

# HANDOUTS

from previous meeting



**October 21, 2003**

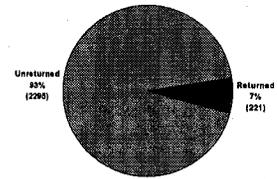
# EMPLOYER SATISFACTION SURVEY RESULTS

FISCAL YEAR 2003

presented by:  
**Mark E. Hersey**  
 Metropolitan Washington Council of Governments

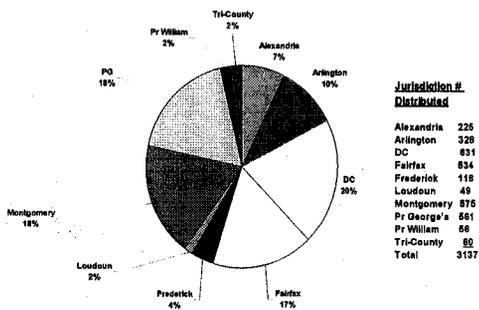


Overall Response Rate



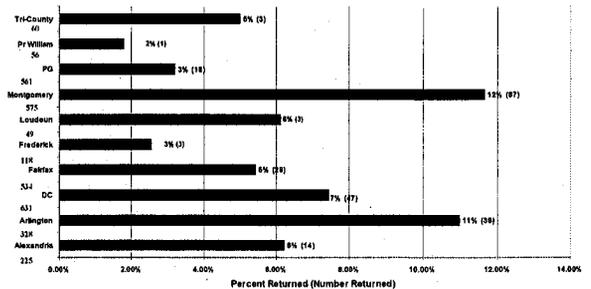
Employer Satisfaction Survey  
 FY2003

Forms Distributed by Jurisdiction

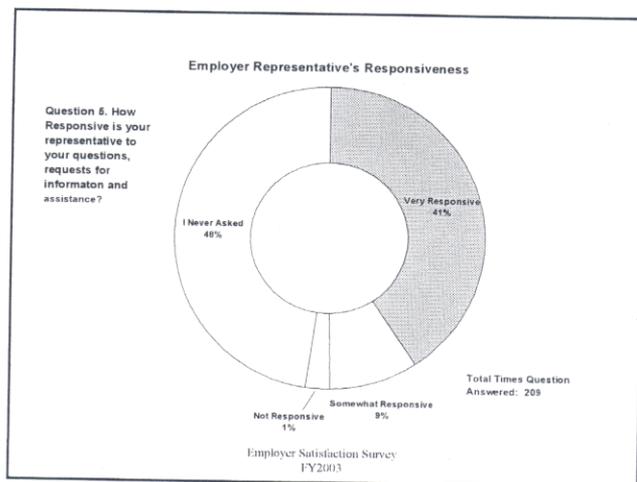
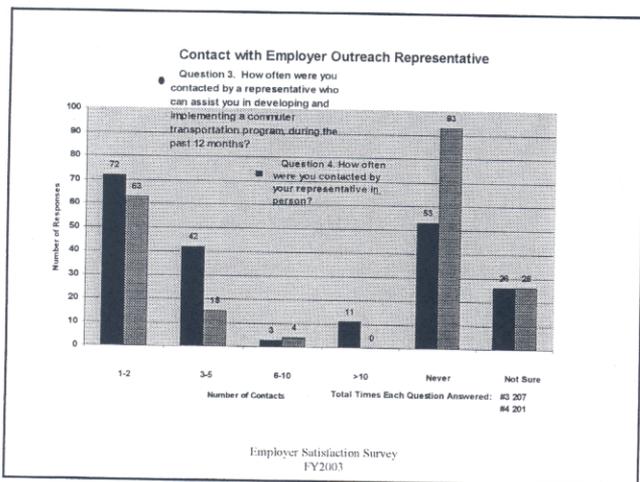
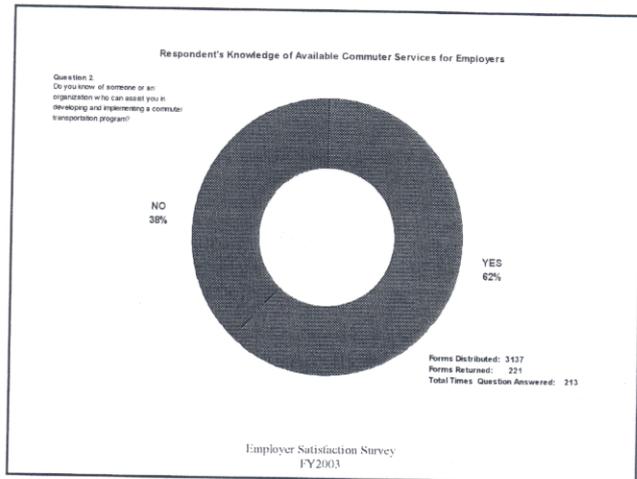
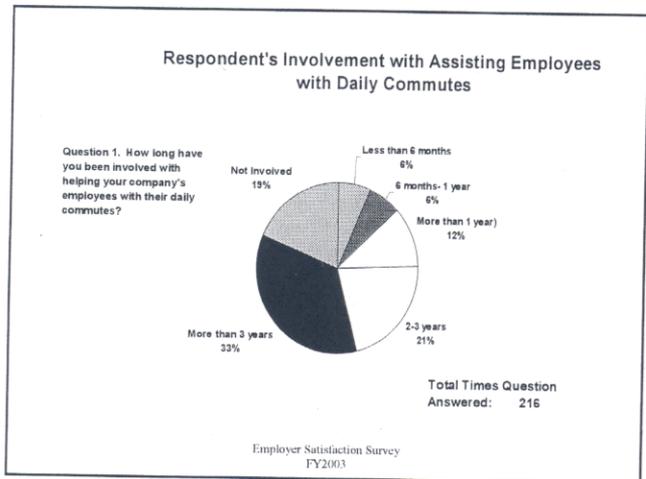


