### National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

**Item #5** 

#### **MEMORANDUM**

July 12, 2007

**TO:** Transportation Planning Board

**FROM:** Ronald F. Kirby

Director, Department of Transportation Planning

**RE:** Letters Sent/Received Since the June 20<sup>th</sup> TPB Meeting

The attached letters were sent/received since the June  $20^{th}$  TPB meeting. The letters will be reviewed under Agenda #5 of the July  $18^{th}$  TPB agenda.

Attachments

### National Capital Region Transportation Planning Board

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

#### **MEMORANDUM**

Date: July 12, 2007

To: Transportation Planning Board

From: Ronald F. Kirby

Director, Department of Transportation Planning

Re: Update on Estimates of CO<sub>2</sub> Emissions from

Cars, Trucks, & Buses in the Metropolitan Washington Region

At the June 20, 2007 TPB meeting I gave a presentation on CO<sub>2</sub> emissions from cars, trucks, and buses in the Metropolitan Washington Region, including estimates of the reductions in those emissions that could be affected through the implementation of the proposed California LEV II vehicle program. I noted in the presentation that before California can implement its LEV II program, the state needs to obtain a waiver from EPA under the Clean Air Act. California requested such a waiver in December of 2005, but the EPA Administrator recently informed the Congress that he does not plan to act on California's request until the fall of 2008. Some thirteen other states (including Maryland) are planning to adopt California's LEV II standard, but none will be able to do so until California receives its waiver from EPA. The Governor of California has indicated that the state plans to file suit against EPA to try to expedite action on the waiver request.

On June 21, the day following the TPB meeting, the US Senate passed energy legislation that would mandate the first substantial increase in federal Corporate Average Fuel Economy (CAFÉ) standards since 1975. The new CAFÉ standards would require cars, trucks, and sport-utility vehicles (SUVs) to achieve an average fuel economy of 35 miles per gallon (mpg) by 2020. (Current federal standards are 27.5 mpg for cars and 22.2 mpg for SUVs and light trucks). The US House of Representatives is expected to take up its own energy legislation this month, but that legislation is not currently expected to include the new CAFÉ standards contained in the Senate legislation.

On June 27 I gave the attached updated presentation on  $CO_2$  emissions to the newly established COG Climate Change Steering Committee. In addition to the estimated  $CO_2$  reductions from CAL LEV II vehicles included in the June 20

Transportation Planning Board July 12, 2007 Page 2

presentation to the TPB, the June 27 presentation contained estimates of the benefits of the federal CAFÉ standards contained in the June 21 Senate legislation. As can be seen from the tables on slides 13 and 15, while baseline CO<sub>2</sub> emissions are projected to grow by 48 percent from 2002 to 2030, this rate of growth would be reduced to 22 percent with CAL LEV II vehicles, and to 16 percent with the Senate's "35 mpg by 2020" federal CAFÉ standards. As requested at the June 20 TPB meeting, the information contained in this presentation is being transmitted to our Congressional delegation, along with an expression of concern regarding the delayed response to California's request for a waiver for its LEV II program.

In addition to these potential state and federal vehicle standards, there was a brief discussion at the June 20 TPB meeting of other federal, state and local incentives that are or could be available to accelerate the purchase of more fuel-efficient vehicles. It was noted that Northern Virginia has significantly higher ownership levels of hybrid vehicles than either the District of Columbia or Suburban Maryland, due primarily to access to HOV lanes afforded to hybrid owners in Virginia. It was also reported that the federal government has been providing tax credits for purchases of alternative fueled vehicles, and that Loudoun County has a reduced personal property tax category for "special fuels" vehicles.

TPB staff has compiled the attached initial list of incentives that are available to purchasers of alternative fueled vehicles in the Washington region. Staff plans to update this initial list as additional information becomes available on existing or potential incentives. As the data in the attached June 27 presentation shows, a significant shift toward a more fuel-efficient fleet is a necessary step toward reducing the rate of growth of CO<sub>2</sub> and other greenhouse gas emissions from cars, trucks, and buses in the Washington region.

Attachments

### Incentives Available For Alternative Fueled Vehicles In the Washington Region

#### Financial Incentives

**Federal**: <u>Tax credits</u> of \$250-\$3,400 are available for individuals and businesses that purchase alternative fueled vehicles including hybrid vehicles. Once a manufacturer sells 60,000 vehicles the credit phases out in the following two quarters. Toyota has reached the limit and therefore their products are not eligible after 10-1-2007.

**District of Columbia**: Exemption of vehicle excise taxes exists for owners of Hybrid Electric Vehicles (HEVs) and clean fuel vehicles. Additionally, <u>vehicle</u> registration fees for HEVs and clean fuel vehicles are reduced to \$36 per year versus a fee of up to \$155 per year for a 5000 lb. vehicle.

**Maryland**: Ethanol and biodiesel producers are eligible for <u>production incentives</u> of \$0.05 to \$0.20 per gallon (From December 2007 through December 2017).

**Virginia:** Business involved with the manufacturing of components for alternative fuel vehicles (AFV) are eligible for a job creation tax credit of \$700 per full time employee. Producers of ethanol and biodiesel are eligible for a production grant of \$0.10 per gallon of fuel sold in the Commonwealth.

**Corporate**: Private corporations provide <u>financial incentives</u> ranging from \$1,000 to \$10,000 toward purchase of alternative fueled vehicles meeting certain eligibility criteria. Examples are: Google: \$5,000 for vehicles achieving 45mpg or better; Bank of America: \$3,000 towards purchase of HEV.

**Loudoun County**: Loudoun County has a <u>reduced personal property tax</u> category for "special fuels" for commercial and non-commercial vehicles with a rate of \$0.01 per \$100 of assessed value compared to \$4.20 per \$100 of assessed value of other vehicles.

**Arlington County**: In CY2007 Arlington County provides <u>personal property tax</u> <u>relief</u> on the first \$20,000 of assessed value of clean fuel vehicles (HEV's and similar vehicles). For example, if a vehicle's assessed value is \$24,000, one pays tax on the \$4,000 assessment above the \$20,000 exemption.

#### Non-Financial Incentives

**Virginia:** Vehicles with 'Clean Special Fuels' license plates can use HOV lanes in Virginia, regardless of the number of occupants, until July 1, 2008. For HOV

lanes in the I-95/I-395 corridor, this <u>HOV lane exemption</u> applies only to vehicles with clean special fuels plates issued prior to July 1, 2006.

The following hybrid vehicles qualify for the exemption: Toyota Prius, Honda Insight, Honda Civic, Ford Escape, Toyota Highlander, Lexus RX400, Mercury Mariner, Honda Accord, Toyota Camry, Lexus GS450h.

**Maryland**: Qualified HEVs and zero-emission vehicles are <u>exempt from certain mandatory motor vehicle emissions and inspection testing</u> requirements. This applies for the first three years after the vehicle is originally registered in the state, if the vehicle obtains a rating from the U.S. Environmental Protection Agency of at least 50 miles per gallon during city fuel economy tests.

