

ITEM 10 - Information

May 17, 2006

Update on Air Quality Planning Activities

Staff

Recommendation: Receive briefing on the enclosed memorandum on four ongoing work activities:

- results from applying a vehicle identification number (VIN) decoder to July 1, 2005 vehicle registration data;
- comparison of "monthly versus seasonal" approaches to estimation of yearly mobile source emissions;
- status of Round 7.0a cooperative forecasts; and
- a status report on 8-hour ozone SIP work activities and schedule.

Issues: None

Background: TPB staff has been involved throughout the year in supporting the Metropolitan Washington Air Quality Committee (MWAQC) in the preparation of mobile source emission inventories needed for State Implementation Plans. This item provides a status report on some of these activities.

National Capital Region Transportation Planning Board

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MEMORANDUM

May 10, 2006

To: Transportation Planning Board

From: Michael J. Clifford
Systems Planning Applications Director

Subject: Update on Air Quality Planning Activities

This agenda item is designed to provide the Board with an overview of several ongoing work activities in the air quality planning area. These topics, each of which has some attached descriptive material, are as follows.

1. 'VIN Decode' Results This project involves reading a 'vehicle identification number' (VIN) from District of Columbia, Maryland and Virginia vehicle registration files to extract information such as vehicle age, weight and fuel type, i.e., characteristics which are relevant to vehicle emissions rates. The first attachment is Daivamani Sivasailam's memo to files, which documents the results of the VIN Decoder project. Since the appendices to his memo are lengthy they are not reproduced here, but are available on the COG website. These data are currently being used in SIP planning work and will be used in subsequent air quality conformity assessments. Additional information will be presented at the May 17th TPB meeting.

2. Monthly Vs. Seasonal VOC Results The second attachment is an email transmittal of three charts from me to Sunil Kumar on the COG/DEP staff, to conclude discussion of 'monthly vs. seasonal' approaches to the estimation of total yearly mobile source emissions. The charts, prepared at the request of the Metropolitan Washington Air Quality Committee (MWAQC)'s Emissions Inventory Working Group, show the comparison of 'precursor VOC' rates for each approach. The charts verify that similar rates are obtained using either approach for this pollutant, consistent with the previous similar emissions results seen for PM2.5 and 'precursor NOx'.

3. Round 7.0a Cooperative Forecasts The third attachment is a memo from Paul DesJardin on the COG/HSPPS staff, which reports further progress in the formal development of the Round 7.0a Cooperative Forecasts which are to be utilized in the air quality conformity assessment of the 2006 CLRP and FY2007-12 TIP. He also notes that these forecasts will incorporate the Baltimore Metropolitan Council's latest adopted

forecasts, Round 6B.

4. SIP Schedule The fourth attachment contains COG/DEP's current schedule for development of the 8-hour ozone state implementation plan. Work efforts are well along in this planning effort to produce a new air quality attainment plan for the region, which will set new mobile source emissions budgets for transportation.

Staff will provide additional details on each of these items at the May 17th TPB meeting.

Attachments (4)

ATTACHMENT A

Memorandum

May 10, 2006

To: VIN Decoder Project Files

From: Daivamani Sivasailam
Principal Transportation Engineer

Subject: Development of vehicle age distributions and diesel vehicle percentages using VIN decoder software - Overview

Introduction

This memorandum summarizes the methodology used, and the results obtained, in developing Mobile 6 input files of vehicle characteristics data summarized from 2005 District of Columbia, Maryland and Virginia vehicle registration data. The Mobile 6 model requires age distribution (1-25+ years) and diesel fueled vehicle percentages for 16 separate vehicle types (passenger cars, motorcycles, light trucks, and heavy trucks in ascending weight categories). The model then generates 28 vehicle types by applying the diesel percentages to the relevant vehicle types. This work continues the cycle of obtaining consistent vehicle registrations on a 3 year basis. These results will be used in the development of the mobile source emissions inventories for state implementation plan (SIP) preparation, starting with immediate application in the 8-Hour Ozone plan, and in air quality conformity assessments.

Background

In FY 2005, Department of Transportation Planning staff embarked on a pilot test of VIN decoder software. Samples of VIN data were obtained from the District of Columbia, Maryland, and Virginia and they were decoded using software called VINPOWER developed by ESP Data Solutions. From the decoded database, age distributions and diesel vehicle percentages for sixteen vehicle types were developed. The resulting distributions were compared with (2002) distributions previously developed from DMV data by the air agencies. Staff concluded that the software could be used to develop vehicle age distributions and diesel vehicle percentages for calendar year 2005. In FY 2006 staff purchased the full version of the decoder software and internally developed the program required to run the software in a batch mode.

Application of VIN Decoder

During spring 2005, the air agencies were asked to provide registration data including VIN numbers as of July 1, 2005. DTP staff received the data in early fall and, after data were cleaned of duplicates, successfully decoded the vehicle identification using the VIN decoder software. Staff then executed several work tasks to translate the decoded data into the vehicle type, age and fuel type categories required by the Mobile 6 model. These steps are documented in the 3 appendices attached to this memorandum, one each for the District of Columbia, Maryland, and Virginia. Attachments 1 and 2 provide summary data for each jurisdiction in terms of fleet mix and vehicle age, respectively.

Committee Review

Several conference calls and meetings were held with air and transportation department representatives to discuss the results, and a number of changes were suggested to improve the vehicle age distributions and diesel vehicle percentages. Changes incorporated to date are as follows:

1) Vehicles Aged 25 Years and Older:

Since the VIN decoder software used could not fully decode vehicles manufactured prior to 1980, staff used the registration data base (which contained control totals of total number of vehicle registrations by model year) to identify the total number of vehicles that were 25 years and older. These vehicles were then distributed among the 16 vehicle types using the vehicle type distribution of vehicles aged 20 through 24 that were decoded using the software.

2) Transit Bus (Diesel) vs. Shuttle Bus (Gas) categories

Under the 28 vehicle categories there are three bus categories namely, heavy duty diesel transit bus, heavy duty diesel school bus and heavy duty gas bus. The heavy duty gas bus would include school, transit and other types of buses. None of the heavy duty gas buses were assigned to transit bus, since the Mobile 6 guidance states that all urban transit buses are diesel. Since the gas buses were mostly small shuttle buses they were distributed among the heavy duty vehicle types HDV2B, HDV3, and HDV6 using the gross vehicle weight of the gas buses as determined by the VIN decoder.

3) School Bus and Transit Bus Age Distribution: Actual vs. Default Data

It was decided to use the VIN decoded transit and school bus registration data instead of the Mobile 6.2 defaults as was done previously, despite the 'peaks' occasioned by the periodic purchase of vehicles.

4) Light Duty Diesel Truck Categories (2 for Diesel, 4 for Gas)

Under the 28 vehicle categories there are four light gas trucks (LDGT1, LDGT2, LDGT3, and LDGT4). However, there are only two light duty diesel trucks, with the light duty diesel trucks 1 and 2 combined into one category (LDDT12) and light duty diesel trucks 3 and 4 into one category (LDDT34). The two light duty diesel truck categories were distributed among the four light duty trucks 1, 2, 3, and 4 based on the gross vehicle weight as determined by the VIN decoder.

