



CMAQ PERFORMANCE PLAN

To be submitted with GDOT's Baseline Performance
Period Report for the 2018-2021 Reporting Period

Prepared by: Cartersville-Bartow MPO
For: Its Portion of the Atlanta Urbanized Area in Georgia

Introduction

The purpose of this report is to document how Congestion Mitigation and Air Quality (CMAQ) transportation projects allocated in the Atlanta urbanized area help the region meet its two and four-year targets. The targets herein were established under a joint effort by the Atlanta Regional Commission (ARC) and the Georgia Department of Transportation (GDOT). ARC staff performs the air quality conformity analyses for the Cartersville-Bartow County Metropolitan Planning Organization (CBMPO) as its area lies within the designated nonattainment zone for greater Atlanta. CBMPO agrees with these targets.

Baseline Condition

To establish targets, the ARC and GDOT looked at baseline conditions in the Atlanta urbanized area for three specific measures that relate to the CMAQ program:

- Peak-Hour Excessive Delay Measure (PHED)
- Non-Single-Occupant-Vehicle Measure (Non-SOV)
- On-Road Mobile Source Emissions Measure

The results of these analyses for the baseline year 2017 are documented below.

Traffic Condition Measures

Two of the measures relate to traffic conditions: PHED and Non-SOV. The PHED measure is defined as the annual hours of peak hour excessive delay per capita. Excessive delay refers to the additional time spent in congestion based on an established speed threshold. Peak periods are defined as Monday through Friday 6:00AM – 10:00AM and 3:00PM – 7:00PM. The baseline annual 2017 PHED per capita measure for the Atlanta urbanized area is 20.4 hours.

The Non-SOV measure is computed as the percent of working population that do not drive alone to work in a car, van or truck. A variety of data sources are available to calculate this measure. ARC and GDOT settled on using the American Community Survey (ACS) Journey to Work data. ACS data is aggregated in five-year bins. The baseline 2012-2016 calculated Non-SOV measure for the Atlanta urbanized area is 22.1%.

On-Road Mobile Source Emissions Measures

ARC and GDOT used the CMAQ Public Access System to compile the estimated emissions reduction benefits of projects in the Atlanta urbanized area. For the baseline report, projects in federal fiscal years 2014-2017 were summed in kg/day to determine the baseline.

Table 1 – Baseline On-Road Mobile Source Emissions by Pollutant

Pollutant	2014-2017 Baseline Emissions Sum (kg/day)	Baseline Emissions per Year (kg/day)
NO _x	4,084	1,021
VOC	1,383	346
PM _{2.5} ¹	184	46
CO ₂ (e) ²	51,351	12,838

¹ The Atlanta urbanized area is a former annual PM_{2.5} nonattainment area. PM_{2.5} is reported for information purposes only. There is no target associated with PM_{2.5}.

² CO₂(e) is a greenhouse gas equivalent and is reported for information purposes only. There is no target associated with GHG emissions.

Targets

For the first performance period, between 2018 and 2021, ARC and GDOT coordinated to establish targets for the CMAQ traffic congestion and on-road emissions measures. GDOT was required to set targets by May 20, 2018. CBMPO then has 180 days to approve the targets. Currently, CBMPO anticipates Board approval of the targets after the October 1 deadline for the State DOT Baseline Performance Period Report. Below are the targets that GDOT has approved and CBMPO's Board will approve in the fall.³

Table 2 – Established State CMAQ-focused 2 and 4-year Targets

Performance Measure	2-Year Target	4-Year Target
Annual PHED per Capita	N/A	24.6 hours
Percent of Non-SOV Travel	22.1%	22.1%
Emissions – NO _x	563.3 kg/day	1,085.0 kg/day
Emissions - VOC	205.7 kg/day	386.6 kg/day

Description of Projects

CBMPO and GDOT coordinate in the selection of CMAQ projects for deployment in the Atlanta ozone nonattainment area within Bartow County. All projects selected using federal funds are reviewed against program goals of reducing congestion and/or reducing emissions of ozone precursor pollutants. In the case of projects within the ARC (non-attainment area/boundary), nearly all projects selected for CMAQ funding pass through ARC's CMAQ Calculator, a tool maintained by ARC since 2013 to estimate the congestion and emissions benefits of CMAQ projects. The CBMPO intends to use a similar process with the future allocation of CMAQ funds towards projects within its service area. GDOT then uploads the results of this modeling into the CMAQ Public Access System upon the obligation of funding to projects.

CBMPO did not become eligible for CMAQ funding until the MPO was initially certified in 2016. At this time Bartow County has not utilized CMAQ funds. The expectation is that CMAQ funding will be incorporated into future CBMPO LRTP and TIP projects as long as there is enough to complete a project with that source of funds. It is expected that emissions benefits will increase as CMAQ projects and others are programmed later in the reporting period.

In summary, CBMPO intends to coordinate with ARC and others to adopt the same CMAQ performance targets for the Atlanta nonattainment area and will screen future CMAQ projects in a similar manner with these targets in mind.

³ After CBMPO's board approves the CMAQ-related targets, CBMPO will submit an updated version of this CMAQ Performance Plan for GDOT to transmit to the United States Department of Transportation