


## **National Capital Region Transportation Planning Board**

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### MEMORANDUM

May 20, 2009

To: Transportation Planning Board

From: Ronald F. Kirby   
Director, Department of  
Transportation Planning

Subject: Status Report on the Air Quality Conformity Assessment of the 2009  
Constrained Long Range Plan (CLRP) and the FY2010 – 2015  
Transportation Improvement Program (TIP)

### **Overview**

On February 18 the TPB approved the project submissions and the scope of work for the air quality conformity assessment of the 2009 CLRP and the FY2010 – 2015 TIP. Since that time staff has proceeded with the conformity analysis, including network development, preparation of travel demand forecasts, preparation of emissions factors (using newly obtained and analyzed 2008 vehicle registration data throughout the region), and estimation of mobile source emissions.

Work is proceeding according to schedule: transportation networks for all analysis years (2010, 2020, and 2030) have been created; Round 7.2 Cooperative Forecasts have been received and incorporated; travel demand forecasts have been prepared through 2020; emissions factors have been developed through 2010; and mobile source emissions through 2010 have been completed. Preliminary results and observations are discussed below.

### **Preliminary Results**

At the April TPB meeting, staff reported on observations concerning the region's 'older than expected' vehicle fleet, gleaned from analysis of the latest vehicle registration files. Specifically, higher emissions rates will result from the older fleet. Accordingly, staff prepared the following table to summarize and to report the resulting impacts upon mobile source emissions inventories associated with the 2009 CLRP and FY2010 – 2015 TIP.

The table reports the latest 2010 forecasts in comparison to those estimated as part of the 2008 CLRP. Despite a 2.5% decrease in VMT (associated with lower household

and job forecasts in Round 7.2 compared to last year's Round 7.1 Cooperative Forecasts), daily ozone season emissions for VOC and NOx and annual emissions of direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursor NOx show increases in total emissions. These increases range from 1.3% to 7.5 %. In comparison to mobile source emissions budgets the plan and program inventories adhere to all emissions budgets, but the older fleet has severely diminished the 'adherence margin', especially for the ozone season pollutants. (For example, VOC emissions are within the 66.5 ton budget by a margin of less than three quarters of a ton.)

Since mobile source emissions are rapidly decreasing through time, when the 2020 and 2030 emissions forecasts are completed they should not pose a threat to the ability of the Board to make a conformity determination. Nonetheless, this year's experience illustrates the potential for factors other than transportation system facilities and programs to affect the outcome of the conformity process.

### **Next Steps**

Remaining items on this year's conformity schedule include: presentation of draft final results for all analysis years at the June meeting of the TPB Technical Committee; release of a draft final report for public comment followed by presentation to the Board at its June meeting; and approval action at the July TPB meeting.



**2010 Forecasts of Mobile Source Emissions  
2008 CLRP vs. 2009 CLRP Conformity Assessments**

	Emissions					2010 Emissions Budgets	Adherence Margin	
		2008 CLRP	2009 CLRP	Change	% Change		2008 CLRP	2009 CLRP
<b>Ozone Season (Tons/Day)</b>	VOC	61.7	65.8	+4.1	+6.6%	66.5	4.8	0.7
	NOx	128.0	137.6	+9.6	+7.5%	144.3	16.3	6.7

<b>Annual (Tons/Year)</b>	PM <sub>2.5</sub>	1,031	1,044	+13	+1.3%	1,105.4	74.4	61.4
	Precursor NOx (000)	46	48	+2	+5.5%	51.4	5.4	3.4