5) Aggregation of Diesel Fractions by Jurisdiction

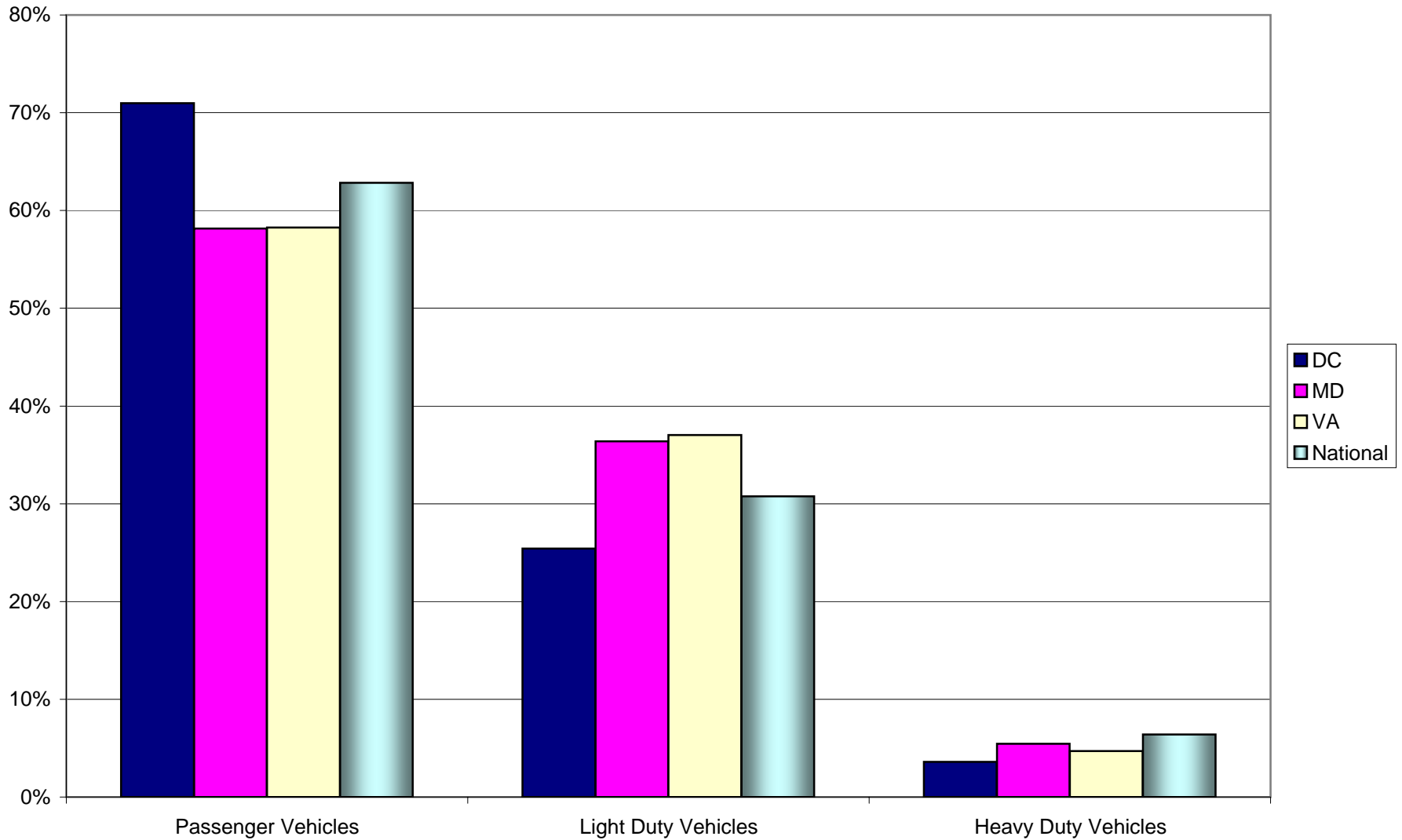
In Maryland and Northern Virginia, age distributions by vehicle type were developed at the county level. However, diesel vehicle percentages were aggregated to one representing Maryland and one for Northern Virginia. The District's data were combined with the Maryland jurisdictions to develop a diesel vehicle percentage for the District of Columbia.

Appendices 1–3 contain the detailed documentation memorandum for each state along with the Mobile 6.2 input files available for use in the 8-hour ozone emissions inventory work.

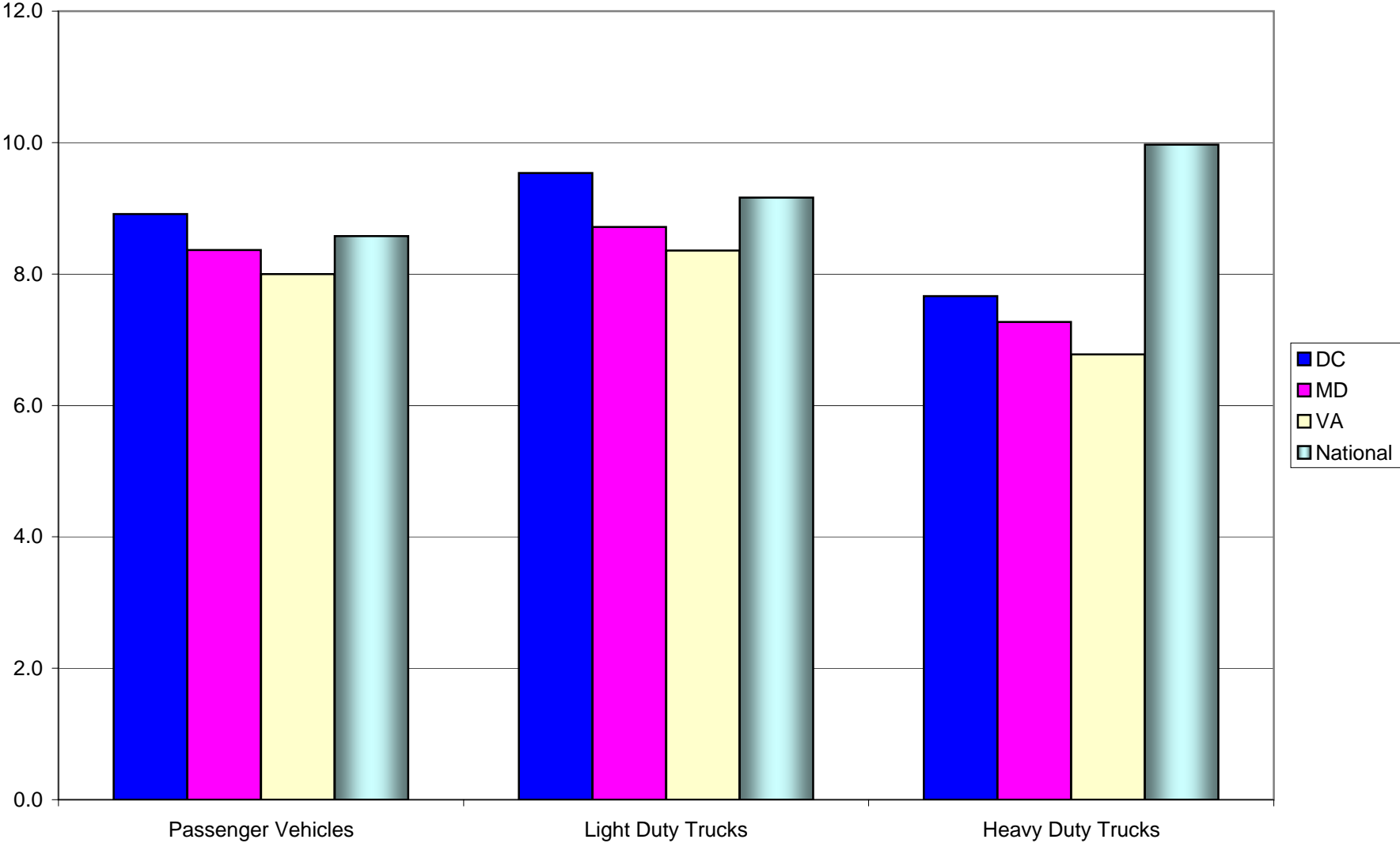
Attachments (2)

Appendices (3)

Vehicle Fleet Distributed by Vehicle Type for the Washington Metropolitan Area



Average Vehicle Age for the Washington Metropolitan Area



ATTACHMENT B

From: Mike Clifford
Sent: Monday, May 01, 2006 1:26 PM
To: Sunil Kumar
Cc: Eulalie Gower-Lucas; Daivamani Sivasailam; Jane Posey
Subject: Transmittal of VOC emissions rates for monthly vs. seasonal inventory methods

