Appendix

# Analysis of Potential Mobile Source Measures \* \* \*DRAFT March 2006\* \* \*

last updated March 1, 2006

Measure Name	Definition	RACM	Reason
			I
CAL LEV II Standards	Adopt CAL LEV II Standards, which will require increased zero emission vehicles with marginal VOC and CO2 reductions in 2010.	No	Will not provide reductions by M 2008
Expand Remote Sensing Program	Expand the Adoption of a Remote Sensing Program to DC and MD.	No	Will not provide reductions by M 2008
OTC Corridor Strategy	Implement Truck Stop electrification projects and Heavy-Duty Engine Engine Control Module (ECM) Recalibration (chip reflash) along the I-95 corridor.	No	No creditable emission reducti
Clean Vehicle Purchases	Accelerate adoption of alternative fueled vehicles. Target a variety of fleet and vehicle types.	No	No creditable emission reduct
Voluntary Diesel Retrofits	Implement voluntary diesel retrofit programs. Target a variety of fleet and vehicle types.	No	No creditable emission reduct
Mandatory Diesel Retrofit Program	Require retrofit of onroad diesel vehicles. Target a variety of fleet and vehicle types.	No	Will not provid reductions by M 2008
Rebate for Purchase of Hybrid Vehicles	Issue rebate for purchase and registration of hybrid vehicles.	No	No creditable emission reduct
Zero I/M waivers and exemptions	Eliminate all waivers and exemptions in the I/M program.	No	Will not provid reductions by N 2008
Fleet ILEV for light-duty gasoline vehicles	Require fleets operating in nonattainment area to be comprised of a percentage of Inherently Low Emission Vehicles (ILEV).	No	Will not provid reductions by N 2008
Expand I/M Requirements to Upwind Counties	Expand Inspection and Maintenance Requirements.	-	Under Discussio IAQC
Control Vehicle Idling	No Idling Rule – Restriction. Limits idling to 5 minutes for all non-commercial, consumer operated vehicles within the Washington NAA. Establish exemptions where required.	No	Will not provid reductions by M 2008
Enhanced Enforcement of Mobile Source Regulations	Increase smoking vehicle enforcement.	No	No creditable emission reduct
Enhanced Enforcement of Vehicle Idling	Step-up enforcement of existing regulations to prevent extended vehicle idling.	No	No creditable emission reduct
Enhanced Enforcement: Speed Limits	Increase speed limit enforcement so that more vehicles are traveling at or below the posted limit.	No	No creditable emission reduc
Vehicle Share Programs	Develop vehicle share programs.	No	No creditable emission reduc
On-road Heavy-Duty Diesel Smoke Testing and I/M Program	Implement a smoke testing and/or Inspection/Maintenance Program for On-road Heavy-duty Diesel Engines.	No	Will not provic reductions by N 2008
Control Bus Emissions	Provide electrified parking spaces for tour buses.	No	No creditable emission reduct
Control Delivery Truck Emissions	Establish voluntary emission reduction program with delivery fleets.	No	No creditable emission reduc
"Cash for Clunkers" On-Road Vehicles	Fund voluntary program paying vehicle owners to turn in old vehicles for scrappage.	No	Not economica feasible
Annual Gasoline Vehicle Pollution Fee	Levy an annual fee on petroleum-powered vehicles based on mileage driven and emission rates (odometer tax).	No	Will not provid reductions by N 2008

Graduated Car Tax	Charge higher car tax under a variety of different scenarios, including multiple cars and petroleum-based vehicles.	No	Will not provide reductions by May
Pay-as-you-drive auto insurance (\$/gal)	Offer auto insurance rates linked to number of gallons of fuel consumed by vehicle.	No	2008 vviii not provide reductions by May
Control VOC Content of Automotive Products	Windshield Wiper Fluid – lower VOC. Establish evaporative standards that are lower than those set by the EPA – 35 weight-percent VOC.	No	2008 Will not provide reductions by May 2008
Gasoline Engine Retrofit Program	Retrofit with 3-way catalysts on gasoline-burning heavy duty trucks that currently have 2-way catalysts or no catalysts.	No	No creditable emission reduction
Motorcycle I/M Program	End the motorcycle smog check exemption.	No	Will not provide reductions by May 2008
"Cash for Clunkers" Gas Caps Program	Provide free replacement gas caps to light- and medium-duty vehicle owners.	No	No creditable emission reduction
Electric Vehicle Tax Incentives	Establish incentives to purchase electric vehicles.	No	No creditable emission reduction
Truck Idling Reduction: Truck Stop Electrification (TSE)	Implement Projects to Electrify Truck Stops.	No	No creditable emission reduction
Truck Idling Reduction: Auxilliary Power Units (APU)	Increase Market Penetration of APUs to Reduce Truck Idling.	No	No creditable emission reduction
Improve Truck Fleet Efficiency	Encourage Adoption of Technologies that Increase Truck Fleet Efficiency.	No	No creditable emission reduction
Increase Intermodal Transport	Increase Use of Intermodal Options for Transporting Goods.	No	No creditable emission reduction
Control Heavy Duty Diesel Engines	Heavy-Duty Engine Engine Control Module (ECM) Recalibration (chip reflash).	No	No creditable emission reduction
Augment Diesel I/M Program	Augment truck and bus inspections with community-based inspections.	No	No creditable emission reduction
Establish Restricted Zones in Downtown Areas and Transit Centers	Restrict private vehicle use in certain areas during business hours, encouraging pedestrian, bicycle, and transit use.	No	Not economically feasible
Biodiesel Fuel	Expand use of biodiesel fuel for on-road vehicles.	No	No creditable emission reduction
CARB Diesel Fuel	Implement CARB diesel fuel standards.	No	Will not provide reductions by May 2008 vviii not provide
High Cetane Fuel	Require High Cetane Diesel Fuel for On-road Vehicles.	No	reductions by May
Low-NOx Diesel Fuel	Require regional use of low-NOx fuel additives for on-road diesel vehicles	No	Will not provide reductions by May 2008
Fuel Additives to Reduce Emissions	Use emulsified diesel fuel in diesel-burning heavy duty vehicles.	No	Not enforceable
Gas Tax Increase	Implement a fuel tax on on-road gasoline.	No	Not economically feasible
Diesel Tax Increase	Implement a fuel tax on on-road diesel.	No	Not economically feasible
Expand HOV Network on the Freeway System	Construct additional HOV lanes on regional freeways.	No	Will not provide reductions by May 2008
Manage Roadway Usage: CAPCOM	Regional Travel Information System/Driver Assistance. Enhance real time traffic information to allow drivers to make better decisions about when and where to travel. CAPCOM.	No	No creditable emission reductions

Replace Traffic Signals with Lesser Controls	Install roundabouts in place of signals at low volume intersections.	No	No creditable emission reductions
Signals to Flashing Yellow 12am-5am	From midnight until 5am, set intersection signals to flashing yellow in predominant direction and flashing red in minor direction for all low volume intersections where safety permits.	No	No creditable emission reductions
Traffic Signal Optimization	Regularly optimize traffic signals to reduce idling and low-speed emissions.	No	No creditable emission reductions
Build Park & Ride Lots at Major Intersections of Commuter Highways	Construct new park & ride commuter lots along HOV facilities.	No	No creditable emission reductions
Extend Ramp Metering	Install signals to control flow of vehicles at selected freeway ramp entrances to maintain level of service.	No	No creditable emission reductions
Permit Right Turn on Red	Reduce vehicle idling time by permitting right turn on red, where safety allows.	No	No creditable emission reductions
Manage Roadway Usage: No Drive Days	Odd/Even License Plate no Drive Days. Prohibit drivers from traveling during certain periods, based on vehicle tags or other easily identifiable criteria. Can be a permanent or episodic control.	No	No creditable emission reductions
Congestion Pricing on Low Occupancy Vehicles	Impose a fee on vehicles containing two or fewer persons that use designated roadways during the peak AM period.	No	Will not provide reductions by May 2008
Value Pricing	Restricted Access/ "Green Curb". Differential fees and access permits applied on roads, tunnels, bridges and delivery/loading zones during periods of high congestion.	No	Will not provide reductions by May 2008
Mobile Source Mitigation Fees: Entry Fees	Collect fees and tolls from drivers to use roads or enter areas.	No	Will not provide reductions by May 2008
Transportation Funding Initiatives	Require that Congestion Mitigation Air Quality (CMAQ) funds be used only for projects that significantly improve air quality.	No	No creditable emission reductions
Establish Clean Air Fund	Sell Clean Air License Plates to fund air quality programs (similar to "Save the Bay" tags).	No	No creditable emission reductions
Electronic Tolling	Expand interoperability of electronic tolling systems.	No	No creditable emission reductions
Control Vehicle Speeds: Automated Enforcement	Automate speed enforcement and lower the speed limit to 55 mph for heavy duty vehicles.	No	No creditable emission reduction
Control Vehicle Speeds: Lower Limits	Speed Limit Restriction: Regional speed limit of 55 mph on all roads which previously had posted speeds of greater than 55 mph.	No	No creditable emission reductions
Manage Roadway Usage: Dedicated Bus Lanes	Dedicate roadway lanes for use by buses.	No	No creditable emission reductions