Sources:

Federal

http://www.energy.gov/taxbreaks.htm

New energy tax credits for Hybrids http://www.fueleconomy.gov/feg/tax\_afv.shtml

Maryland

http://www.hybridcars.com/local-incentives/region-by-region.html

http://www.eere.energy.gov/afdc/progs/view\_ind.cgi?afdc/5835/0

Virginia

http://www.eere.energy.gov/afdc/progs/view\_ind.cgi?afdc/4780/0

District of Columbia

http://www.eere.energy.gov/afdc/progs/view\_ind.cgi?afdc/5979/0

**Loudoun County** 

http://www.loudoun.gov/government/rates.htm#Personal

Air Quality Gold Book: State and Local Government Initiatives to Clean the Air Metropolitan Washington, D.C. Severe Ozone Non-attainment Area <a href="http://www.mwcog.org/uploads/committee-documents/91ldXw20040218094532.pdf">http://www.mwcog.org/uploads/committee-documents/91ldXw20040218094532.pdf</a>

Arlington

http://www.arlingtonclimateblog.com/climate/2007/06/20000\_incentive.html

http://www.washingtonpost.com/wp-n/content/article/2007/01/01/AR2007010100557.html

# CO<sub>2</sub> Emissions from Cars, Trucks & Buses in the Metropolitan Washington Region

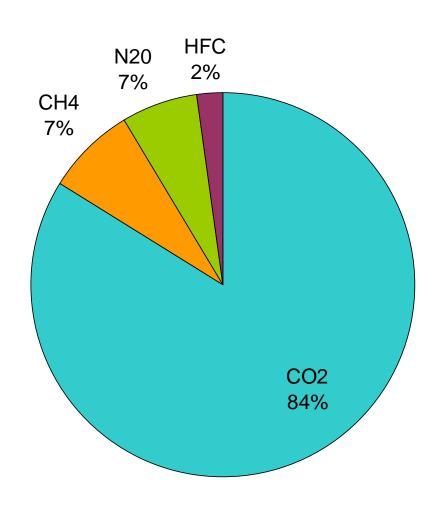
Presentation to the COG Climate Change Steering Committee

Ronald F. Kirby
Director of Transportation Planning

June 27, 2007

### **Greenhouse Gases**

- Carbon Dioxide (CO<sub>2</sub>)
- Methane (CH₄)
- Nitrous Oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF<sub>6</sub>)



### **Emission Sources**

- Electricity
- On-road Motor Vehicles
- Solid Waste
- Wastewater
- Natural Gas/Home Heating Oil
- Aviation, Rail, Construction, Agriculture
- Substitutes to Ozone Depleting Substances
- Land Use, Land Use Change, and Forestry

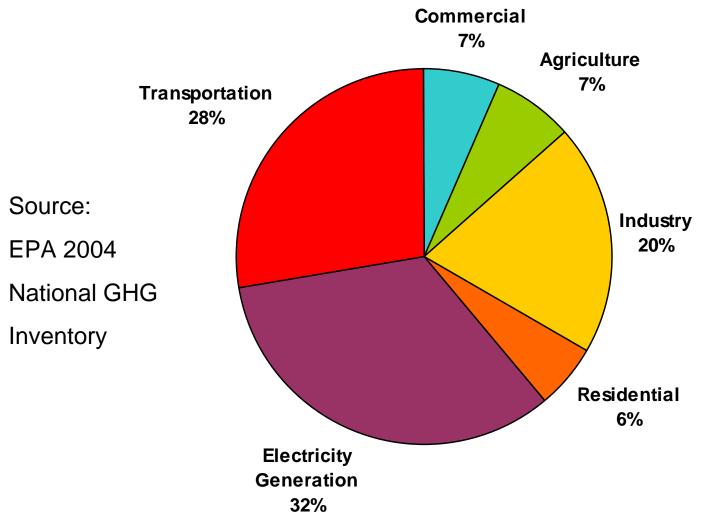








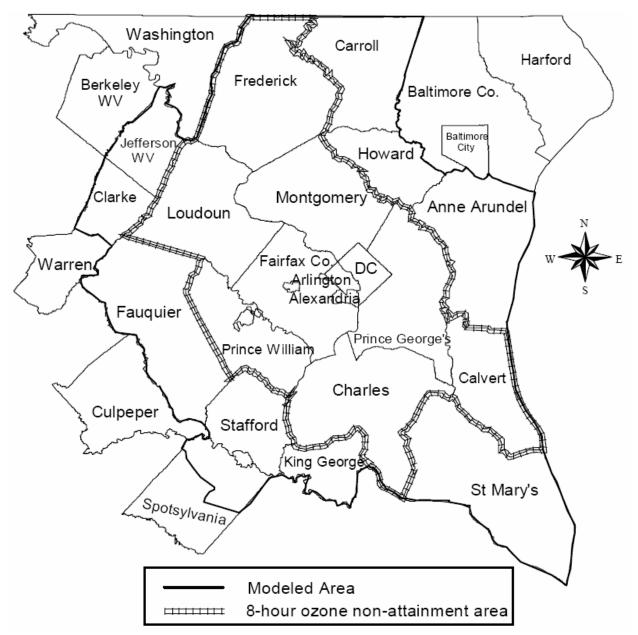
### US Greenhouse Gas Emissions by Sector



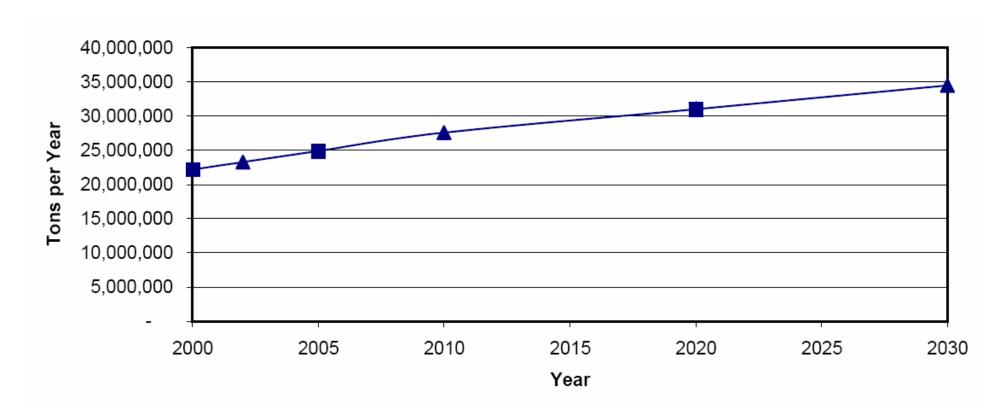
# Estimates of CO<sub>2</sub> Emissions from Mobile Sources (Cars, Trucks & Buses) in the Metropolitan Washington Region

- 8-hour Ozone Non-Attainment Area (map on next slide)
- 2006 CLRP, Round 7.0a Cooperative Forecasts
- 2005 Regional Fleet Inventory (New Inventory scheduled for 2008)
- EPA Mobile 6.2 Emissions Model

### 8-Hour Ozone Non-Attainment Area



### Annual Mobile CO<sub>2</sub> Emissions (Tons) for 8-Hour Ozone Non-Attainment Area



Note: Years 2000, 2005 and 2020 were interpolated using 2002, 2010 and 2030 emissions estimates from the October 18, 2006 conformity determination.

