

# Capitol Region Council of Governments

241 Main St., Hartford, CT 06106

Phone: (860) 522-2217 Web: [www.crcog.org](http://www.crcog.org)

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## Air Quality Conformity Analysis

for the FFY 2007-2011 TIP  
& the 2007 Regional Transportation Plan

***DRAFT***

For review March 27, 2007

Each regional planning agency (including CRCOG) is required to demonstrate that their long range transportation plan does 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.

**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)

**Type of Tests.** Under conformity rules provided by the U.S. Environmental Protection Agency, two separate tests are applied to determine if the TIP and the Transportation Plan violate the Clean Air Act.

**Test 1: Comparison to Actual 2002 Emissions**

VOC and NOX emissions from transportation sources must be less than the emissions that existed in 2002

**2002 baseline emissions:**

VOC	44.8 tons/day
NOx	88.9 tons/day

**Test 2: Comparison to Emissions Budget**

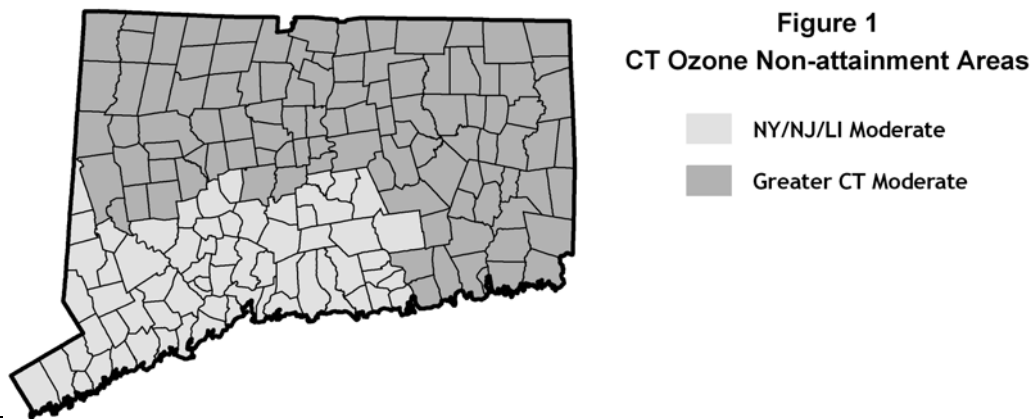
In 2007 and all subsequent years, VOC and NOX emissions from transportation sources must be less than emissions budget as established in the State Implementation Plan for Air Quality (SIP.)

**Emissions budgets:<sup>1</sup>**

VOC	33.7 tons/day
NOx	61.6 tons/day

**Air Quality Analysis Districts.** The federal air quality districts for ozone are shown in Figure 1. For ozone analysis purposes, CRCOG is part of the Greater Connecticut district. 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.

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 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.



<sup>1</sup> The SIP budgets for this conformity report are interim budgets based on the 8-hour standard as formulated under EPA memo dated December 6, 2004.

## Findings & Conclusions

The data provided by the Connecticut Department of Transportation indicate that the Region's long range plan, when combined with all other regional plans in the relevant air quality district, passes both tests required under current conformity rules. The Region is in conformity with the federal Clean Air Act and the Connecticut SIP. Provided below is a summary of the results. Actual emissions estimates and comparisons are provided in Tables 1.

**Test 1: Comparison to Actual 2002 Emissions**

VOC and NOx emissions from transportation sources must be less than the emissions that existed in 2002. Future emissions of VOC and NOx are below 2002 level emissions.

**Test 2: Comparison to Emissions Budget**

In 2007 and all subsequent years, VOC and NOx emissions from transportation sources in the Greater Connecticut or severe ozone nonattainment area must be less than emissions budget as established in the SIP. VOC and NOx emissions are below their respective emissions budgets.

**Quantitative Analysis by Connecticut DOT.** The quantitative analysis required for this demonstration was performed by ConnDOT 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 Table 1.

*Table 1*  
**Greater CT Ozone "Moderate" Nonattainment Area**  
*(emissions in tons per day)*

	2002 Base	Emissions Budget	Projected		Budget Comparison <i>(plan - budget)</i>	
			2007 Plan	2035 Plan	2007 Plan	2035 Plan
VOC emissions	44.8	<b>33.7</b>	29.9	13.6	-3.8	-20.1
NOx emissions	88.9	<b>61.6</b>	57.7	11.7	-3.9	-49.9
VMT	44,436,432	----	47,801,996	61,603,576	----	----

Note: Emissions budgets are interim budgets based on 8-hour standard.

**Resolution on  
AIR QUALITY CONFORMITY**

**WHEREAS**, the Capitol Region Council of Governments is required to submit an "Air Quality Conformity Statement" to the U.S. Federal Highway Administration (FHWA) and to the U.S. Environmental Protection Administration (EPA) in accordance with the criteria of the final conformity rule promulgated by EPA (40 CFE 51 and 93) when adopting an annual Transportation Improvement Program or when effecting a significant revision of the Region's Transportation Plan; 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; and 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 Capitol Region Council of Governments that the plans and programs to be considered today April 25, 2007 and submitted to FHWA and EPA conform to the requirements of Section 7506 (3) (A) as interpreted by EPA (40 CFR 51 and 93); and

**WHEREAS**, the State of Connecticut elected to assess conformity in the Greater Connecticut Ozone Moderate Nonattainment Area (Hartford, New London, Tolland, Windham and Litchfield counties), and the Connecticut Department of Transportation has assessed the impact of all transportation plans and transportation improvement programs (TIPs) in the Greater Connecticut Ozone Moderate Nonattainment Area (Air Quality Conformity Report, March 2007); and

**WHEREAS**, the Connecticut Department of Transportation assessment 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**, by the Capitol Region Council of Governments that based on the analysis performed by the Connecticut Department of Transportation, we find that the 2007 Capitol Region Transportation Plan and the FFY 2007-2011 Capitol Region TIP conform to air quality requirements of the U.S. Environmental Protection Administration (40 CFR 51 and 93), related U.S. Department of Transportation guidelines (23 CFR 450) and with Title 42, Section 7506 (3) (A).

*I certify that the above is a true copy of the resolution adopted  
by the CRCOG Policy Board at its meeting on April 25, 2007.*

*(to be signed if adopted)*

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*Susan Karp, Secretary  
Capitol Region Council of Governments*

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*Date*