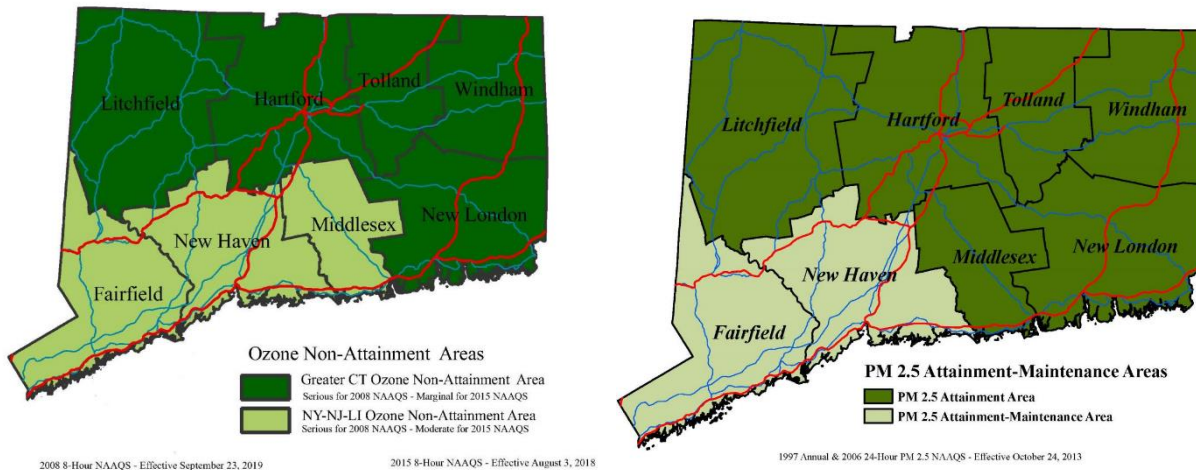


Section B: Air Quality Conformity Analysis Summary

for the FFY2021-2024 TIP
and the 2045 Metropolitan Transportation Plan

Each regional planning agency (including CRCOG) is required to demonstrate that its Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP) do not violate the federal Clean Air Act. This demonstration requires tests for several types of pollutants, for several different analysis years, and for several different analysis areas or districts as explained below. For reasons also described below, the Connecticut Department of Transportation (CTDOT) performs a statewide analysis, with all Plans and TIP projects in the state analyzed together.

Air Quality Analysis Districts. The federal air quality districts are shown in the figures below. CRCOG is part of the Greater Connecticut Ozone Non-Attainment Area. The Greater Connecticut district includes other planning regions in addition to CRCOG. It uses county boundaries and includes the following counties: Hartford, Tolland, Litchfield, Windham, and New London. The Greater Connecticut district is classified as a “marginal” non-attainment area. CRCOG is in an attainment area for fine particulate matter (PM_{2.5}).



Since the air quality districts overlap many regional planning districts, the emissions analysis is coordinated by CTDOT to include the TIPs and MTPs of several regions. Each region submits its draft TIP and MTP to CTDOT where the projects are combined to analyze the emissions impacts within each air quality district. CTDOT's most recent Air Quality Conformity determination was completed in April 2020. That full document is available on CTDOT's STIP website and on CRCOG's TIP website.

Types of Pollutants. The air quality analysis for ozone includes calculations of vehicle emissions of two types of pollutants:

1. Hydrocarbons (HC or VOC-Volatile Organic Compounds)
2. Nitrogen Oxides (NO_x)

Emissions Test. Under conformity rules provided by the U.S. Environmental Protection Agency (EPA), a test is applied to determine if the TIP or the MTP violate the Clean Air Act. In March 2017, EPA informed the CT Department of Environmental Protection that the EPA had determined the 2017 Motor Vehicle Emissions Budgets (MVEB) for the Greater Connecticut ozone nonattainment area were adequate determiners of future transportation conformity. Therefore, the future year emissions are compared to the 2017 MVEB to determine compliancy.

In order to be compliant, VOC and NO_x transportation emissions must be less than the following 2017 transportation emission budgets:

- VOC: 15.9 tons/day
- NO_x: 22.2 tons/day

Findings and Conclusions. The analysis conducted by CTDOT indicates that the Capitol Region’s MTP and TIP, when combined with all other regional plans and TIPs in the relevant air quality district, pass the test required under current conformity rules. The Region is in conformity with the federal Clean Air Act and the Connecticut State Implementation Plan. The quantitative analysis required for this determination are summarized in the table below.

| Ozone Conformity - NO_x and VOC Emissions Budget Test Results for the Greater Connecticut Ozone Nonattainment Area (tons per day) | | | | | | |
|--|----------------|-----------------------|---------------|-----------------------|-------------------|-----------------------|
| Year | Results | | Budget | | Difference | |
| | VOC | NO_x | VOC | NO_x | VOC | NO_x |
| 2020 | 15.31 | 20.06 | 15.90 | 22.20 | - 0.59 | - 2.14 |
| 2025 | 12.65 | 13.25 | 15.90 | 22.20 | - 3.25 | - 8.95 |
| 2035 | 7.64 | 7.83 | 15.90 | 22.20 | - 8.26 | - 14.37 |
| 2045 | 6.47 | 6.98 | 15.90 | 22.20 | - 9.43 | - 15.22 |

VOC: Hydrocarbons or Volatile Organic Compounds
NO_x: Nitrogen Oxides