

To: CRCOG Transportation Committee
CC: CRCOG Policy Board
From: Timothy Malone, Principal Planner
 Jennifer Carrier, CRCOG - Director of Transportation Planning
Date: July 17, 2017
Subject: ***Air Quality Conformity Analysis***

The Connecticut Department of Transportation has asked us to endorse the Air Quality Conformity Resolution for our draft FFY2018-2021 Transportation Improvement Program (TIP) and our 2015 Long Range Transportation Plan (LRTP). A summary of the Air Quality Conformity Analysis (AQCA) report is attached, along with a resolution endorsing the AQCA. We will be looking for adoption of this resolution at the July 24 meeting.

The State performs the AQCA on a statewide basis, with all LRTPs and TIP projects in the state analyzed together. This is due to overlap between planning region boundaries and the two air quality analysis districts in the state. The AQCA is updated when a new TIP or LRTP are developed, or every six months to a year in order to incorporate new projects from the State Transportation Improvement Program (STIP).

The May 2017 analysis shows that the State’s LRTPs and draft TIPs are within the approved 2009 motor vehicle emissions budgets. The table below shows the results for the Greater Connecticut Ozone “Moderate” Nonattainment Area:

Greater CT Ozone "Moderate" Nonattainment Area (emissions in tons per day)

Year	RESULTS		BUDGET		DIFFERENCE	
	VOC	NOx	VOC	NOx	VOC	NOx
2018	15.07	19.74	26.30	49.20	-11.23	-29.46
2025	11.38	11.86	26.30	49.20	-14.92	-37.34
2035	6.65	6.91	26.30	49.20	-19.65	-42.29
2040	6.15	6.48	26.30	49.20	-20.15	-42.72
VOC: Hydrocarbons or Volatile Organic Compounds NOX: Nitrogen Oxides						

CRCOG is required to have a 30-day public comment period for the AQCA that includes a public hearing. The comment period was open between 6/15 and 7/21. A public hearing was held at 11:30am on 6/26/2017 at MIRA. As of this writing, no comments have been received. The full documents are available on our website: <http://www.crcog.org/tip>

Air Quality Conformity Analysis

for the FFY 2018-2021 TIP & the 2015 Regional Transportation Plan

SUMMARY

Each regional planning agency (including CRCOG) is required to demonstrate that their Regional Transportation Plan 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 State performs a statewide analysis, with all Plans and TIP projects in the state analyzed together.

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

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

Emissions Test. Under conformity rules provided by the U.S. Environmental Protection Agency (EPA), a test is applied to determine if the TIP and the Transportation Plan violate the Clean Air Act. In December 2010, the EPA informed the CT Department of Environmental Protection that the 2009 Motor Vehicle Emissions Budgets (MVEB) were adequate determiners of future transportation conformity. Therefore, the future year emissions are compared to the 2009 MVEB to determine compliancy.

Test: VOC and NOx emissions from transportation sources must be less than the 2009 motor vehicle emissions budgets

2009 emissions budget:

- VOC 26.30 tons/day
- NOx 49.20 tons/day

Air Quality Analysis Districts. The federal air quality districts for ozone are shown in the figure to the right. For ozone analysis purposes, CRCOG is part of the Greater Connecticut Moderate Ozone Area. The Greater Connecticut district includes other planning regions in addition to the Capitol Region. It uses county boundaries and includes the following counties: Hartford, Tolland, Litchfield, Windham, and New London. The Greater Connecticut district is classified as a "moderate" nonattainment area. Previously it was a "marginal" nonattainment area. The designation changed in 2016 due to not meeting 2008 ozone standards prior to the July 20, 2015 deadline.