Convenience Commercial Centers in Residential Areas	Change zoning ordinances to allow neigborhood-serving retail establishments in residential areas.	No	No creditable emission reductions
Incentives for Mixed Use at Transit Centers	Include incentives for mixed-use development at transit centers to reduce sprawl and VMT.	No	No creditable emission reductions
Infill Development	Implement an infill development program throughout the Washington region.	No	No creditable emission reductions
Proximity Commute: Job Swap	Encourage employees of the same firm to swap jobs, permitting each to work at a location closer to home.	No	No creditable emission reductions
Shorter Distance from Buildings to Bus Stops	For existing buildings, re-route traffic to allow buses to come closer to the building. For new buildings, alter setback requirements to allow closer bus access.	No	No creditable emission reductions
Smart Growth and Infill Development Programs	Encourage development/redevelopment of land in designated growth areas, encouraging local governments to place greater emphasis on land development near transit stations.	No	No creditable emission reductions
Telecommuting Centers and Telework Program	Telecommuting centers, including marketing activity, consultant support, commuter and employer information and assistance.	No	No creditable emission reductions
Telecourses at Local Colleges and Universities	Encourage local colleges and universities to offer telecourses to reduce vehicle trips.	No	No creditable emission reductions
Restrict Construction of New Parking	Restrict construction of new parking at employment centers based on distance from transit and urban core.	No	No creditable emission reduction
ATM Machines Installed at Metro Stations	Install ATMs near metro stations for rider convenience.	No	No creditable emission reductions
Automatic Bus Locator System	System would provide bus location information to WMATA dispatchers. This would decrease wait time and improve on- time arrival/departure.	No	No creditable emission reductions
Clean Commute/Try Transit Week	Promotes use of alternative transportation, including transit, by daily commuters for one week per year.	No	No creditable emission reductions
College 33 Pass System	Expand Baltimore college bus fare program to DC area. Program allows students to receive reduced fares near 19 participating schools in the region.	No	No creditable emission reductions
Discount Multi-Trip Bus Fares	Introduce discount programs reducing cost of multiple bus rides through purchase of pass books (e.g. 10-trip tickets).	No	No creditable emission reductions
Additional Transit Stores	Establish additional stationary transit stores in the region.	No	No creditable emission reductions
Subsidize Transit Usage	Expand Metro Check to all County Employees	No	Not economically feasible
Expand Peak Period Metrorail Service	Extend peak-period service on Metrorail so trains run more frequently between 6-11 am and 3-8 pm.	No	No creditable emission reductions
Expand VRE Train Service	Expand VRE train service to include additional departures.	No	No creditable emission reductions
Express Buses From Outyling Areas	Implement direct bus service from outlying Park & Ride lots and far suburbs to major work centers.	No	No creditable emission reductions

Flat Fare For All Transit Trips	Single price all public transit services with free transfers all day, 7 days per week.	No	Not economically feasible
Free Bus Service Off-Peak	Institute free off-peak bus service from 10-2 on weekdays and all day on weekends.	No	Not economically feasible
Free bus-to-rail / rail-to-bus transfers	Institute free bus-to-rail transfer similar to free rail-to-bus transfer currently in place.	No	Not economically feasible
Free Rail Use 10-3	Free Metrorail trips for all riders from 10AM-3PM on weekdays.	No	Not economically feasible
Free Transit Passes to Students	Free transit passes for high school and college students, subsidized by schools or through student registration fee.	No	Not economically feasible
Half Price Fares on Feeder Bus Service	All metro bus and local bus services to Metrorail and commuter rail stations reduce fares by half.	No	Not economically feasible
Increase Commuter Rail Frequency	Increase frequency of MARC service to every 15 minutes on Penn and Camden lines and every 10 min on the Brunswich line. Increase VRE frequency to every 15 minutes.	No	No creditable emission reductions
Metrorail Feeder Bus Service & Fare Buydown	Improve Metrorail feeder bus service at underutilized park & ride lots, implement fare buydown program.	No	Not economically feasible
New MARC Coaches	Purchase additional coaches for MARC to accommodate increased ridership.	No	No creditable emission reductions
New Surface Parking at Transit Centers	Add new parking spaces at transit centers (bus, Metrorail, MARC) parking lots.	No	No creditable emission reductions
Provide Additional Transit Service to Core	Increase funding for transit services to expand core service.	No	Will not provide reductions by May 2008
Provide Additional Transit Service Access	Increase funding for enhancing access to transit services.	No	No creditable emission reductions
Real-Time Bus Schedule Information	Expand trials of real-time bus schedule information to local transit providers.	No	No creditable emission reductions
Reduce Parking Fees at Facilities Outside the Beltway Adjacent to Metro	Reduce parking fees at Metro parking facilities or county/city managed facilities outside of the Beltway that are located near Metro stations.	No	No creditable emission reductions
Regional Bus Service Expansion	Expansion of Metrobus and other regional bus services.	No	No creditable emission reductions
Support Rail to Dulles Airport	Provide funding to expand rail services to Dulles Airport.	No	Will not provide reductions by May 2008
Transit Prioritization Queue Jumps	Provide queue jumps for buses at over-capacity signalized intersections throughout the region. Queue jumps allow buses to use a shoulder or other designated lane to bypass intersection queues and move forward towards the stop line.	No	No creditable emission reductions
Universal Transportation Access	SmarTrip card will allow users to pay fares on all rail and bus systems in the region (including parking in Metrorail lots) using one electronic card.	No	Not economically feasible

WMATA Bus Information Displays with Maps	Install additional information boxes with maps and schedule information. Would include schedules in languages other than English in neighborhoods where most residents speak another language.	No	No creditable emission reductions
Rush Hour Shift	Shift Metrorail AM and PM rush hours to start 30 min earlier and end 30 min later.	No	No creditable emission reduction
Employer Metro Shuttle Bus Services	Provide incentives for businesses to provide employee shuttle service to the nearest rail or transit stop.	No	No creditable emission reduction
Eliminate or Restrict Airport Parking	Eliminate airport parking and replace with alternative fuel shuttle buses.	No	No creditable emission reduction
Bicycle Racks in DC	Install bicycle racks at various locations throughout the region.	No	No creditable emission reductions
Bike Lockers at Metro Stations, Park & Ride Lots, Other Locations	Expand existing bike lockers at Metrorail stations, install bicycle storage spaces in parking lots.	No	No creditable emission reduction
Bike Racks on Transit Buses	Provide external bike racks on WMATA and other local transit buses.	No	No creditable emission reduction
Bike/Pedestrian Paths	Fund construction of additional bicycle/pedestrian paths in the region.	No	No creditable emission reduction
Employers Provide Free Bicycles for Midday Use	Require employers to provide one bicycle per 50 employees for mid-day business or personal use.	No	No creditable emission reduction
Bike to Work Day	Conduct a one-day bike to work event. Provide outreach activities, education on the bike-to-work option, and assistance in trying bike-to-work.	No	No creditable emission reduction
Safe Routes to School Program	Implement a safe pedestrian and bicycle routes to school program to reduce VMT.	No	No creditable emission reduction
Improvements to Bicycle and Pedestrian Access	Provide incentives to developments that speed improvements to bicycle/pedestrian access. This includes improvements to sidewalks, curb ramps, crosswalks, lighting, etc.	No	No creditable emission reduction
Enhance Pedestrian Facilities	Improve pedestrian facilities throughout region (e.g., Richmond Highway Corridor).	No	No creditable emission reduction
Mobile Commuter Stores	Fund mobile commuter stores in suburban commercial areas.	No	No creditable emission reductions
4 Day Work Week/Flexible Work Schedules	Encourage employers to adopt a shorter work week, with employees working 4 10-hour days.	No	No creditable emission reductions
Access to Jobs Program	Identifies gaps in transit service between places of residence and places of work for low wage workers.	No	No creditable emission reduction
Mandatory Employee Commute Reduction	Mandatory employer trip reduction to reduce employee vehicle trips.	No	Potential adverse impacts
Restrict Parking at Schools	Restrict high school students from driving to and parking at high schools when bus service is available.	No	No creditable emission reduction
Student & staff based college & university rideshare programs	Create rideshare program focused on students and staff at regional universities.	No	No creditable emission reduction
Vanpool Programs	Create programs and incentives designed to increase the number of vanpools in the region.	No	No creditable emission reduction
Commuter Parking Tax	Implement daily tax on employers or employees that match certain commuting/parking criteria.	No	Potential adverse impacts

Market Based Parking Charge at Federal Facilities	Negotiate agreement with federal government to charge market rate for daily parking for all employees.	No	No creditable emission reduction
Parking Impact Fee: All Parking	Levy annual impact fee on every parking space in nonattainment area.	No	Not economically feasible
Free Parking for Carpools/Vanpools	Provide free reserved parking spaces for all carpools or vanpools.	No	Not economically feasible
Employer Parking Cash-Out	Implement program encouraging or requiring employers to provide the value of subsidized parking to employees who use alternative commute strategies.	No	Not economically feasible
Remove Trash Trucks From Area Streets	Reduce use of trash trucks through transport of trash by barge.	No	No creditable emission reductions
Clean Air Partners: Air Quality Action Days	Take a variety of actions on Air Quality Action Days to reduce emissions and improve air quality (free transit, telework, carpool).	No	No creditable emission reductions
Clean Air Partners: Public Outreach and Education	Implement Strategic Communication Campaigns to Increase Public Awareness (reduce vehicle use).	No	No creditable emission reductions
Local Government Education Campaign	Implement Strategic Communication Campaigns to Increase Local Government Air Quality Improvement Efforts (reduce vehicle use).	No	No creditable emission reductions
Mass Marketing Campaign	Marketing effort involving business-to-business advertising campaign in print media and on world wide web.	No	No creditable emission reduction
Commuter Choice - State & Local Government Employees	Provide the region's local, state and municipal employees with transit benefits.	No	No creditable emission reductions
Commuter Choice Tax Credit	Employers subsidize employees' monthly transit or vanpool costs and receive a tax credit for incurred expenses.	No	No creditable emission reductions
Commuter Operations Center	Provides commuter assistance services, including carpool and vanpool ridematching.	No	No creditable emission reductions
Guaranteed Ride Home	Provides free rides home in event of unexpected emergency or unscheduled overtime to commuters using public transport.	No	No creditable emission reductions
Integrated Rideshare	Provides transit, park & ride, and telecenter information to all commuters on a matchlist.	No	No creditable emission reductions
Interactive Rideshare Kiosks	Transportation Information Kiosks in Maryland, Virginia and the District of Columbia.	No	No creditable emission reductions

# Measure -- CAL LEV II Standards

Quick Refer	ence:	CAL LE
Measure Name:		CAL LE

CAL LEV CAL LEV II Standards

#### Description:

Adopt CAL LEV II Standards, which will require increased zero emission vehicles with marginal VOC and CO2 reductions in 2010.

