

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

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March 3, 2021

TO: DCHC MPO Technical Committee
FROM : DCHC MPO Lead Planning Agency
SUBJECT: CMAQ Call for Projects Funding Recommendation

Executive Summary

On January 25, 2021, the North Carolina Department of Transportation (NCDOT) released materials for a call for projects for Congestion Mitigation Air Quality Improvement (CMAQ) funds to be issued by MPOs. Applications are due to NCDOT by March 15, 2021. DCHC MPO staff recommend four projects for funding in this round:

Project	Requested Funding	Local Match	Total	Existing Project	Project Phase
City of Durham Bike Facilities II: Club & Foster	\$ 422,524	\$ 252,476	\$ 675,000	N	Design and Construction
GoTriangle Transit Access Improvements	\$ 400,000	\$ 100,000	\$ 500,000	N	Design and Construction
TJCOG TDM Program/DCHC area	\$ 571,487	\$ 142,872	\$ 714,359	Y	Program
Town of Chapel Hill Estes Drive Bike/Ped Improvement	\$ 800,000	\$ 200,000	\$ 1,000,000	Y	Construction
Total	\$ 2,194,011	\$ 695,348	\$ 2,889,359		

The DCHC MPO Technical Committee (TC) recommended the MPO staff-recommended projects, shown above, on an 18-6 vote at its February 24, 2021 meeting. City of Durham staff have opposed this recommendation and have provided an alternate slate of projects to be funded. The memo supporting the City of Durham's recommendation is attached.

Background

The Durham Chapel Hill Carrboro Metropolitan Planning Organization (DCHC MPO) periodically receives an allocation of Congestion Mitigation and Air Quality Improvement (CMAQ) funds for disbursement to member jurisdictions and agencies. CMAQ funds are federal funds dedicated to projects that show an air quality benefit. A 20 percent local match is required for CMAQ funds. DCHC MPO received \$2,194,011 in CMAQ funding for FY22. The last CMAQ call for projects occurred in 2017 for FY18 and 19.

Applications

Local jurisdictions and agencies submitted eight applications for this funding cycle. The total requested funding from these eight applications is \$5,790,001. All of the projects that were submitted showed an emissions benefit. A list of all submitted projects with emissions calculations is attached.

Selection Criteria

Staff used the MPO's Federal Funding Policy, last updated in 2015, to guide development of a funding recommendation. The Federal Funding Policy does not include a quantitative scoring rubric for CMAQ funding. It states only that agencies must request a minimum of \$100,000 and that the DCHC share of the regional Transportation Demand Management (TDM) program should come from CMAQ funds. Based on general guidance in the funding policy, MPO staff considered the following factors in making a funding recommendation:

- **Emissions benefit:** It is federally required that CMAQ projects provide an emissions benefit. Because all of the submitted projects demonstrated an emissions benefit, and the difficulty of testing some of the assumptions related to the emissions calculation, this was not the primary determinant of MPO staff's funding recommendation. MPO staff reran emissions calculations for two transit projects, Chapel Hill Transit Bus Replacement and GoTriangle Transit Access Improvements, because of concerns that the CMAQ emissions toolkit was unfavorable to transit projects. The final calculations are shared here, but have not previously been shared with the Technical Committee.
- **Project schedule:** DCHC MPO is working to ensure the timely completion of projects constructed with the federal funding that the MPO receives. Staff therefore stated a preference for existing projects in the call because we did not want jurisdictions committing to new projects if they lacked funding and resources to complete existing projects. In keeping with precedent, staff also favored projects that requested funds for construction over those that requested funds for earlier phases given that projects in the former category are most likely to be implemented.
- **Other funding sources available to applicants:** MPO staff also considered whether other funding sources could be applied to projects such as:
 - Surface Transportation Block Grant Direct Attributable (STBGDA) funds, which are allocated to agencies and jurisdictions in the MPO based on population.
 - STBG-Any Area and Transportation Alternatives Program Direct Attributable (TAPDA) funds which are offered on a competitive basis.
 - STBGDA COVID funds, which are available to local jurisdictions this year without a local match.
- **Geographic equity:** Staff wanted to make sure that all jurisdictions and agencies in the MPO had a reasonable chance to receive funding during this cycle. The CMAQ call for projects is intended to be part of a larger call for projects that staff had to split into two calls to meet external deadlines. This CMAQ funding recommendation may therefore not be representative of the overall distribution of federal funds in FY22.
- **Local priorities:** The City of Durham was the only jurisdiction to submit multiple projects. Staff consulted City of Durham staff about their priorities, as funding more than one project in the City of Durham would mean not funding other projects in the region. While two projects were submitted by agencies in the Town of Chapel Hill, those agencies did not coordinate during the submission of their applications. Staff therefore used other criteria, such as emissions benefit, to guide our recommendation.