# 2002-2030 Changes in Households, Employment, VMT, NOx, VOC and CO<sub>2</sub> for the 8-Hour Ozone Non-Attainment Area

	2002	2030	% Change
Households	2,893,646	4,162,621	44%
Employment	1,742,117	2,463,893	41%
Annual VMT (000,000's)	39,212	53,726	37%
NOx (tons/day)	259.232	34.899	-87%
VOC (tons/day)	101.117	39.41	-61%
CO2 (tons/year)	23,273,168	34,450,922	48%

### Regional Average Rates for CO<sub>2</sub> (Grams per Vehicle Mile)

	2002	2010	2030
Major Road Network	506	527	546
Local Roads	454	476	490
School Bus	1,634	1,642	1,647
Transit Bus	2,402	2,350	2,334

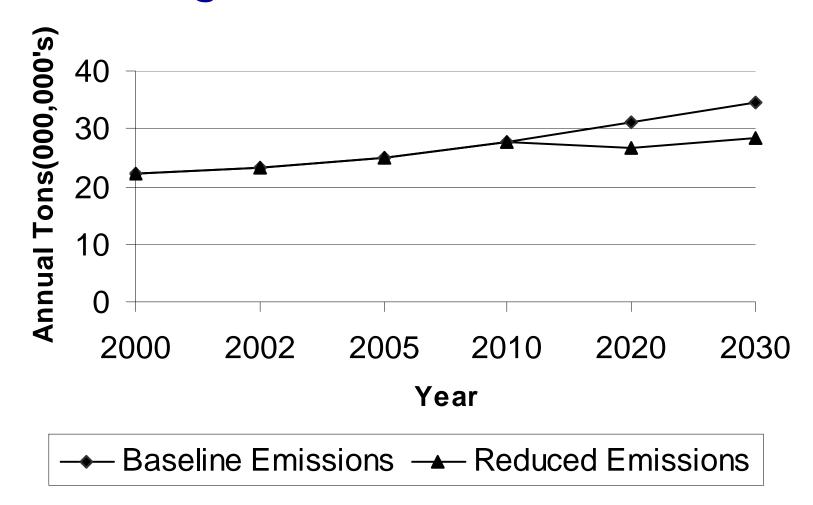
### Vehicle Fleet and Demographic Data for the Washington Region by State

	DC	MD	VA	Washington Metro Area	National
Passenger Vehicles	178,665	935,998	889,426	2,004,089	105,955,155
Light Duty Trucks	63,193	568,131	549,240	1,180,563	97,974,626
Heavy Duty Trucks	8,936	85,160	69,829	163,925	15,389,261
Total Vehicles	250,794	1,589,289	1,508,495	3,348,578	219,328,042
Population	577,500	2,236,600	2,057,700	4,871,800	296,410,400
Vehicles per Person	0.43	0.71	0. 73	0.69	0.74
Households	252,000	811,500	771,500	1,835,000	122,671,734
Vehicles per Household	1.00	1.96	1.96	1.82	1.79
Hybrid Vehicles	923	2,640	8,280	11,843	405,911
Hybrid Vehicles per 1,000 People	1.60	1.18	4.02	2.43	1.37
Hybrid Vehicles per 1,000 Households	3.66	3.25	10.73	6.45	3.31
Hybrid Percent of Passenger Vehicles	0.52	0.28	0.93	0.59	0.38
Hybrid Percent of Total Vehicles	0.37	0.17	0.55	0.35	0.19

## California Low Emission Vehicles II (CAL LEV II)

- More stringent emissions standards for greenhouse gases (CO<sub>2</sub>, methane, nitrous oxide) and other pollutants
- Applies to automobiles and light trucks starting with the 2009 model year
- California requested EPA waiver in December 2005; EPA not planning to act until Fall 2008
- Eleven other states including Maryland plan to adopt CAL LEV II, and another six states are considering these standards

### Reductions in Annual CO<sub>2</sub> Emissions with Regionwide CAL LEV II Vehicles



# Reductions in Annual CO<sub>2</sub> Emissions (Millions of Tons) with Regionwide CAL LEV II Vehicles

	2002	2020	2030	% Change 2002 - 2030
Baseline	23.273	31.018	34.451	48%
CAL LEV II Reductions	0	4.386	5.993	-
Percent Reductions	0	14.1	17.4	-
Reduced Emissions	23.273	26.632	28.458	22%

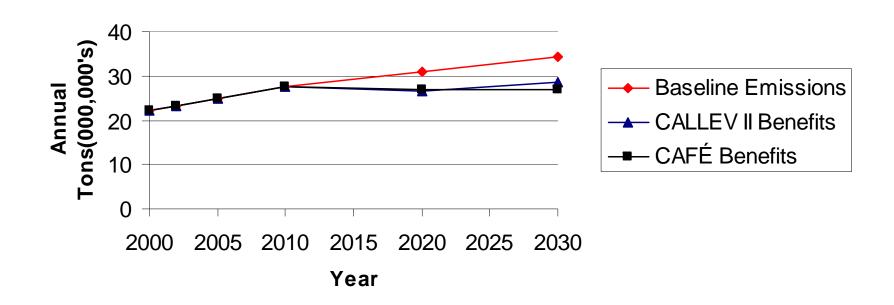
### "35 mpg by 2020" Federal CAFE Standards

- Corporate average fuel economy (CAFE) standards would be raised to 35 mpg by 2020 for all cars, trucks, and sport utillity vehicles
- First substantial change in federal CAFE standards since 1975
- Included in Senate energy bill passed on Thursday, June 21, 2007
- House bill expected in July

# Reductions in Annual CO<sub>2</sub> Emissions (Millions of Tons) with "35 mpg by 2020" Federal CAFE Standards

	2002	2020	2030	% Change 2002 - 2030
Baseline	23.273	31.018	34.451	48%
CAFE Reductions	0	4.185	7.512	-
Percent Reductions	0	13.5	21.8	-
Reduced Emissions	23.273	26.833	26.939	16%

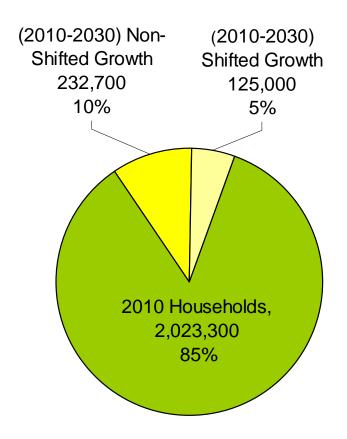
# Annual CO<sub>2</sub> Emissions Reductions for CAL LEV II and "35 mpg by 2020" CAFE Standards