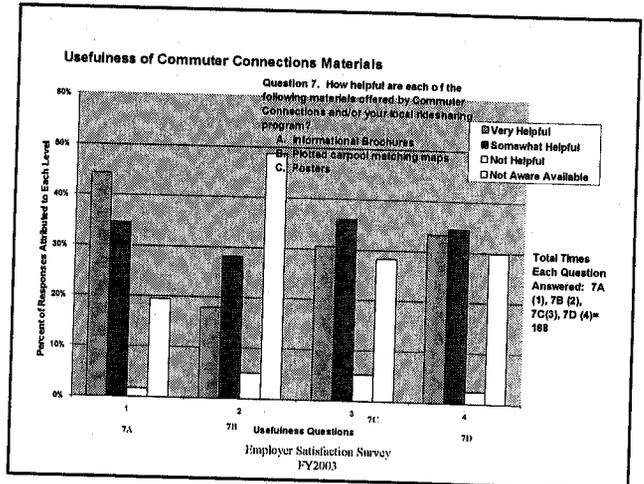
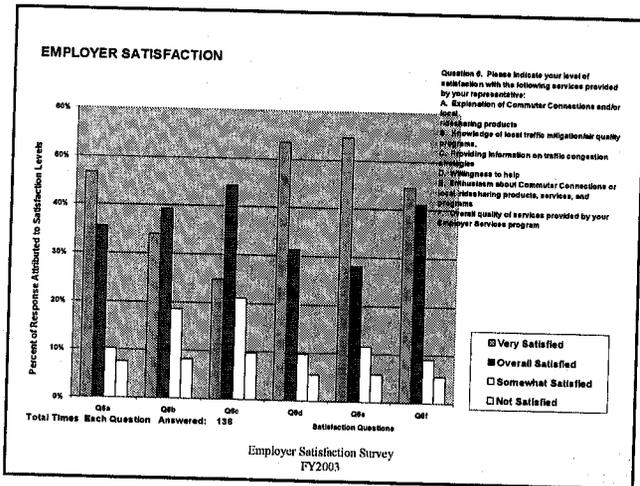
Employer Satisfaction Survey  
 FY2003