RACM Determination: Reason: No Will not provide reductions by May 2008

### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

### Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Any regulation mandating carbon emission reductions would be controversial.

· Year of first benefits is 2010.

### Summary Analysis

Reductions from CAL LEV II will not be be available by May 2008.

# Measure -- Expand Remote Sensing Program

Quick Reference: Measure Name: Remote Sensing Expand Remote Sensing Program Description:

Expand the Adoption of a Remote Sensing Program to DC and MD.

RACM Determination: Reason: No Will not provide reductions by May 2008

### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
stimated Reductions	

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Year of first benefits is 2009.

Summary Analysis

# Measure -- OTC Corridor Strategy

Quick Reference:	Corridors
Measure Name:	OTC Corridor Strategy
RACM Determination:	No
Reason:	No creditable emission reduction

#### Description:

Implement Truck Stop electrification projects and Heavy-Duty Engine Engine Control Module (ECM) Recalibration (chip reflash) along the I-95 corridor.

### **RACM Criterion Summary**

Estimated Cost Effectiveness Estimated Reductions

Yes
No
Yes
-
Yes
-

### Issues

 $\cdot$  Voluntary Measure. May be included as part of the Innovative Measures Bundle.

### · Consider mandatory chip reflash program.

· Year of first benefits is 2009 if mandatory.

#### Summary Analysis

# Measure -- Clean Vehicle Purchases

Quick Reference:	AFV Purchase
Measure Name:	Clean Vehicle Purchases
RACM Determination:	No
Reason:	No creditable emission red

#### **Description:**

Accelerate adoption of alternative fueled vehicles. Target a variety of fleet and vehicle types.

on reduction

### **RACM Criterion Summary**

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

### Issues

 $\cdot$  Voluntary Measure. May be included as part of the Innovative Measures Bundle.

· Year of first benefits is 2007.

Estimated Reductions	

### Summary Analysis

May be included in the voluntary bundle. Not RACM. No creditable emission reduction.

# Measure -- Voluntary Diesel Retrofits

Quick Reference: Measure Name: Vol Diesel Retrofit Voluntary Diesel Retrofits

#### Description:

Implement voluntary diesel retrofit programs. Target a variety of fleet and vehicle types.

RACM Determination: No Reason: No cred

No creditable emission reduction

### **RACM Criterion Summary**

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

### Issues

 $\cdot$  Voluntary Measure. May be included as part of the Innovative Measures Bundle.

#### · Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

#### Summary Analysis

May be included in the voluntary bundle. Not RACM. No creditable emission reduction.

# Measure -- Mandatory Diesel Retrofit Program

Quick Reference: Measure Name: Mand Diesel Retrofit Andatory Diesel Retrofit Program

Description:

Require retrofit of onroad diesel vehicles. Target a variety of fleet and vehicle types.

RACM Determination: Reason: No Will not provide reductions by May 2008

#### **RACM Criterion Summary**

-	
Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

#### Issues

Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Any regulation mandating onroad diesel vehicle retrofits would be controversial.

· Year of first benefits is 2009.

#### Summary Analysis

# Measure -- Rebate for Purchase of Hybrid Vehicles

Quick Reference: Measure Name: Hybrid Rebates Rebate for Purchase of Hybrid Vehicles Description:

Issue rebate for purchase and registration of hybrid vehicles.

RACM Determination: Reason: No No creditable emission reduction

### **RACM Criterion Summary**

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

### Issues

 $\cdot$  Voluntary Measure. May be included as part of the Innovative Measures Bundle.

 $\cdot$  Consider expanding program to cover clean diesel.

· Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

#### Summary Analysis

# Measure -- Zero I/M waivers and exemptions

Quick Reference: Measure Name: No Waivers Zero I/M waivers and exemptions Description:

Eliminate all waivers and exemptions in the I/M program.

RACM Determination: Reason:

Will not provide reductions by May 2008

### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

No

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Estimated Cost Effectiveness Estimated Reductions · Year of first benefits is 2009.

#### Summary Analysis

# Measure -- Fleet ILEV for light-duty gasoline vehicles

Quick Reference: Measure Name: Fleet ILEV Fleet ILEV for light-duty gasoline vehicles Description:

Require fleets operating in nonattainment area to be comprised of a percentage of Inherently Low Emission Vehicles (ILEV).

RACM Determination: Reason:

No Will not provide reductions by May 2008

#### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	No
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

#### Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Any regulation mandating fleet requirements would be controversial.

· Year of first benefits is 2009.

#### Summary Analysis

# Measure -- Expand I/M Requirements to Upwind Counties

Quick Reference: Measure Name: Upwind IM Expand I/M Requirements to Upwind Counties Description:

Expand Inspection and Maintenance Requirements.

RACM Determination: Reason:

Under Discussion at IAQC

### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

#### Issues

· This measure would require state-level regulation by Virginia or other upwind states.

 $\cdot$  This would require well over 12 months to develop, pass and require compliance with a regulation.

 $\cdot$  The IAQC is currently evaluating the potential for controls on upwind sources.

· If pursued, upwind sources would need to be added to the emissions inventory.

· Year of first benefits is 2009.

### Summary Analysis

The IAQC is currently evaluating the potential for controls on upwind sources.

# Measure -- Control Vehicle Idling

Quick Reference:	No Idling
Measure Name:	Control Vehicle Idling
RACM Determination:	No
Reason:	Will not provide reductions by May 2008

#### Description:

No Idling Rule – Restriction. Limits idling to 5 minutes for all noncommercial, consumer operated vehicles within the Washington NAA. Establish exemptions where required.

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	No

Estimated Cost Effectiveness	
Estimated Reductions	

### Issues

 $\cdot$  This measure would require either state-level regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Regulations restricting automobile idling would be difficult to enforce.

· Year of first benefits is 2009.

#### Summary Analysis

# Measure -- Enhanced Enforcement of Mobile Source Regulations

Quick Reference: Measure Name: Enforce Smoking Vehicles Enhanced Enforcement of Mobile Source Regulations

Description:

Increase smoking vehicle enforcement.

RACM Determination: Reason:

No creditable emission reduction

**RACM Criterion Summary** 

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	No

No

Issues

· Voluntary Measure.

· Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

#### Summary Analysis

# Measure -- Enhanced Enforcement of Vehicle Idling

Quick Reference: Measure Name: Enforce Idling Enhanced Enforcement of Vehicle Idling Description:

Step-up enforcement of existing regulations to prevent extended vehicle idling.

RACM Determination: No Reason: No

No creditable emission reduction

### **RACM Criterion Summary**

Yes
Yes
Yes
-
Yes
No

Issues

· Voluntary Measure.

 $\cdot$  Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

#### Summary Analysis

# Measure -- Enhanced Enforcement: Speed Limits

Quick Reference: Measure Name: Enforce Speed Limits Enhanced Enforcement: Speed Limits Description:

Increase speed limit enforcement so that more vehicles are traveling at or below the posted limit.

RACM Determination: No Reason: No c

No creditable emission reduction

### **RACM Criterion Summary**

Implementation by May 2008	Yes
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	No

Issues

· Voluntary Measure.

· Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

#### Summary Analysis

# Measure -- Vehicle Share Programs

Quick Reference: Measure Name:	Vehicle Sharing Vehicle Share Progran	IS	Description: Develop vehicle share programs.	
RACM Determination: Reason:	No No creditable emission	reduction		
DACM Criterian Summers				
RACM Criterion Summary		Issue	3	
Implementation by May 2008	Yes		s ntary Measure.	
-	Yes No			
Implementation by May 2008				

· Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

Yes

No

### Summary Analysis

No Adverse Impacts

Reductions >0.1 tpd

# Measure -- On-road Heavy-Duty Diesel Smoke Testing and I/M Program

Quick Reference: Measure Name: Onroad Smoke Test On-road Heavy-Duty Diesel Smoke Testing and I/M Program Description:

Implement a smoke testing and/or Inspection/Maintenance Program for On-road Heavy-duty Diesel Engines.

RACM Determination: Reason:

Will not provide reductions by May 2008

### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

No

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Estimated Cost Effectiveness	
Estimated Reductions	

· Year of first benefits is 2009.

#### Summary Analysis

# Measure -- Control Bus Emissions

Quick Reference: Measure Name:	Tour Bus Control Bus Emission	Description:           s         Provide electrified parking spaces for tour buses.
RACM Determination: Reason:	No No creditable emissio	n reductions
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Voluntary Measure.
Enforceable	No	
Technologically Feasible	Yes	
Economically Feasible	-	
No Adverse Impacts	Yes	
Reductions >0.1 tpd	-	Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

### Summary Analysis

# Measure -- Control Delivery Truck Emissions

Quick Reference: Measure Name:	Delivery Trucks Control Delivery Truck Emissic	Description:           Dons         Establish voluntary emission reduction program with delivery fleets.
RACM Determination: Reason:	No No creditable emission reducti	on
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Voluntary Measure.
Enforceable	No	
Technologically Feasible	Yes	

· Year of first benefits is 2007.