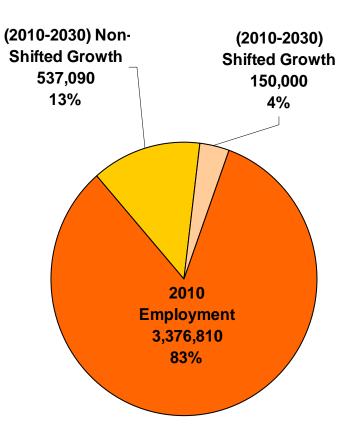


### Additional CO2 Reductions Could be Achieved through Reductions in Vehicle Miles of Travel (VMT)

- ► Travel Demand Reduction Strategies such as Telecommuting, increased transit and ridesharing
- Land Use/Transportation strategies such as the TPB Scenarios
- Current programs/scenarios reduce 2030 VMT by one to two percent

# 2030 Household and Employment Growth: TPB Transit Oriented Development Scenario





### Conclusions

- VOC and NOx mobile emissions are declining significantly even though overall vehicle travel is growing, due primarily to cleaner vehicles and fuels
- CO<sub>2</sub> mobile emissions are growing steadily. To achieve CO<sub>2</sub> reductions we need to:
  - Reduce CO<sub>2</sub> emissions per vehicle mile (e.g. California LEV II standards, Federal CAFE Standards)
  - Reduce vehicle miles of travel (Demand management, land use/transportation strategies)

### GOVERNMENT OF THE DISTRICT OF COLUMBIA DISTRICT DEPARTMENT OF TRANSPORTATION

Transportation Policy & Planning Administration



July 11, 2007

Mr. Ronald F. Kirby, Director Department of Transportation Planning Metropolitan Washington Council of Governments 777 North Capitol Street, NE Washington, DC 20002

Dear Mr. Kirby:

This letter is to request your assistance to amend the FY 2008 Unified Planning Work Program (UPWP). Specifically, we are requesting that one additional task be added to the District of Columbia's Technical Assistance Program: Highway Performance Monitoring System (HPMS). The cost of this activity is \$100,000 and the District's of Columbia's Technical Assistance Program budget will be increased from \$372,500 to \$472,500. These additional funds will be used for TPB staff time spent on the following:

- 1) Technical support in the GIS mapping of traffic volume data for 2006;
- Overall data quality assurance in assisting DDOT in meeting requirements from the HPMS Field Manual and Traffic Monitoring Guidelines;
- Technical support to DDOT in preparing and documenting traffic counts data and factors for its 2007 HPMS submission; and
- Assisting DDOT in coordinating its HPMS program and communicating progress on high priority subject areas that are part of DDOT's HPMS Continuous Process Improvements.

The District of Columbia has funds available for this project. Upon approval of the amendment, DDOT will issue a purchase order to the Metropolitan Washington Council of Governments (COG) for the additional funds.

Thank you for your assistance in this regard. Please contact me at (202) 671-2325 or Mark Rawlings at (202) 671-2234.

Sincerely,

Rick Rybeck

Deputy Associate Director, TPPA

cc:

Ken Laden Mark Rawlings



### THE PRINCE GEORGE'S COUNTY GOVERNMENT OFFICE OF THE COUNTY EXECUTIVE



JUL 0 5 2007

Ms. Catherine Hudgins, Chair National Capital Region Transportation Planning Board Metropolitan Washington Council of Governments 777 North Capitol Street, N.E., Suite 300 Washington, D.C. 20002-4290

Dear Ms. Hudgins:

On behalf of Prince George's County, I am pleased to announce our participation in the FY 2008 Street Smart Safety Campaign. The county is committed to pledging \$37,100 to this effort in FY 2008. I am excited about this campaign as it reinforces the importance of pedestrian and bicycle safety and complements the County Executive's vision of a Livable Community in Prince George's County.

Again, I would like to thank the Metropolitan Washington Council of Government's commitment to this effort and I look forward to a successful campaign.

Sincerely, from From

Jacqueline F. Brown, Ph.D. Chief Administrative Officer



### MONTGOMERY COUNTY COUNCIL ROCKVILLE, MARYLAND

OFFICE OF THE COUNCIL PRESIDENT

June 11, 2007

The Honorable Catherine Hudgins, Chair National Capital Region Transportation Planning Board 777 North Capitol Street, N.E., Suite 300 Washington, D.C. 20002-4290

Dear Ms. Hudgins:

In response to your May 31, 2007 letter requesting a contribution for the Street Smart Program, I am pleased to inform you that the Montgomery County Council has appropriated \$45,000 for the program for FY 2008.

We are happy to participate in funding this effective regional campaign promoting pedestrian and bicycle safety.

Sincerely,

Marilyn J. Praisner Council President

MJP:go 028771

Copy: Tim Firestine, Chief Administrative Officer, Montgomery County

STELLA B. WERNER COUNCIL OFFICE B

STELLA B. WERNER COUNCIL OFFICE BUILDING • 100 MARYLAND AVENUE • ROCKVILLE, MARYLAND 20850 240/777-7900 • TTY 240/777-7914 • FAX 240/777-7989



June 26, 2007

The Honorable John D. Porcari Secretary of Transportation 7201 Corporate Center Drive Hanover, Maryland 21076

Dear Secretary Porcari:

I join you in acknowledging the fine work our respective staffs have done in framing the "Metropolitan Area Transportation Operations Coordination Program" (MATOC) and the program's "Steering Committee".

In your recent letter you suggested that we, as the executive sponsors of this effort, form a "MATOC Executive Committee", meeting periodically to review the progress of the efforts and provide our input in support of this important work. I look forward to joining you and the other executive members of this group in discussing regional transportation issues during these meetings.

Your letter also pointed out that the agreement calls for each of us to name representatives and, if required alternates to the MATOC Steering Committee. I am appointing, W. Mark Miller, our Emergency Planning Operations Coordinator as our representative. He may be reached by phone at 202-962-1787 or by email at <a href="mailto:mmiller1@WMATA.com">mmiller1@WMATA.com</a>. Our alternate will be Ronald Bodmer, our Emergency Management Coordinator. His phone number is 301-618-1158 and email address is <a href="mailto:rbodmer@WMATA.com">rbodmer@WMATA.com</a>.

Sincerely,

John B. Catoe, Jr. General Manager

600 Fifth Street, NW Washington, D.C. 20001 202/962-1234

**Transit Authority** 

Washington Metropolitan Area

cc: Mr. Pierce R. Homer, Secretary, Virginia Department of Transportation Mr. Emeka Moneme, Director, District of Columbia Department of Transportation.