Response Rate by Jurisdiction



Employer Satisfaction Survey  
 FY2003

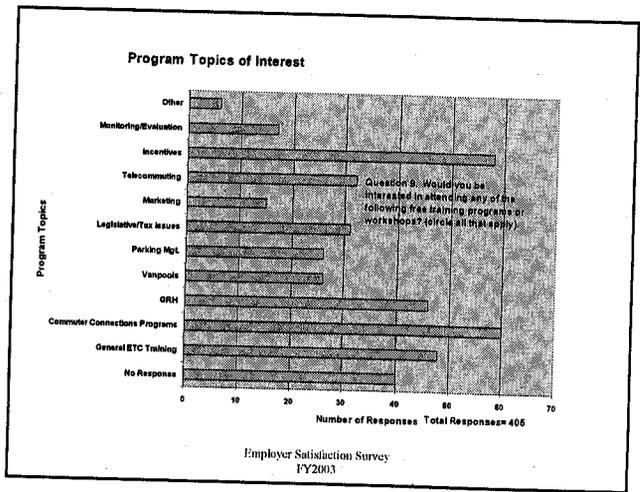


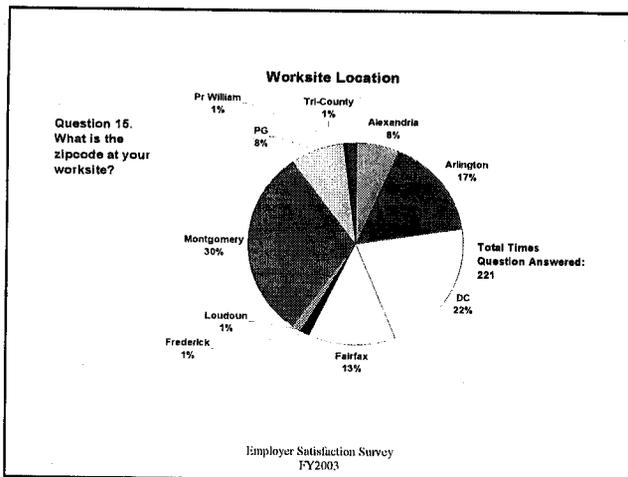
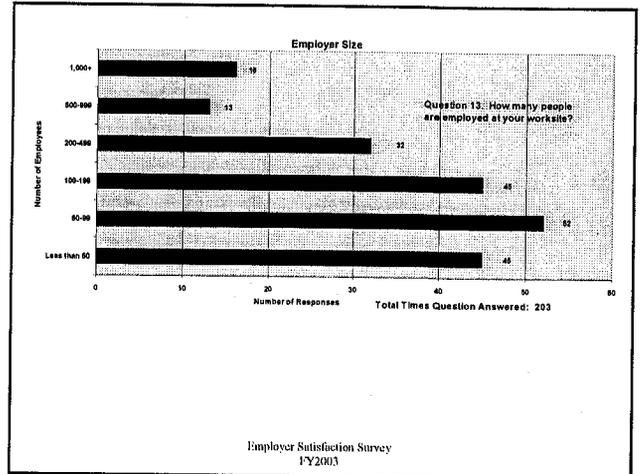
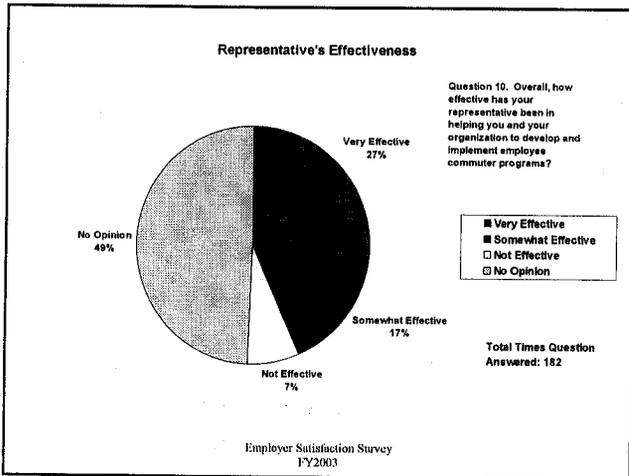


### Question 8-8C Commuter Survey

QUESTIONS	Possible Responses	# of Responses	Percent of Total
Q8. Did you participate in the Commuter Connections employee survey or another commuter survey?	YES (answers 8A)	24	40%
		28	47%
	NO	8	13%
	NOT SURE		
<b>TOTAL RESPONSES</b>			
Q8A. Did your representative give you a copy of the statistical summary of your employee Commute Survey?	YES (answers 8B)	9	28%
		15	47%
	NO	8	25%
	NOT SURE		
<b>TOTAL RESPONSES</b>			
Q8B. Did Your Representative use your statistics to create an employee commute program or to promote ridesharing in general?	YES	6	33%
	NO	7	39%
	NOT SURE	5	28%
	TOTAL RESPONSES	18	

Employer Satisfaction Survey FY2003





### CUSTOMER SERVICE SATISFACTION SURVEY 2003

Jurisdictions	Surveys sent	Responses	Returns /Response	Percentage Return
Alexandria	225	14	11	6%
Arlington	328	36	21	11%
DC	631	47	59	7%
Fairfax	534	29	89	5%
Frederick	118	3	9	3%
Loudoun	49	3	6	6%
Montgomery	575	67	31	12%
Prince George's	561	18	41	3%
PRTC	56	1	3	2%
Tri-County	60	3	2	5%
<b>Total Surveys sent</b>	<b>3137</b>	<b>221</b>	<b>272</b>	<b>7%</b>

Employer Satisfaction Survey  
FY2003



**Campaign Summary**  
As of October 15, 2003  
DRAFT

**Overview:**

Dudnyk was awarded the contract for the Mass Marketing TERM in July 2003. The Mass Marketing TERM calls for the development of an integrated communications plan aimed at residents in the Washington region to induce a change in their travel behavior from driving alone to alternative commute modes including ridesharing, public transit, telecommuting, bicycling or walking. The thrust of this initiative is to unify the various marketing approaches of Commuter Connections and its partners in the region, under one umbrella concept – to create a “brand promise” for Commuter Connections as the one point solution for commuters seeking alternative commuting options.

Along with the Mass Marketing TERM, Dudnyk is now also responsible for the TERMS for Guaranteed Ride Home, Telework and Telework Centers. The following note outlines the progress to date on the four TERMS.

**Mass Marketing TERM**

Through an extensive overview of existing research as well as primary research conducted through the months of May and June, among state funders, stake holders, employers and commuters, Dudnyk arrived at a communications strategy that would help position Commuter Connections in a relevant position in the lives of commuters. This insight came from research that focused on commuters’ cognitive constructs, the way they file and associate experiences and points of view within their own minds.

- Most commuters, regardless of how they commute, have very similar attitudes and use the same language to express their positive and negative experiences.
- The most compelling emotional association with commuting is *frustration*. Commuters appear to be in a common state of anxiety that is often directed at whoever is in their proximity.
  - Drivers express anger at other drivers.
  - Mass transit riders express it at other riders.
- This level of frustration is much more associated with the commute to work than the commute home.