Estimated Cost Effectiveness	
Estimated Reductions	

Yes

### Summary Analysis

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

# Measure -- "Cash for Clunkers" On-Road Vehicles

Quick Reference: Measure Name: Vehicle Replace "Cash for Clunkers" On-Road Vehicles Description:

Fund voluntary program paying vehicle owners to turn in old vehicles for scrappage.

RACM Determination: Reason: No Not economically feasible

### **RACM Criterion Summary**

Yes
No
Yes
No
Yes
-

Issues

· Voluntary Measure.

· Year of first benefits is 2006.

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Annual Gasoline Vehicle Pollution Fee

Quick Reference: Measure Name: Odometer Tax Annual Gasoline Vehicle Pollution Fee Description:

Levy an annual fee on petroleum-powered vehicles based on mileage driven and emission rates (odometer tax).

RACM Determination: Reason:

Will not provide reductions by May 2008

### **RACM Criterion Summary**

Estimated Cost Effectiveness

Estimated Reductions

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	-
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

No

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Year of first benefits is 2009.

# Measure -- Graduated Car Tax

Car Tax
Graduated Car Tax
No
Will not provide reductions by May 2008

#### Description:

Charge higher car tax under a variety of different scenarios, including multiple cars and petroleum-based vehicles.

RACM Criterion Summary

Estimated Cost Effectiveness Estimated Reductions

-	
Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Year of first benefits is 2009.

# Measure -- Pay-as-you-drive auto insurance (\$/gal)

Quick Reference: Measure Name: VMT Insurance Pay-as-you-drive auto insurance (\$/gal) Description:

Offer auto insurance rates linked to number of gallons of fuel consumed by vehicle.

RACM Determination: No Reason: Wil

Will not provide reductions by May 2008

### **RACM Criterion Summary**

Estimated Cost Effectiveness

Estimated Reductions

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	-
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Year of first benefits is 2009.

## Measure -- Control VOC Content of Automotive Products

Quick Reference: Measure Name:

Enforceable

Product VOC Control VOC Content of Automotive Products Description:

Windshield Wiper Fluid – lower VOC. Establish evaporative standards that are lower than those set by the EPA – 35 weight-percent VOC.

RACM Determination: Reason:

Will not provide reductions by May 2008

#### **RACM Criterion Summary**

Implementation by May 2008

Technologically Feasible

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Estimated Cost Effectiveness	
Estimated Reductions	

No

No

Yes

· Year of first benefits is 2009.

# Measure -- Gasoline Engine Retrofit Program

Quick Reference: Measure Name: Gas Retrofits Gasoline Engine Retrofit Program Description:

Retrofit with 3-way catalysts on gasoline-burning heavy duty trucks that currently have 2-way catalysts or no catalysts.

 RACM Determination:
 No

 Reason:
 No creditable emission reduction

**RACM Criterion Summary** 

Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

· Potential voluntary measure.

# Measure -- Motorcycle I/M Program

Quick Reference:	Motorcycle
Measure Name:	Motorcycle
RACM Determination:	No

Mot cle IM le I/M Program

Description:

End the motorcycle smog check exemption.

Reason:

Will not provide reductions by May 2008

### **RACM Criterion Summary**

Estimated Cost Effectiveness Estimated Reductions

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

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Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Year of first benefits is 2009.

# Measure -- "Cash for Clunkers" Gas Caps Program

Quick Reference: Measure Name: Gas Caps "Cash for Clunkers" Gas Caps Program Description:

Provide free replacement gas caps to light- and medium-duty vehicle owners.

RACM Determination: Reason: No No creditable emission reduction

**RACM Criterion Summary** 

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Mobile Source Mitigation Fees

Quick Reference: Measure Name: Mobile Miti Fees Mobile Source Mitigation Fees Description:

Establish mobile sector mitigation fees

RACM Determination: Reason: No Will not provide reductions by May 2008

### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	-
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Estimated Cost Effectiveness	
Estimated Reductions	

· Year of first benefits is 2009.

# Measure -- Electric Vehicle Tax Incentives

 

 Quick Reference: Measure Name:
 Electric Vehicle Electric Vehicle Tax Incentives
 Description: Establish incentives to purchase electric vehicles.

 RACM Determination: Reason:
 No No creditable emission reduction
 Issues

 RACM Criterion Summary
 Issues

 Implementation by May 2008
 Yes

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Truck Idling Reduction: Truck Stop Electrification (TSE)

Quick Reference:	
Measure Name:	

TSE Truck Idling Reduction: Truck Stop Electrification (TSE) Description:

Implement Projects to Electrify Truck Stops.

RACM Determination: Reason:

No creditable emission reduction

**RACM Criterion Summary** 

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

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### Measure -- Truck Idling Reduction: Auxilliary Power Units (APU)

Quick Reference: Measure Name: Truck APU Truck Idling Reduction: Auxilliary Power Units (APU) Description:

Increase Market Penetration of APUs to Reduce Truck Idling.

RACM Determination: Reason:

No creditable emission reduction

**RACM Criterion Summary** 

#### Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 Yes

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness Estimated Reductions		
Estimated Reductions	Estimated Cost Effectiveness	
	Estimated Reductions	

Summary Analysis

· Potential voluntary measure.

# Measure -- Improve Truck Fleet Efficiency

Quick Reference: Measure Name: Truck Efficiency Improve Truck Fleet Efficiency Description:

Encourage Adoption of Technologies that Increase Truck Fleet Efficiency.

RACM Determination: No Reason: No cre

No creditable emission reduction

#### **RACM Criterion Summary**

#### Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible

 Economically Feasible
 Yes

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

· Potential voluntary measure.

# Measure -- Increase Intermodal Transport

Quick Reference: Measure Name:	Intermodal Increase Intermodal Transport	Description: Increase Use of Intermodal Options for Transporting Goods.
RACM Determination: Reason:	No No creditable emission reductio	n
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	

Summary Analysis

Technologically Feasible

Estimated Cost Effectiveness Estimated Reductions

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Yes

Yes

Yes

### Measure -- Control Heavy Duty Diesel Engines

Quick Reference: Measure Name: Chip Reflash Control Heavy Duty Diesel Engines Description:

Heavy-Duty Engine Engine Control Module (ECM) Recalibration (chip reflash).

RACM Determination: No Reason: No cro

No creditable emission reduction

#### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	Yes
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness	
Estimated Reductions	

#### Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

 $\cdot$  Program would only correct issues with compliance with existing programs.

· Year of first benefits is 2009.

### Measure -- Augment Diesel I/M Program

Quick Reference: Measure Name: Community Inspect Augment Diesel I/M Program Description:

Augment truck and bus inspections with community-based inspections.

RACM Determination: Reason: No No creditable emission reduction

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	
Louinaleu Reductions	

### Measure -- Establish Restricted Zones in Downtown Areas and Transit Centers

Quick Reference:
Measure Name:
RACM Determination:

Restricted Zones Establish Restricted Zones in Downtown Areas and Transit Centers No

Not economically feasible

#### Description:

Restrict private vehicle use in certain areas during business hours, encouraging pedestrian, bicycle, and transit use.

**RACM Criterion Summary** 

Reason:

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	No
Reductions >0.1 tpd	Yes

Issues

 $\cdot$  Mandatory Program. Would require complex negotiation between various stakeholders and authorities having jurisdiction.

Estimated Cost Effectiveness Estimated Reductions · Year of first benefits is 2009.

## Measure -- Biodiesel Fuel

Quick Reference: Measure Name:	Onroad biodiesel Biodiesel Fuel	Description: Expand use of biodiesel fuel for on-road vehicles.
RACM Determination: Reason:	No No creditable emissio	
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	
Technologically Feasible	Yes	
Economically Feasible	-	
No Adverse Impacts	Yes	
Reductions >0.1 tpd	-	

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- CARB Diesel Fuel

Quick Reference: Measure Name:	CARB Diesel CARB Diesel Fuel	Description: Implement CARB diesel fuel standards.
RACM Determination: Reason:	No Will not provide reductions by May 2008	
RACM Criterion Summary	Issues	

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Year of first benefits is 2009.

Summary Analysis

Estimated Cost Effectiveness Estimated Reductions

## Measure -- High Cetane Fuel

Quick Reference: Measure Name:	Onroad cetane High Cetane Fuel	Description: Require High Cetane Diesel Fuel for On-road Vehicles.
RACM Determination: Reason:	No Will not provide reductions by May 2008	
RACM Criterion Summary	Issues	

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

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 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

Estimated Cost Effectiveness	
Estimated Reductions	

· Year of first benefits is 2009.

## Measure -- Low-NOx Diesel Fuel

Quick Reference: Measure Name: Low Nox Onroad Fuel Low-NOx Diesel Fuel Description:

Require regional use of low-NOx fuel additives for on-road diesel vehicles

RACM Determination: Reason: No Will not provide reductions by May 2008

#### **RACM Criterion Summary**

Estimated Cost Effectiveness

Estimated Reductions

Implementation by May 2008	No
Enforceable	No
Technologically Feasible	-
Economically Feasible	No
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Mandating fuel additives may be challenging to implement.

· Year of first benefits is 2009.

## Measure -- Fuel Additives to Reduce Emissions

Quick Reference: Measure Name: Emulsified Diesel Fuel Additives to Reduce Emissions Description:

Use emulsified diesel fuel in diesel-burning heavy duty vehicles.

RACM Determination:	No
Reason:	Not enforceable

Issues

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	-
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Gas Tax Increase

Quick Reference: Measure Name:	Onroad Gas Tax Gas Tax Increase	Description: Implement a fuel tax on on-road gasoline.
RACM Determination:	No	
Reason:	Not economically feasible	
RACM Criterion Summary		Issues
Implementation by May 2008	No	· Mandatory Program: This measure would require state-level legislation or regulation
Enforceable	Yes	by Maryland, Virginia and the District.
Technologically Feasible	Yes	
Economically Feasible	No	$\cdot$ All three states require well over 12 months to develop, pass and require compliance
No Adverse Impacts	No	with a regulation.
Reductions >0.1 tpd	-	
Estimated Cost Effectiveness		Year of first benefits is 2009.

