

## **ITEM 7 - Action**

March 20, 2013

Approval of Amendment to the Additional Air Quality Conformity Analysis Conducted to Respond to the EPA Designation of the Washington Region under the 2008 Ozone National Ambient Air Quality Standards (NAAQS)

### **Staff**

**Recommendation:** Adopt Resolution R11-2013 to approve an amendment to the recent 2015 forecast year air quality conformity analysis of the 2012 CLRP and FY2013-2018 TIP which was conducted to satisfy the designation requirements of the EPA 2008 Ozone NAAQS.

**Issues:** None

**Background:** At the February 20th meeting, notice was provided on an amendment to the recent 2015 forecast year air quality conformity analysis of the 2012 CLRP and FY2013-2018 TIP which was conducted to satisfy the designation requirements of the EPA 2008 Ozone National Ambient Air Quality Standards (NAAQS). After the TPB approved this new air quality conformity analysis on December 19, 2012, the EPA found adequate new mobile budgets on February 7, 2013, requiring their immediate use in air quality conformity analyses. Because this adequacy

finding occurred prior to USDOT's approval of the recent conformity analysis, this analysis must be amended to show that mobile emissions in the 2012 CLRP and FY2013-2018 TIP are below the new EPA approved mobile budgets.

**NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD  
777 North Capitol Street, N.E.  
Washington, D.C. 20002**

**RESOLUTION FINDING THAT THE 2012 CONSTRAINED LONG RANGE PLAN AND  
FY2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM SHOW ADHERENCE  
TO MOBILE BUDGETS, INCLUDING FOR THE 2015 ATTAINMENT YEAR, FOUND  
ADEQUATE BY THE ENVIRONMENTAL PROTECTION AGENCY IN FEBRUARY  
2013, AND THEREFORE CONFORM WITH THE REQUIREMENTS OF  
THE CLEAN AIR ACT AMENDMENTS OF 1990**

**WHEREAS**, the National Capital Region Transportation Planning Board (TPB) has been designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia as the Metropolitan Planning Organization (MPO) for the Washington Metropolitan Area; and

**WHEREAS**, the U.S. Environmental Protection Agency (EPA), in conjunction with the U.S. Department of Transportation (DOT), under the Clean Air Act Amendments of 1990 (CAAA), issued on November 24, 1993 "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act," and, over the years, subsequently amended these regulations and provided additional guidance, which taken together provide the specific criteria for TPB to make a determination of conformity of its financially Constrained Long Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP) with the state implementation plans (SIPs) for air quality attainment within the Metropolitan Washington non-attainment area; and

**WHEREAS**, on December 19, 2012 the TPB approved a conformity analysis update for the 2012 Constrained Long Range Plan (CLRP) and the FY2013-2018 Transportation Improvement Program (TIP), which was performed to satisfy requirements associated with the EPA's 2008 National Ambient Air Quality Standards (NAAQS); and

**WHEREAS**, prior to the Federal Highway Administration's (FHWA) approval of the December 19, 2012 conformity analysis, the EPA found adequate new motor vehicle emissions budgets (MVEBs), requiring an amendment of the conformity analysis to show adherence to the newly approved mobile budgets; and

**WHEREAS**, on February 14, 2013, the information pertinent to the amendment of the conformity analysis was released for a 30-day public comment period and inter-agency review; and

**WHEREAS**, the analysis reported in *Air Quality Conformity Update Amendment of the 2012 Constrained Long Range Plan and the FY2013-2018 Transportation Improvement Program for the Washington Metropolitan Region*, dated March 20, 2013, demonstrates adherence to all mobile source emissions budgets for volatile organic compounds, nitrogen oxides, and carbon monoxide, and demonstrates that PM2.5 emissions meet the requirement that such emissions are not greater than 2002 levels, meets all regulatory, planning and interagency consultation requirements, and therefore provides the basis for a finding of conformity of the plan with the requirements of the CAAA; and

**WHEREAS**, in the attached letters of March 14 and 15, 2013, the Maryland Department of the Environment (MDE) and the Metropolitan Washington Air Quality Committee (MWAQC) concur that the transportation-sector emissions associated with the transportation plans meet the approved motor vehicle emissions budgets for ozone season pollutants and carbon monoxide, and are no greater than the 2002 levels for fine particles pollutants;

**NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD** determines that the 2012 Constrained Long Range Plan and the FY2013-2018 Transportation Improvement Program conform to all requirements of the Clean Air Act Amendments of 1990.