In addition to the above criteria, staff also considered whether, given the project schedule, the project is a better candidate for a future round of CMAQ funding. It is anticipated that projects not selected in this round of

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funding will be prioritized for FY23 CMAQ funding; NCDOT staff has stated the call for those funds will begin in November 2021.

Recommended Projects

MPO staff is recommending two regional projects and two local projects for CMAQ funding. This recommendation maximizes the number of projects that will receive funding. While regional projects benefit all MPO areas, the local projects benefit both counties that had project submissions: Durham and Orange. The following projects are recommended for funding:

Project	Requested Funding	Local Match	Total	Existing Project	Project Phase
City of Durham Bike Facilities II: Club & Foster	\$ 422,524	\$ 252,476	\$ 675,000	N	Design and Construction
GoTriangle Transit Access Improvements	\$ 400,000	\$ 100,000	\$ 500,000	N	Design and Construction
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1) TJCOG TDM

- **Project Description:** The Triangle Transportation Demand Management (TDM) program is a joint effort of the North Carolina Department of Transportation (NCDOT), the Capital Area MPO (CAMPO), the Durham-Chapel Hill-Carrboro (DCHC) MPO, GoTriangle and the Triangle J Council of Governments (TJCOG). The program leverages CMAQ funds with local and regional service provider matching funds to target businesses and commuters to change behaviors and reduce the growth in commute vehicle miles traveled (VMT) by 25%.
- **Emissions Benefit:** This project had the highest overall emissions benefit.
- **Project Schedule:** TJCOG regularly applies for funding from DCHC every two years. This allows for continuity in regional TDM programming.
- **Other funding sources available to applicants:** CMAQ is one of several funding sources used to fund the regional TDM program. The DCHC Federal Funding Policy states that CMAQ funding should be used for the DCHC portion of the regional TDM program.
- **Geographic Equity:** This project benefits all jurisdictions in the DCHC area.
- **Local Priorities:** TDM has been and continues to be a priority for the MPO Board, and was most recently endorsed as part of the MPO Board's legislative priorities.

2) City of Durham Bike Facilities II

- **Project Description:** This project will design and construct buffered bike facilities with vertical protection on Club Boulevard (Washington Street to Broad Street) and the

Blackwell/Corcoran/Foster Street corridor (American Tobacco Trailhead to Washington Street) in Durham.

- **Emissions Benefit:** This project scored third in emissions benefits.
- **Project Schedule:** The City of Durham stated that this project was the highest priority of the three projects it submitted. Although this was not an existing project and design and ROW are not complete, MPO staff is recommending this project for funding because it aligns with the City of Durham's stated priorities.
- **Other funding sources available to applicants:** This project is also eligible for STBG-Any Area competitive funding and STBGDA COVID relief funds.
- **Geographic Equity:** This local project benefits the City of Durham/Durham County.
- **Local Priority:** The City of Durham stated that this project was the highest priority of its three submitted projects.

