

Memorandum

To: Transportation Advisory Committee
From: DCHC MPO Lead Planning Agency
Date: August 12, 2009
Subject: FY 2013-2017 Congestion Mitigation Air Quality (CMAQ) Call for Projects

Congestion Mitigation Air Quality (CMAQ) funds are provided to air quality non-attainment and maintenance areas for activities that will reduce congestion and improve air quality. In November 2008, the North Carolina Department of Transportation (NCDOT) announced a revised process for the selection of CMAQ projects. They also set schedules and deadlines for three CMAQ project selection processes. One of those processes was the selection of projects for FY 2013 through 2017 CMAQ funding for the FY 2012-2018 Transportation Improvement Program (TIP). The NCDOT has requested that MPOs and RPOs submit a prioritized list of CMAQ project proposals by October 30, 2009. This list must be submitted via NCDOT's Strategic Planning Office of Transportation. The MPO also must provide a proposed funding schedule for the CMAQ projects that best fits the MPO's annual CMAQ target.

The DCHC MPO has approximately \$10,101,845 of CMAQ funding available for FY 2013 through 2017. This corresponds with an annual CMAQ target of \$2,020,369. CMAQ funding requires a minimum 20% local match. In May, the TCC set a schedule for the FY 2013-2017 CMAQ Call for Projects. Applications were due by June 24, 2009. These applications were reviewed by the TCC TIP Subcommittee at two meetings on July 1, 2009 and July 13, 2009. The TCC made a recommendation for funding at the July 22, 2009 TCC meeting.

Background Information

The calculation of emission reductions for nitrogen oxides (NO_x), volatile organic compounds (VOCs), and carbon monoxide (CO) is required for the CMAQ application. NO_x and VOCs react to form ozone in the atmosphere. The TCC reviewed these calculations to ensure that the calculations were done consistently. However, due to different sources for emission factors, it should be noted that there is some variance in the accuracy of some of the calculations. Staff continues to work on developing a consistent methodology for the calculation of emission reductions.

The DCHC MPO has not traditionally used a formula to decide how CMAQ funding should be distributed geographically in the MPO. Funding decisions have been made based on the technical merits of the project and general determinations of regional equity. NCDOT uses a formula to determine how much CMAQ funding each MPO and RPO receives based on the population and a pollutant factor. The pollutant factor for each county is based on the degree the county is in non-attainment or maintenance for ozone and carbon monoxide. Durham, Orange, and northeast Chatham Counties are in maintenance

for ozone, and Durham County is in maintenance for carbon monoxide. The table below displays how the CMAQ target for the DCHC MPO was determined.

MPO/RPO	County	Non Attainment Area Population (2000 Census) ²	Pollutant Factors		Factored Population	% Factored Population	Yearly Target	2011-2017 Total CMAQ Target (2013 - 2017)
			8-hr Ozone Basic (1.0)	8-hr Ozone Moderate (1.1) PM _{2.5} (1.2) Ozone + CO (1.2 x O ₃ Factor)				
Durham-Chapel Hill-Carrboro MPO								
	Chatham ^P	10,337	1.0		10,337			
	Durham	223,314	1.2		267,977			
	Orange	93,450	1.0		93,450			
					371,764	8.42%	\$2,020,369	\$10,101,843

If the MPO chose to distribute funding according to this formula, it would result in the following:

County	Factored Population Percentage	FY 2013-2017 CMAQ Target
Chatham	2.78%	\$280,831
Durham	72.08%	\$7,281,408
Orange	25.14%	\$2,539,603

Fourteen CMAQ applications were submitted to the MPO requesting a total of \$15,050,118. The full applications are available for download on the City of Durham's FTP site. Contact LPA staff if you would like to access the FTP site. In summary the applications were:

- TJ COG – Triangle Transportation Demand Management (TDM) Program – This is the continuation of funding for the DCHC MPO's share of the regional TDM program. It includes funding for both the local "hot spot" programs and the regional program. Funding is shared by NCDOT, CMAQ funds from the CAMPO and DCHC MPO, and local agencies.
- DATA – Operating Assistance for New Fixed Route – The funds would be used to operate a new route from the Southpoint Mall area to Duke University for two years. DATA will use new hybrid diesel buses that are already funded to operate the service.
- Town of Cary – New Hope Church Road American Tobacco Trail Park and Ride Lot – The funds would be used to construct a trailhead parking lot for the American Tobacco Trail. Funding is shared by the Town of Cary, Chatham County, and CMAQ funds from the DCHC MPO. The local jurisdictions are providing more than the minimum 20% local match.
- Chapel Hill – Martin Luther King Jr. Blvd. Shared Pathway from Homestead Road to Carolina North
- Durham - Sidewalks on Campus Walk Avenue from Morreene Road to Lasalle Street and Sidewalks on Lasalle Street from Kangaroo Drive to Erwin Road
- Chapel Hill – Estes Drive Sidewalks and Bicycle Lanes from Guy Phillips Middle School to Martin Luther King Jr. Blvd.
- DATA – Replacement of five gasoline paratransit cutaway vans with hybrid electric gasoline vans
- Carrboro – Jones Creek Greenway from the Upper Bolin Creek Trail to the ARRA-funded Twin Creeks Greenway which will provide access to Morris Grove Elementary School. Funds will also be provided for bicycle incentive and safety programs at the school.
- Durham – Sidewalks and Bike Lanes on Hope Valley Road from Martin Luther King Jr. Parkway to US 15-501 Business
- Durham - Sidewalks on Cameron Avenue from Erwin Road to Duke University Road

- Durham – Sidewalks on Alston Avenue from Carpenter Fletcher Road to Sedwick Road
- DATA – Replacement of five diesel buses with hybrid electric diesel buses
- Chapel Hill Transit – Replacement of two 40' diesel buses with two 60' hybrid electric diesel buses to be used on the NS route
- Hillsborough – Riverwalk Phase II along the Eno River from S. Occoneechee Street to Exchange Park Road

TCC Recommendation

The TCC recommends generally prioritizing CMAQ projects according to the cost-benefit ratio as defined as the federal share of the total cost divided by the sum of the annual emission reductions for VOC, NOx, and CO. The year of funding should also correspond to this priority order. The TCC recommendation includes a variation on strictly following the cost-benefit ratio. The TCC recommends providing the Town of Cary half of its requested funds for the New Hope Church Road American Tobacco Trail Park and Ride Lot and providing the remaining funding to the Town of Hillsborough's Riverwalk, Phase II project. This recommendation is shown on the table attached to the resolution endorsing candidate CMAQ project proposals for FY 2013-2017 (Attachment 7A). For comparison, the table in Attachment 7B shows the project funding and schedule based only on the cost-benefit ratio. There was a split vote at the TCC meeting on this recommendation.

Schedule

Action	Date
TCC opens call for projects	5/27/09
Project proposals are due to DCHC MPO	6/24/09
Applications are emailed to TCC for review	6/25/09
TCC recommendation for funding	7/22/09
TAC approves project proposals	8/12/09
If deferred, TCC responds to TAC requests	8/26/09
If deferred, TAC approves project proposals	9/9/09
LPA submits projects to NCDOT through SPOT prioritization tool	10/05/09 – 10/30/09
NCDOT deadline for project proposals	10/30/09

TCC Recommendation: That the TAC approve the priority order of projects and funding schedule shown in the table attached to the resolution endorsing candidate CMAQ project proposals for FY 2013-2017 (Attachment 7A).

TAC Action: Approve the resolution endorsing candidate CMAQ project proposals for FY 2013-2017 (Attachment 7A).