Mr. Ron Kirby, Director, Transportation Planning Metropolitan Washington Council of Governments

Mr. John Contestable, Acting Assistant Secretary for Administration, Maryland Department of Transportation

By Metrorail: Judiciary Square-Red Line Gallery Place-Chinatown Red, Green and Yellow Lines

A District of Columbia, Maryland and Virginia Transit Partnership



### COMMONWEALTH of VIRGINIA

#### DEPARTMENT OF TRANSPORTATION 1401 EAST BROAD STREET RICHMOND, VIRGINIA 23219-2000

David S. Ekern, P.E. COMMISSIONER

June 21, 2007

To:

Metropolitan Planning Organizations/Planning District Commissions

Subject:

Statewide Transportation Improvement Program (STIP)

I am pleased to share that, through extensive coordination with the Federal Highway Administration; Virginia's STIP is now in substantial compliance with the provisions of SAFETEA-LU. This determination is critical in light of the passage of HB3202 and the infusion of additional revenue into the transportation program. FHWA's concurrence with our approach will enable us to continue processing STIP/TIP amendments as necessary after July 1<sup>st</sup> to advance and accelerate Virginia's transportation program and to obligate federal funding. A copy of FHWA's letter is attached for your reference.

A key element of demonstrating a good-faith effort towards compliance with SAFETEA-LU was the development of an addendum to current STIP to include obligation information for FY09 and FY10. In the coming weeks, we will be providing this addendum to each MPO for concurrence. Your action is a key element of demonstrating full compliance with SAFETEA-LU. While we continue to work under the currently approved STIP, we are also looking forward to the development of a new STIP for FY09-12. This process will begin in October with anticipated federal approval of the new FY09-12 STIP in September 2008. A preliminary schedule is attached for your information.

I also want to take this opportunity to let you know about a new initiative I have included in my FY08 Business Plan. This effort is intended to integrate the STIP, Six Year Improvement Program, and Six Year Maintenance and Operations Program into a unified, consistent planning and programming process. I have recently appointed Jennifer DeBruhl to serve as Special Assistant to the Deputy Commissioner to lead this effort along with the development of Virginia's next STIP. Many of you may know Jennifer from her experience with FHWA's planning team and leadership of the Department's Urban program over the past several years. She will be assembling a multi-disciplinary team to work on this process and will be seeking your input and involvement as the team's work progresses.

A videoconference is being scheduled to discuss these issues in more detail. If you need additional information in the interim, please contact Jennifer DeBruhl at (804) 786-4293 or by email at Jennifer.DeBruhl@VDOT.virginia.gov.

Sincerely,

C:

David S. Ekern, P.E.

The Honorable Pierce Homer Mr. Roberto Fonseca-Martinez

VirginiaDOT.org
WE KEEP VIRGINIA MOVING

### FY09 STIP Development Schedule DRAFT

June 2007	CTR approval of EVAS 12 CVID
ounc 2007	<ul> <li>CTB approval of FY08-13 SYIP</li> <li>Transmittal of TIP addendum for FY09-10 for MPO</li> </ul>
	concurrence (SAFETEA-LU compliance)
July 2007	
July 2007	<ul> <li>Provide 2035 financial projections to MPOs for Constrained</li> </ul>
	Long Range Plan updates
August 2007	<ul> <li>Year End Obligation Authority Redistribution – FY07</li> </ul>
September 2007	<ul> <li>Federal fiscal year closeout – FY07</li> </ul>
	<ul> <li>Initiate Fall Transportation Meetings (early public</li> </ul>
	involvement for the development of the FY09 STIP)
October 2007	<ul> <li>Begin preparation of obligation information for MPO FY09</li> </ul>
	TIPs (focus on non-attainment areas first)
	<ul> <li>Begin federal fiscal year 2008</li> </ul>
November 2007	<ul> <li>Project lists with phase starts provided to MPOs</li> </ul>
	<ul> <li>Complete Fall Transportation Meetings</li> </ul>
December 2007	<ul> <li>Air Quality Conformity analysis begins for FY09 TIPs</li> </ul>
	<ul> <li>Obligation information provided to non-attainment MPOs for</li> </ul>
	TIPs.
Y	<ul> <li>Annual list of obligations provided for public release.</li> </ul>
January 2008	Air Quality Conformity approval by FHWA on TIP
Fah 2000	addendum (where applicable)
February 2008	<ul> <li>Obligation information provided to attainment MPOs for TIPs</li> </ul>
March 2008	Prepare obligation information for rural areas (non-MPO)
April 2008	•
May 2008	<ul> <li>Air Quality Conformity approval by FHWA/FTA/EPA</li> </ul>
	<ul> <li>Public Involvement for STIP (part of SYIP Public Hearings)</li> </ul>
_	<ul> <li>MPOs conduct public involvement on TIPs</li> </ul>
June 2008	<ul> <li>FY09 TIPs approved by MPOs and submitted to VDOT</li> </ul>
Y	<ul> <li>CTB approval of FY09-14 SYIP</li> </ul>
July 2008	<ul> <li>STIP submitted to FHWA/FTA for approval</li> </ul>
August 2008	<ul> <li>Year End Obligation Authority Redistribution – FY08</li> </ul>
September 2008	<ul> <li>FHWA/FTA approval of the STIP</li> </ul>
	<ul> <li>Post approved STIP on VDOT's website; MPOs post,</li> </ul>
	approved TIPs on their websites
October 2008	Begin federal fiscal year 2009



U.S. Department of Transportation

Federal Transit Administration Region III 1760 Market Street, Suite 500 Philadelphia, PA 19103 215-656-7100 215-656-7260 (fax)

Federal Highway Administration VA Division 400 North 8th Street, Room 750 Richmond, VA 23240 804-775-3320 804-775-3356 (fax)

Pierce R. Homer Secretary of Transportation Patrick Henry Building, 3rd Floor 1111 East Broad Street Richmond, VA 23219

Subject: SAFETEA-LU Revisions

Statewide Transportation Improvement Program (STIP)

Dear Secretary Homer:

The Federal Highway Administration and the Federal Transit Administration have reviewed the information in your May 31, 2007 letter that included information related to new planning regulations related to Virginia's STIP. The letter outlines how Virginia has responded to the changes in the STIP regulations and asks for our concurrence that the STIP is SAFETEA-LU compliant.

The new USDOT transportation planning regulations, published in the Federal Register on February 14, 2007 did not dramatically change the programming process. One of the changes made pursuant to the legislation is that the STIP must cover no less than a four-year period as opposed to the previous requirement for a three-year program. This requirement applies to the Metropolitan transportation improvement programs (TIPs) as well.

In February, FHWA accepted format changes to the form VDOT uses to demonstrate fiscal constraint of the highway program and to the electronic database of STIP projects that now cover four years. At that time we requested that the out years of the program be populated with projects to show a substantial programming of anticipated Federal-aid funds. The project listing enclosed with your letter demonstrates a substantial effort in projecting Federal-aid obligations for those out years.

In order for the USDOT to consider a STIP to be fully SAFETEA-LU compliant, the transit portion of the program must also be revised to meet the new requirements as well. FTA is currently working with DRPT regarding their needs related to meeting SAFETEA-LU requirements; including populating the out years of the transit program to reflect anticipated funds and projects.

Regarding SAFETEA-LU compliance, we recognize that the process of formally including these new project phase starts to the TIPs will be dependent upon the processes established by each MPO and that these changes cannot be formally included into the programs by July 1, 2007. This would preclude us from formally approving a STIP amendment at this time.

