bonus allocation and local participation deductions, \$23 billion is available for programming. (Note – funds available for programming and used in the development of the 2018-2027 STIP were prior to the actions of the 2017 General Assembly).

Table 3, presented on pages 3-8 and 3-9, depicts funding that is available for programming in the STIP.

### 3.3 Anticipated Inflation Impact

Inflation is not explicitly factored into the above revenue estimates. However, before programming projects in the STIP, available funds were reduced by an amount for inflation.

The following inflation factors for future construction and right of way cost increases were used: 2018 - 1.005, 2019 - 1.0151, 2020 - 1.0252, 2021 - 1.0355, 2022 through 2027 -1.0458.

- 2018: 1.005
- 2019: 1.0151
- 2020: 1.0252
- 2021: 1.0355
- 2022 through 2027: 1.0458

This allows project costs used in the MTIP and STIP to be shown in current (2018) dollars.

**Table 3. Funds Available for Programming (\$ in Millions)**

	STATE FISCAL YEAR					
	2018	2019	2020	2021	2022	2023
Motor Fuels Tax	564.6	585.9	600.2	610.8	619.5	626.3
DMV Fees & Investment Income	162.2	161.1	160.9	176.0	178.1	181.3
Use Tax	820.8	839.3	858.8	867.8	878.1	894.2
<b>Total State Trust Fund Revenues</b>	<b>\$ 1,547.7</b>	<b>\$1,586.3</b>	<b>\$ 1,619.9</b>	<b>\$ 1,654.6</b>	<b>\$1,675.7</b>	<b>\$ 1,701.7</b>
NCTA GAP Funding	-49	-49	-49	-49	-49	-49
GO Debt Service	-52.2	-50	-59.8	-	-	-
Visitors Center	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Program Administration	-37.6	-38.6	-39.4	-40.2	-40.8	-41.4
<b>Available Trust Fund Revenues</b>	<b>\$ 1,408.5</b>	<b>\$ 1,448.3</b>	<b>\$ 1,471.3</b>	<b>\$ 1,564.9</b>	<b>\$ 1,585.5</b>	<b>\$ 1,611.0</b>
Federal Aid	1,159.8	1,186.3	1,214.5	1,214.4	1,214.4	1,214.4
Less SPR Funds	-32.2	-34.0	-34.8	-34.8	-34.8	-34.8
Less CMAQ	-30	-30	-30	-30	-30	-30
Less EEP	-30	-30	-30	-30	-30	-30
Less Yadkin River GARVEE Debt Service	-17.2	-15.6	-5.1	-5.1	-	-
<b>Available Federal Aid</b>	<b>\$ 1,049.4</b>	<b>\$ 1,076.7</b>	<b>\$ 1,114.6</b>	<b>\$ 1,114.5</b>	<b>\$ 1,119.6</b>	<b>\$ 1,119.6</b>
<b>Total Available Funds</b>	<b>\$ 2,457.9</b>	<b>\$ 2,525.0</b>	<b>\$ 2,585.9</b>	<b>\$ 2,679.4</b>	<b>\$ 2,705.1</b>	<b>\$ 2,730.6</b>
Preliminary Engineering	-200	-200	-200	-200	-200	-200
Construction Cost Overruns	-58.0	-60.0	-61.8	-64.6	-65.4	-66.2
Bonus Allocation for Tolling and Local Participation	-69.3	-39.1	-22.6	-48.8	-42.6	-25.2
Less Inflation	-10.7	-33.6	-58.0	-84.0	-109.8	-111.7
<b>Funds Available for Programming</b>	<b>\$2,120.0</b>	<b>\$2,192.3</b>	<b>\$2,243.5</b>	<b>\$2,282.0</b>	<b>\$2,287.4</b>	<b>\$2,327.5</b>