# National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

---

March 20, 2013

## MEMORANDUM

TO: Transportation Planning Board

FROM: Jane A. Posey  
Senior Transportation Engineer

SUBJECT: Amendment to the December 19, 2012 Air Quality Conformity Update of the 2012 CLRP & FY2013-2018 TIP

On December 19, 2012 the Transportation Planning Board (TPB) approved an updated air quality conformity analysis of the 2012 Constrained Long Range Plan and FY2013-2018 Transportation Improvement Program (TIP). This update was performed to satisfy requirements associated with the Environmental Protection Agency's (EPA's) 2008 National Ambient Air Quality Standards (NAAQS). After the TPB approves any conformity analysis, the documents are forwarded to the United States Department of Transportation (USDOT) for final approval.

In 2007 the Metropolitan Washington Air Quality Committee (MWAQC) submitted mobile budgets to EPA for approval. These budgets were submitted for a State Implementation Plan (SIP) to address the 1997 8-hour ozone standard. This SIP included 2008 Reasonable Further Progress (RFP) budgets, 2009 Attainment budgets, and a 2010 Contingency budget. In 2009 EPA found adequate the 2008 RFP budgets for use in conformity analyses, but did not act on the other mobile budgets included in the SIP.

On February 7, 2013 EPA found adequate the 2009 Attainment and 2010 Contingency budgets, requiring their immediate use in air quality conformity analyses. This approval occurred prior to USDOT's approval of the December 19, 2012 air quality conformity analysis of the 2012 CLRP and FY2013-2018 TIP. Consequently the analysis must be amended to include the newly approved mobile budgets.

In order to amend the conformity analysis, staff modified the relevant exhibits from the conformity report to show that mobile emissions in the 2012 CLRP and FY2013-2018 TIP are below the newly approved budgets. The budgets are 66.5 tons/day of Volatile Organic Compounds (VOC) and 146.1 tons/day of Nitrogen Oxides (NOx) for the 2009 Attainment Plan and 144.3 tons/day of NOx for the 2010 Contingency Plan. Exhibit 16 shows that mobile source VOC and NOx emissions for each forecast year are below the mobile budgets. Exhibits 20 and 21 present the same information in a graphical format. The updated exhibits are attached.

This information was released for a required 30-day public comment period on February 14, 2013. The comment period ended on March 16, 2013. Two comment letters were received.

Comment: The Maryland Department of the Environment (MDE) provided written comment in its March 14, 2013 letter. The letter states that MDE concurs with the conformity finding. MDE applauds the TPB for implementing programs to meet the area's mobility needs to protect public health and improve air quality. MDE wants to better communicate the challenges faced by the region in meeting the new ozone standard, including the need to start showing cleaner air in the summer of 2013. MDE notes that the mobile budgets used in the current conformity process were set using the old 1997 ozone standard, and that there are currently no budgets for the new 2008 ozone standard. It refers to preliminary technical analysis completed by the Ozone Transport Commission (OTC), and suggests that mobile source emissions of nitrogen oxides

(NO<sub>x</sub>) will need to be reduced to levels in the 45 to 50 tons per day to meet the new standard. MDE states that with a 2015 attainment date, area monitors must measure clean data in the summers of 2013, 2014, and 2015. MDE points out that the current conformity analysis projects 2015 NO<sub>x</sub> mobile emissions at 87.9 tons per day, and suggests that the region faces a daunting challenge in meeting the new standard.

Response: The TPB appreciates that MDE concurs with the conformity finding. The TPB understands that the attainment date for the 2008 Ozone Standard is 2015, and that by the attainment date the region's monitors must have a design value of 75 parts per billion. Mobile sources are contributing significantly to reductions of VOC and NO<sub>x</sub> in the region. From the date of enactment of the Clean Air Act Amendments of 1990 to the attainment year of 2015, the region's population is projected to increase by 41%, while mobile source VOC and NO<sub>x</sub> emissions are on track to be reduced by 83% and 76%, respectively. The TPB recognizes that the region should continue to make progress to reduce emissions across all sectors to meet the new standard. As outlined in the recently enacted transportation legislation, "Moving Ahead for Progress in the 21<sup>st</sup> Century" (MAP-21), emission reduction programs and projects will be evaluated based on measures of cost-effectiveness, such as dollars per ton of emissions reduced. The TPB is currently using EPA's MOVES model to study the cost-effectiveness of numerous TERMS for achieving additional emission reductions. The TPB looks forward to working with MWAQC and its environmental partners to find the most cost-effective ways to reduce emissions from all sources, in order to clean the air while continuing to provide the mobility needed to support a strong regional economy.