Sunil,

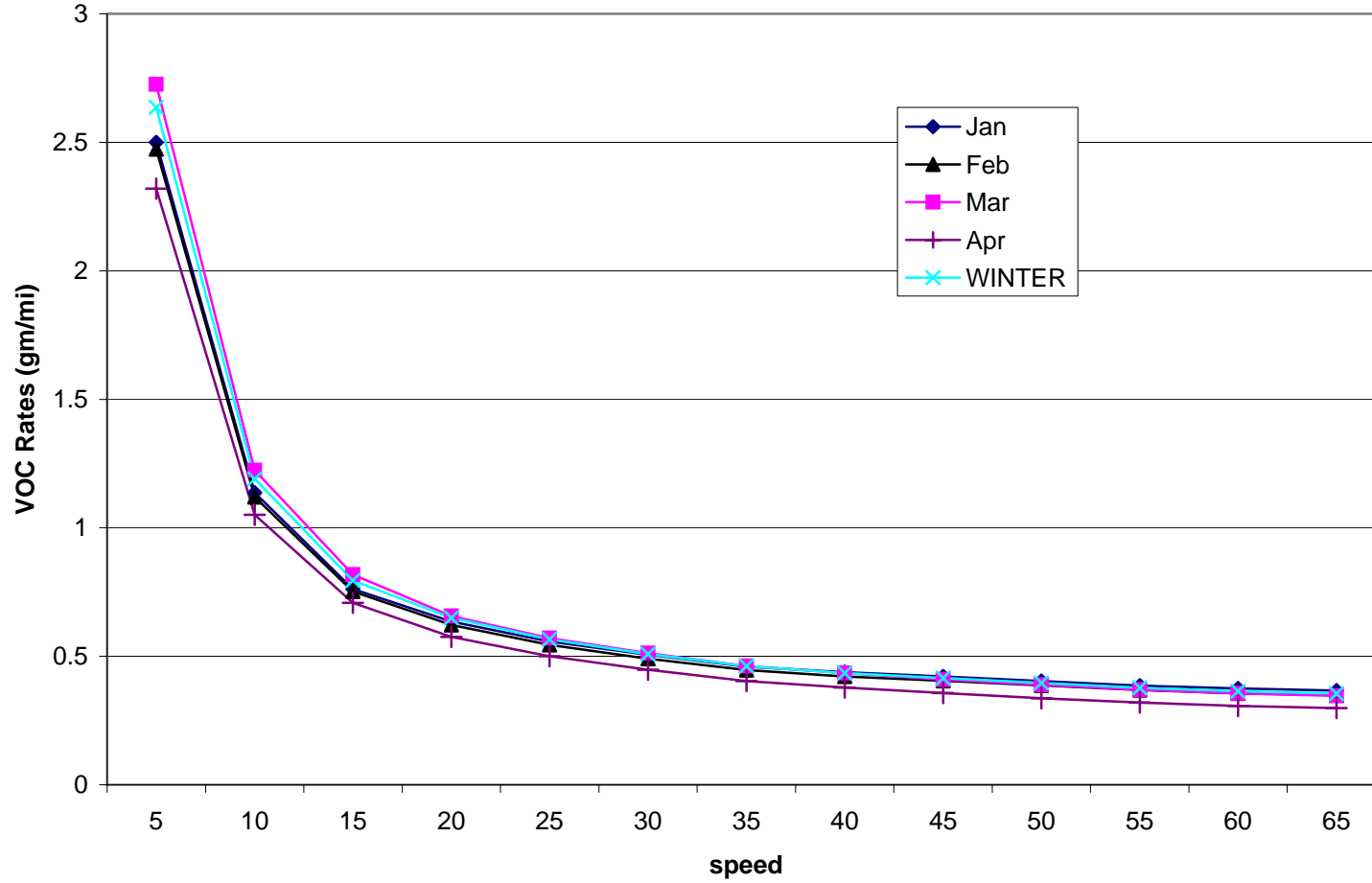
At the Emissions Inventory Working Group conference call on April 13th we discussed comparisons of monthly versus seasonal mobile source emissions inventory results. The group was comfortable with proceeding with the 3 season approach, but asked for a review of VOC emissions factors using the 2 different approaches.

DTP staff has now completed such a comparison for several jurisdictions in the region. The attached pdf file illustrates the monthly vs. seasonal comparison using DC as an example. (Such VOC rates had been generated as part of the earlier monthly and seasonal Mobile6 runs but the rates had not been formatted, so programming steps had to be carried out to produce the VOC rates.) The rates in the attached plots show a close association for the monthly and seasonal values throughout the year, throughout the vehicle speed range.

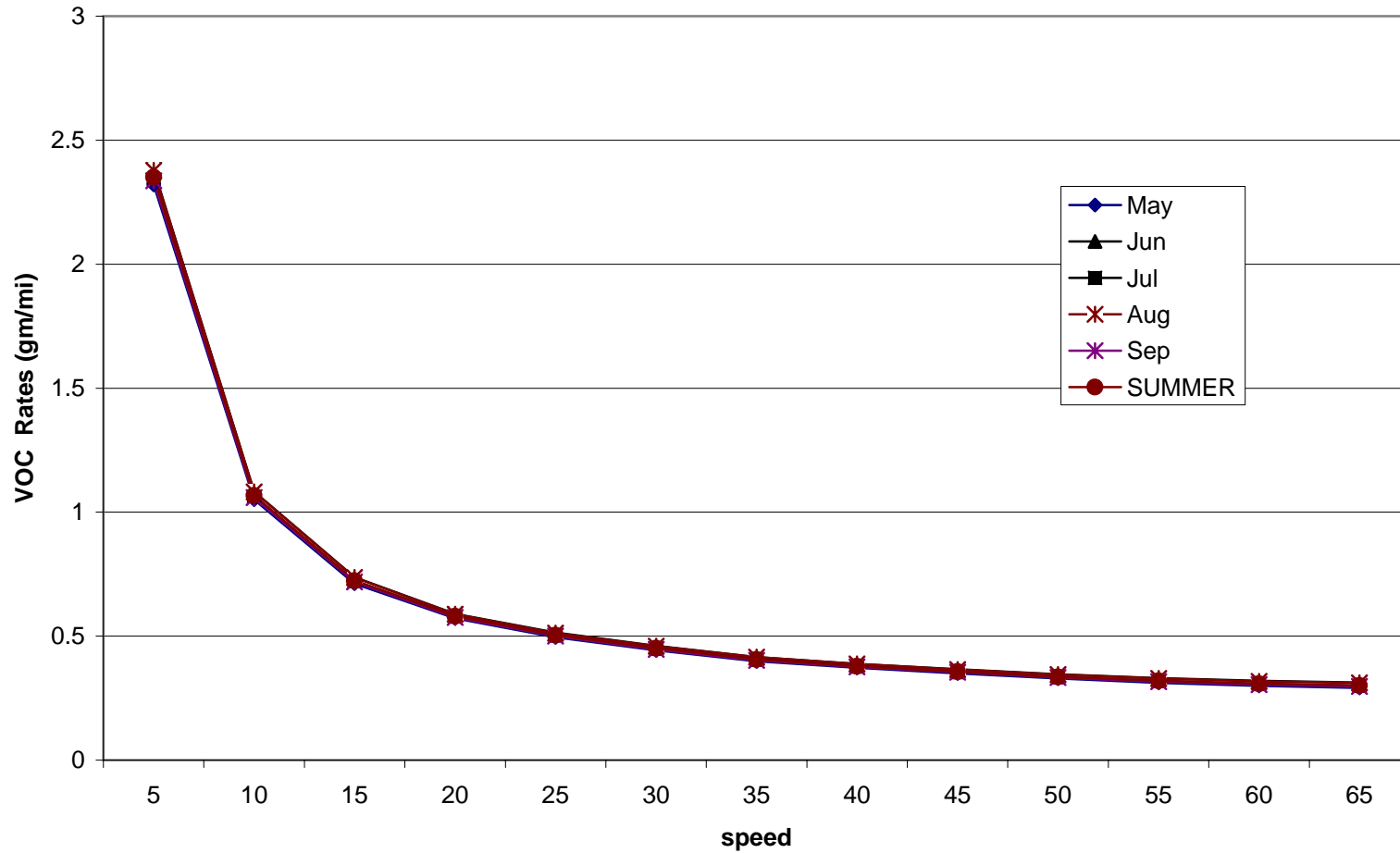
Thank you for your data review work in discussing initial results. Please distribute these data to the participants on the working group conference call.