We are aware of the efforts underway to better integrate Virginia's programming efforts with Federal programming requirements and that, beyond this current effort to meet the four-year requirement, a schedule is being developed for a complete TIP/STIP update based on Virginia's new six year program expected to be adopted this week.

In light of the above, we recognize that there are procedural steps that need to be completed in the transition towards full SAFETEA-LU compliance. However, we do find that VDOT is making good-faith efforts in complying with the programming requirements of SAFETEA-LU. As such we will continue our current practice of processing amendments to the STIP on a case-by-case review. Please continue to coordinate with Virginia's MPOs in the completion of their transition to meet the new requirements both in the programming and the long range planning areas.

We look forward to working with you and your staff in efforts towards improving and streamlining Virginia's transportation planning and programming process.

Regional Administrator
Federal Transit Administration

Date: 6-21-67

Roberto Fonseca-Martinez
Division Administrator
Federal Highway Administration

Date: 6/2/07



Federal Transit Administration Region III 1760 Market Street, Suite 500 Philadelphia, PA 19103 215-656-7100

Federal Highway Administration DC Division 1990 K Street, N.W., Suite 510 Washington, DC 20006 202-219-3536

JUN 2 9 2007

HPR-DC

Conformity Determination for the Amended FY 2007-2012 Transportation Improvement Program (TIP), the 2006 Constrained Long Range Transportation (CLRP) Plan for the Washington Metropolitan Area

Honorable Catherine M. Hudgins, Chairman National Capital Region Transportation Planning Board c/o Mr. Ronald Kirby, Director of Transportation Planning Metropolitan Washington Council of Governments 777 North Capital Street, NW, Suite 300 Washington, D.C. 20002-4201

### Dear Chairman Hudgins:

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have completed our review of the Air Quality Conformity Determination of the amended 2006 Constrained Long Range Plan and the FY 2007-2012 Transportation Improvement Program for the Washington Metropolitan Area adopted by the Transportation Planning Board (TPB) on June 20, 2007.

The Environmental Protection Agency, in a letter to FHWA's District of Columbia Division dated June 27, 2007, for the air quality conformity (enclosed), acknowledges its review and includes technical documentation that supports the conformity finding to include an interchange at US15/340 and Jefferson Technology Park in Frederick, Maryland into the region's CLRP and FY 2007-2012 TIP.

FHWA/FTA find that the amended 2006 CLRP and the FY 2007-2012 TIP conform to the region's State Implementation Plans, and that the conformity determination has been performed in accordance with the Transportation Conformity Rule (40CFR Part 93), as amended.

Any questions concerning this approval action should be directed to Ms. Sandra Jackson, FHWA District of Columbia Division Office, (202) 219-3521 or Deborah Burns, FTA Washington DC Metropolitan Office, (202) 219-3565.

Sincerely,

Mark R. Kenrii

Division Administrator

Federal Highway Administration

Letitia A. Thompson Regional Administrator

Federal Transit Administration

Enclosure



cc: Kwame Arhin, FHWA, MD
Ed Sundra FHWA, VA
Unwanna Dabney, FHWA, VA
Michele Destra, FTA
Gail McFadden-Roberts, FTA
Joanne Sorenson, VDOT
Lyn Erickson, MDOT
Emeka Monome, DDOT
John Catoe, WMATA

Enclosure



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

JIN 2 7 2007

Mr. Mark R. Kehrli Division Administrator Federal Highway Administration, District of Columbia Division 1900 K Street, NW, Suite 510 Washington, D.C. 20006-1103

Dear Mr. Kehrli:

The United States Environmental Protection Agency (EPA) Region III has reviewed the Amended 8-Hour Ozone and PM2.5 Conformity Determination for the 2006 Constrained Long-Range Plan and the FY 2007-2012 Metropolitan Washington Transportation Improvement Program (TIP) as adopted by the National Capital Region Transportation Planning Board (TPB) and submitted to us by the Federal Highway Administration (FHWA) on June 21, 2007. EPA has reviewed the Conformity Determination in accordance with the procedures and criteria of the Transportation Conformity Rule contained in 40 CFR part 93.

Our review of the conformity determinations for the Washington, D.C. Metropolitan Area indicates that the determinations meet the requirements of the Clean Air Act and the applicable regulations promulgated thereunder at 40 CFR Part 93. Enclosed, please find EPA's detailed evaluation titled "Technical Support Document for Review of the Amended 8-Hour Ozonc and PM2.5 Conformity Determination of the 2006 Constrained Long-Range Plan and the FY 2007-2012 Metropolitan Washington Transportation Improvement Program."

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Please feel free to call Carol Febbo, Chief, Energy, Radiation and Indoor Environment Branch at (215) 814-2076 or Martin T. Kotsch, at (215) 814-3335 to discuss this review.

Sincerely,

Judith M. Katz, Director

Air Protection Division

#### Enclosure

cc: Kwame Arhin (FHWA, MD)
Sandra Jackson (FHWA, DC)
Ed Sundra (FHWA, VA)
Howard Simons (MDOT)
Diane Franks (MDE)
Jim Sydnor (VDEQ)
Joan Rohlfs (MWAQC)
Tony Tarone (FTA)

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street

1650 Arch Street Philadelphia, Pennsylvania 19103

June 27, 2007

SUBJECT:

Technical Support Document for Review of the Amended 8-Hour Ozone and PM2.5 Conformity Determinations of the 2006 Constrained Long Range Plan and the FY 2007-2012 Metropolitan Washington Transportation Improvement

Program,
Mach Roland
FROM: Martin T. Kotsch, (3AP23)

TO: Administrative Record of EPA's Review of the Amended 8-Hour Ozone and PM2.5 Conformity Determinations of the 2006 Constrained Long Range Plan and the FY 2007-2012 Metropolitan Washington Transportation Improvement Program

THE Carol Febbo, Chief Lewis K. Fellows Energy, Radiation and Indoor Environment Branch (3AP23)

The purpose of this document is to review the Amended 8-Hour Ozone and PM2.5 conformity determinations of the 2006 Constrained Long Range Plan (CLRP) and the amended FY 2007-2012 Metropolitan Washington Transportation Improvement Program (TIP) prepared by the Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board (TPB). The TIP and CLRP conformity determinations were submitted to the Environmental Protection Agency (EPA) on June 21, 2007 by the District of Columbia Division of the United States Federal Highway Administration (FHWA). The amended TIP added one new regionally significant project in Frederick County, Maryland with no other changes to the emissions analysis.

The Metropolitan Washington D.C. Area is a moderate 8-hour non-attainment area for ozone. For the 8-hour conformity analysis, the 2005 Attainment SIP budgets for the 1-hour standard are

applicable for use in the 8-hour conformity analysis per 93.109(e) of the conformity rule since there are no current adequate or approved 8-hour mobile budgets. As a small piece of the previous geographical 1-hour non-attainment area (Stafford County, VA) is now in another non-attainment area (Fredericksburg, VA), the previous 1-hour budget for 2005 could have been reduced to reflect the new smaller 8-hour non-attainment area. However, TPB chose to continue to include Stafford County in its travel demand analysis and emissions analysis, which is permissible under the conformity rule until such time that new SIPs for the smaller 8-hour non-attainment area with new mobile budgets are submitted and either found adequate or approved by EPA.