Comment: The Metropolitan Washington Air Quality Committee (MWAQC) provided written comment in its March 15, 2013 letter. The letter states that the MWAQC concurs that the transportation-sector emissions associated with the transportation plans meet the approved motor vehicle emissions budgets for ozone season pollutants and carbon monoxide, and are no greater than the 2002 levels for fine particles pollutants, as is necessary to meet conformity requirements. The Committee points out that the recently approved budgets were developed for the 1997 ozone standard and are several years old, and that the budgets do not reflect levels of emissions required to achieve the new lower 2008 ozone standard. The new lower standard is 75 parts per billion (ppb), and the region's air quality monitors show levels of 87 ppb. The Committee cautions that the region faces a challenge in meeting the new standard, and that there should be a continued effort to reduce emissions across all sectors in order to meet the 2015 attainment deadline. MWAQC emphasizes the need for new federal emission control programs such as Tier 3. It urges the TPB's continued investment in programs to mitigate future growth in vehicle emissions. The Committee also urges the TPB to maintain its commitments to TERMS and other emissions reduction measures, and suggests that these efforts are essential for meeting the 2008 ozone standard, and potential more stringent standards in the future.

Response: The TPB appreciates MWAQC's concurrence that the amended air quality conformity analysis of the 2012 CLRP and FY2013-2018 TIP meets all of the required emissions tests. Conformity requirements indicate that the region must show adherence to the budgets most recently found adequate by EPA, even if those budgets are not associated with the current standard. The TPB is aware of the new, more stringent ozone standard, and agrees that the region should continue its effort to reduce emissions across all sectors. The TPB concurs that federal emission control programs can be beneficial, and agrees with MWAQC on the need for continued investment in public transit, ridesharing, and other programs to reduce emissions. The TPB supports maintenance of commitments to TERMS and other emissions reduction measures.

The TPB will be asked to approve the amended conformity analysis of the 2012 CLRP and FY2013-2018 TIP at its March 20<sup>th</sup> meeting.



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley  
Governor

Robert M. Summers, Ph.D.  
Secretary

Anthony G. Brown  
Lieutenant Governor

March 14, 2013

The Honorable Scott K. York, Chair  
National Capital Region Transportation Planning Board  
777 North Capitol Street, NE  
Washington, D.C. 20002

Dear Chair York:

The purpose of this letter is to provide comments on the Amendment to the December 19, 2012 Air Quality Conformity Update of the 2012 CLRP & FY2013-2018 TIP as requested in the February 20, 2013 memorandum from Jane Posey.

The Maryland Department of the Environment (MDE) concurs and supports the conformity finding. We applaud the Transportation Planning Board (TPB) for its continuing efforts to be creative and innovative in identifying and implementing programs to meet the area's mobility needs to protect public health and help improve air quality.

We are very concerned over the need to better communicate the challenges the region faces in meeting the new health based standard for ground level ozone. This standard is very stringent and calls for clean air in the Washington area starting in the summer of 2013.

The budgets used in the current conformity process were set for the old 1997 ozone standard. There is currently no conformity budget for the new ozone standard. Preliminary technical analysis completed by the Ozone Transport Commission (OTC) indicates that significant additional emission reductions from stationary, area and mobile sources will be needed to meet the new ozone standard. This work suggests that mobile source emissions of nitrogen oxide (NO<sub>x</sub>) in the Washington area will need to be reduced to levels in the 45 to 50 tons per day (tpd) range for the region to record clean air. Under the Clean Air Act, the Washington area has a 2015 attainment date for this new standard, which means the area's monitors need to measure clean air in 2013, 2014 and 2015. The projected NO<sub>x</sub> emissions in 2015 from the current conformity analysis are 87.9 tpd.

The challenge faced by the region to meet the new standard and protect public health is daunting. We encourage the TPB to continue working with the Metropolitan Washington Air Quality Committee and the states to better communicate this very difficult challenge.

Thank you again for the opportunity to comment on the draft conformity analysis.

Sincerely,

George S. (Tad) Aburn, Jr., Director  
Air & Radiation Management Administration

5

# Metropolitan Washington Air Quality Committee

---

Suite 300, 777 North Capitol Street, N.E. Washington, D.C. 20002-4239 202-962-3358 Fax: 202-962-3203

March 15, 2013

Honorable Scott K. York, Chair  
National Capital Region Transportation Planning Board  
777 North Capitol Street, NE  
Washington, D.C. 20002

Dear Chair York:

Thank you for providing an opportunity to the Metropolitan Washington Air Quality Committee (MWAQC) to comment on the amended Air Quality Conformity Update for the 2012 Constrained Long Range Plan (CLRP) and the FY2013-2018 Transportation Improvement Program (TIP). MWAQC understands that this amendment is being done to include the 2009 attainment plan and the 2010 contingency plan mobile budgets in the updated 2012 CLRP & FY2013-2018 TIP. These mobile budgets were part of the State Implementation Plan (SIP) for the Washington DC-MD-VA nonattainment region for the old 1997 8-hour ozone standard of 84 parts per billion (ppb), which was submitted as part of the Attainment Plan in 2007. The above mobile budgets for Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) were found to be adequate by the U.S. Environmental Protection Agency (EPA) for transportation conformity purposes on Feb 7, 2013 for the purposes of meeting the 1997 8-hour ozone standard.