3) Town of Chapel Hill Estes Drive Bicycle and Pedestrian Improvements

- **Project Description:** The project will provide bicycle and pedestrian facilities (raised bike lanes, sidewalk, multiuse path) along North Estes Drive between Martin Luther King Jr. Boulevard and Caswell Road.
- **Emissions Benefit:** This project scored sixth in emissions benefits.
- **Project Schedule:** This is a shovel ready project. Design and right-of-way acquisition are complete. CMAQ funding will allow this project to move into construction.
- **Other funding sources available to applicants:** This project is also eligible for STBG-Any Area and STBGDA COVID relief funds.
- **Geographic Equity:** This local project benefits the Town of Chapel Hill/Orange County.
- **Local Priority:** This project has been a major priority for Chapel Hill in recent years, and these funds, along with the Town's allocation of STBGDA COVID funds, provides the funding necessary to allow the Town to start construction.

4) GoTriangle Transit Access Improvements

- **Project Description:** This project will provide transit access improvements at the intersection of US 15-501 and Eastowne Drive in Chapel Hill. This project will add bus stops where bus stops are not currently established due to lack of adequate infrastructure along US 15-501. Because of the traffic volume and 45 mph speed limit of this part of US 15-501, additional improvements above and beyond a typical bus stop, such as construction of new bus pullouts, sufficient merge distance to re-enter the travel lane, bus shelters, connections to sidewalks, and possible transit signal priority, are required.
- **Emissions Benefit:** This project scored fifth in emissions benefits once MPO staff had a chance to rerun the emissions calculations for transit projects.
- **Project Schedule:** This project would be designed in FY22 and constructed in FY23. While a new project, it is small enough in scale that it can be implemented quickly.
- **Other funding sources available to applicants:** While GoTriangle does receive STBGDA funding from the MPO through its transit allocation, those funds are usually earmarked for ongoing operations and not dedicated to capital projects.
- **Geographic Equity:** This location will serve three new developments, a Wegman's grocery store; UNC Healthcare facilities under construction at Eastowne; and the newly renovated State

Employees Credit Union (SECU). Together, these destinations will employ over 2,500 people along core GoTriangle regional route (400), which provides all day, every day transit connections to Durham, Patterson Place/New Hope Commons, and Downtown Chapel Hill/UNC. This location will also be served by route 405, which provides direct connections to Durham and Carrboro during peak periods. The Orange County Transit Tax is providing the local match for this project; of all the new projects submitted for funding in FY22 to the Orange Staff Working Group (SWG), this is the only project the SWG recommended for funding.

- **Local Priority:** During discussion of this project during the Orange SWG meeting, Chapel Hill Transit staff provided their support.

Projects that Were Not Selected

5) Chapel Hill Transit Electric Bus Purchase

Project Description: Chapel Hill Transit requested funding to replace two diesel buses with two electric buses and a charger.

This project initially scored most poorly of all eight projects when it came to emissions. MPO modeling staff reran the emission calculation, and this project then scored seventh out of eight. MPO staff believes that the CMAQ Emissions Toolkit may be more geared towards VMT replacement, which did not serve this project well (folks are already riding existing diesel buses instead of driving). MPO staff also had to consider geographic equity, which meant that we could not select two projects of such high dollar amount in Chapel Hill. In addition to scoring better on emissions, the Town of Chapel Hill's Estes Drive project is an existing one, which we expressed a preference for in the Call for Projects. Chapel Hill Transit was awarded \$1,093,015 in the FY18-19 CMAQ call for projects for the purchase of clean diesel buses.

6) City of Downtown Durham Wayfinding II

Project Description: This project would install pedestrian and vehicular wayfinding signage, parking lot signage, information kiosks, and Intelligent Transportation Systems signs to communicate parking and transportation information to visitors of downtown Durham.