In accordance with these findings, work was created following the message strategy:

***“Commuter Connections is the solution to the frustration of commuting.”***

***Creative development:*** Six creative concepts were developed to the above strategy, which were further fine-tuned to three that were then screened through various levels of research – including stakeholders, commuters as well as the TPB. The “testimonial concept” was unanimously selected as the most compelling creative approach, which was further validated through a quantitative on-line survey involving 300 commuters in the Washington area. This research also tested alternative taglines, of which “Flexible solutions for a better commute” emerged as a clear winner.

**Creative units:** Radio was selected as the primary medium for this campaign, since it is the most efficient way to target SOV commuters, specifically during “drive times.” Television will play a secondary role in this campaign. Strategically, television sets the stage for reinforcing and communicating the Commuter Connections message to a broad audience.

Five :60 second radio spots in English and one in Spanish were created to support the intensive radio schedule. The scripts portray a cross-section of commuters across age groups, ethnic backgrounds and genders with a variety of “commuting frustrations”. In each spot, Commuter Connections is positioned as the one point solution with a variety of alternative commuting options for commuters that improved the quality of their commute and eventually the quality of their lives. The :30 second TV spot too, is based on the testimonial approach with the protagonist turning to Commuter Connections as the answer to her commuting frustrations.

Each of these creative elements is consistent with the strategy that was developed based on extensive commuter research. The campaign takes into account the fact that while our target audience may be diverse in terms of demographics, their “attitude towards commuting (frustration)” is what unifies them, and forms the corner stone of the campaign’s creative treatment. The titles of the six :60 second radio spots are:

Emilio  
Jack and Diane  
Bill and Carol  
Mike  
Jan  
Ana and Maria (Hispanic spot)

**Media schedule:** The campaign will have two media flights – one in fall and one in spring. The total media outlay is \$1.05MM. Of this budget, radio accounts for about 49% (about \$515,000), TV accounts for 36% (about \$380,000), Hispanic media accounts for 10% (about \$100,000) and the Internet plan accounts for the remaining 5% (\$50,000) of the total media expenditure. The fall flight extends from the last week in September to the third week in October. It picks up again in January and is flighted on a three-week basis till the middle of June. To attain cost efficiencies, the media was negotiated and bought for the fall and the spring flights all at once. This also helps us evaluate the overall media impact of the campaign.

The target audience for the media buy is:

Primary: Adults 35-56 years  
Secondary: Adults 25-55 years  
(all in the Washington DMA)

The radio spots will run across 14 radio stations effectively covering a spectrum of target groups. The radio plan reaches 92.2% people in our target base a total of 30.7 times. The flight is skewed for morning drive time. The :30 second TV spot will air over six TV stations (network affiliate stations and cable) and is scheduled for early morning, evening and late news. The TV plan reaches 90.8% people in our target a total of 14.4 times. The TV plan creates a larger brand presence for Commuter Connections complimenting the radio testimonial campaign that focuses on a strong call to action.

## Radio buy and schedule for Mass Marketing Campaign Fall 2003 and Spring 2004

	9/22	9/29	10/6	10/13	1/5	1/12	1/19	2/16	2/23	3/1	4/26	5/3	5/10	5/31	6/7	6/14	NET COST
WARW-FM																	\$28,687.50
WASH-FM																	\$23,651.25
WBIG-FM																	\$46,622.50
WGMS-FM																	\$23,205.00
WHUR-FM																	\$33,787.50
WJFK-FM																	\$33,490.00
WJZW-FM																	\$25,478.75
WMAL-AM																	\$57,120.00
WMMJ-FM																	\$28,305.00
WMZQ-FM																	\$26,127.30
WPGC-A+F																	\$43,732.50
WRQX-FM																	\$51,552.50
WTEM-AM																	\$19,596.75
WTOP-A+F																	\$73,312.50
																	<b>\$514,669.05</b>
																	<b>TOTAL</b>
<b>GRP</b>	184.9	181.4	179.9	180.1	191.5	179.2	179.4	187	179.5	179.5	171.3	168.6	168.8	168.1	168.3	168.1	<b>2,835.6</b>
<b>Spots</b>	257	283	263	263	243	230	230	257	246	246	251	226	226	219	219	219	<b>3,878</b>
<b>REACH</b>	47.4%	42.2%	41.8%	41.9%	47.9%	47.2%	47.2%	46.8%	46.0%	46.0%	45.1%	44.4%	44.4%	45.4%	45.5%	45.4%	<b>92.4%</b>
	60.0%		49.3%		59.8%			58.1%			56.5%			57.3%			
	67.9%																
<b>FREQ</b>	3.9	4.3	4.3	4.3	4.0	3.8	3.8	4.0	3.9	3.9	3.8	3.8	3.8	3.7	3.7	3.7	<b>30.7</b>
	6.1		7.3		9.2			9.4			9.0			8.8			
	10.7																
<b>Stations</b>	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	<b>14</b>

The five radio spots are being rotated among the above stations based on synergies with the characters depicted in the spot and the station's listenership profile. An average of two spots per station will be rotated during the duration of the flight. During any given week throughout the campaign flights, the spot can be heard on seven of the fourteen stations.

