

**5.2.1 Mobile Budgets (cont.)**

As required by the transportation conformity rule, this maintenance plan establishes on-road mobile source emissions budgets for NO<sub>x</sub> and PM<sub>2.5</sub>. These budgets represent the level of mobile source emissions that can be emitted in the area while supporting the air quality plan. The mobile source budgets established by this plan are presented in Table 5-4 and Table 5-5.

This maintenance plan provides a two-tiered approach for the motor vehicle emissions budgets (MVEBs). This approach will be applied in future conformity analyses supporting the 1997 annual PM<sub>2.5</sub> standard and uses transportation buffers<sup>1</sup> to accommodate future transportation conformity determinations.

The initial Tier 1 MVEBs for PM<sub>2.5</sub> and the precursor NO<sub>x</sub> established for 2017 (interim year) and 2025 (out year) are based on mobile emissions inventory projections for 2017 and 2025. One exception is the PM<sub>2.5</sub> budget for 2025 which adds a transportation buffer of 28 tons per year (tpy) of PM<sub>2.5</sub> emissions to the budget to accommodate current inventory projections for 2040. The Tier 1 MVEBs will be in effect once the maintenance plan budgets are determined to be adequate.

The Tier 2 MVEBs have been developed by adding a 20% transportation buffer to the mobile emissions inventory projections for PM<sub>2.5</sub> and NO<sub>x</sub> in 2017 and 2025. The buffers will add 357 tpy of PM<sub>2.5</sub> and 8,342 tpy of NO<sub>x</sub> to the 2017 emission inventories, and 264 tpy of PM<sub>2.5</sub> and 5,480 tpy of NO<sub>x</sub> to the 2025 emission inventories to develop the Tier 2 MVEBs. The overall emissions inventories even with these buffers remain below the maintenance year caps for both pollutants. In the near term, mobile source emissions are rapidly decreasing due to the implementation of the NLEV, and HDDV rules, even as VMT continues to grow. Once these rules have sufficiently penetrated the fleet, growth in VMT begins to push mobile emissions back on an upward trend. The transportation buffers are provided to accommodate technical uncertainties primarily due to model changes and to vehicle fleet turnover that may affect future motor vehicle emissions inventories. Tier 2 MVEBs become effective if it is determined that one or more of these uncertainties lead to motor vehicle emissions estimates above the Tier 1 MVEBs. This determination will be made through the interagency consultation process and will be fully documented in the first conformity analysis that utilizes the Tier 2 budgets.<sup>2</sup>

Table 5-4 provides details of the Tier 1 MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> for 2007, 2017, and 2025. Table 5-5 provides details of the Tier 2 MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> for 2007, 2017, and 2025. The transportation buffers listed in the tables below use emission reductions achieved but not needed to maintain compliance with the standard after the attainment year.

<sup>1</sup> Section 93.124(a) of the Code of Federal Regulations (CFR) allows for the use of conformity buffers (or safety margins) in setting motor vehicle emissions budgets.

<sup>2</sup> District of Columbia: <http://www.dcregs.dc.gov/Gateway/ChapterHome.aspx?ChapterNumber=20-15> (See Rule 20-1507)

Maryland: <http://www.dsd.state.md.us/comar/SubtitleSearch.aspx?search=26.11.26>

Virginia: <http://www.deq.state.va.us/Portals/0/DEQ/Air/Regulations/C151-TRN.pdf> (9VAC5-151-70)

Transportation Planning Board: [http://www.mwcog.org/store/item.asp?PUBLICATION\\_ID=233](http://www.mwcog.org/store/item.asp?PUBLICATION_ID=233)

## PM2.5 Maintenance Plan DRAFT Motor Vehicle Emissions Budgets

*Table 5-4: Washington DC-MD-VA Maintenance Plan Tier 1 On-Road Mobile Source Emissions Budgets*