The City of Durham's Wayfinding project scored second when it came to emissions benefits. However, there were concerns about the emissions calculation. One of the assumptions made by the City of Durham was that 10 percent of drivers in downtown Durham would become lost without a new wayfinding system. This number struck MPO staff as high given the widespread use of GPS technology. Durham previously received \$556,600 in FY18 CMAQ funding for a Downtown Wayfinding project.

7) Neighborhood Bike Routes II & III

Project Description: This project would include design and construction of bicycle boulevards on 11 corridors using signs, pavement markings, and speed and volume management measures to give priority to bicyclists.

Neighborhood Bike Routes scored fourth overall on emissions benefits. Although MPO staff had concerns that design has not been completed for the project, the fact that the project primarily involves striping plans led MPO staff to believe it could be quickly designed and constructed. The City of Durham was offered full funding for this project with a 20 percent local match, but declined in favor of partial funding for Bike Facilities II. City of Durham staff informed MPO staff that Bike Facilities II was more in keeping with Durham's priorities to

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implement projects from the 2017 Bike+Walk Implementation Plan. The City of Durham previously received \$505,498 in FY18 -19 CMAQ funding for Neighborhood Bike Routes.

8) **Town of Carrboro S. Greensboro Sidewalk**

Project Description: The project consists of a section of sidewalk roughly 3,100 feet in length, along one side of South Greensboro Street in Carrboro.

This project was previously submitted and received CMAQ funding totaling \$440,000 in the FY18-19 call for projects. This application is for additional funding needed, totaling approximately \$450,000, due to increases in estimated construction costs based on new information determined through the design process. The Town of Carrboro requested funding for construction in FY23. Because the current schedule for this project does not have construction being undertaken until the fall of 2022, MPO staff believes it will be a better candidate for FY23 CMAQ funding, which NCDOT has stated will be released in November of 2021. The Town can also use its STBG-DA funding allocation for this project.

Next Steps

Once the MPO Board approves a list of recommended projects for CMAQ funding, MPO staff will forward recommended projects to NCDOT for review. NCDOT makes the final determination on whether or not to grant funding requests. A funding recommendation is due to NCDOT on March 15, 2021.

Issues and Analysis

1) **Schedule of Call for Projects**

CMAQ funding was initially intended to be part of a larger call for funding which included STBG-DA, STBG-Any Area, and Regional Bicycle and Pedestrian (TAPDA) funding. After the initial call for projects was issued, MPO staff learned that the MPO would receive \$2,340,706 of COVID relief STBGDA funds. MPO staff decided to split the call for projects into two separate calls to give local jurisdictions additional time to decide how they wanted to use their STBG funds. CMAQ funding applications were due on February 10, 2021, because of an external deadline, while STBG and Regional Bike-Ped funding applications are due on March 31, 2021.

MPO staff anticipates that once the larger pot of funding is distributed, the overall distribution of funding will appear to be more geographically equitable. The CMAQ funding decision is not necessarily representative of how all federal funds will be distributed to DCHC jurisdictions and agencies in FY22.

2) **Where does CMAQ fit within the larger DCHC funding pool?**

The DCHC FY22 allocation of CMAQ comprises about 20 percent of overall federal funding for the current federal funding cycle, and 46 percent of competitive funding available to the MPO for distribution to local governments and agencies in FY22. See below for an explanation.

Competitive versus Non-Competitive Funding

DCHC allocates a portion of federal funding, primarily STBGDA funding, based on population. DCHC is believed to be the only MPO in North Carolina that allocates STBGDA funding based on population. Other MPOs in the state use an open call for projects for their STBGDA funding. In addition to providing a funding advantage to larger jurisdictions, suballocation of STBDA funds based on population allows jurisdictions to program their STBGDA funding in advance.