MWAQC has reviewed the draft amended Air Quality Conformity assessment and concurs that the transportation-sector emissions associated with the proposed transportation plans meet the approved motor vehicle emissions budgets (MVEBs) for the old 1997 8-hour ozone standard (84 ppb), in addition to meeting the approved motor vehicle emissions budgets for the carbon monoxide standard and the interim base year 2002 emissions tests for the annual fine particulate matter (PM<sub>2.5</sub>) standard. However, it should be noted that even the new budgets that were recently approved by EPA are several years old and don't reflect levels of emissions required to achieve the new lower ozone standard.

The region is now working toward meeting a new more stringent 2008 ozone standard of 75 ppb, for which the region is designated as marginal nonattainment. The deadline for meeting this 75 ppb standard is 2015. Moreover, EPA has initiated a process to review the new 2008 ozone standard and may propose in the next year to make it even more stringent. Ambient data from the region's air quality monitors shows 8-hour ozone design value concentrations are now at 87 ppb. With current air quality levels significantly above the 2008 ozone standard, the region faces a challenge in meeting new lower clean air standards. The region should continue to make progress to reduce emissions across all sectors to achieve lower ozone concentrations, in order to meet an attainment deadline of 2015 (with compliance determined based on air quality readings for the summers of 2013 through 2015), as required for areas designated as marginal nonattainment.

As noted in our December 5, 2012 comment letter to the National Capital Region Transportation Planning Board (TPB), MWAQC emphasizes the need for new federal emission control programs such as Tier 3 to reduce emissions from future fleets. Further, we urge TPB's continued investment in public transit, ride-sharing, and transit-oriented development to mitigate future growth in vehicle emissions. We also strongly urge TPB to maintain its commitments to Transportation Emission Reduction Measures and other emission reduction measures. All of these efforts are essential to meet the 2008 ozone standard and potentially more stringent ozone and fine particle standards expected in the future.

Thank you again for the opportunity to comment on the draft conformity analysis.