A portion of the MPO planning area is also a CO maintenance area with an emissions budget, but since the one new project in the Tip/Plan is in Frederick County, which was classified unclassifiable/attainment for CO by EPA and is outside the existing CO non-attainment area and no VMT from the new project impacts the emissions within the CO nonattainment area, no new CO conformity determination was done for the overall emissions analysis.

The Metropolitan Washington D.C. Area is a non-attainment area for PM2.5 annual standard, with smaller geographical boundaries than its previous 1-hour ozone non-attainment area. Therefore the TPB developed a new transportation model which reflected the smaller non-attainment area to develop the necessary VMT and related emission factors to complete the conformity analysis and determination.

The conformity determination was reviewed in accordance with the procedures and criteria of the Transportation Conformity Rule, 40 CFR Part 93, Sections 93.102(b)(1), 93.102 (b)(2)(iv), 93.102(b)(2)(v), 93.102(b)(3), 93.106, 93.108, 93.110, 93.111, 93.112, 93.113(b), 93.113(c), 93.118 and 93.119.

### Evaluation of the Amended 2006 Constrained Long Range Plan and the FY2007-2012 Metropolitan Washington Transportation Improvement Program

SECTION of 40 CFR Part 93	CRITERIA	Y/N	COMMENTS
93.110	Is the conformity determination based upon the latest planning assumptions?  (a) Is the conformity determination, with respect to all other applicable criteria in §§93.111 - 93.118, based upon the most recent planning assumptions in force at the time of the conformity determination?  (b) Are the assumptions derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other designated agency? Is the conformity determination based upon the latest assumptions about current and future background concentrations?	Y	(a) & (b) The conformity determination is based upon latest planning assumptions in force and approved by the TPB at the time of the determination. The assumptions include:  1) Travel Demand Modeling Assumptions:  - Use of newer Version 2.1D #50 travel demand model process  -New travel forecasts incorporated.  2) Emissions Model Assumptions: MOBILE6.2 modeled emissions factors were developed for years; 2010, 2020, 2030 for ozone and PM2.5.  3) Emissions Factor Assumptions  -Enhanced I/M was assumed in DC, MD, VA  -Low emission vehicle program was modeled  -No oxygenated fuels were assumed for wintertime  -Tier 2 / low sulfur vehicle controls were modeled  4) Vehicle Registration Data: 2005 data for Maryland DC and Virginia  5) Land Activity Assumptions (growth forecasts):  -In May, 2006 Round 7.0a forecasts were approved by the TPB for use in the conformity determination. As a result, household data as well as employment data have been updated. New growth figures between 2002 and 2030 used in this determination are shown below:  -Household: 43% increase  -Employment: 45% increase

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(c) Are any changes in the transit operating policies (including fares and service levels) and assumed transit ridership discussed in the determination?	Y	(c) Transit policies such as frequency and hours of operation were updated from the last conformity determination
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(d) The conformity determination must include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.	Y	(d) Transit ridership and services were adjusted to reflect increased fares from several providers within the affected region. No changes in bridge tolls are anticipated at this time
(c) Does the conformity determination use the latest existing information regarding the effectiveness of the TCMs and other implementation plan measures which have already been implemented?	Y	(e) All of the TCMs listed in the Phase II Attainment Plat for the Metropolitan Washington D.C. area were implemented timely. The latest information regarding TCMs and other implementation plan measures effectiveness have been used.
(t) Are key assumptions specified and included in the draft documents and supporting materials used for the interagency and public consultation required by §93.105?	Y	(f) Appendix A of the conformity determination provides key assumptions for this conformity determination. This document and its earlier drafts were developed through the interagency and public consultation process detailed in the chart on page A8 of Appendix A.
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The same of the sa	reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.  (c) Does the conformity determination use the latest existing information regarding the effectiveness of the TCMs and other implementation plan measures which have already been implemented?  (t) Are key assumptions specified and included in the draft documents and supporting materials used for the interagency and public consultation	reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.  (c) Does the conformity determination use the latest existing information regarding the effectiveness of the TCMs and other implementation plan measures which have already been implemented?  (t) Are key assumptions specified and included in the draft documents and supporting materials used for the interagency and public consultation

93.111	Is the conformity determination based upon the latest emissions model?	Y	This conformity determination used the mobile emissions model: MOBILE6.2, the latest EPA emissions model available to do the emissions analysis
93.112	Did the MPO make the conformity determination according to the consultation procedures of the conformity rule or the state's conformity SIP?	Y	Consultation procedures were followed in accordance to the TPB consultation procedures.  These procedures are based on the procedures of the Federal Conformity Rule.
а		G Comment	Interagency Consultation The TPB has consulted with all appropriate agencies. This includes the District of Columbia Environmental Regulation Administration, Maryland Department of the Environment, Maryland Department of Transportation, Maryland Office of Planning, Virginia Department of Environmental Quality, Virginia Department of Transportation, Federal Highway Administration.
	9		EPA, and county representatives of the counties of the Metropolitan Washington D.C. area.  Public Consultation The TPB has provided opportunities for public comment on the amended Conformity Determination. On April
	0		12, 2007 the TPB released for public comment, the draft air conformity analysis for the TIP and CLRP for thirty days. No comments relevant to air quality were received on the amended Conformity Determination.
93.106(a) (1)	Are the horizon years correct?	Y	The horizon years chosen, 2010, 2020 and 2030 represent appropriate horizon years for the 8-Hour Ozone and PM2.5 conformity determination. 2010 is within the first 5 years of the transportation plan.

	CRITERIA APPLICABLI	ONL	Y TO THE CLRP
93.102(b)(2)(iv)	Has the EPA and the State made a finding that NOx is an insignificant contributor to the direct mobile PM emissions or does any applicable implementation plan (or implementation plan submission) fail to establish an approved (or adequate) NOx budget as part of a PM 2.5 reasonable further progress, attainment or maintenance strategy?	N	NOx is included in the PM emission analysis
93.102(b)(2)(v)	Has the EPA or State made a finding that VOCs, SOx or NH(3) as precursors to be a significant contributor to the mobile PM emissions or has an applicable implementation plan (or implementation plan submission) establish an approved (or adequate) budget for VOCs, SOx or NH(3) as part of a PM 2.5 reasonable further progress, attainment or maintenance strategy?	N	VOCs, SOx and NH(3) as precursors are not included in the emissions analysis

93.102(b)(3)	Has the EPA or the State made a finding that re-entrained road dust is a significant contributor to the PM mobile emissions or has an applicable implementation plan (or implementation plan submission) establish an approved (or adequate) budget that includes re-entrained road dust as part of a PM 2.5 reasonable further progress, attainment or maintenance strategy?	N	Re-entrained road dust is not included in the emissions analysis
93.106(a) (2)(i)	Does the plan quantify and document the demographic and employment factors influencing transportation demand?	Y	Pages 19-20 of the conformity determination summarizes; population, employment, and households for the Metropolitan Washington D.C. area. These forecasts were based upon the Round 7.0a forecast.
93.106(a) (2)(ii)	Is the highway and transit system adequately described in terms of the regionally significant additions or modifications to the existing transportation network which the transportation plan envisions to be operational in the horizon years?	Y	Appendix B of the conformity determination lists the projects and provides a description of the projects anticipated to be completed during the evaluation period of the conformity analysis
93.108	Is the transportation plan fiscally constrained?		The TPB and FHWA have determined that the plan is fiscally constrained
93.113(b)	Are TCM's being implemented in a timely manner?	Y	All the TCMs listed in the Phase II Attainment Plan for the Metropolitan Washington D.C. area were timely implemented. The latest information regarding TCMs and other implementation plan measures effectiveness have been used.