Summary Analysis

Estimated Reductions

## Measure -- Diesel Tax Increase

Quick Reference: Measure Name:	Onroad Diesel Tax Diesel Tax Increase	Description: Implement a fuel tax on on-road diesel.	
RACM Determination: Reason:	No Not economically feasible		
RACM Criterion Summary		Issues	
Implementation by May 2008	No	· Mandatory Program: This measure would require state-level legislation or regulation	
Enforceable	Yes	by Maryland, Virginia and the District.	
Technologically Feasible	Yes		
Economically Feasible	No	$\cdot$ All three states require well over 12 months to develop, pass and require compliance	
No Adverse Impacts	No	with a regulation.	
Reductions >0.1 tpd	-		
Estimated Cost Effectiveness		Year of first benefits is 2009.	
Estimated Reductions			

# Measure -- Expand HOV Network on the Freeway System

Quick Reference: Measure Name: Expand HOV Expand HOV Network on the Freeway System Description:

Construct additional HOV lanes on regional freeways.

RACM Determination: Reason:

Will not provide reductions by May 2008

**RACM Criterion Summary** 

Estimated Cost Effectiveness Estimated Reductions Issues

No
-
Yes
-
Yes
-

No

- Adding significant new HOV lane capacity to the region's transportation network may not be possible by May 2008.

### Measure -- Manage Roadway Usage: CAPCOM

Quick Reference: Measure Name:

Enforceable

CAPCOM Manage Roadway Usage: CAPCOM

RACM Determination: Reason: No No creditable emission reductions

#### Description:

Regional Travel Information System/Driver Assistance. Enhance real time traffic information to allow drivers to make better decisions about when and where to travel. CAPCOM.

RACM Criterion Summary

Implementation by May 2008

Technologically Feasible

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Issues
--------

· Potential voluntary measure.

 $\cdot$  Adding significant new travel information systems to the region may not be possible by May 2008.

Estimated Cost Effectiveness	
Estimated Reductions	

No

No

Yes

Yes

## Measure -- Replace Traffic Signals with Lesser Controls

Quick Reference: Measure Name: Rotary Replace Traffic Signals with Lesser Controls Description:

Install roundabouts in place of signals at low volume intersections.

· Adding significant new rotary capacity to the region's transportation network may not

RACM Determination: No Reason: No creditab

No creditable emission reductions

**RACM Criterion Summary** 

### Issues

be possible by May 2008.

 Implementation by May 2008
 No

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

## Measure -- Signals to Flashing Yellow 12am-5am

Quick Reference: Measure Name: Flashing Signals Signals to Flashing Yellow 12am-5am

RACM Determination: Reason:

No No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness Estimated Reductions · Potential voluntary measure.

**Description:** 

From midnight until 5am, set intersection signals to flashing yellow in predominant direction and flashing red in minor direction for all

low volume intersections where safety permits.

# Measure -- Traffic Signal Optimization

Quick Reference: Measure Name: Signal Optimization Traffic Signal Optimization

Description:

Regularly optimize traffic signals to reduce idling and low-speed emissions.

RACM Determination: No Reason: No

No creditable emission reductions

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Build Park & Ride Lots at Major Intersections of Commuter Highways

Quick Reference:	Park and Ride
Measure Name:	Build Park & Ride Lots at Major Intersections of Commuter Highways
RACM Determination:	No
Reason:	No creditable emission reductions

Description:

Construct new park & ride commuter lots along HOV facilities.

**RACM Criterion Summary** 

Issues
--------

 $\cdot$  Adding significant new park and Ride capacity to the region's transportation network may not be possible by May 2008.

Implementation by May 2008	No
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Extend Ramp Metering

RACM Criterion Summary		Issues	
Reason:	No creditable emission reductions		
<b>RACM Determination:</b>	No		
Quick Reference: Measure Name:	Ramp Meter Extend Ramp Metering		Description Install sign entrances

### **RACM Criterion Summary**

Yes
No
Yes
-
Yes
-

In stall show all	-	-	<u> </u>	1	-	

· Potential voluntary measure.

ion: nals to control flow of vehicles at selected freeway ramp to maintain level of service.

 $\cdot$  Adding significant ramp metering capabilities to the region's transportation network may not be possible by May 2008.

Estimated Cost Effectiveness Estimated Reductions

### Measure -- Permit Right Turn on Red

Quick Reference: R Measure Name: P

Right on Red Permit Right Turn on Red

#### Description:

Reduce vehicle idling time by permitting right turn on red, where safety allows.

RACM Determination: No Reason: No c

No creditable emission reductions

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Manage Roadway Usage: No Drive Days

Quick Reference: Measure Name:

Enforceable

No Drive Days Manage Roadway Usage: No Drive Days

RACM Determination: Reason:

**RACM Criterion Summary** 

Implementation by May 2008

Estimated Cost Effectiveness Estimated Reductions

Technologically Feasible

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

No No creditable emission reductions

#### **Description:**

Odd/Even License Plate no Drive Days. Prohibit drivers from traveling during certain periods, based on vehicle tags or other easily identifiable criteria. Can be a permanent or episodic control.

Yes

No

No

#### Issues

Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Potential adverse impacts.

Year of first benefits is 2009.

### Measure -- Congestion Pricing on Low Occupancy Vehicles

Quick Reference: Measure Name: Congest Pricing Congestion Pricing on Low Occupancy Vehicles Description:

Impose a fee on vehicles containing two or fewer persons that use designated roadways during the peak AM period.

RACM Determination: Reason: No Will not provide reductions by May 2008

#### **RACM Criterion Summary**

Estimated Cost Effectiveness

Estimated Reductions

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Potential adverse impacts.

Year of first benefits is 2009.

### Measure -- Value Pricing

Quick Reference:	Value Pri
Measure Name:	Value Pri
RACM Determination:	No

ricing ricing

#### **Description:**

Restricted Access/ "Green Curb". Differential fees and access permits applied on roads, tunnels, bridges and delivery/loading zones during periods of high congestion.

RACM Determination:	No
Reason:	W

/ill not provide reductions by May 2008

#### **RACM Criterion Summary**

Estimated Cost Effectiveness Estimated Reductions

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Potential adverse impacts.

· Year of first benefits is 2009.

## Measure -- Mobile Source Mitigation Fees: Entry Fees

Quick Reference: Measure Name: Entry Fees Mobile Source Mitigation Fees: Entry Fees Description:

Collect fees and tolls from drivers to use roads or enter areas.

RACM Determination: Reason:

Will not provide reductions by May 2008

#### **RACM Criterion Summary**

Estimated Cost Effectiveness

Estimated Reductions

Implementation by May 2008	No
Enforceable	Yes
Technologically Feasible	-
Economically Feasible	-
No Adverse Impacts	-
Reductions >0.1 tpd	-

No

Issues
--------

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Potential adverse impacts.

· Year of first benefits is 2009.

### Measure -- Transportation Funding Initiatives

Quick Reference: CMAQ Measure Name: **RACM** Determination: No

Transportation Funding Initiatives

#### Description:

Require that Congestion Mitigation Air Quality (CMAQ) funds be used only for projects that significantly improve air quality.

Reason: No creditable emission reductions

**RACM Criterion Summary** 

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Issues

 $\cdot$  Mandatory Program: This measure would require state-level legislation or regulation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with a regulation.

· Potential adverse impacts.

· Year of first benefits is 2009.

## Measure -- Establish Clean Air Fund

Quick Reference: Measure Name:	Clean Air Establish	
RACM Determination:	No	
Reason:	No credita	

lean Air Fund stablish Clean Air Fund

#### Description:

Sell Clean Air License Plates to fund air quality programs (similar to "Save the Bay" tags).

nation: No No creditable emission reductions

Yes

No

Yes

No

Yes

#### **RACM Criterion Summary**

Implementation by May 2008

Estimated Cost Effectiveness Estimated Reductions

Technologically Feasible

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Enforceable

### Issues

Potential voluntary measure.

Summary Analysis	

# Measure -- Electronic Tolling

Quick Reference: Measure Name:	Electronic Tolling Electronic Tolling	Description: Expand interoperability of electronic tolling systems.
RACM Determination: Reason:	No No creditable emissio	on reductions
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	
Technologically Feasible	-	
Economically Feasible	-	
No Adverse Impacts	Yes	
Reductions >0.1 tpd	-	

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Control Vehicle Speeds: Automated Enforcement

Quick Reference: Measure Name: Auto Enforce Control Vehicle Speeds: Automated Enforcement Description:

Automate speed enforcement and lower the speed limit to 55 mph for heavy duty vehicles.

RACM Determination: No Reason: No

No creditable emission reduction

**RACM Criterion Summary** 

Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Control Vehicle Speeds: Lower Limits

Quick Reference: Measure Name: Lower Limits Control Vehicle Speeds: Lower Limits Description:

Speed Limit Restriction: Regional speed limit of 55 mph on all roads which previously had posted speeds of greater than 55 mph.

RACM Determination: Reason:

No creditable emission reductions

#### **RACM Criterion Summary**

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

No

Estimated Cost Effectiveness	
Estimated Reductions	

#### Issues

 $\cdot$  This measure would require state-level legislation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with new legislation.

## Measure -- Manage Roadway Usage: Dedicated Bus Lanes

Quick Reference: Measure Name: Dedicated Bus Lanes Manage Roadway Usage: Dedicated Bus Lanes Description:

Dedicate roadway lanes for use by buses.