**Table 3. Funds Available for Programming (\$ in Millions) ~ (cont'd)**

	STATE FISCAL YEAR				
	2024	2025	2026	2027	10-Year STIP
Motor Fuels Tax	630.7	635.0	638.5	640.9	6,152.4
DMV Fees & Investment Income	185.0	205.8	209.6	213.4	1,833.4
Use Tax	912.6	930.1	947.3	964.5	8,913.5
<b>Total State Trust Fund Revenues</b>	<b>\$ 1,728.3</b>	<b>\$ 1,770.8</b>	<b>\$ 1,795.4</b>	<b>\$ 1,818.8</b>	<b>\$ 16,899.2</b>
NCTA GAP Funding	-49	-49	-49	-49	-490
GO Debt Service	-	-	-	-	-162
Visitors Center	-0.4	-0.4	-0.4	-0.4	-4
Program Administration	-42	-43.1	-43.7	-44.2	-411
<b>Available Trust Fund Revenues</b>	<b>\$ 1,636.9</b>	<b>\$ 1,678.3</b>	<b>\$ 1,702.4</b>	<b>\$ 1,725.2</b>	<b>\$ 15,832.2</b>
Federal Aid	1,214.4	1,214.4	1,214.4	1,214.4	12,061.4
Less SPR Funds	-34.8	-34.8	-34.8	-34.8	-345.4
Less CMAQ	-30	-30	-30	-30	-300
Less EEP	-30	-30	-30	-30	-300
Less Yadkin River GARVEE Debt Service	-	-	-	-	-43.1
<b>Available Federal Aid</b>	<b>\$ 1,119.6</b>	<b>\$ 1,119.6</b>	<b>\$ 1,119.6</b>	<b>\$ 1,119.6</b>	<b>\$ 11,073</b>
<b>Total Available Funds</b>	<b>\$ 2,756.5</b>	<b>\$ 2,798.0</b>	<b>\$ 2,822.0</b>	<b>\$ 2,844.8</b>	<b>\$ 26,905.1</b>
Preliminary Engineering	-200	-200	-200	-200	-2000
Construction Cost Overruns	-66.9	-68.2	-68.9	-69.6	-649.7
Bonus Allocation for Tolling and Local Participation	-25.4	-28.4	-10.9	-28.4	-340.5
Less Inflation	-112.9	-114.6	-116.4	-116.6	-868.3
<b>Funds Available for Programming</b>	<b>\$2,351.3</b>	<b>\$2,386.8</b>	<b>\$2,425.8</b>	<b>\$2,430.2</b>	<b>\$23,046.7</b>

### 3.4 Cash Model

NCDOT uses a cash model to manage its operations on a cash-flow basis; the Department uses statistical models that were developed specifically to support NCDOT programs. The models are used to forecast future cash demands and financial capacity. These projections serve as the basis for the dollar values found herein.

NCGS §143C:6-11 revised the cash target to between 15% and 20% of the total appropriations from the Highway Fund and Highway Trust Fund for the current fiscal year. Any federal funds on hand shall not be considered as cash for this purpose. The target shall include an amount necessary to make all municipal-aid funding requirements. Also, NCGS §143C:6-11 revised the cash balance floor to at least 7.5% of the total appropriations for the current fiscal year. If this floor is not maintained, no further transportation project contract commitments may be entered into until the floor is restored. Session Law 2014-100 Senate Bill 744 Section 34.23(c) established a cash balance ceiling of one billion dollars. If the balance exceeds the ceiling, the Department must report to the General Assembly and Fiscal Research the reasons for exceeding the ceiling and the plans to reduce the balance.

The proposed STIP was modeled to insure that the department would have adequate cash to pay for all programmed projects. Based on the program of projects and anticipated revenue, it appears that there

should be adequate funding available to support the program.

Figure 2 on page 3-11 depicts a sample view of a 60-month cash model.