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DCHC awards other funding sources such as CMAQ, STBG-Any Area, and Regional Bicycle and Pedestrian funding (TAPDA) on a competitive basis. **This year, DCHC MPO also received \$2,340,706 in STBGDA COVID relief funds that was suballocated to jurisdictions based on population.** The federal law providing the STBGDA COVID funding gives states discretion on whether or not to require the typical 20 percent local match; NCDOT allowed that decision to be made by each MPO. DCHC MPO chose to offer COVID relief funds without requiring the 20 percent local match. The table below shows the current suballocation of STBGDA and STBGDA COVID relief funding. **Altogether, 58% of federal funding from this funding cycle was suballocated to local jurisdictions based on population.**

Jurisdiction	STBGDA Allocation	STBGDA COVID Relief Funds	Total
Carrboro	\$412,172	\$206,343	\$618,515
Chapel Hill	\$481,269	\$429,255	\$910,524
Chatham County	\$17,498	\$22,599	\$40,097
City of Durham*	\$2,829,234	\$1,442,230	\$4,271,464
Durham County*	\$89,672	\$57,908	\$147,580
Hillsborough	\$237,479	\$126,447	\$363,926
Orange County	\$86,600	\$55,924	\$142,524
Total	\$4,153,924	\$2,340,706	\$6,494,630

* Both the City of Durham and Durham County have already programmed their FY21-22 allocation of STBGDA COVID funds. In 2019, the City of Durham programmed the entirety of their STBGDA distribution through FY24 for bike/ped projects. Durham County uses its funds for a planning position. Although these funds have already been programmed, they are included so as not to skew the overall federal funding picture.

The table below shows the competitive funding currently available to jurisdictions and agencies:

Funding Source	Total Available	% of Competitive Funding
CMAQ	\$ 2,194,011	46%
STBG-Any Area	\$ 752,885	16%
Regional Bicycle and Pedestrian	\$ 1,812,318	38%
Total	\$ 4,759,214	100%

The table below shows how competitive funding compares to non-competitive funding for DCHC MPO in the current funding cycle.

Competitive	Total	% of Overall Funding
Competitive	\$ 4,759,214	42%
Non-Competitive	\$ 6,494,630	58%
Total	\$ 11,253,844	100%

The table below shows how competitive funding compares to non-competitive funding if the federal funds already programed by the City of Durham and Durham County for FY 21-22 is not considered.

Funding Type	Funding Available	% of Overall Funding
Competitive	\$ 4,759,214	57%
Non-Competitive	\$ 3,575,724	43%
Total	\$ 8,334,938	100%

In summary, \$8.3 million is currently available for projects in DCHC MPO. A total of \$4.8 million will be awarded competitively. The DCHC FY22 allocation of CMAQ comprises about 20 percent of overall federal funding for the current funding cycle, and 46 percent of competitive funding available to the MPO for distribution to local governments and agencies in FY22.

3) Geographic Equity

The DCHC Federal Funding policy, last updated in 2015, states that **“when projects are being considered, equity and funding in jurisdictions over time will be considered.”** DCHC staff has interpreted this to mean that all jurisdictions in the MPO should have access to competitive federal funding sources, regardless of population. DCHC is thought to be the only MPO in North Carolina that suballocates STBGDA funds based on population, which provides a funding advantage to larger jurisdictions and allows all jurisdictions to program their funding in advance. This year, the availability of STBGDA COVID relief funds means that 58 of DCHC's federal funding will be suballocated based on population.

While jurisdictions may have smaller populations and may therefore receive a smaller share of federal funding that is allocated based on population, the cost to construct transportation projects in smaller jurisdictions in many cases will be similar to that in larger jurisdictions. Competitive funding not based on population therefore provides a crucial opportunity for smaller jurisdictions to receive funding they may not otherwise have access to.

4) How does this decision compare to past CMAQ recommendations?

In FY18-19, the City of Durham received 57% of CMAQ funds. While the City of Durham has only received 19% of CMAQ funding for FY 22, **it is not representative of all of the federal funds that the City of Durham may receive at the end of this federal funding cycle.** MPO staff will be able to share more data about the overall distribution of funding once funding recommendations are made related to STBG-Any Area and Regional Bike-Ped funding.