RACM Determination: Reason:

No creditable emission reductions

**RACM Criterion Summary** 

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 Yes

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Convenience Commercial Centers in Residential Areas

Quick Reference: Measure Name: Commercial Convenience Convenience Commercial Centers in Residential Areas Description:

plans may not be possible by May 2008.

Change zoning ordinances to allow neigborhood-serving retail establishments in residential areas.

· Adding significant new commercial convenience centers to the region's land use

RACM Determination: Reason:

No creditable emission reductions

RACM Criterion Summary

### Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd
 Yes

No

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Incentives for Mixed Use at Transit Centers

Quick Reference: Measure Name: Mixed Use Incentives for Mixed Use at Transit Centers Description:

Include incentives for mixed-use development at transit centers to reduce sprawl and VMT.

RACM Determination: Reason:

No creditable emission reductions

**RACM Criterion Summary** 

### Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd
 Yes

No

Estimated Cost Effectiveness	
Estimated Reductions	

- Adding significant new incentives to the region's land use plans may not be possible by May 2008.

# Measure -- Infill Development

Quick Reference: Measure Name:	Infill Development Infill Development	Description: Implement an infill development program throughout the Washington region.
RACM Determination:	No	
Reason:	No creditable emission reductions	
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	· Potential voluntary measure.
Enforceable	No	

Summary Analysis

Technologically Feasible

Estimated Cost Effectiveness Estimated Reductions

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

Yes

Yes

Yes

### Measure -- Proximity Commute: Job Swap

Quick Reference: Measure Name: Proximity Commute Proximity Commute: Job Swap

#### Description:

Encourage employees of the same firm to swap jobs, permitting each to work at a location closer to home.

RACM Determination: Reason: No No creditable emission reductions

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Shorter Distance from Buildings to Bus Stops

Quick Reference: Measure Name: Bus Stop Access Shorter Distance from Buildings to Bus Stops

RACM Determination: Reason:

No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

#### **Description:**

For existing buildings, re-route traffic to allow buses to come closer to the building. For new buildings, alter setback requirements to allow closer bus access.

# Measure -- Smart Growth and Infill Development Programs

Quick Reference: Measure Name: Smart Growth Smart Growth and Infill Development Programs

RACM Determination: Reason:

No No creditable emission reductions

#### **RACM Criterion Summary**

Issues

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	Yes

Estimated Cost Effectiveness Estimated Reductions

· Potential voluntary measure.

Description:

Encourage development/redevelopment of land in designated growth areas, encouraging local governments to place greater

emphasis on land development near transit stations.

# Measure -- Telecommuting Centers and Telework Program

Quick Reference: Measure Name:

Reason:

Telecommute Telecommuting Centers and Telework Program Description:

Telecommuting centers, including marketing activity, consultant support, commuter and employer information and assistance.

**RACM** Determination: No No creditable emission reductions

**RACM Criterion Summary** 

Issues

· Potential voluntary measure.

Implementation by May 2008 Yes Enforceable No Technologically Feasible Yes Economically Feasible No Adverse Impacts Yes Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Telecourses at Local Colleges and Universities

Quick Reference: Measure Name: Telecourse Telecourses at Local Colleges and Universities Description:

Encourage local colleges and universities to offer telecourses to reduce vehicle trips.

RACM Determination: No Reason: No credi

No creditable emission reductions

**RACM Criterion Summary** 

Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	
Louinaleu Reductions	

# Measure -- Restrict Construction of New Parking

Quick Reference: Measure Name: Restrict New Parking Restrict Construction of New Parking Description:

Restrict construction of new parking at employment centers based on distance from transit and urban core.

RACM Determination: Reason:

No No creditable emission reduction

#### **RACM Criterion Summary**

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	No
Reductions >0.1 tpd	-

Issues

· Mandatory Program.

· Potential adverse impacts.

Estimated Cost Effectiveness Estimated Reductions · Year of first benefits is 2009.

# Measure -- ATM Machines Installed at Metro Stations

Quick Reference: Measure Name: Metro ATM ATM Machines Installed at Metro Stations Description:

Install ATMs near metro stations for rider convenience.

RACM Determination: Reason:

No creditable emission reductions

**RACM Criterion Summary** 

#### Issues

· Potential voluntary measure.

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

No

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Automatic Bus Locator System

Quick Reference: Measure Name: Bus Locator Automatic Bus Locator System

#### Description:

System would provide bus location information to WMATA dispatchers. This would decrease wait time and improve on-time arrival/departure.

RACM Determination: Reason: No No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Clean Commute/Try Transit Week

Quick Reference: Measure Name: Clean Commute Clean Commute/Try Transit Week

#### Description:

Promotes use of alternative transportation, including transit, by daily commuters for one week per year.

RACM Determination: No Reason: No

No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

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# Measure -- College 33 Pass System

Quick Reference:
Measure Name:

College Pass College 33 Pass System

Yes

No

Yes

Yes

Yes

#### Description:

Expand Baltimore college bus fare program to DC area. Program allows students to receive reduced fares near 19 participating schools in the region.

RACM Determination: Reason:

No No creditable emission reductions

#### **RACM Criterion Summary**

Implementation by May 2008

Estimated Cost Effectiveness Estimated Reductions

Technologically Feasible

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Enforceable

### Issues

· Potential voluntary measure.

Summary A	Analysis
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# Measure -- Discount Multi-Trip Bus Fares

Quick Reference: Measure Name: Discounted Fares Discount Multi-Trip Bus Fares

#### Description:

Introduce discount programs reducing cost of multiple bus rides through purchase of pass books (e.g. 10-trip tickets).

RACM Determination: No Reason: No cre

No creditable emission reductions

#### **RACM Criterion Summary**

### Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 Yes

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	
Louinaleu Reductions	

Potential voluntary measure.

# Measure -- Additional Transit Stores

Quick Reference: Measure Name:	Transit Stores Additional Transit Sto	res	<u>Description:</u> Establish additional stationary transit stores in the region.
RACM Determination: Reason:	No No creditable emissio	n reductions	
RACM Criterion Summary		ls	sues
Implementation by May 2008	Yes	- F	Potential voluntary measure.
Enforceable	No		
Technologically Feasible	Yes		

Summary Analysis

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

Estimated Cost Effectiveness Estimated Reductions Yes

# Measure -- Subsidize Transit Usage

Quick Reference: Measure Name:	Subsidize Transit Subsidize Transit Usag	ge Expand Metro Check to all County Employees
RACM Determination: Reason:	No Not economically feasi	ble
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	
Technologically Feasible	Yes	

Summary	Analysis
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Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Estimated Cost Effectiveness Estimated Reductions No

Yes

# Measure -- Expand Peak Period Metrorail Service

Quick Reference: Measure Name: Expand Peak Transit Expand Peak Period Metrorail Service Description:

Extend peak-period service on Metrorail so trains run more frequently between 6-11 am and 3-8 pm.

RACM Determination: Reason: No No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Expand VRE Train Service

Quick Reference:	Expand VRE	Description:
Measure Name:	Expand VRE Train Service	Expand VRE train service to include additional departures.
RACM Determination:	No	
Reason:	No creditable emission reductions	
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	

Summary Analysis

Technologically Feasible Economically Feasible No Adverse Impacts

Estimated Cost Effectiveness Estimated Reductions

Reductions >0.1 tpd

Yes

# Measure -- Express Buses From Outyling Areas

Quick Reference: Measure Name: Express Bus Express Buses From Outyling Areas Description:

Implement direct bus service from outlying Park & Ride lots and far suburbs to major work centers.

RACM Determination: No Reason: No credit

No creditable emission reductions

**RACM Criterion Summary** 

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Flat Fare For All Transit Trips

Quick Reference: Measure Name: Flat Fares Flat Fare For All Transit Trips Description:

Single price all public transit services with free transfers all day, 7 days per week.

RACM Determination: Reason: No Not economically feasible

#### **RACM Criterion Summary**

Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 Yes

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Reductions >0.1 tpd

# Measure -- Free Bus Service Off-Peak

Quick Reference: Measure Name: Free Offpeak Bus Free Bus Service Off-Peak

#### Description:

Institute free off-peak bus service from 10-2 on weekdays and all day on weekends.

RACM Determination: Reason: No Not economically feasible

Yes

No

Yes

No

Yes

#### **RACM Criterion Summary**

Implementation by May 2008

Estimated Cost Effectiveness Estimated Reductions

Technologically Feasible

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Enforceable

SS	u	es	

Potential voluntary measure.

# Measure -- Free Rail Use 10-3

Quick Reference: Measure Name:	Free Offpeak Rail Free Rail Use 10-3	Description: Free Metrorail trips for all riders from 10AM-3PM on weekdays.
RACM Determination:	No	
Reason:	Not economically feas	sible
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	
Technologically Feasible	Yes	
Economically Feasible	No	
No Adverse Impacts	Yes	

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Reductions >0.1 tpd

### Measure -- Free bus-to-rail / rail-to-bus transfers

Quick Reference: Measure Name: Free Transit Transfer Free bus-to-rail / rail-to-bus transfers Description:

Institute free bus-to-rail transfer similar to free rail-to-bus transfer currently in place.

RACM Determination: Reason: No Not economically feasible

#### **RACM Criterion Summary**

Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Free Transit Passes to Students

Quick Reference: Measure Name: Free Student Pass Free Transit Passes to Students

#### Description:

Free transit passes for high school and college students, subsidized by schools or through student registration fee.

RACM Determination: Reason: No Not economically feasible

#### **RACM Criterion Summary**

### Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

· Potential voluntary measure.

# Measure -- Half Price Fares on Feeder Bus Service

Quick Reference: Measure Name:

Half Price Feeder Bus Half Price Fares on Feeder Bus Service

**RACM** Determination: Reason:

No Not economically feasible

#### **RACM Criterion Summary**

#### Issues

Implementation by May 2008 Yes Enforceable No Technologically Feasible Yes Economically Feasible No No Adverse Impacts Yes Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Description:

All metro bus and local bus services to Metrorail and commuter rail stations reduce fares by half.