**Media added value opportunities:** Added-value opportunities worth \$ 136,504.00 have been negotiated with the following radio stations:

WARW-FM	94.7 FM	Classic Rock
WASH-FM	97.1 FM	Adult Contemporary
WBIG-FM	100.0 FM	Oldies
WGMS-FM	103.5 FM	Classical
WHUR-FM	96.3 FM	Urban Adult Contemporary
WJFK-FM	106.7 FM	Talk/Personality
WJZW-FM	106.9 FM	Smooth Jazz
WMAL-FM	630 AM	News/Talk/Information
WMMJ-FM	102.3 FM	Urban Adult Contemporary
WMZQ-FM	98.7 FM	Country
WPGC-AM/FM	95.5 Urban Contemporary / 1580	Gospel
WRQX-FM	107.3 FM	Adult Contemporary
WTEM-AM	980 AM	All Sports

The added-value opportunities comprise a variety of initiatives including ninety-seven :60 second PSAs, fifty-two :30 second PSAs, eight :15 second PSAs, thirty-six :10 second PSAs and sixty-four billboard adjacencies. In addition, Dudnyk has also negotiated links to the websites of a number of radio stations and the opportunity to distribute brochures at their events. In addition to the above, the stations have also offered the following customized opportunities:

- **WBIG-FM:**
  - Theme Weekend Sponsorship: Two weekends TBD during flight weeks. Feature includes 25 theme liners Wednesday-Friday 6am-6am sponsorships and twenty five:10 second Wednesday Sunday 6am-6am sponsorships.
  
- **WJZW-FM:**
  - Lights out Washington Sponsorship: Commuter Connections was the sponsor of Lights Out Washington during 9/30 and 10/2.
  
- **WMMJ-FM:**
  - Weekly Van Hit Sponsorships: GRH will be the weekly sponsor of van hits. This includes eight :15-second liners and one call-back during the appearance.

**Hispanic media plan:**

2003												2004												Estimated GRPs / Cost																								
Sept				Oct				Nov				Dec				Jan				Feb					Mar				Apr				May				June											
1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29	29	5	12	19	26	2		9	16	23	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14					
				90														60						120												120								180				\$60,000.00
				150														156						148												127								127				\$39,770.00
				18														12						24												24								36				\$99,770.00

:60 SPOTS in MEGA & Radio Capital
:60 SPOTS in VIVA 900
:10 LIVE LINERS in MEGA & Radio Cap

**Hispanic media added-value opportunities:** Added-value opportunities worth \$7,746.0 have been negotiated with the three radio stations mostly on the form of PSAs and sponsorships leading to a total of one hundred and fourteen :10second PSAs and ninety six sponsorship spots.

**Television Plan:** Includes a combination of network affiliates, cable networks and local cable stations.

**Adults 35-54**

	9/29	10/6	10/13	10/20	1/12	1/19	2/16	2/23	3/15	3/22	4/26	5/3	5/17	5/24	TOTAL NET
WJLA-TV															\$80,240.00
WRC-TV															\$89,760.00
WTTG-TV															\$84,405.00
WUSA-TV															\$86,955.00
NWS8-TV															\$18,742.50
Comcast-TV															\$20,230.00
															<b>\$380,332.50</b>
															<b>TOTAL</b>
GRP	91.7	91.7	91.7	91.7	97.3	97.3	101.7	98.8	98.8	98.8	87	87	87	87	<b>1307.5</b>
Spots	59	59	59	59	59	59	59	58	58	58	59	59	59	59	<b>823</b>
REACH	48.3%	48.3%	48.3%	48.3%	51.2%	51.2%	53.5%	52.0%	52.0%	52.0%	45.8%	45.8%	45.8%	45.8%	<b>90.8%</b>
	81.5%				67.1%		69.1%		68.1%		62.1%		62.1%		
FREQ	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	<b>14.4</b>
	4.5				2.9		2.9		2.9		2.8		2.8		

**Internet Plan:** The proposed media plan also includes a four-week Internet test comprising web banners as well as search word sponsorships. Here is a summary of the Internet plan:

Timing: 4 Weeks, September 29 – October 27

Total Budget: \$50,000		Expected Delivery
Overture	\$2,375	5,247 Clicks
Google	\$4,000	7,142 Clicks
<b>Pay for Performance</b>	<b>\$6,375</b>	
Washingtonpost.com	\$17,000	1,200,000 Impressions/month
WTOPNews.com	\$6,000	700,000+ Impressions/month
NBC4.com	\$10,000	1,000,000 Impressions/month
Mapquest.com	\$10,000	1,250,000 Impressions/month
<b>“Banner/Site” Advertising</b>	<b>\$43,000</b>	

Creative: Banners, Skyscrapers, Big Boxes

**Integrated Communications Plan:** The above media plan is supported by an integrated communications plan comprising of Public Relations and Interactive Marketing. The key PR initiatives planned for the course of the year include press releases; media outreach programs, Speakers’ Bureau, pro-active relationships with associations such as the Chambers of Commerce etc. The key interactive marketing initiatives suggest possible inclusion of E-newsletters, surveys on the Commuter Connections website, a proposed landing page on the website as a mechanism to collect visitor information as well as featuring testimonials on the website.