### 3.5 The North Carolina Turnpike Authority (NCTA)

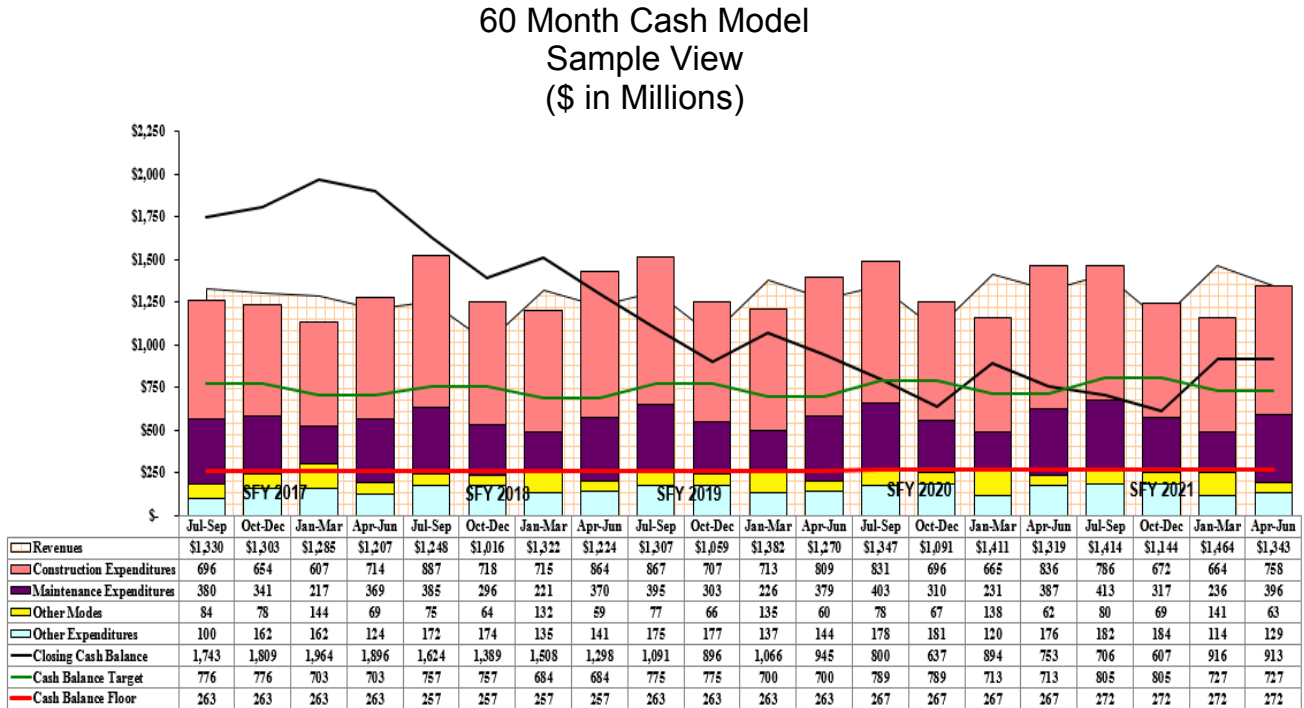
NCTA is a public agency of the State of North Carolina located within NCDOT. The Triangle Expressway is the first modern toll facility in North Carolina. The Expressway is approximately 18.8 miles of new highway construction, extending the partially complete “Outer Loop” around the greater Raleigh area from I-40 in the north to the NC 55 Bypass in the south. The Triangle Expressway was completed on schedule on January 2, 2013, approximately five percent under budget providing excess bond proceeds. During Fiscal Year (“FY”) 2014, the Turnpike Authority developed a fiscally-responsible plan to utilize these proceeds. Included in this plan were partially funding two additional interchanges, the Veridea Parkway Interchange (formerly the Old Holly Springs-Apex Road Interchange) and the Morrisville Parkway Interchange, which will provide increased connectivity and access along the Expressway.