Mike

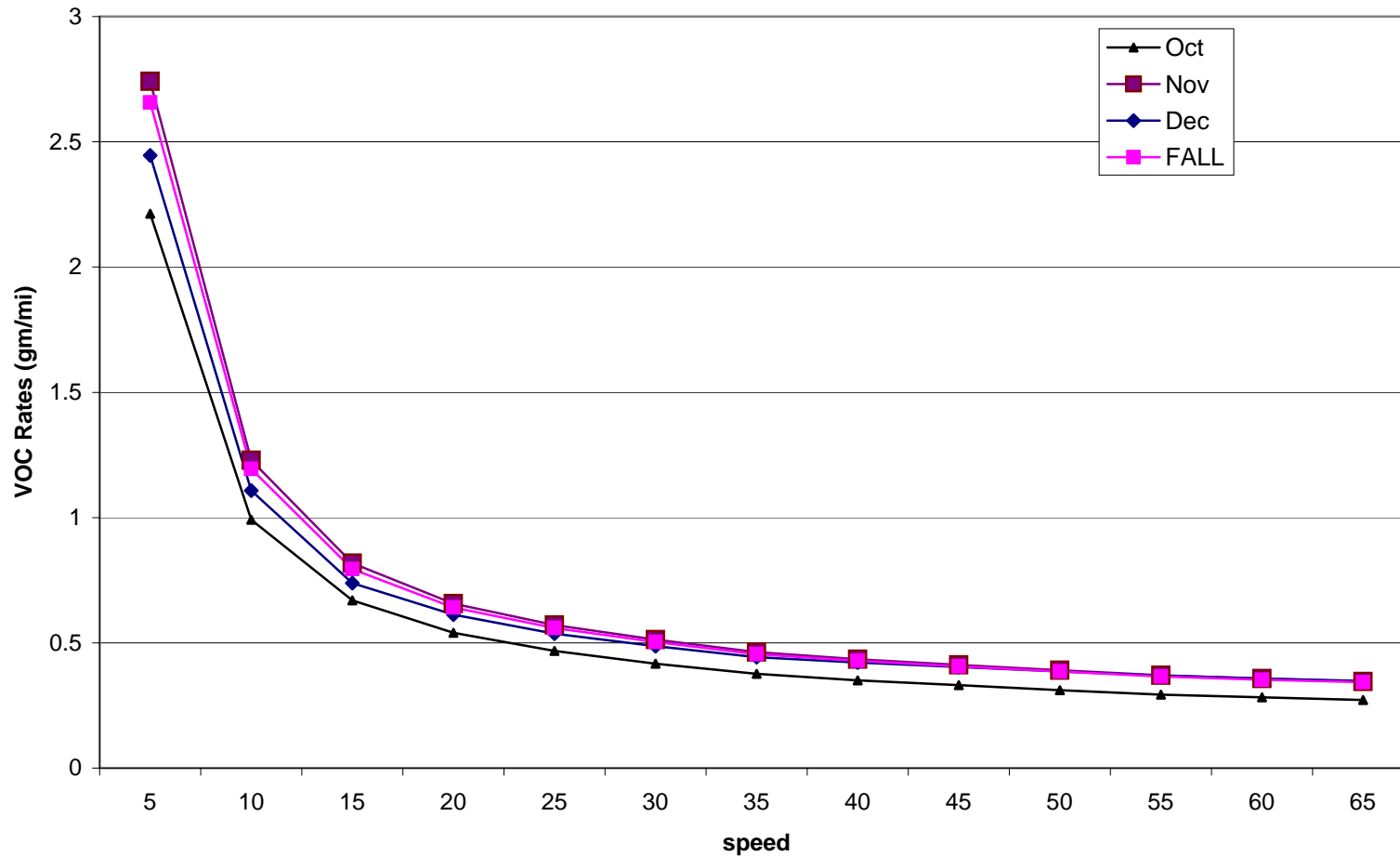
Attachment A
Comparison of 2002 Mobile VOC Rates by Month and Season
for DC Freeways
Winter Season



Attachment B
Comparison of 2002 Mobile VOC Rates by Month and Season
for DC Freeways
Summer Season



Attachment C
Comparison of 2002 Mobile VOC Rates by Month and Season
for DC Freeways
Fall Season





ATTACHMENT C

MEMORANDUM*District of Columbia**Bowie**College Park**Frederick County**Gaithersburg**Greenbelt**Montgomery County**Prince George's County**Rockville**Takoma Park**Alexandria**Arlington County**Fairfax**Fairfax County**Falls Church**Loudoun County**Manassas**Manassas Park**Prince William County*

Date: April 25, 2006

To: Michael Clifford
Department of Transportation Planning

From: Paul DesJardin
Department of Human Services, Planning and Public Safety

Subject: Planning Directors Approval of Round 7.0a Cooperative Forecasts

During the March 17 meeting of the Planning Directors Technical Advisory Committee (PDTAC), the District of Columbia requested the opportunity to modify their current (Round 7.0) Cooperative Forecasts to reflect land use changes relating to the recently approved design of the Washington Nationals stadium, released on March 15th, and associated infrastructure improvements to be included in this year's update of the TPB's Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP).

The District of Columbia Office of Planning (DCOP) analyzed the likely impacts of the stadium and requested a modification to the employment, population and household Forecasts for the transportation analysis zone (TAZ) in which it is to be constructed and, during their April 21 meeting, the PDTAC approved the requested changes. As described in the attached memorandum and summary tables, the District anticipates that between 2005 and 2030, total employment in the TAZ would grow by 3,000 jobs, while the total number of households would increase by more than 1,300 during the same period.

The summary tables also reflect the Baltimore Metropolitan Council's (BMC) Round 6B Cooperative Forecasts, approved last Fall. As can be seen in the comparison tables, the new BMC Forecasts for 2030 are approximately 39,700 jobs higher, while the population and household projections for 2030 have increased, respectively, by approximately 5,800 people and 1,600 households.

Should you have any additional questions regarding this matter, please don't hesitate to contact me on extension 3293.

cc: Ronald Kirby
Robert Griffiths
Calvin Smith
Stuart Freudberg

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF PLANNING



Office of the Director

April 19, 2006

Mr. Paul DesJardin
Planning Section Manager
Metropolitan Washington Council of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4239

Dear Mr. DesJardin,

Thank you for this opportunity to provide the Council of Governments with updated partial forecast for the Round 7.0a, with specific reference to Traffic Analysis Zone (TAZ) 174, in which the Baseball Stadium will be located. The following table provides a summary of the changes in households, population, and employment projected for the next twenty-five years. The attached spreadsheet provides more detailed comparisons between Round 7.0 and partial Round 7.0a.

District of Columbia Round 7.0a Partial Forecasts for TAZ 174

	2005	2010	2015	2020	2025	2030	2005-2030
Households	12	13	338	663	988	1,313	+1,301
Population	19	19	507	995	1,482	1,970	+1,951
Employment	1,097	1,597	2,847	3,347	3,747	4,097	+3,000

Round 7.0a shows an increase of 1,300 households between 2005 and 2030. This is due to three planned and proposed projects resulting in additional housing units. The three projects are the Florida Rock Project, South Capitol and N St., and Half & N. St. Together, they will add 1,300 units, which is an additional 1,000 units over what was previously forecast in Round 7.0.

The population projection for TAZ 174 will change as well. The net addition of 1,300 households, with an assumed household size of 1.5 persons, will result in an increase of population in that area by about 1,950 persons. This represents an increase from Round 7.0 of 1,300 persons.

The employment forecast for TAZ 174 was adjusted in Round 7.0a to account for the changed land use of that area. Round 7.0 forecast was based on proposed plans to build one or more office complex in that area. However, since the baseball stadium will occupy most of the area, employment over the next 25 years is forecast to increase by 3,000, which is 679 jobs less than the previous forecast.

If you have any questions regarding our forecast, please contact Joy Phillips of our office at (202) 442-7630.