· Potential voluntary measure.

### Measure -- Increase Commuter Rail Frequency

Quick Reference: Measure Name: Rail Frequency Increase Commuter Rail Frequency

RACM Determination: No Reason: No cr

No creditable emission reductions

### Description:

Increase frequency of MARC service to every 15 minutes on Penn and Camden lines and every 10 min on the Brunswich line. Increase VRE frequency to every 15 minutes.

**RACM Criterion Summary** 

Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Metrorail Feeder Bus Service & Fare Buydown

Quick Reference: Measure Name: Fare Buydown Metrorail Feeder Bus Service & Fare Buydown

RACM Determination: Reason:

No Not economically feasible

#### **RACM Criterion Summary**

Issues

· Potential voluntary measure.

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Description:

Improve Metrorail feeder bus service at underutilized park & ride lots, implement fare buydown program.

# Measure -- New MARC Coaches

to accommodate increased

Quick Reference: Measure Name:	MARC Coaches New MARC Coaches	Description: Purchase additional coaches for MARC ridership.
RACM Determination: Reason:	No No creditable emission reductions	
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.

Summary Analysis

Enforceable

Technologically Feasible

Estimated Cost Effectiveness Estimated Reductions

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

No

Yes

Yes

# Measure -- New Surface Parking at Transit Centers

Issues

Quick Reference: Measure Name: Transit Parking New Surface Parking at Transit Centers Description:

Add new parking spaces at transit centers (bus, Metrorail, MARC) parking lots.

 $\cdot$  Adding significant new transit parking capacity to the region's transit system may not be possible by May 2008.

RACM Determination: No Reason: No

No creditable emission reductions

#### **RACM Criterion Summary**

Implementation by May 2008	No
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Provide Additional Transit Service to Core

Quick Reference: Measure Name: Expand Core Service Provide Additional Transit Service to Core Description:

Increase funding for transit services to expand core service.

RACM Determination: Reason:

Will not provide reductions by May 2008

**RACM Criterion Summary** 

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 No

 Enforceable
 No

 Technologically Feasible

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Provide Additional Transit Service Access

Quick Reference: Measure Name: Transit Access Provide Additional Transit Service Access Description:

Increase funding for enhancing access to transit services.

RACM Determination: Reason:

No creditable emission reductions

**RACM Criterion Summary** 

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Real-Time Bus Schedule Information

Quick Reference: Measure Name:

Real time Schedule Real-Time Bus Schedule Information

**RACM** Determination: Reason:

No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

Implementation by May 2008 Yes Enforceable No Technologically Feasible Yes Economically Feasible No Adverse Impacts Yes Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Description:

Expand trials of real-time bus schedule information to local transit providers.

· Potential voluntary measure.

# Measure -- Reduce Parking Fees at Facilities Outside the Beltway Adjacent to Metro

 Quick Reference:
 Reduced Parking Fees

 Measure Name:
 Reduce Parking Fees at Facilities Outside the Beltway Adjacent to Metro

 RACM Determination:
 No

No creditable emission reductions

#### Description:

Reduce parking fees at Metro parking facilities or county/city managed facilities outside of the Beltway that are located near Metro stations.

#### **RACM Criterion Summary**

Reason:

Issues
--------

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Regional Bus Service Expansion

Quick Reference: Measure Name: Bus Expansion Regional Bus Service Expansion Description:

Expansion of Metrobus and other regional bus services.

RACM Determination: No Reason: No cre

No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Support Rail to Dulles Airport

Quick Reference: Measure Name: Rail to Dulles Support Rail to Dulles Airport Description:

Provide funding to expand rail services to Dulles Airport.

RACM Determination: Reason: No Will not provide reductions by May 2008

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 No

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

L-103

# Measure -- Transit Prioritization -- Queue Jumps

Quick Reference: Measure Name: Queue Jumps Transit Prioritization -- Queue Jumps

RACM Determination: No Reason: No credita

No creditable emission reductions

### **RACM Criterion Summary**

#### Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

· Potential voluntary measure.

Description:

Provide queue jumps for buses at over-capacity signalized

queues and move forward towards the stop line.

intersections throughout the region. Queue jumps allow buses to use a shoulder or other designated lane to bypass intersection

# Measure -- Universal Transportation Access

Quick Reference: Measure Name:

Enforceable

Universal Access Universal Transportation Access

RACM Determination: Reason:

No Not economically feasible

#### Description:

SmarTrip card will allow users to pay fares on all rail and bus systems in the region (including parking in Metrorail lots) using one electronic card.

**RACM Criterion Summary** 

Implementation by May 2008

Technologically Feasible

Issues

 $\cdot$  Potential voluntary measure.

Yes

Yes

Summary Analysis

Estimated Reductions

### Measure -- WMATA Bus Information Displays with Maps

Quick Reference: Measure Name: WMATA Maps WMATA Bus Information Displays with Maps

RACM Determination: Reason:

No No creditable emission reductions

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness Estimated Reductions

Summary Analysis

#### Description:

Install additional information boxes with maps and schedule information. Would include schedules in languages other than English in neighborhoods where most residents speak another language.

# Measure -- Rush Hour Shift

Quick Reference: Measure Name:	Rush Hour Shift Rush Hour Shift	Description: Shift Metrorail AM and PM rush hours to start 30 min earlier and end 30 min later.
RACM Determination:	No	
Reason:	No creditable emission reduction	
RACM Criterion Summary		Issues
RACM Criterion Summary	Yes	Potential voluntary measure.
	Yes	

Summary	Analysis

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

Estimated Cost Effectiveness Estimated Reductions Yes

# Measure -- Employer Metro Shuttle Bus Services

Quick Reference: Measure Name: Employer Shuttles Employer Metro Shuttle Bus Services Description:

Provide incentives for businesses to provide employee shuttle service to the nearest rail or transit stop.

RACM Determination: Reason:

No No creditable emission reduction

#### **RACM Criterion Summary**

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Eliminate or Restrict Airport Parking

Quick Reference: Measure Name: Restrict Airport Parking Eliminate or Restrict Airport Parking Description:

Eliminate airport parking and replace with alternative fuel shuttle buses.

RACM Determination: Reason: No No creditable emission reduction

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 No

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Bike Racks on Transit Buses

· Potential voluntary measure.

Quick Reference: Measure Name:	Bus Bike Bike Racks on Transit Buses		<u>D</u> e Pr bu
RACM Determination: Reason:	No No creditable emission reduction		
RACM Criterion Summary		Issues	

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Description:

Provide external bike racks on WMATA and other local transit buses.

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### Measure -- Bike Lockers at Metro Stations, Park & Ride Lots, Other Locations

Quick Reference:		
Measure Name:		
RACM Determination:		

Reason:

Bike Lockers Bike Lockers at Metro Stations, Park & Ride Lots, Other Locations No

No creditable emission reduction

Description:

Expand existing bike lockers at Metrorail stations, install bicycle storage spaces in parking lots.

**RACM Criterion Summary** 

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Bicycle Racks in DC

Quick Reference: Measure Name:	Bike Racks Bicycle Racks in DC	Description: Install bicycle racks at various locations throughout the region.
RACM Determination: Reason:	No No creditable emissio	n reductions
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	
Technologically Feasible	Yes	

Summary Analysis

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

Estimated Cost Effectiveness Estimated Reductions Yes

# Measure -- Bike/Pedestrian Paths

Quick Reference: Measure Name:	Bike Ped Paths Bike/Pedestrian Paths	Description: Fund construction of additional bicycle/pedestrian paths in the region.
RACM Determination: Reason:	No No creditable emissio	reduction
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	
Technologically Feasible	Yes	
Economically Feasible	-	
No Adverse Impacts	Yes	
Reductions >0.1 tpd	-	

Estimated Cost Effectiveness	
Estimated Reductions	

## Measure -- Employers Provide Free Bicycles for Midday Use

Quick Reference: Measure Name: Free Bike Employers Provide Free Bicycles for Midday Use Description:

Require employers to provide one bicycle per 50 employees for mid-day business or personal use.

RACM Determination: No Reason: No

No creditable emission reduction

RACM Criterion Summary

Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Bike to Work Day

· Potential voluntary measure.

Quick Reference:	Bike to Work		Description:
Measure Name:	Bike to Work Day		Conduct a one-or
RACM Determination:	No		education on the
Reason:	No creditable emission reduction		to-work.
RACM Criterion Summary		Issues	

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	No

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Conduct a one-day bike to work event. Provide outreach activities, education on the bike-to-work option, and assistance in trying bike-to-work.

### Measure -- Safe Routes to School Program

Quick Reference: Measure Name: Safe Routes Safe Routes to School Program Description:

Implement a safe pedestrian and bicycle routes to school program to reduce VMT.

RACM Determination: No Reason: No

No creditable emission reduction

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Improvements to Bicycle and Pedestrian Access

Quick Reference: Measure Name: Improve Access Improvements to Bicycle and Pedestrian Access

RACM Determination: Reason:

No creditable emission reduction

#### **RACM Criterion Summary**

Issues

· Potential voluntary measure.

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

No

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

#### Description:

Provide incentives to developments that speed improvements to bicycle/pedestrian access. This includes improvements to sidewalks, curb ramps, crosswalks, lighting, etc.

### Measure -- Enhance Pedestrian Facilities

Quick Reference: Measure Name: Enhance Ped Enhance Pedestrian Facilities

#### Description:

Improve pedestrian facilities throughout region (e.g., Richmond Highway Corridor).