Total revenues, inclusive of toll revenue and processing fees, but excluding transponder revenues, were \$36.3 million and \$29.0 million for FY 2016 and FY 2015. FY 2016 total revenues increased by 25% year-over-year (YOY) when compared to FY 2015. Transponder revenues were \$0.60 million and \$0.45 million for FY 2016 and FY 2015, respectively, increasing

**Figure 2\*. 60-Month Cash Model**

**Sample View**

**(\$ in Millions)**



\*Figure 2 above was obtained from NCDOT's FY2018-2027 STIP.

by 33% YOY. Operating expenses totaled \$14.8 million and \$13.6 million for FY 2016 and FY 2015. FY 2016 operating expenses increased by 9% YOY from the previous year due, in part, to the increased number of transactions.

## **4. REVENUE INFORMATION ON LOCAL FUNDING**

Local funding is being provided by different jurisdictions and agencies that are located within, or operate in the DCHC MPO area, including Orange, Durham, and Chatham Counties, the City of Durham, the Towns of Chapel Hill, Carrboro, and Hillsborough, GoTriangle, and the Triangle J Council of Governments.

Local funding is provided as the non-federal matching funds for federal Congestion Mitigation Air Quality (CMAQ), Surface Transportation Block Grant - Direct Attributable (STBGDA), and Transportation Alternatives Program (TAP) funding. Each of these federal funding sources require 20 percent local match. The DCHC MPO's distribution of STBGDA funds to local jurisdictions and agencies is based on the STBGDA funding distribution policy that was approved by the DCHC MPO Board in 2014.

STIP Project U-4727 uses federal STBGDA funding to supplement the MPO's Unified Planning Work Program. The local matching funds for STBGDA are provided by the local jurisdictions.

Another STIP project, C-4924, uses federal CMAQ funding to fund a regional Transportation Demand Management program administered by Triangle J Council of Governments. The local funding associated with this project is provided by the selected local service providers. The local service providers are selected during a call for projects

and could include local governments, nonprofit organizations, universities, or other entities.

Local funding is also provided as the match for public transportation projects. Typically, for capital projects, the local government provides a 10 percent local match, the state provides a 10 percent match, and federal funding is provided at 80 percent. These local funds are provided by the City of Durham, the Town of Chapel Hill, Orange County, and GoTriangle. Operating assistance for transit projects often includes up to 50 percent local funding match.

More information regarding how local jurisdictions and agencies will program their respective local funding match(es) for projects is available in each local government's adopted budget and Capital Improvement Program.



## **4.1 STP-DA and TAP Funding Programs**

STBGDA and TAP funds are directly allocated to the DCHC MPO annually, based on the population of the urbanized area. As of FY18, the DCHC MPO receives approximately \$4.5 million annually in STBGDA funds and \$350,000 annually in TAP funds. TAP is often shown as TAP-DA for the DCHC MPO to differentiate between the TAP funding that the DCHC MPO receives and the TAP funding that the NCDOT receives.

STBGDA can be used for many different planning, highway, transit, or bicycle/pedestrian projects. The DCHC MPO has a policy to not use STBGDA for highway projects, unless the STBGDA funds are applied to the project for project costs related to incidental bicycle and pedestrian improvements. In 2017, the DCHC MPO held a Call for Projects for STBGDA funds for FY2015-18. DCHC MPO STBGDA funding follows a distribution policy that was adopted by the MPO Board in 2014. The policy's methodology is shown in Figure 3.

TAP was created under MAP-21 and continues under the FAST Act. TMAs, such as DCHC MPO, receive a direct allocation of TAP annually, based on the population of the urbanized area. NCDOT also receives TAP funding. Federal legislation requires that TAP projects be selected through a competitive process. TAP can only be used for "transportation alternatives" including bicycle and pedestrian facilities, trails, scenic areas, community improvement activities,

environmental mitigation, and safe routes to school programs. NCDOT plans to program much of its TAP funding through the P4.0 process. DCHC MPO plans to hold a Call for Projects for TAP-DA funds in spring 2018.