Sincerely,

Charles C. Graves
Deputy Director of Long Range Planning
D.C. Office of Planning

District of Columbia

Households, Population & Employment Forecast for TAZ 174 (Baseball Stadium)

Note: Round 7.0 is the previously approved data, while Round 7.0a is the newly required subset of the previous data

Round 7.0 for TAZ 174	2005	2010	2015	2020	2025	2030
Households 7.0	12	13	293	301	308	313
Population 7.0	19	19	624	642	659	669
Employment 7.0	1,307	1,741	3,533	3,816	4,899	4,986

Round 7.0a for TAZ 174	2005	2010	2015	2020	2025	2030
Households 7.0a	12	13	338	663	988	1,313
Population 7.0a	19	19	507	995	1,482	1,970
Employment 7.0a	1,097	1,597	2,847	3,347	3,747	4,097

	2005	2010	Households			2030	Change	
			2015	2020	2025		2005-2030	
Households 7.0	12	13	293	301	308	313	301	
Households 7.0a	12	13	338	663	988	1,313	1,301	
			Change from previous forecast					1,000

	2005	2010	Population			2030	Change	
			2015	2020	2025		2005-2030	
Population 7.0	19	19	624	642	659	669	650	
Population 7.0a	19	19	507	995	1,482	1,970	1,951	
			Change from previous forecast					1,301

	2005	2010	Employment			2030	Change	
			2015	2020	2025		2005-2030	
Employment 7.0	1,307	1,741	3,533	3,816	4,899	4,986	3,679	
Employment 7.0a	1,097	1,597	2,847	3,347	3,747	4,097	3,000	
			Change from previous forecast					-679

Summary of Intermediate Employment Forecasts
Round 7.0a Cooperative Forecasts
(Thousands)

**DRAFT Planning Directors Technical
Advisory Committee - April 21, 2006**

JURISDICTION	2000	2005	2010	2015	2020	2025	2030	2000 to 2030		MSA Regional Share
								Number	% Change	
District of Columbia	743.6	744.8	783.5	816.0	829.5	843.8	859.1	115.5	15.5%	8.3%
Arlington County	182.6	195.2	217.8	237.8	254.4	263.6	275.8	93.2	51.1%	6.7%
City of Alexandria	89.3	105.6	113.3	123.2	132.5	141.3	148.0	58.7	65.7%	4.2%
Central Jurisdictions	1,015.5	1,045.6	1,114.5	1,177.0	1,216.5	1,248.7	1,282.9	267.4	26.3%	19.2%
Montgomery County (1)	474.3	500.0	545.0	580.0	615.0	645.0	670.0	195.7	41.3%	14.1%
Rockville (2)	68.7	75.3	87.6	93.7	99.9	102.1	104.7	36.0	52.3%	2.6%
Prince George's County	338.3	358.7	390.0	424.0	460.9	501.0	544.7	206.4	61.0%	14.8%
Fairfax County (3)	577.0	600.5	683.9	729.6	774.5	814.2	844.6	267.6	46.4%	19.2%
City of Fairfax (4)	28.8	29.2	31.3	33.3	35.3	37.3	39.3	10.5	36.5%	0.8%
City of Falls Church	9.5	9.5	11.8	15.1	17.8	19.9	20.3	10.8	113.7%	0.8%
Inner Suburbs	1,427.8	1,498.0	1,662.0	1,782.0	1,903.5	2,017.4	2,118.9	691.0	48.4%	49.7%
Loudoun County	90.5	122.7	153.7	183.8	212.9	242.0	271.2	180.6	199.6%	13.0%
Prince William County	94.6	111.6	128.6	143.7	159.1	173.5	186.0	91.4	96.6%	6.6%
City of Manassas	22.5	23.3	24.6	26.2	26.3	26.6	26.8	4.3	19.1%	0.3%
City of Manassas Park	2.7	3.0	4.5	4.6	4.7	4.8	4.9	2.2	79.5%	0.2%
Calvert County (5)	22.8	29.4	32.9	33.7	34.5	35.1	35.6	12.8	55.9%	0.9%
Charles County (5)	41.9	56.5	62.9	64.8	66.8	67.9	69.1	27.2	65.0%	2.0%
Frederick County	96.3	122.2	142.4	151.5	158.3	163.5	167.3	71.0	73.7%	5.1%
Stafford County (6)	30.5	38.3	46.1	52.7	59.2	66.3	73.4	42.9	140.9%	3.1%
Outer Suburbs	401.9	506.9	595.8	660.9	721.9	779.7	834.3	432.4	107.6%	31.1%
<i>Anne Arundel County (7)</i>	<i>297.0</i>	<i>317.1</i>	<i>334.7</i>	<i>357.1</i>	<i>379.6</i>	<i>401.5</i>	<i>423.3</i>	<i>126.3</i>	<i>42.5%</i>	<i>n/a</i>
<i>Carroll County (7)</i>	<i>68.3</i>	<i>76.3</i>	<i>84.3</i>	<i>86.8</i>	<i>88.3</i>	<i>89.3</i>	<i>90.3</i>	<i>22.0</i>	<i>32.2%</i>	<i>n/a</i>
<i>Howard County (7)</i>	<i>160.0</i>	<i>180.0</i>	<i>200.0</i>	<i>215.0</i>	<i>230.0</i>	<i>245.0</i>	<i>260.0</i>	<i>100.0</i>	<i>62.5%</i>	<i>n/a</i>
<i>Modeled Region - Baltimore Area Jurisdictions</i>	<i>525.3</i>	<i>573.4</i>	<i>619.0</i>	<i>658.9</i>	<i>697.9</i>	<i>735.8</i>	<i>773.6</i>	<i>248.3</i>	<i>47.3%</i>	<i>n/a</i>
<i>King George County (6)</i>	<i>9.2</i>	<i>11.3</i>	<i>13.3</i>	<i>15.2</i>	<i>17.1</i>	<i>22.8</i>	<i>28.5</i>	<i>19.3</i>	<i>209.0%</i>	<i>n/a</i>
<i>Spotsylvania County (6)</i>	<i>25.5</i>	<i>28.9</i>	<i>34.8</i>	<i>39.7</i>	<i>44.7</i>	<i>49.4</i>	<i>54.1</i>	<i>28.6</i>	<i>112.2%</i>	<i>n/a</i>
<i>Modeled Portion Only</i>	<i>24.0</i>	<i>27.2</i>	<i>32.8</i>	<i>37.4</i>	<i>42.1</i>	<i>46.6</i>	<i>51.0</i>	<i>27.0</i>	<i>112.3%</i>	<i>n/a</i>
<i>Fredericksburg City (6)</i>	<i>19.0</i>	<i>26.6</i>	<i>34.3</i>	<i>39.2</i>	<i>44.0</i>	<i>48.7</i>	<i>53.4</i>	<i>34.4</i>	<i>181.1%</i>	<i>n/a</i>
<i>Modeled Region - Fredericksburg Area Jurisdictions</i>	<i>52.2</i>	<i>65.1</i>	<i>80.4</i>	<i>91.8</i>	<i>103.2</i>	<i>118.0</i>	<i>132.9</i>	<i>109.3</i>	<i>209.1%</i>	<i>n/a</i>
<i>St. Mary's County (5)</i>	<i>49.6</i>	<i>55.8</i>	<i>61.9</i>	<i>63.5</i>	<i>65.1</i>	<i>66.2</i>	<i>67.2</i>	<i>17.6</i>	<i>35.5%</i>	<i>n/a</i>
<i>Clarke County</i>	<i>4.4</i>	<i>4.7</i>	<i>5.1</i>	<i>5.4</i>	<i>5.7</i>	<i>6.0</i>	<i>6.4</i>	<i>2.0</i>	<i>45.0%</i>	<i>n/a</i>
<i>Fauquier County</i>	<i>17.2</i>	<i>19.7</i>	<i>22.3</i>	<i>24.9</i>	<i>29.2</i>	<i>32.2</i>	<i>35.4</i>	<i>18.2</i>	<i>105.5%</i>	<i>n/a</i>
<i>Jefferson County</i>	<i>12.8</i>	<i>14.8</i>	<i>16.8</i>	<i>18.8</i>	<i>20.8</i>	<i>22.6</i>	<i>24.5</i>	<i>11.7</i>	<i>91.7%</i>	<i>n/a</i>
<i>Modeled Region - Other Jurisdictions</i>	<i>84.0</i>	<i>95.0</i>	<i>106.1</i>	<i>112.6</i>	<i>120.8</i>	<i>127.0</i>	<i>133.4</i>	<i>49.5</i>	<i>58.9%</i>	<i>n/a</i>
Northern Virginia	1,128.0	1,238.9	1,415.7	1,550.0	1,676.9	1,789.5	1,890.3	762.3	67.6%	54.8%
Suburban Maryland	973.6	1,066.8	1,173.2	1,253.9	1,335.5	1,412.5	1,486.6	513.1	52.7%	36.9%
MSA REGIONAL TOTAL	2,845.2	3,050.4	3,372.3	3,619.9	3,841.8	4,045.9	4,236.0	1,390.9	48.9%	100.0%
TPB Model Region Total	3,506.7	3,783.9	4,177.8	4,483.2	4,763.7	5,026.7	5,275.9	1,769.2	50.5%	100.0%

(1) Forecasts for years 2000 to 2030 include all of Takoma Park

(2) Included in Montgomery County total.