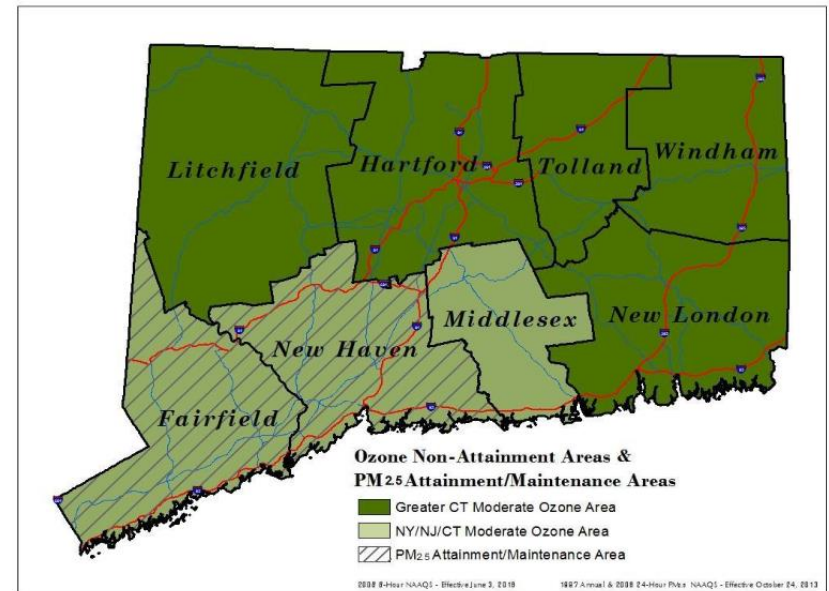


Figure 1. Map of Ozone Non-Attainment Areas

Since the air quality districts overlap many regional planning districts, the emissions analysis must be coordinated to include the TIPs and transportation plans of several regions. The Connecticut

Department of Transportation performs this coordination role. Each region submits its draft TIP and long range plan to the DOT. The DOT in turn combines the TIPs and the transportation plans for all appropriate regions to analyze the emissions impacts on each air quality district.

Findings & Conclusions

The data provided by the Connecticut Department of Transportation indicate that the Capitol Region’s long range plan 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. Provided below is a summary of the results. Actual emissions estimates and comparisons are provided in Table 1.

Test: VOC and NOx emissions from transportation sources must be less than the 2009 transportation emissions budgets.

Future emissions of VOC and NOx are below the 2009 emissions budget.

Quantitative Analysis by Connecticut DOT. The quantitative analysis required for this demonstration was performed by CTDOT in cooperation with the regional planning agencies. This cooperative effort is required because the federal air quality districts overlap Connecticut’s regional planning districts as explained above. The results are presented in the table below.

**Greater CT Ozone "Moderate" Nonattainment Area
(emissions in tons per day)**

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VOC: Hydrocarbons or Volatile Organic Compounds

NOX: Nitrogen Oxides

RESOLUTION ON CONFORMITY WITH THE CLEAN AIR ACT - OZONE

WHEREAS, the Capitol Region Council of Governments (CRCOG) is required to submit an Air Quality Conformity Statement to the US Federal Highway Administration (FHWA) and to the US Environmental Protection Agency (EPA) in accordance with the final conformity rule promulgated by EPA (40 CFR 51 and 93) when adopting an annual Transportation Improvement Program (TIP) or when effecting a significant revision of the Region's Long Range Transportation Plan (LRTP); and

WHEREAS, Title 42, Section 7506 (3) (A) states that conformity of transportation plans and programs will be demonstrated if:

1. the plans and programs are consistent with recent estimates of mobile source emissions;
2. the plans and programs provide for the expeditious implementation of certain transportation control measures;
3. the plans and programs contribute to annual emissions reductions consistent with the Clean Air Act of 1977, as amended; and

WHEREAS, it is the opinion of the CRCOG that the plans and programs approved today, July 24, 2017 and submitted to FHWA and EPA conform to the requirements of Title 42, Section 7506 (3) (A) as interpreted by EPA (40 CFR 51 and 93); and

WHEREAS, the State of Connecticut has elected to assess conformity in the Greater Connecticut Ozone Moderate Nonattainment area (Litchfield, Hartford, Tolland, New London and Windham Counties) and the Connecticut Department of Transportation has jointly assessed the impact of all transportation plans and programs in these Nonattainment areas (Ozone Air Quality Conformity Report May 2017); and

WHEREAS, the Connecticut Department of Transportation's assessment (above) has found that plans and programs jointly meet mobile source emissions guidelines advanced by EPA pursuant to Section 7506 (3) (A).

NOW THEREFORE BE IT RESOLVED THAT the Capitol Region Council of Governments finds that the 2015 LRTP and the FFY 2018-2021 TIP and all Amendments conform to air quality requirements of the U.S. Environmental Protection Agency (40 CFR 51 and 93), related U.S. Department of Transportation guidelines (23 CFR 450), and with Title 42, Section 7506 (3) (A) and hereby approves the existing May 2017 Ozone Air Quality Conformity Determination.

CERTIFICATE

The undersigned duly qualified and acting Secretary of the Capitol Region Council of Governments certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting of the Capitol Region Council of Governments on July 24, 2017.

DATE: _____

BY: _____

Lisa Heavner, Secretary
Capitol Region
Council of Governments