## **4.2 Project Screening & Prioritization Process for TAP Funding**

The DCHC MPO policy related to programming TAP funds for projects requires MPO member jurisdictions and agencies to submit project funding requests to the MPO LPA staff. Projects are evaluated based on the screening criteria and scoring methodology listed below. The MPO TC makes a recommendation to the MPO Board to review. The MPO Board reviews the recommendation to approve the projects. The following criteria and methodology satisfies the federal requirement that all TAP funding be selected through a competitive process.

### **4.2.1 Screening Criteria**

- Projects must anticipate a minimum of \$1 million (federal) funding for construction. Design and right-of-way phases can request less than \$1 million (federal) if the construction phase is expected to exceed \$1 million (federal);
- Only the next imminent project phase should be requested (i.e. construction funding should only be requested once design and right-of-way is complete); and
- Projects must be part of the adopted Regional Routes as

listed in the current MTP.

### 4.2.2 Scoring Methodology

- **40 Percent Project Readiness** – Priority will be given to projects that are ready to be constructed or are ready to move to the next phase of project development:

- » 100 points - Construction funding requested - right-of-way and design complete.
- » 50 points - Right-of-way funding requested - design complete.
- » 25 points - Planning requested.

- **30 Percent Safety**

- » Variable score from 0-100 points based on the relative number of bike/ped crashes on the facility or parallel facility.

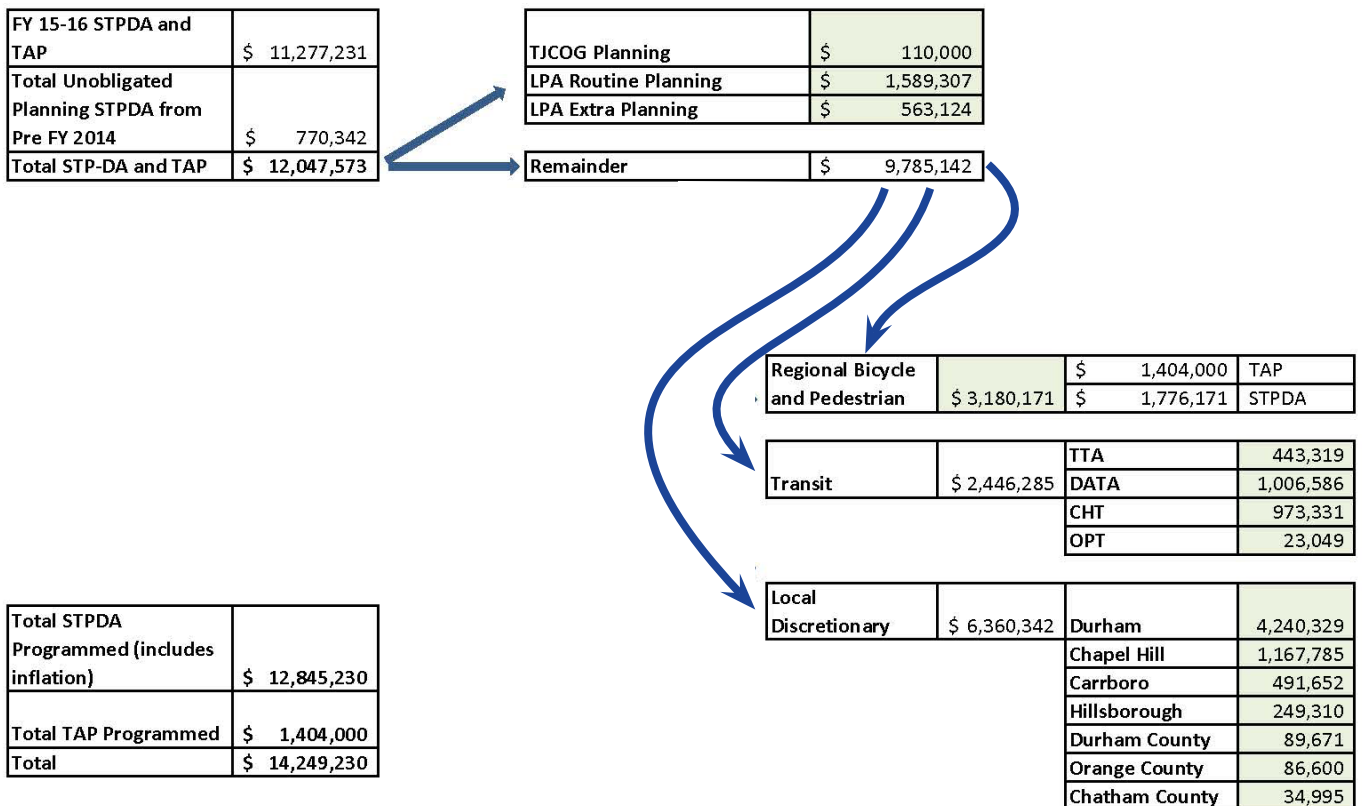
- **15 Percent Spans Multiple Jurisdictions**