Sincerely,



Hon. Leta Mach, Chair  
Metropolitan Washington Air Quality Committee



EXHIBIT 16

**AIR QUALITY CONFORMITY UPDATE AMENDMENT**

**Summary Table - 8-Hour Ozone Nonattainment Area**

**Mobile Source Emissions Inventories  
for 2012 CLRP and the FY 2013-2018 TIP  
(Tons/Day)**

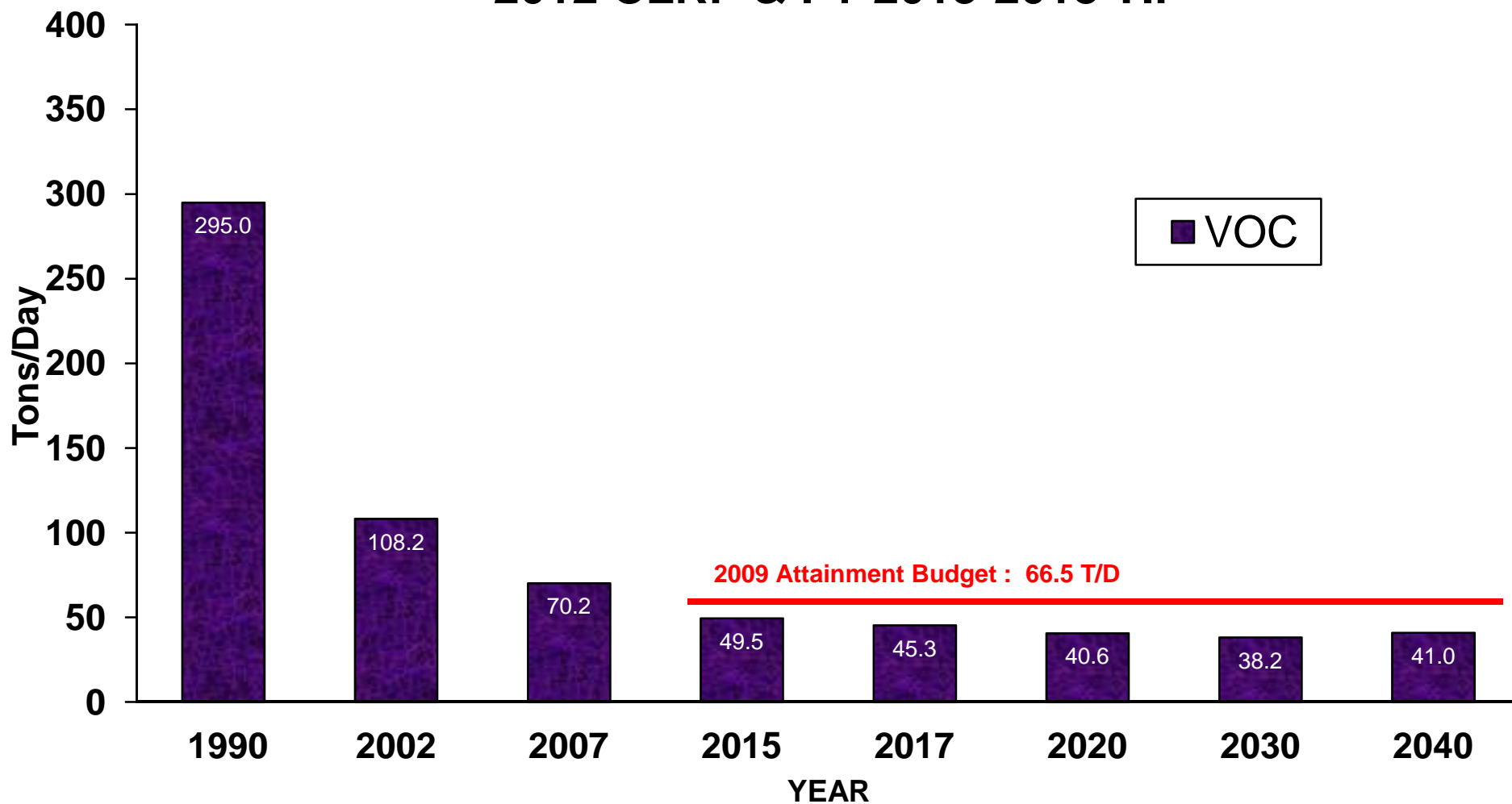
	2002		2007		2015		2017		2020		2030		2040	
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
<b>I Network</b>														
Start	18.66	9.46	10.47	5.66	6.76	3.98	6.13	3.20	5.49	2.46	5.10	1.89	5.28	1.94
Running	54.72	219.02	33.01	142.85	23.37	73.34	21.88	57.24	20.47	41.88	21.19	29.33	22.90	29.71
Soak	8.53	-----	7.80	-----	6.16	-----	5.53	-----	4.71	-----	3.86	-----	4.07	-----
<b>II Off-Network</b>														
Diurnal	2.36	-----	2.05	-----	1.37	-----	1.21	-----	1.07	-----	0.71	-----	0.80	-----
Resting Loss	11.93	-----	9.43	-----	6.75	-----	5.91	-----	4.52	-----	3.02	-----	3.41	-----
Local Roads	9.91	11.39	5.96	7.89	4.06	4.47	3.78	3.64	3.52	2.87	3.59	2.40	3.79	2.50
School Buses	0.42	5.97	0.43	5.64	0.27	3.10	0.25	2.61	0.22	1.92	0.17	0.63	0.16	0.27
Transit Buses	0.38	6.51	0.25	5.36	0.17	2.46	0.14	1.85	0.13	1.28	0.13	0.44	0.13	0.28
Auto Access	1.29	1.59	0.77	0.94	0.45	0.58	0.52	0.49	0.47	0.41	0.43	0.35	0.45	0.37
<b>Total</b>	108.20	253.93	70.17	168.35	49.45	87.93	45.34	69.02	40.60	50.82	38.20	35.04	40.99	35.05

Mobile Emissions Budgets:	66.50	144.30	66.50	144.30	66.50	144.30	66.50	144.30	66.50	144.30	66.50	144.30	66.50	144.30
Budget Adherence Margin:	17.05	56.37	21.16	75.28	25.90	93.48	28.30	109.26	25.51	109.25				

# EXHIBIT 20

## AIR QUALITY CONFORMITY UPDATE **AMENDMENT**

### Mobile Source VOC Emissions for the 8-Hour Ozone Nonattainment Area 2012 CLRP & FY 2013-2018 TIP



# EXHIBIT 21

## AIR QUALITY CONFORMITY UPDATE AMENDMENT

### Mobile Source NOx Emissions for the 8-Hour Ozone Nonattainment Area 2012 CLRP & FY2013-2018 TIP