Year	NO <sub>x</sub> On-Road Emissions (tpy)	PM <sub>2.5</sub> On-Road Emissions (tpy)
<b>2007 Attainment Year</b>	91,639	3,452
<b>2017 Interim Budget</b>	41,709	1,787
2025 Predicted Emissions	27,400	1,322
Transportation Buffer	---	28
<b>2025 Final Budget</b>	27,400	1,350

*Table 5-5: Washington DC-MD-VA Maintenance Plan Tier 2 On-Road Mobile Source Emissions Budgets*

Year	NO <sub>x</sub> On-Road Emissions (tpy)	PM <sub>2.5</sub> On-Road Emissions (tpy)
<b>2007 Attainment Year</b>	91,639	3,452
2017 Predicted Emissions	41,709	1,787
Transportation Buffer	8,342	357
<b>2017 Interim Budget</b>	50,051	2,144
2025 Predicted Emissions	27,400	1,322
Transportation Buffer	5,480	264
<b>2025 Final Budget</b>	32,880	1,586

Calculated as a percentage of total emissions, the transportation buffer for the 2017 Tier 2 PM<sub>2.5</sub> MVEB is 1.9% of the total PM<sub>2.5</sub> inventory and for the 2017 Tier 2 NO<sub>x</sub> MVEB is 9.2% of the total NO<sub>x</sub> inventory. For 2025, the transportation buffer for the Tier 2 PM<sub>2.5</sub> MVEB is 1.5% of the total PM<sub>2.5</sub> inventory and for NO<sub>x</sub> is 7.4% of the total NO<sub>x</sub> inventory.

The Washington DC-MD-VA area commits to evaluating and submitting, as a revision to the 1997 PM<sub>2.5</sub> NAAQS maintenance plan, updated annual 2017 and 2025 MVEBs for NO<sub>x</sub> and PM<sub>2.5</sub> by the end of 2015.

### 5.2.2.4 Future Control Strategies

The Washington DC-MD-VA area commits to begin planning to identify appropriate strategies to help the area achieve and maintain compliance with a potential bump-up of the region to a moderate classification for the 2008 ozone NAAQS, and with any future ozone NAAQS. This planning process will include, but is not limited to, the development of a preliminary 15% Rate of Progress Plan for the 2008 ozone NAAQS.

The Washington DC-MD-VA area will work with jurisdictions and EPA to demonstrate the feasibility of (and get SIP credit for) achieving reductions across the entire region from market

## PM2.5 Maintenance Plan DRAFT Motor Vehicle Emissions Budgets

forces that will result in cleaner products being distributed across the entire region even when the regulations driving the cleaner products have only been adopted in a part of the region.

Maryland and the District of Columbia will work to pursue at least five new regulations to insure that, to the extent the transportation buffers are needed, there is no degradation of environmental protection in the Maryland and District of Columbia portion of the nonattainment area. These new measures will also begin the process of further reducing ozone and fine particle levels in the region to ensure that public health is protected. Maryland and the District agree with the scientific community who believe that more stringent ozone and fine particle standards are needed. The new regulatory programs include low sulfur home heating fuel, enhancements to current controls on consumer products and industrial adhesives, off-road idling, and tougher requirements for smaller diesel generators. The commitments made by Maryland and the District will not be construed to infringe upon any prerogative of the Commonwealth of Virginia.

Virginia will pursue measures that are necessary to attain and maintain current and future air quality standards as well as measures that may decrease the burden on regulated parties. For instance, Virginia is committed to pursue measures such as the on-road emissions program, which will ensure that up to 30 percent of all eligible registered vehicles in the Northern Virginia area have the option of remotely passing required biennial vehicle emissions inspections by 2015. The increased level of on-road monitoring could also result in the early identification and repair of high emitting vehicles so that this program will maintain environmental protections as well as reduce the time required for station-based tests. Virginia is also committed to supporting voluntary efforts to reduce energy consumption through energy efficiency and renewable energy programs. Organizations, such as the nonprofit Local Energy Alliance Program (LEAP), run residential and commercial programs in Northern Virginia that seek to reduce energy use by at least 20 percent, saving consumers money, conserving resources, and decreasing air emissions.