- » 100 points – spans more than two local jurisdictions.
- » 50 points – spans more than one local jurisdiction.

- **15 Percent Density**

- » Variable score from 0-100 points based on the relative population and employment density of a 0.5 mile buffer of the corridor.

**Figure 3. Example of DCHC MPO STP-DA & TAP Distribution Policy**



**Table 4. STBGDA & TAP-DA Funded Projects in the MTIP**

TIP #	Name
C-4928	SR 1317 (Morreene Road)
C-5650	South Greensboro Street Sidewalk
C-5572	West Ellerbe Creek Trail
EB-4707 A	Old Chapel Hill Rd / Old Durham Rd
EB-4707 B	Old Chapel Hill Rd / Old Durham Rd
EB-5720	R. Kelly Bryant Bridge Trail South
EL-4828	Morgan Creek Greenway (West)
TA-5154	GoTriangle Replacement Paratransit Vehicles
TD-5260	Hillsborough Park and Ride Planning/PE/Design
TG-5235	Safety & Security Cameras
TG-4958	Passenger Amenities
TG-6189	Chatham County Flex to Transit
TT-6107	Purchase Mobile Data Terminals
U-0071	New Route (East End Connector)
U-3308	NC 55 (Alston Ave)
U-4445	R. Kelly Bryant Bridge
U-4724	SR 1158 (Cornwallis Road)
U-4726	DCHC MPO Bike/Ped TAP-Eligible Projects
U-4726 DE	Bolin Creek Greenway

TIP #	Name
U-4726 1x	Friday Center Drive
U-4726 DD	Rogers Road Sidewalks
U-4726 DF	Bicycle Detector Loops
U-4726 HJ	NC 751 and NC 54 Sidewalks
U-4726 HK	Hillandale Road (Bike/Ped)
U-4726 HL	Barbee Road Sidewalks
U-4726 HM	Avondale Road (Bike/Ped)
U-4726 HN	Hillandale Road Bike/Ped
U-4726 HO	Carpenter Fletcher Road (Bike/Ped)
U-4726 IJ	Tanyard Branch Greenway
U-4726 IK	Homestead Road Sidewalks
U-4727	DCHC MPO Planning Allocation and Work Program
U-5023	DCHC MPO STP-DA Reserve Funds
U-5543	Variable Message Signs in Chapel Hill
U-5549	Various (Downtown Access Imp)

### 4.3 CMAQ Funding Program

Federal CMAQ funds are apportioned annually to each state according to the severity of its air quality problems. The CMAQ program is funded by the FHWA; therefore CMAQ projects must follow federal laws and regulations. Because transportation and environmental program priorities fluctuate, a limited portion of CMAQ apportionment can be transferred (flexed) to other Federal Aid highway programs including:

- Surface Transportation Program (STP)
- National Highway System (NHS)
- Highway Bridge Program (HBP)
- Interstate Maintenance (IM)
- Recreational Trails Program (RTP)
- Highway Safety Improvement Program (HSIP)

The transfer of funds has specific monetary provisions and will differ each year. It is also a requirement that any transfer of such funds must still be obligated in nonattainment and maintenance areas.