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93.118	For areas with SIP Budgets: is the Transportation Plan, TIP or Project consistent with the motor vehicle emissions budget(s) in the applicable SIP?	Y	On May 13, 2005, (70 FR 25688) EPA approved the 2005 Attainment Plans for both Virginia and the District of Columbia. On November 16, 2005 (70 FR 69440) EPA approved the 2005 Attainment Plan for Maryland, therefore those mobile budgets are the applicable budgets to be used in this conformity determination. All three of these attainment mobile budgets are identical.
			2005 Mobile Budget: 2010 Analysis
1			97.4. T/D (VOC) 65.6 T/D (VOC) 234.7 T/D (NOx) 140.2 T/D (NOx)
			2005         Mobile Budget         2020         Analysis           97.4. T/D (VOC)         41.6 T/D(VOC)           234.7 T/D (NOx)         49.3 T/D (NOx)
20		-	2005 Mobile Budget 97.4. T/D (VOC) 39.5 T/D(VOC) 38.0 T/D (NOx)
93.119	For areas without emission budgets: Does the Transportation Plan, TIP or Project demonstrate contribution to emission reductions?	Y	There are no PM2.5 SIP budgets for the area, therefore an interim test of using the less than base year (2002) test analysis was conducted and the results are showed below. Under 93.109 (e), this interim test is permissible as the area had choice of either the less than base year test or build/no greater than build analysis for the area. The base year emissions are based on emissions modeling done by the TPB and agreed upon by the air agencies in the three jurisdictions and are shown as tons per year below. The analysis shows that the PM2.5 non-attainment area passes the interim emissions test.
2			2002 BaseYear       2010 Analysis         1634.4 tpy (Direct PM)       1013.2 tpy (Direct PM)         96721.0 tpy (NOx)       47180.2 tpy (NOx)
	6		2002 Base Year       2020 Analysis         1634.4 tpy (Direct PM)       750.3 tpy (Direct PM)         96721.0 tpy (NOx)       16317.5 tpy (NOx)
			2002 Base Year       2030 Analysis         1634.4 tpy (Direct PM)       767.6 tpy (Direct PM)         96721.0 tpy (NOx)       12430.3 tpy (NOx)
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### Evaluation of the Amended 2006 Constrained Long Range Plan and the FY2007-2012 Metropolitan Washington Transportation Improvement Program

CRITERIA APPLICABLE ONLY TO THE TIP							
93.10 <b>2</b> (b)(2)(iv)	Has the EPA and the State made a finding that NOx is an insignificant contributor to the direct mobile PM emissions or does any applicable implementation plan (or implementation plan submission) fail to establish an approved (or adequate) NOx budget as part of a PM 2.5 reasonable further progress, attainment or maintenance strategy?	N	NOx is included in the PM emission analysis				
93.102(b)(2)(v)	Has the EPA or State made a finding that VOCs, SOx or NH(3) as precursors to be a significant contributor to the mobile PM emissions or has an applicable implementation plan (or implementation plan submission) establish an approved (or adequate) budget for VOCs, SOx or NH(3) as part of a PM 2.5 reasonable further progress, attainment or maintenance strategy?	N	VOCs, SOx and NH(3) as precursors are not included in the emissions analysis				
93.102(b)(3)	Has the EPA or the State made a finding that re-entrained road dust is a significant contributor to the PM mobile emissions or has an applicable implementation plan (or implementation plan submission) establish an approved (or adequate) budget that includes re-rentrained road dust as part of a PM 2.5 reasonable further progress, attainment or maintenance strategy?	N	Re-entrained road dust is not included in the emissions analysis				

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93.113(b)	Are TCM's being implemented in a timely manner?	Y	All the TCMs listed in the Phase II Attainment Plan for the Metropolitan Washington D.C. area were implemented timely. The latest information regarding TCMs and other implementation plan measures effectiveness have been used.
93.118	For areas with SIP Budgets: is the Transportation Plan, TIP or Project consistent with the motor vehicle emissions budget(s) in the applicable SIP?	Y	On May 13, 2005, (70 FR 25688) EPA approved the 2005 Attainment Plans for both Virginia and the District of Columbia. On November 16, 2005 (70 FR 69440) EPA approved the 2005 Attainment Plan for Maryland, therefore those mobile budgets are the applicable budgets to be used in this conformity determination. All three of these attainment mobile budgets are identical.
			2005 Mobile Budget: 2010 Analysis  97.4. T/D (VOC) 65.6 T/D (VOC) 234.7 T/D (NOx) 140.2 T/D (NOx)  2005 Mobile Budget 2020 Analysis 97.4. T/D (VOC) 41.6 T/D(VOC)
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	93.119		For areas without emission budgets:  Does the Transportation Plan, TIP or Project demonstrate contribution to emission reductions?	Y	There are no PM2.5 SIP budgets for the area, therefore an interim test of using the less than base year (2002) test analysis was conducted and the results are showed below. Under 93.109 (e), this interim test is permissible as the area had choice of either the less than base year test or build/no greater than build analysis for the area. The base year emissions are based on emissions modeling done by the TPB and agreed upon by the air agencies in the three jurisdictions and are shown as tons per year below. The analysis shows that the PM2.5 non-attainment area passes the interim emissions test.
		12		=	2002 BaseYear       2010 Analysis         1634.4 tpy (Direct PM) 1013.2 tpy (Direct PM)         96721.0 tpy (NOx)       47180.2 tpy (NOx)         2002 Base Year       2020 Analysis         1634.4 tpy (Direct PM)       750.3 tpy (Direct PM)         96721.0 tpy (NOx)       16317.5 tpy (NOx)
			g g	¥.	2002 Base Year 2030 Analysis 1634.4 tpy (Direct PM) 767.6 tpy (Direct PM) 96721.0 tpy (NOx) 12430.3 tpy (NOx)

#### CONCLUSION

Pursuant to FHWA's June 21, 2007 request, we have reviewed the Amended 8-Hour Ozone and PM2.5 conformity determinations for the 2006 Constrained Long Range Plan and the FY2007-2012 Metropolitan Washington Transportation Improvement Program prepared by the Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board. We have determined that the 2006 Constrained Long Range Plan and the FY2007-2012 Metropolitan Washington Transportation Improvement Program meet the requirements of the federal conformity rule.