RACM Determination: No Reason: No

No creditable emission reduction

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Mobile Commuter Stores

Quick Reference: Measure Name:	Commuter Stores Mobile Commuter Stores	Description: Fund mobile commuter stores in suburban commercial areas.
RACM Determination: Reason:	No No creditable emission reductions	5
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	

Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-
Estimated Cost Effectiveness	

Yes

Summary Analysis

Estimated Reductions

Technologically Feasible

### Measure -- 4 Day Work Week/Flexible Work Schedules

Quick Reference: Measure Name: Flex Work 4 Day Work Week/Flexible Work Schedules Description:

Encourage employers to adopt a shorter work week, with employees working 4 10-hour days.

RACM Determination: No Reason: No c

No creditable emission reductions

**RACM Criterion Summary** 

#### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Access to Jobs Program

Quick Reference: Measure Name: Access to Jobs Access to Jobs Program

#### Description:

Identifies gaps in transit service between places of residence and places of work for low wage workers.

RACM Determination: No Reason: No

No creditable emission reduction

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

## Measure -- Mandatory Employee Commute Reduction

Quick Reference: Measure Name: Mand Commute Reduction Mandatory Employee Commute Reduction Description:

Mandatory employer trip reduction to reduce employee vehicle trips.

RACM Determination: Reason: No Potential adverse impacts

#### **RACM Criterion Summary**

Yes
No
Yes
No
No
-

Issues

· Mandatory Program.

· Potential adverse impacts.

Estimated Cost Effectiveness
Estimated Reductions

· Year of first benefits is 2009.

# Measure -- Restrict Parking at Schools

Quick Reference: Measure Name: Restrict School Parking Restrict Parking at Schools

#### Description:

Restrict high school students from driving to and parking at high schools when bus service is available.

RACM Determination: Reason: No No creditable emission reduction

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 No

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Student & staff based college & university rideshare programs

Quick Reference:
Measure Name:
RACM Determination:

Reason:

College Rideshare Student & staff based college & university rideshare programs No

No creditable emission reduction

Description:

Create rideshare program focused on students and staff at regional universities.

**RACM Criterion Summary** 

Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

· Potential voluntary measure.

Estimated Cost Effectiveness Estimated Reductions

# Measure -- Vanpool Programs

Quick Reference: Measure Name:	Vanpool Programs Vanpool Programs	Description: Create programs and incentives designed to increase the number of vanpools in the region.
RACM Determination:	No	
Reason:	No creditable emission red	duction
RACM Criterion Summary		Issues
Implementation by May 2008	Yes	Potential voluntary measure.
Enforceable	No	
Technologically Feasible	Yes	

Yes

Summary Analysis

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

Estimated Cost Effectiveness Estimated Reductions

# Measure -- Commuter Parking Tax

Quick Reference:	Commuter Parking Tax
Measure Name:	Commuter Parking Tax
RACM Determination:	No
Reason:	Potential adverse impacts

#### Description:

Implement daily tax on employers or employees that match certain commuting/parking criteria.

**RACM Criterion Summary** 

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	No
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

#### Issues

 $\cdot$  Mandatory Measure: This measure would require state-level legislation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with new legislation.

· Year of first benefits is 2009.

### Measure -- Market Based Parking Charge at Federal Facilities

Quick Reference: Measure Name:

Reason:

Federal Parking Market Based Parking Charge at Federal Facilities Description:

Negotiate agreement with federal government to charge market rate for daily parking for all employees.

**RACM** Determination: No

No creditable emission reduction

**RACM Criterion Summary** 

Issues

· Potential voluntary measure.

Implementation by May 2008 Yes Enforceable No Technologically Feasible Yes Economically Feasible No Adverse Impacts Yes Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Parking Impact Fee: All Parking

Quick Reference: Measure Name: Parking Fee Parking Impact Fee: All Parking

Description:

Levy annual impact fee on every parking space in nonattainment area.

RACM Determination: Reason: No Not economically feasible

#### **RACM Criterion Summary**

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	No
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

#### Issues

Mandatory Measure: This measure would require state-level legislation by Maryland, Virginia and the District.

 $\cdot$  All three states require well over 12 months to develop, pass and require compliance with new legislation.

· Year of first benefits is 2009.

### Measure -- Free Parking for Carpools/Vanpools

Quick Reference: Measure Name: Carpool Parking Free Parking for Carpools/Vanpools Description:

Provide free reserved parking spaces for all carpools or vanpools.

RACM Determination: Reason: No Not economically feasible

**RACM Criterion Summary** 

Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible
 No

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

· Potential voluntary measure.

# Measure -- Employer Parking Cash-Out

Quick Reference: Measure Name: Parking Cashout Employer Parking Cash-Out

#### **Description:**

Implement program encouraging or requiring employers to provide the value of subsidized parking to employees who use alternative commute strategies.

RACM Determination: Reason: No Not economically feasible

#### **RACM Criterion Summary**

Implementation by May 2008

Issues

· Potential voluntary measure.

Enforceable	No
Technologically Feasible	Yes
Economically Feasible	No
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Yes

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Remove Trash Trucks From Area Streets

Quick Reference: Measure Name: Barge Trash Remove Trash Trucks From Area Streets Description:

Reduce use of trash trucks through transport of trash by barge.

RACM Determination: Reason:

No creditable emission reductions

**RACM Criterion Summary** 

#### Issues

· Potential voluntary measure.

 Implementation by May 2008

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Clean Air Partners: Air Quality Action Days

Quick Reference: Measure Name: Air Quality Action Days Clean Air Partners: Air Quality Action Days

on: No

ction Davs

RACM Determination: Reason:

No creditable emission reductions

#### **RACM Criterion Summary**

### Issues

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

#### Description:

Take a variety of actions on Air Quality Action Days to reduce emissions and improve air quality (free transit, telework, carpool).

This is an episodic measure.

### Measure -- Clean Air Partners: Public Outreach and Education

Quick Reference: Measure Name: Clean Air Partners Clean Air Partners: Public Outreach and Education Description:

Implement Strategic Communication Campaigns to Increase Public Awareness (reduce vehicle use).

RACM Determination: Reason:

No creditable emission reductions

**RACM Criterion Summary** 

#### Issues

· Existing voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

No

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Local Government Education Campaign

Quick Reference: Measure Name: Government Education Local Government Education Campaign Description:

Implement Strategic Communication Campaigns to Increase Local Government Air Quality Improvement Efforts (reduce vehicle use).

RACM Determination: Reason: No No creditable emission reductions

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Mass Marketing Campaign

Quick Reference: Measure Name: Mass Marketing Mass Marketing Campaign

Yes

No

Yes

Yes

Yes

Yes

#### Description:

Marketing effort involving business-to-business advertising campaign in print media and on world wide web.

RACM Determination: No Reason: No c

No creditable emission reduction

#### **RACM Criterion Summary**

Implementation by May 2008

Estimated Cost Effectiveness Estimated Reductions

Technologically Feasible

Economically Feasible

No Adverse Impacts

Reductions >0.1 tpd

Enforceable

### Issues

Potential voluntary measure.

# Measure -- Commuter Choice - State & Local Government Employees

Quick Reference: Measure Name:	Commuter Choice Commuter Choice - State & Local Government Employees
RACM Determination:	No
Reason:	No creditable emission reductions

Description: Provide the region's local, state and municipal employees with transit benefits.

#### **RACM Criterion Summary**

Issues

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

### Measure -- Commuter Choice Tax Credit

Quick Reference: Measure Name: Comm Choice Tax Credit Commuter Choice Tax Credit

#### Description:

Employers subsidize employees' monthly transit or vanpool costs and receive a tax credit for incurred expenses.

RACM Determination: Reason: No No creditable emission reductions

#### **RACM Criterion Summary**

### Issues

· Potential voluntary measure.

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Commuter Operations Center

Quick Reference: Measure Name: Commuter Operations Commuter Operations Center

#### Description:

Provides commuter assistance services, including carpool and vanpool ridematching.

RACM Determination: Reason:

No No creditable emission reductions

#### **RACM Criterion Summary**

Issues

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Cost Effectiveness	
Estimated Reductions	

# Measure -- Guaranteed Ride Home

Quick Reference:	Ride Home
Measure Name:	Guaranteed Ride Home
RACM Determination:	No
Reason:	No creditable emission reductions

#### Description:

Provides free rides home in event of unexpected emergency or unscheduled overtime to commuters using public transport.

RACM Criterion Summary

Issues

Implementation by May 2008	Yes
Enforceable	No
Technologically Feasible	Yes
Economically Feasible	-
No Adverse Impacts	Yes
Reductions >0.1 tpd	-

Estimated Reductions	

# Measure -- Integrated Rideshare

Quick Reference: Measure Name:	Rideshare Integrated Rideshare		Description: Provides transit, park & ride, and telecenter information to all commuters on a matchlist.
RACM Determination:	No		
Reason:	No creditable emission reductions		
RACM Criterion Summary		Issues	
Implementation by May 2008	Yes		
Enforceable	No		

Summary Analysis

Technologically Feasible

Estimated Cost Effectiveness Estimated Reductions

Economically Feasible No Adverse Impacts

Reductions >0.1 tpd

Yes

Yes

### Measure -- Interactive Rideshare Kiosks

Quick Reference: Measure Name:	Kiosks Interactive Rideshare Kiosks	
RACM Determination: Reason:	No No creditable emission reductions	
RACM Criterion Summary		Issues

 Implementation by May 2008
 Yes

 Enforceable
 No

 Technologically Feasible
 Yes

 Economically Feasible

 No Adverse Impacts
 Yes

 Reductions >0.1 tpd

Estimated Cost Effectiveness	
Estimated Reductions	

Summary Analysis

Description:

Transportation Information Kiosks in Maryland, Virginia and the District of Columbia.