The CMAQ program is based on a competitive process in which proposals for candidate transportation projects are submitted to NCDOT. MPOs and RPOs responsible for transportation planning in air quality non-attainment and maintenance areas are encouraged to work cooperatively with their member jurisdictions to develop and submit project proposals. There is currently a minimum project cost threshold requirement of \$100,000.

Public transportation project(s) selected as part of the CMAQ competitive process are flexed to the FTA and retain the funding laws and regulation under the CMAQ program. FTA is ultimately responsible for the administration of flexed CMAQ funds.

### 4.4 DCHC MPO CMAQ Funding Program

NCDOT has reserved 60 percent of the state's CMAQ funds for subregional projects. The DCHC MPO's subregional annual funding target varies each year. NCDOT issued a Call for Projects in fall 2017. Applications for CMAQ funding were prepared by DCHC MPO member jurisdictions for projects that reduce emissions and improve air quality. The applications are a standard form from NCDOT and each application requires a calculation of the estimated emission reductions that will result from the implementation of each project.

The completed applications were submitted to the MPO LPA staff. LPA staff use a prioritization methodology to evaluate and score the applications. The methodology is based on the cost per kilogram of Carbon Monoxide (CO) reduced, cost per kilogram of Nitrogen Oxide (NOx) reduced, support for the regional rail projects, and support for promoting a state of good repair for transit vehicles.

After the project applications were scored by LPA staff, CMAQ funding was allocated to the projects in prioritized

order. LPA staff presented the result of the prioritization to the MPO Technical Committee, which reviewed the projects and reported favorably to the MPO Board. The MPO Board approved the list of CMAQ project submissions to NCDOT on March 8, 2018. Table 5 lists DCHC MPO projects funded in this most recent call.

In addition to projects selected for funding during the NCDOT’s biennial Call for Projects described above, the DCHC MPO and Capital Area Metropolitan Planning Organization (CAMPO) jointly allocate CMAQ funds to the Triangle-region Travel Demand Management (TDM) program. The TDM program is managed by the Triangle J Council of Governments (TJCOG). The TDM program offers very high air quality benefits and competes very favorably for CMAQ funding. CMAQ funds have been approved through 2019 for the TDM program.

**Table 5. DCHC MPO CMAQ Funded Projects**

TIP #	Name
C-4924 B	TJCOG TDM
C-5605 E	Durham Bicycle Lane Striping
C-5605 F	Durham Bike Share
C-5605 G	Downtown Durham Loop Separated Bike Lane
C-5605 H	Downtown Durham Wayfinding Program
C-5605 I	Durham Neighborhood Bike Routes
C-5650	South Greensboro Street Sidewalks
TA-6681	Chapel Hill Transit Bus Replacement
TA-6682	GoDurham Electric Buses

## 5. HIGHWAY FUNDING FOR MPO-SPECIFIC PROJECTS

Following the adoption of the FY2018-2027 STIP by the NCDOT Board of Transportation, NCDOT provided each MPO with funding summary tables for projects located within their MPO area. The funding summary tables demonstrate that the STIP is fiscally constrained. The MTIP is a subset of the STIP, so the MTIP

is also fiscally constrained. The estimated costs account for inflation. Table 6 below presents a summary of funding for highway projects located within the DCHC MPO area for FY2016-2021.