## Guaranteed Ride Home TERM

The campaign for the GRH TERM focuses on the logistics of the program, with the Mass Marketing campaign taking care of communicating the larger benefits of alternative commuting as well as the services of Commuter Connections. Given the need for a strong “retail-oriented”, call to action creative, radio was selected as the channel of delivery for the GRH message. The radio campaign is supported by three radio commercials that explore a variety of commonly quoted instances when commuters would need the assurance of a guaranteed ride home. The radio spots are anchored in the underlying “frustration” that would motivate commuters to explore alternative commuting modes. They also incorporate a slightly different rendition of the testimonial approach used in the Mass Marketing campaign. The media outlay for the TERM is \$500,000.00.

### Radio buy and schedule for GRH campaign

	10/20	10/27	11/3	11/10	11/17	1/26	2/2	3/15	3/22	3/29	4/5	4/12	4/19	NET COST
WARW-FM														\$33,150.00
WASH-FM														\$19,337.50
WBIG-FM														\$31,025.00
WJFK-FM														\$33,320.00
WJZW-FM														\$37,400.00
WMMJ-FM														\$24,900.00
WMZQ-FM														\$36,910.40
WPGC-A+F														\$89,207.50
WRQX-FM														\$65,747.50
WTOP-A+F														\$69,997.50
WWDC-FM														\$25,606.25
WWZZ/														\$8,223.75
WWVZ-FM														<b>\$474,825.40</b>
														<b>Total</b>
GRP	200.4	191.3	183.5	190.3	204	178.9	176.3	225.6	190.2	190.4	192.1	192.3	192.1	2447.1
Spots	300	257	255	259	245	256	255	335	253	253	290	290	290	3394
REACH	48.9%	47.8%	45.9%	46.4%	52.3%	45.9%	45.2%	55.2%	50.0%	50.0%	49.9%	49.9%	49.9%	85.0%
Among 25-54?	75.2%					53.0%		65.2%			61.8%			
								79.4%						
FREQ	4.1	4.0	4.0	4.1	3.9	3.9	3.9	4.1	3.8	3.8	3.8	3.8	3.8	28.8
	12.9					6.7		9.3			9.2			
								14.8						

**Media added-value opportunities:** Added-value opportunities worth \$191,297.50 have been negotiated with the following radio stations:

WARW-FM	94.7 FM	Classic Rock
WASH-FM	97.1 FM	Adult Contemporary
WBIG-FM	100.0 FM	Oldies
WJFK-FM	106.7 FM	Talk/Personality
WJZW-FM	106.9 FM	Smooth Jazz
WMMJ-FM	102.3 FM	Urban AC
WPGC-AM/FM	95.5 FM	Urban Contemporary / 1580 Gospel
WMZQ-FM	98.7 FM	Country
WWDC-FM	101.1 FM	Alternative
WRQX-FM	107.3 FM	Adult Contemporary
WTOP-AM/FM	1500 AM / 107.7 FM	News/Information
WWZZ-FM	104.1 FM	Hot Adult Contemporary

The added-value opportunities comprise a variety of initiatives including one hundred and three :60 second PSAs, thirty-two :30 second PSAs, sixteen :15 second PSAs, ninety-eight :10 second PSAs and twenty-nine billboard adjacencies. A number of stations have also offered links on their website and the opportunity to distribute brochures at their events. In addition to the above, the stations have also offered the following customized opportunities:

- WASH-FM:
  - Promotional Opportunity – “Win a Stress-Free Getaway”: Guaranteed Ride Home will be included on WASHFM.COM with sponsorship identity, promotional tag line encouraging listeners to sign up for GRH, along with the GRH logo and hyperlink to the GRH home page. Contest details will also be posted on website.
  - Community Affairs Show interview: A Guaranteed Ride Home spokesperson will have the opportunity to be interviewed on air with Jerry Phillips of “Community Line Report on Metro Talk”. Tentative time to air is Sundays at 8:15am on up to 6 Clear Channel radio stations.
  - Guaranteed Ride Home brochures will be distributed at “Boo at the Zoo” on Oct 25 and “At Work” Work – Perk Appearances (every Monday) in October.
  
- WJFK-FM:
  - Interview on public service programming. Interview on Washington Weekly with Buzz Burbank airing Sunday morning.
  
- WJZW-FM:
  - On Air Interview: A GRH representative is invited to be a guest on Spectrum. The program airs 6am-7am and features informative discussions with guests from local government, business, non-profit organizations and the private sector about topics affecting the local community. This includes website exposure on the Spectrum web page.

- WMZQ-FM:
  - E-Newsletter Blast: GRH will be included in 2 newsletter blasts. This feature targets 28,000 listeners. GRH will receive logo and hyperlink included.
  
- WPGC-AM/FM:
  - The WPGC Street Team travels to high-traffic, highly visible locations around DC and will distribute Guaranteed Ride Home literature at 10 of these events. The station has giveaways, interactive games, the station vehicle and more to encourage listeners to come out. Two Guaranteed Ride Home mentions included in each event.
  
- WRQX-FM:
  - Community Affairs Show interview: A Guaranteed Ride Home spokesperson will have the opportunity to be interviewed on “Sundays with Chilli Amar.” Chilli Amar is the News Director for the Jack Diamond show. The programming airs 5:30 am Sundays.
  