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Agency	FY18&19 Funding Recommendation	% Funding Available in FY18&19	FY21 Funding Recommendation	% Funding Available in FY22	Total Received	% of Funding from Last Two Cycles
City of Durham	\$2,727,798	57%	\$422,524	19%	\$3,150,322	45%
Chapel Hill (Transit & Town)	\$1,093,015	23%	\$800,000	0%	\$1,893,015	27%
TJCOG	\$538,690	11%	\$571,487	26%	\$1,110,177	16%
Town of Carrboro	\$440,000	9%	\$ -	0%	\$440,000	6%
GoTriangle	\$ -	0%	\$400,000	18%	\$400,000	6%
Total	\$4,799,503	100%	\$2,194,011	100%	\$6,993,514	100%

In anticipation of a rescission of federal funds, MPO staff reprogrammed unobligated funds from the 2017 Call for Projects to FY19 – FY21. This reprogramming is described in an attachment. The table below shows how funds were distributed to local jurisdictions as a result of the reprogramming.

Jurisdiction	FY 19 CMAQ Funding	% of FY 19	FY20 CMAQ Funding	% of FY 20	FY21 CMAQ Funding	% of FY 21	Total CMAQ Funding Programmed	% of Total
City of Durham	\$ 2,110,393	53%	\$ 2,331,000	81%	\$ 128,410	22%	\$ 4,569,803	62%
Town of Carrboro	\$ -	0%	\$ 533,000	19%	\$ 444,000	78%	\$ 977,000	13%
Town of Hillsborough	\$ 518,850	13%	\$ -	0%	\$ -	0%	\$ 518,850	7%
Town of Chapel Hill	\$ 1,016,618	26%	\$ -	0%	\$ -	0%	\$ 1,016,618	14%
TBD	\$ 305,449	8%	\$ -	0%	\$ -	0%	\$ 305,449	4%
Total	\$ 3,951,310		\$ 2,864,000		\$ 572,410		\$ 7,387,720	100%

5) Update of the DCHC Federal Funding Policy

The current DCHC Federal Funding policy is scheduled for an update in 2024. Ambiguities in the current policy have led to concerns about the transparency and fairness in DCHC's decision making. Ideally, an update of the policy would coincide with the release of updated population data from the 2020 census or the conclusion of the MPO Governance Study, which should address some of the issues raised in this memo. It is unlikely that staff will be able to revise the existing policy in time for the second part of the current call for projects, which is due on March 31, 2021.

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However, the MPO Board could direct MPO staff to work with the Technical Committee to update the Federal Funding Policy sooner than 2024 or before the conclusion of the MPO Governance Study.

TC Recommendation

The TC voted 18-6 in favor of recommending that the MPO Board approve the list of projects proposed by MPO staff for CMAQ funding. Five voting members from the City of Durham and Durham County voted to oppose the recommendation. One member of the TC from Chapel Hill voted against the LPA staff recommendation because he misunderstood the motion.

LPA Staff Recommendation: Approve the list of projects recommended by LPA Staff and the Technical Committee.

Alternatives

The MPO Board could choose not to endorse the list of projects recommended by the Technical Committee and LPA staff and instead make a funding recommendation that aligns with one of the options proposed by the City of Durham in their memo (attached).

Both options presented by the City of Durham would mean withdrawing funding from the GoTriangle Transit Access Improvement project and recommending that the City of Durham receive an additional \$400,000 for their Bicycle Facilities II project. Should the MPO Board make this decision, GoTriangle will not be able to leverage \$400,000 in federal funding to improve regional transit access to developments that support approximately 2,500 jobs.

Attachments:

- All projects with final emissions calculations
- Original Call for Projects
- City of Durham's memo
- FY 19&21 CMAQ Reprogramming Handout
- CMAQ Funding Recommendation PowerPoint