**Table 6. Summary of Highway Project Funding**

		<i>(Estimated Costs are in Thousands of Dollars)</i>				
<b>FUNDING SOURCE</b>	<b>FUNDING DESCRIPTION</b>	<b>FUNDING TYPE</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
CMAQ	Congestion Mitigation	Federal	6,479	2,464	3,041	
HSIP	Highway Safety Improvement Program	Federal	210			
L	Local Funding Share	Other	5,516	622	309	372
NHP	National Highway Performance Program	Federal		5,910	3,639	5,694
NHPIM	National Highway Performance Program (Interstate Maintenance)	Federal		12,637		
S(M)	State	State		144	4,258	
STBG	Surface Transportation Block Grant	Federal		593	17,287	1,489
STBGDA	Surface Transportation Block Grant (Direct Attributable)	Federal	4,090		978	4,882
STPOFF	Surface Transportation Program (Off System)	Federal	1,457			
T	Highway Trust Funds	State	40,935	28,552	34,010	19,700
TAPDA	Transportation Alternatives Program (Direct Attributable)	351				

## 6. NON-HIGHWAY FUNDING FOR MPO-SPECIFIC PROJECTS

Following the adoption of the FY2018-2027 STIP by the NCDOT Board of Transportation, NCDOT provided each MPO with funding summary tables for projects located within their MPO area. The funding summary tables demonstrate that the STIP is fiscally constrained. The

MTIP is a subset of the STIP, so the MTIP is also fiscally constrained. The estimated costs account for inflation. Table 7 below presents a summary of funding for non-highway projects located within the DCHC MPO area for FY2018-2021.

**Table 7. Summary of Non-Highway Project Funding**

<i>(Estimated Cost are in Thousands of Dollars)</i>						
<b>FUNDING SOURCE</b>	<b>FUNDING DESCRIPTION</b>	<b>FUNDING TYPE</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
CMAQ	Congestion Mitigation	Federal	3,355			
FBUS	Capital Program - Bus Earmark (5309)	Federal	1,355			
FED	Unidentified Federal Funding	Federal	1,165	162	164	
FMPL	Metropolitan Planning (5303)	Federal	118	123	128	133
FEDT	Undesignated Federal Transit Funding	Federal		968	984	
FEPD	Elderly and Persons with Disabilities (5310)	Federal	268			
FMPL	Metropolitan Planning (5503)	Federal	112	113	114	115
FNF	New Freedom Program	Federal	63	63	64	65
FNU	Non Urbanized Area Formula Program (5311)	Federal	63	63	64	64
FUZ	Capital Program - Bus Earmark (5309)	Federal	14,586	11,620	10,536	10,913
L	Local Funding Share	Other	9,471	2,882	3,183	3,915
O	Local or Non-Federal or Non-State Funds	Other			3,280	590
S	State	State	881	382	634	488
SMAP	Operating Assistance and State Maintenance	State	6,407	6,471	6,535	6,601
STBGDA	Surface Transportation Block Grant (Direct Attributable)	Federal	9,171			
T	Highway Trust Funds	State	3,341	2,680	9,862	3,596
TAP	Transportation Alternatives Program	Federal	8,059	1,689	566	7,263
TAP-DA	Transportation Alternatives Program (Direct Attributable)	Federal	1,084	355	358	362

## 7. SUMMARY OF FY2018-2021 PROJECT COSTS BY FUNDING SOURCE

The three primary sources of funding used to fund projects and programs in the DCHC MPO’s MTIP are federal, state, and other or local funding. Other or local funding is a combination of funding sources that includes the required local funding share and any other funding contributed from non-federal and non-state funding sources.

The federal and state funding sources are more fully discussed earlier in this chapter and are comprised of numerous different programs designed to fund different aspects, phases, or costs related to the

development and maintenance of the transportation system.

The total estimated amount of funding for all three funding sources in the DCHC MPO area for FY2018-2021 is approximately \$360,263,000. While the funding percentage amounts for the first four years remain unchanged from the previous MTIP, the total funding amount has decreased by approximately 27 percent. Figure 4 below illustrates the breakdown of funding by the three funding sources.

**Figure 4. Summary of FY2018-2021 Project Costs by Funding Source**

