

**TCM Update - 2009 PM2.5 Emissions Estimates (tons/year)
Of TCMs & Vehicle / Fuel Technology Measures
In The Severe Area Ozone SIP For Inclusion In The PM2.5 SIP**

Ref #	Description	Emissions (Annual) t/yr		Project Category #
		2009		
		PM2.5	Pre-NOx	
TCMs				
DC-1	Bicycle Lane in D. C. (8 miles)	0.0102	0.5991	C
DC-3	Bicycle Racks in D.C. (150 Racks)	0.0012	0.0865	C
MD-2	Transit Parking Facilities	0.0342	1.4939	C
MD-3	MARC Replacement/Expansion Coaches	0.3799	16.5990	C
MD-4	Bicycle Facilities	0.0076	0.3320	C
MD-5	Park and Ride Facilities	0.0722	3.1538	C
MD-6	Grosvenor Metro Garage	0.0589	2.5728	C
MD-7	Maryland Park-and-Ride Lots (Recent Additions)	0.0650	2.8384	C
NV-1	Northern Virginia Districtwide Park-And-Ride Spaces	0.3039	13.2792	C
NV-2	Transit Access Improvements (VRE Parking Spaces)	0.1482	6.4736	C
NV-4	Improved Pedestrian Access	0.0076	0.3320	C
NV-5	Construction of Bus Shelters (12)	0.0038	0.1660	C
NV-6	Park & Ride Spaces (New)	0.3474	13.7446	C
NV-7	Bicycle Lanes/Trails in Northern Virginia (12 miles)	0.0153	0.8981	C
NV-8	Bicycle Lockers in Northern Virginia (VDOT)	0.0024	0.1037	C
NV-10	Bicycle Trails/Lanes in Northern Virginia (29 miles)	0.0370	2.1719	C
NV-11	Sidewalk improvements in Northern Virginia (1.5 miles)	0.0022	0.1263	C
WM-1	Bicycle Racks on Buses (1458 racks)	0.0495	2.1738	C
TCM subtotal		1.5462	67.1446	
Vehicle Technology Based, Fuel Based And Maintenance Based Measures				
DC-2	New CNG Powered Trash Trucks (2 Vehicles)	0.0084	0.6629	SP
MD-1	Maryland Suburban Bus Replacements	0.0950	7.5330	SP
NV-3	Purchase Of New Transit Buses (WMATA)	0.2545	20.1883	SP
NV-9	Hybrid light Duty Vehicles (25 vehicles)	0.0034	0.2712	SP
NV-12	11 New CNG Buses in place of Diesel Buses	0.0661	5.2429	SP
WM-2	ULSD; CRT Filters (886 buses)	-	-	H
WM-3	CNG Buses (164 buses)	0.6055	48.0301	SP
Veh Tech subtotal		1.03	81.93	
Grand Total		2.58	149.07	

: TR - Traffic Stream, C - Commute, H - Engine Technology (Heavy Duty Vehicles), SP- Specific Vehicle Type
Projects for which VT & VMT are not available; emissions estimates are carried out using ratios.