(3) Forecasts for all years include Fairfax County Government employees working at the Fairfax County Public Safety Center.

(4) Forecasts for all years do not include Fairfax County Government employees (+/- 2,000 jobs) working at the Fairfax County Public Safety Center

(5) Tri-County Council for Southern Maryland develops ten-year incremental population, housing unit and employment forecasts for Calvert County, Charles County and St. Mary's County.

(6) Source: Fredericksburg Area Metropolitan Planning Organization (FAMPO).
CLRP 2030 Projections, March 2003, adjusted to common employment definition.

(7) Source: Baltimore Metropolitan Council, Round 6-B.

**Summary of Intermediate Population Forecasts
Round 7.0a Cooperative Forecasts
(Thousands)**

**DRAFT Planning Directors Technical
Advisory Committee - April 21, 2006**

JURISDICTION	2000	2005	2010	2015	2020	2025	2030	2000 to 2030		Regional Share
								Number	% Change	
District of Columbia	572.1	577.5	608.7	641.9	673.0	712.0	733.8	161.8	28.3%	7.9%
Arlington County	190.3	198.3	212.2	223.3	233.1	241.6	249.6	59.3	31.1%	2.9%
City of Alexandria	128.3	135.9	143.9	149.4	153.2	159.5	169.4	41.1	32.0%	2.0%
Central Jurisdictions	890.7	911.6	964.8	1,014.6	1,059.2	1,113.1	1,152.8	262.1	29.4%	12.7%
Montgomery County (1)	873.3	942.0	1,000.0	1,040.0	1,077.1	1,115.3	1,155.8	282.5	32.3%	13.7%
Rockville (2)	47.4	59.9	65.3	68.3	68.8	69.0	69.5	22.1	46.7%	1.1%
Prince George's County	808.1	852.9	872.6	893.3	914.9	949.7	993.1	185.1	22.9%	9.0%
Fairfax County (3)	969.0	1,040.9	1,132.5	1,211.5	1,276.0	1,303.7	1,330.9	361.9	37.4%	17.6%
City of Fairfax (4)	21.4	22.1	23.5	25.0	25.6	25.7	26.5	5.1	23.9%	0.2%
City of Falls Church	10.4	10.6	12.3	13.9	14.7	14.9	15.4	5.0	48.5%	0.2%
Inner Suburbs	2,682.1	2,868.5	3,040.9	3,183.7	3,308.3	3,409.3	3,521.8	839.7	31.3%	40.8%
Loudoun County	169.6	247.3	318.1	379.6	422.9	454.9	480.6	311.0	183.4%	15.1%
Prince William County	281.3	352.1	416.8	463.4	489.9	524.9	556.3	275.0	97.8%	13.4%
City of Manassas	35.1	37.6	38.6	40.3	40.8	41.2	41.9	6.7	19.2%	0.3%
City of Manassas Park	10.3	12.9	15.0	15.8	16.5	16.7	16.8	6.5	63.3%	0.3%
Calvert County (5)	74.6	82.8	91.0	93.5	96.0	98.3	101.4	26.8	36.0%	1.3%
Charles County (5)	120.5	138.0	147.4	162.3	177.2	193.1	204.2	83.7	69.4%	4.1%
Frederick County	195.3	220.9	243.2	265.6	287.9	310.4	339.7	144.4	74.0%	7.0%
Stafford County (6)	92.4	107.1	121.7	136.4	151.0	174.5	195.8	103.4	111.8%	5.0%
Outer Suburbs	979.2	1,198.6	1,391.9	1,556.8	1,682.2	1,814.0	1,936.7	957.5	97.8%	46.5%
<i>Anne Arundel County (7)</i>	489.7	511.6	526.8	540.1	551.0	562.1	567.6	77.9	15.9%	n/a
<i>Carroll County (7)</i>	150.9	169.5	179.7	187.0	191.9	194.1	193.2	42.3	28.0%	n/a
<i>Howard County (7)</i>	250.8	273.5	294.2	308.9	319.3	320.3	321.1	70.3	28.0%	n/a
Modeled Region - Baltimore Area Jurisdictions	891.4	954.6	1,000.7	1,036.0	1,062.2	1,076.5	1,081.9	190.5	21.4%	n/a
<i>King George County (6)</i>	16.8	19.6	22.3	24.1	25.9	27.7	29.5	12.7	75.8%	n/a
<i>Spotsylvania County (6)</i>	90.4	107.7	124.9	139.0	153.0	167.2	181.4	91.0	100.7%	n/a
<i>Modeled Portion Only</i>	71.6	85.2	98.9	110.0	121.1	132.3	143.5	72.0	100.5%	n/a
<i>Fredericksburg City (6)</i>	19.3	21.5	23.6	25.4	27.1	28.4	29.8	10.5	54.5%	n/a
Modeled Region - Fredericksburg Area Jurisdictions	107.7	126.2	144.8	159.4	174.0	188.5	202.9	95.2	88.4%	n/a
<i>St. Mary's County (5)</i>	86.2	93.5	100.8	107.8	114.8	121.2	127.6	41.4	48.0%	n/a
<i>Clarke County</i>	12.7	14.1	15.4	16.2	16.9	17.9	18.8	6.2	48.6%	n/a
<i>Fauquier County</i>	56.1	64.7	74.5	85.8	98.8	113.9	131.2	75.1	133.7%	n/a
<i>Jefferson County</i>	42.2	46.8	51.4	57.1	62.7	69.6	76.4	34.2	81.1%	n/a
Modeled Region - Other Jurisdictions	197.2	219.1	242.1	266.8	293.2	322.5	354.0	156.8	79.5%	n/a
Northern Virginia	1,908.1	2,164.7	2,434.7	2,658.5	2,823.8	2,957.7	3,083.2	1175.1	61.6%	57.1%
Suburban Maryland	2,071.8	2,236.5	2,354.2	2,454.7	2,553.1	2,666.8	2,794.3	722.5	34.9%	35.1%
MSA REGIONAL TOTAL	4,551.9	4,978.7	5,397.6	5,755.1	6,049.8	6,336.4	6,611.3	2,059.3	45.2%	100.0%
TPB Model Region Total	5,748.2	6,278.6	6,785.2	7,217.3	7,579.3	7,923.9	8,250.1	2,501.9	43.5%	100.0%

(1) Forecasts for years 2000 to 2030 include all of Takoma Park.

(2) Included in Montgomery County total.

(3) Forecasts for all years include Fairfax County group quarters population at the Fairfax County Public Safety Center

(4) Forecasts for all years do not include Fairfax County group quarters population (+/- 1,000 people) at the Fairfax County Public Safety Center and Fairfax County household population (+/- 1,300 people) in TAZ 1609.

(5) Tri-County Council for Southern Maryland develops ten-year incremental population, housing unit and employment forecasts

for Calvert County, Charles County and St. Mary's County.

(6) Source: Fredericksburg Area Metropolitan Planning Organization (FAMPO), CLRP 2030 Projections, March 2003. The estimates for 2010, 2020 and 2030 are control totals provided by the Virginia Employment Commission (VEC) and should only be used for transportation planning purposes. Incremental five-year estimates (2005, 2010)

(7) Source: Baltimore Metropolitan Council, Round 6-B.

Summary of Intermediate Household Forecasts
Round 7.0a Cooperative Forecasts
(Thousands)

DRAFT Planning Directors Technical
Advisory Committee - April 21, 2006

JURISDICTION	2000	2005	2010	2015	2020	2025	2030	2000 to 2030		Regional Share
								Number	% Change	
District of Columbia	248.3	252.0	265.3	280.7	293.3	308.9	318.7	70.4	28.3%	8.6%
Arlington County	86.9	92.1	99.6	105.9	111.5	116.0	119.9	33.0	37.9%	4.0%
City of Alexandria	61.9	66.3	71.0	74.6	76.7	80.5	86.5	24.6	39.7%	3.0%
Central Jurisdictions	397.1	410.5	435.8	461.2	481.4	505.4	525.0	127.9	32.2%	15.6%
Montgomery County (1)	324.6	347.0	370.0	390.0	407.9	424.8	441.3	116.7	36.0%	14.2%
Rockville (2)	17.2	22.6	25.1	26.1	26.3	26.5	26.7	9.5	55.3%	1.2%
Prince George's County	288.6	308.5	321.8	334.6	346.9	360.8	378.1	89.5	31.0%	10.9%
Fairfax County	350.5	377.6	411.5	442.7	462.6	472.6	482.4	131.9	37.6%	16.0%
City of Fairfax (3)	8.2	8.5	9.0	9.6	9.9	10.1	10.5	2.3	28.7%	0.3%
City of Falls Church	4.5	4.6	5.5	6.5	6.9	7.0	7.3	2.8	63.3%	0.3%
Inner Suburbs	976.3	1,046.2	1,117.8	1,183.5	1,234.1	1,275.3	1,319.7	343.4	35.2%	41.8%
Loudoun County	59.9	87.5	112.7	134.4	149.7	161.0	170.1	110.2	184.1%	13.4%
Prince William County	94.6	117.9	140.9	158.5	169.4	181.2	193.1	98.5	104.2%	12.0%
City of Manassas	11.8	12.8	13.4	13.7	13.9	14.1	14.4	2.6	22.4%	0.3%
City of Manassas Park	3.3	4.2	5.0	5.3	5.4	5.4	5.4	2.1	17.8%	0.3%
Calvert County (4)	25.4	28.3	31.0	32.7	34.3	35.1	36.2	10.8	42.3%	1.3%
Charles County (4)	41.7	48.2	52.2	57.9	63.7	72.3	76.9	35.2	84.5%	4.3%
Frederick County	70.1	79.5	87.7	95.9	104.1	112.5	123.1	53.1	75.7%	6.5%
Stafford County (5)	30.2	36.3	40.9	46.4	51.9	59.8	68.4	38.2	126.6%	4.6%
Outer Suburbs	336.9	414.7	483.9	544.8	592.4	641.4	687.6	350.8	104.1%	42.7%
<i>Anne Arundel County (6)</i>	<i>178.7</i>	<i>190.6</i>	<i>201.1</i>	<i>210.5</i>	<i>218.4</i>	<i>224.8</i>	<i>228.1</i>	<i>49.4</i>	<i>27.7%</i>	<i>n/a</i>
<i>Carroll County (6)</i>	<i>52.5</i>	<i>59.5</i>	<i>63.6</i>	<i>66.9</i>	<i>69.5</i>	<i>71.3</i>	<i>71.8</i>	<i>19.3</i>	<i>36.8%</i>	<i>n/a</i>
<i>Howard County (6)</i>	<i>91.0</i>	<i>100.0</i>	<i>108.7</i>	<i>117.5</i>	<i>124.7</i>	<i>127.1</i>	<i>127.6</i>	<i>36.7</i>	<i>40.3%</i>	<i>n/a</i>
Modeled Region - Baltimore Area Jurisdictions	322.1	350.1	373.4	394.9	412.6	423.2	427.5	105.4	32.7%	n/a
<i>King George County (5)</i>	<i>6.1</i>	<i>7.2</i>	<i>8.3</i>	<i>9.1</i>	<i>9.9</i>	<i>10.6</i>	<i>11.4</i>	<i>5.4</i>	<i>87.9%</i>	<i>n/a</i>
<i>Spotsylvania County (5)</i>	<i>31.3</i>	<i>37.7</i>	<i>44.4</i>	<i>50.0</i>	<i>55.6</i>	<i>61.3</i>	<i>67.0</i>	<i>35.7</i>	<i>113.9%</i>	<i>n/a</i>
<i>Modeled Portion Only</i>	<i>24.8</i>	<i>29.8</i>	<i>35.1</i>	<i>39.5</i>	<i>44.0</i>	<i>48.5</i>	<i>53.0</i>	<i>28.2</i>	<i>113.9%</i>	<i>n/a</i>
<i>Fredericksburg City (5)</i>	<i>8.1</i>	<i>9.2</i>	<i>10.4</i>	<i>11.4</i>	<i>12.4</i>	<i>13.1</i>	<i>13.9</i>	<i>5.8</i>	<i>72.1%</i>	<i>n/a</i>
Modeled Region - Fredericksburg Area Jurisdictions	39.0	46.3	53.9	60.0	66.3	72.2	78.4	39.4	101.2%	n/a
<i>St. Mary's County (4)</i>	<i>30.6</i>	<i>33.5</i>	<i>36.4</i>	<i>39.5</i>	<i>42.6</i>	<i>45.5</i>	<i>48.4</i>	<i>17.8</i>	<i>58.0%</i>	<i>n/a</i>
<i>Clarke County</i>	<i>4.9</i>	<i>5.5</i>	<i>6.1</i>	<i>6.5</i>	<i>6.9</i>	<i>7.3</i>	<i>7.8</i>	<i>2.8</i>	<i>57.2%</i>	<i>n/a</i>
<i>Fauquier County</i>	<i>20.2</i>	<i>23.3</i>	<i>26.9</i>	<i>31.0</i>	<i>35.7</i>	<i>41.2</i>	<i>47.5</i>	<i>27.3</i>	<i>135.1%</i>	<i>n/a</i>
<i>Jefferson County</i>	<i>16.2</i>	<i>18.3</i>	<i>20.4</i>	<i>23.2</i>	<i>26.0</i>	<i>29.5</i>	<i>33.1</i>	<i>16.9</i>	<i>104.6%</i>	<i>n/a</i>
Modeled Region - Other Jurisdictions	72.0	80.7	89.9	100.2	111.2	123.5	136.8	64.8	90.0%	n/a
Northern Virginia	711.6	807.9	909.5	997.6	1,057.7	1,107.7	1,157.9	446.3	62.7%	54.3%
Suburban Maryland	750.3	811.4	862.7	911.1	956.9	1,005.5	1,055.7	305.3	40.7%	37.1%
MSA REGIONAL TOTAL	1,710.3	1,871.3	2,037.5	2,189.5	2,307.9	2,422.1	2,532.3	822.0	48.1%	100.0%
TPB Model Region Total	2,143.3	2,348.4	2,554.7	2,744.6	2,897.9	3,041.1	3,174.9	1,031.6	48.1%	100.0%

(1) Forecasts for years 2000 to 2030 include all of Takoma Park.

(2) Included in Montgomery County total.

(3) Forecasts for all years do not include Fairfax County households (+/- 500 households) in TAZ 1609

(4) Tri-County Council for Southern Maryland develops ten-year incremental population, housing unit and employment forecasts for Calvert County, Charles County and St. Mary's County.

(5) Source: Fredericksburg Area Metropolitan Planning Organization (FAMPO), CLRP 2030 Projections, March 2003

(6) Source: Baltimore Metropolitan Council, Round 6-B.

**Summary of Change between Employment Forecasts
Draft Round 7.0a and Round 7.0 Cooperative Forecasts
(Thousands)**

JURISDICTION	2000	2005	2010	2015	2020	2025	2030
District of Columbia	0.0	-0.2	-0.1	-0.7	-0.5	-1.2	-0.9
Arlington County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Alexandria	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central Jurisdictions	0.0	-0.2	-0.1	-0.7	-0.5	-1.2	-0.9
Montgomery County (1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rockville (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prince George's County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fairfax County (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Fairfax (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Falls Church	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inner Suburbs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loudoun County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prince William County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Manassas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Manassas Park	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calvert County (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charles County (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Frederick County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stafford County (6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Outer Suburbs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Anne Arundel County (7)</i>	<i>0.0</i>	<i>0.0</i>	<i>-0.9</i>	<i>6.0</i>	<i>14.0</i>	<i>22.0</i>	<i>31.0</i>
<i>Carroll County (7)</i>	<i>0.0</i>	<i>2.8</i>	<i>7.5</i>	<i>7.7</i>	<i>7.7</i>	<i>7.7</i>	<i>8.7</i>
<i>Howard County (7)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Modeled Region - Baltimore Area Jurisdictions	0.0	2.8	6.6	13.7	21.7	29.7	39.7
<i>King George County (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Spotsylvania County (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Modeled Portion Only	2.6	2.9	3.5	4.0	4.5	5.0	5.4
<i>City of Fredericksburg (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Modeled Region - Fredericksburg Area Jurisdictions	2.6	2.9	3.5	4.0	4.5	5.0	5.4
<i>St. Mary's County (5)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Clarke County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Fauquier County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Jefferson County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Modeled Region - Other Jurisdictions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Northern Virginia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Suburban Maryland	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MSA REGIONAL TOTAL	0.0	-0.2	-0.1	-0.7	-0.5	-1.2	-0.9
<i>Regional Percent Change</i>							
TPB Model Region Total	2.6	5.5	9.9	17.0	25.7	33.5	44.2

(1) Forecasts for years 2000 to 2030 include all of Takoma Park
(2) Included in Montgomery County total.
(3) Forecasts for all years include Fairfax County Government employees working at the Fairfax County Public Safety Center.
(4) Forecasts for all years do not include Fairfax County Government employees (+/- 2,000 jobs) working at the Fairfax County Public Safety Center.
(5) Tri-County Council for Southern Maryland develops ten-year incremental population, housing unit and employment forecasts for Calvert County, Charles County and St. Mary's County.
(6) Source: Fredericksburg Area Metropolitan Planning Organization (FAMPO), CLRP 2030 Projections, March 2003, adjusted to common employment definition.
(7) Comparison is between the BMC Round 6-B and 6-A.

**Summary of Change between Population Forecasts
Draft Round 7.0a and Round 7.0 Cooperative Forecasts
(Thousands)**

JURISDICTION	2000	2005	2010	2015	2020	2025	2030
District of Columbia	0.0	0.0	0.0	-0.1	0.4	0.8	1.3
Arlington County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Alexandria	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central Jurisdictions	0.0	0.0	0.0	-0.1	0.4	0.8	1.3
Montgomery County (1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rockville (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prince George's County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fairfax County (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Fairfax (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Falls Church	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inner Suburbs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loudoun County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prince William County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Manassas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Manassas Park	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calvert County (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charles County (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Frederick County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stafford County (6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Outer Suburbs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Anne Arundel County(7)</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>	<i>1.0</i>	<i>1.9</i>	<i>2.8</i>	<i>4.7</i>
<i>Carroll County (7)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Howard County(7)</i>	<i>0.1</i>	<i>0.1</i>	<i>0.4</i>	<i>0.8</i>	<i>0.6</i>	<i>0.8</i>	<i>1.1</i>
Modeled Region - Baltimore Area Jurisdictions	0.1	0.2	0.4	1.8	2.5	3.6	5.8
<i>King George County (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Spotsylvania County (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Modeled Portion Only</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>City of Fredericksburg (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Modeled Region - Fredericksburg Area Jurisdictions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>St. Mary's County (5)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Clarke County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Fauquier County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Jefferson County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Modeled Region - Other Jurisdictions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Northern Virginia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Suburban Maryland	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MSA REGIONAL TOTAL	0.0	0.0	0.0	-0.1	0.4	0.8	1.3
<i>Regional Percent Change</i>							
TPB Model Region Total	0.1	0.2	0.4	1.7	2.9	4.4	7.1

(1) Forecasts for years 2000 to 2030 include all of Takoma Park

(2) Included in Montgomery County total.

(3) Forecasts for all years include Fairfax County group quarters population at the Fairfax County Public Safety Center.

(4) Forecasts for all years do not include Fairfax County group quarters population (+/- 1,000 people) at the Fairfax County Public Safety household population (+/-1,300 people) in TAZ 1609

(5)Tri-County Council for Southern Maryland develops ten-year incremental population, housing unit and employment forecasts for Calvert County, Charles County and St. Mary's County.

(6) Source: Rappahanock Area Development Commission (RADCO), March 2003. The estimates for 2010, 2020 and 2030 are control Virginia Employment Commission (VEC) and should only be used for transportation planning purposes. Incremental five-year estimates (2010 and 2025) have been developed by MWCOG for the purpose of transportation modeling and air quality analysis.

(7) Comparison is between the BMC Round 6-B and 6-A.

**Summary of Change between Household Forecasts
Draft Round 7.0a and Round 7.0 Cooperative Forecasts
(Thousands)**

JURISDICTION	2000	2005	2010	2015	2020	2025	2030
District of Columbia	0.0	0.0	0.0	0.0	0.4	0.7	1.0
Arlington County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Alexandria	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central Jurisdictions	0.0	0.0	0.0	0.0	0.4	0.7	1.0
Montgomery County (1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rockville (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prince George's County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fairfax County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Fairfax (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Falls Church	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inner Suburbs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loudoun County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prince William County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Manassas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City of Manassas Park	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calvert County (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charles County (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Frederick County	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stafford County (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Outer Suburbs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Anne Arundel County(6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.4</i>	<i>0.8</i>	<i>1.2</i>	<i>2.1</i>
<i>Carroll County (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Howard County (6)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>-0.7</i>	<i>-0.5</i>
<i>Modeled Region - Baltimore Area Jurisdictions</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.4</i>	<i>0.8</i>	<i>0.5</i>	<i>1.6</i>
<i>King George County (5)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Spotsylvania County (5)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Modeled Portion Only</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>City of Fredericksburg (5)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Modeled Region - Fredericksburg Area Jurisdictions</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>St. Mary's County (4)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Clarke County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Fauquier County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Jefferson County</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Modeled Region - Other Jurisdictions</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Northern Virginia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Suburban Maryland	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MSA REGIONAL TOTAL	0.0	0.0	0.0	0.0	0.4	0.7	1.0
<i>Regional Percent Change</i>							
TPB Model Region Total	0.0	0.0	0.0	0.4	1.2	1.2	2.6

(1) Forecasts for years 2000 to 2030 include all of Takoma Park
(2) Included in Montgomery County total.
(3) Forecasts for all years do not include Fairfax County households (+/- 500 households) in TAZ 1609
(4)Tri-County Council for Southern Maryland develops ten-year incremental population, housing unit and employment forecasts for Calvert County, Charles County and St. Mary's County.
(5) Source: Rappahanock Area Development Commission (RADCO), March 2003.
(6) Comparison is between the BMC Round 6-B and 6-A.

ATTACHMENT D

MWAQC 8-Hour Ozone Planning Schedule*
SIP Planning and Transportation Conformity Determinations

May 06
June 06
Fall/Winte

	Fall 2004	Winter 2004	Spring 2005	Summer 2005	Fall-Winter 2005	Spring-Sum 2006	Fall-Winter 2006	Spring 2007
Control Measure Development								
Preliminary identification of new local measures	Blue	Blue	Blue	Blue				
Preliminary identification of regional controls (reduce transport)	Blue	Blue	Blue	Blue				
Adopt preliminary control strategy				Blue	Blue	Yellow		
Public Meetings on control measures				Blue	Blue	Yellow		
Adopt control strategy						Yellow		
Modeling Analysis								
Set-up, testing	Blue	Blue	Blue					
Finalize protocol document			Blue	Blue	Blue			
Strategy analysis				Blue	Blue	Yellow		
Complete attainment modeling					Blue	Yellow		
Complete Weight of Evidence						Yellow		
Inventory Development								
2002 Base Year, Submit to EPA	Blue	Blue	Blue	Blue	Blue	Yellow		
Projection year for 2009	Blue	Blue	Blue	Blue	Blue	Orange		
Prelim. Emission Reduction Requirements			Blue	Blue	Blue	Orange		
Modeling inventories for attainment			Blue	Blue	Blue			
Develop RFP 2008 inventory					Blue	Orange		
Conformity								
Complete final 1-hour conformity	Blue							
Complete 8-hour conformity FY2005-2010 TIP	Blue							
Complete 8-hour conformity FY2006-2011 TIP	Blue	Blue						
Develop 8-hour mobile budgets(SIP)			Blue	Blue	Blue	Yellow		
SIP Submittal								
Public Meetings on control strategy				Blue	Blue	Green	Green	
Draft SIP Template					Blue	Blue	Green	
Prepare Draft Attainment SIP/Regl Air Quality Plan					Blue	Blue	Green	
Adopt Draft Attainment SIP (MWAQC) 10/06						Blue	Green	
Public Hearings							Green	
Approve SIP/Regional Air Quality Plan (12/06-1/07)							Green	
Transmit SIP to IAQC 1/07							Green	
States Submit SIP to EPA							Green	
SIP Deadline: June 15, 2007								Green