- WWZZ-FM:
  - Community Affairs Show interview: A Guaranteed Ride Home spokesperson will have the opportunity to be interviewed on the Sunday morning show.

**Internet test:** The above media plan will be supported by a three-week Internet test in November and April, along the same lines as the plan for the Mass Marketing campaign. The results of the October-November Mass Marketing Internet test flight, will help determine the selection of sites for the GRH Internet schedule.

**Integrated Communications Campaign:** The above media campaign will be supported by a Direct Mailing initiative. As a first step towards a focused Direct Marketing program, Dudnyk recommended a PRIZM cluster analysis of the existing Commuter Connections’ GRH database, in order to identify potential commuters most likely to adopt alternative commuting options. Each record in the GRH database was assigned to one of PRIZM’s 62 existing cluster groups that characterize people based on demographics and lifestyle. The analysis revealed that GRH Commuters are predominately affluent, upper middle, and middle-income town, second city, and suburban families and couples. The detailed report outlines the key zip codes with a high concentration of potential GRH customers. This data will now be overlaid with the Regional Activity Centers and zip codes with a high concentration of Single Occupancy Vehicles (SOVs) to give us the optimum target areas for the GRH mailing activity. Dudnyk plans on completing the mailing by the first week of November. The PRIZM analysis will help determine the mailing groups. Public Relations will also support the program by identifying stories of human interest and the positive experiences of people that have utilized the service.

**Telework Centers TERM**

Dudnyk will support the TERM with a radio campaign in the fall and spring for a total of two weeks with a budget of \$30,000.00. The creative promotes the concept of the 17 telework centers and encourages commuters to motivate their employers with information obtained through Commuter Connections regarding the program.

*Media buy and schedule:*

	11/3	1/5	TOTAL NET
<b>WBIG-FM</b>			\$8,500.00
<b>WJZW-FM</b>			\$10,051.25
<b>WRQX-FM</b>			\$5,227.50
<b>WTOP-A+F</b>			\$5,992.50
			<b>\$29,771.25</b>
			<b>Total</b>
<b>GRP</b>	80.5	82.9	163.4
<b>Spots</b>	108	109	217
<b>REACH</b>	22.4%	25.9%	35.5%
<b>FREQ</b>	3.6	3.2	4.6

## Telework TERM

The Telework Seminars scheduled for 2004 will be supported by six weeks of radio from January to April to coincide with the schedule for the seminars. The media outlay for this effort is \$100,000.00. Public Relations will play an important support role through outreach programs aimed at the chambers of commerce, speakers' bureau and by also promoting events such as the Employer Recognition Awards.

### *Media buy and schedule:*

	1/12	1/26	3/1	3/8	3/29	4/5	Net On Air Fees	Net Promotion Fees	<b>TOTAL NET</b>
<b>WBIG-FM</b>							\$30,855.00	\$0.00	<b>\$30,855.00</b>
<b>WGMS-FM</b>							\$25,627.50	\$5,600.00	<b>\$31,227.50</b>
<b>WTOP-A+F</b>							\$32,130.00	\$5,600.00	<b>\$37,730.00</b>
							<b>\$88,612.50</b>	<b>\$11,200.00</b>	<b>\$99,812.50</b>
									<b>Total</b>
<b>GRP</b>	85.6	85.6	85.6	85.6	85.6	85.6			513.6
<b>Spots</b>	105	105	105	105	105	105			630
<b>REACH</b>	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%			37.5%
<b>FREQ</b>	3.3	3.3	3.3	3.3	3.3	3.3			13.7

**Media added-value opportunities:** Added-value opportunities have been negotiated with all three stations in the form of PSAs, billboards adjacencies and sponsorships. In addition, the customized promotions offered by the stations are:

- **WBIG-FM:**
  - Telework Weekly Feature, BIG Brunch Tie-In: Every Thursday midday host Kathy Whiteside will select one lucky office to win a complete brunch for up to 25 employees from delectable Geppettos Catering. Listeners can enter to win this delicious opportunity by e-mail and by fax. Kathy will draw a winner and that office will receive their brunch the following Friday. As exclusive sponsor of this feature, Telework will receive :10-second promotional announcements (name & sell line), two per day, Monday-Friday, per week through Jan-April 2004. Literature may be distributed at the BIG brunch events as well. Following the BIG Brunch award every Thursday, in the 10am hour, will be the Telework report saluting one Teleworker each week and, highlighting their success with Telework. Further, the Telework report will encourage BIG 100 listeners to log onto BIG 100 for more information regarding Telework or to share their success stories, either as the employee and/or business owner, and to enter the BIG Brunch. Telework will receive a banner ad

with hyperlink on Kathy Whiteside's web page, as well as a dedicated Telework splash page highlighting companies that Telework and providing an opportunity for area offices to enter to win the BIG Brunch

- WGMS-FM:

- "Commuter – Conscious Companies to Watch": Beginning Jan 5, 2004 and continuing until April 11, 2004, WGMS and WTOP will present a new integrated feature series: "Commuter – Conscious Companies to Watch". This program will feature local companies and businesses that support the Teleworking and Guaranteed Ride Home concepts. The goal of this campaign is to expand the concept of Teleworking in the Metro area, and to change the behavior of employees and employers. Each Monday, a dedicated reporter will highlight a local company or business on air on both WGMS and WTOP. These reports will outline the company's success with an established Teleworking program. The report will run between 10am-3pm, during the At-Work day-part on both stations. The on air features will be archived on WTOPnews.com and Classical103.5.com. The Commuter Conscious Companies to Watch multimedia storyboard will launch from the homepage of both station websites. Businesses will be showcased weekly online; companies will benefit further through prominent logo inclusion and hyperlink. Commuter Connections' logo will be prominently displayed on this dedicated web page with hyperlink. Complete details about Telework and Guaranteed Ride Home will be outlined on this web page. Companies will register on-line to be profiled. Both radio stations will promote this feature through 10 promotional announcements running Monday-Sunday 5am-12am. Total cost for this feature is \$5,600 on each station, total of \$11,200.

- WTOP-AM/FM:

- On-Air Interview: WTOP's "Sprawl and Crawl" Transportation reporter will conduct an on-air interview and Q & A session.

## METRO

*In Brief*

### THE REGION

#### Ads Aim to Convert Solo Commuters

The federal government and area transportation agencies are spending \$1 million on an advertising campaign urging commuters to use public transit, carpool or telecommute instead of driving alone to work.

The marketing campaign by the Metropolitan Washington Council of Governments' Commuter Connections program aims to reduce traffic and air pollution by persuading 8,500 solo drivers to use other commuting methods by June 2005. Funding will come from the U.S. Department of Transportation and transportation departments for Maryland, Virginia and the District.

The radio and TV ads, which began this month, emphasize the benefits of commuting by methods other than driving alone, such as reducing stress and saving money and time.

#### Oversight Hearing on National Arboretum

The House Agricultural Committee will hold an oversight hearing today on the U.S. Department of Agriculture's funding and management of the National Arboretum. The hearing, by the subcommittee on agriculture operations, oversight, nutrition and forestry, will begin at 9:30 a.m. in Room 1300 of the Longworth House Office Building.

The oversight hearing is the first to be held by a budget authorizing committee on the arboretum in at least 50 years. Tuckie Westfall, chairman of Friends of the National Arboretum, said in a statement released yesterday. The group has been critical of the Agriculture Department's funding levels of the arboretum.

### VIRGINIA

#### Deer Crashes Into Fairfax Courthouse

Fairfax County Animal Control officers had to euthanize an eight-point buck Saturday morning after it smashed through a glass window at the county courthouse and raced through the building's lobby before being cornered by employees, officials said yesterday.

Sheriff's officials at the courthouse said the animal likely was confused by the sun's reflection on a bank of six-foot windows. The animal was badly injured in the crash, losing most of its blood as it ran around the lobby looking for a way out.

The courthouse was closed at the time of the 10 a.m. incident. Officials said that a sheriff's deputy, aided by several other courthouse employees, was able to pin the deer in a corner until animal control officers arrived. The deer was so severely injured that it

#### Warners Kick Off Pre-K Programs



Virginia Gov. Mark R. Warner listens as his wife, Lisa Collis, reads to children at the Robert L. Taylor Childcare Center in Richmond. The governor and first lady were at the school, which specializes in infant and toddler care, to announce Warner's Education for a Lifetime pre-kindergarten initiatives.

BY BOB BROWN—RICHMOND TIMES DISPATCH VIA ASSOCIATED PRESS

## DNA Findings Delay Trial in Hiker Slayings

### Defense Claims No Forensic Evidence Puts Md. Man at Scene

By MARIAN GLOD  
Washington Post Staff Writer

The trial of the man accused of killing two women hikers at a secluded Shenandoah National Park campsite has been delayed after DNA

to delay the trial to give both sides time to investigate.

"Why not conduct the testing so that we're not dealing in the realm of speculation?" said Ira Robbins, an American University law professor. "It's hard enough for juries to room

Rice became a suspect in the slayings of Williams and Wmams in 1997 after he attacked a woman on Skyline Drive. U.S. Park Police and FBI agents investigating the assault quickly focused on Rice's apparent contempt of women and heroin



MWCOG—Commuter Connections  
Radio  
Telework Centers Campaign—"Alarm"  
:60

**WIFE:** Honey, wake up. Your alarm didn't go off.

**HUSBAND:** (Groggy) Set for 7:30.

**WIFE:** But it takes you at least an hour and a half to get downtown.

**HUSBAND:** (Still Groggy) Not going downtown.

**WIFE:** (Gasp) You quit your job?!

**HUSBAND:** (Continually groggy) No. I just quit my commute. Jack's letting me work three days a week from a telework center.

**WIFE:** Telework center?

**HUSBAND:** (Still groggy) Like a shared office. Everything I need. Top of the line computers with the latest software, high-speed modems, printers, phones, voice mail, e-mail, fax, the works. Only 15 minutes from here.

**WIFE:** So I guess that means you can cook dinner on the days you telework, huh?

**HUSBAND:** Uh, yeah, sure. Can I go back to sleep now?

**ANNCR:** Visit [commuterconnections.org](http://commuterconnections.org) or call 1-800-745-RIDE to request free information that tells your employer about the benefits of telework centers—like more productivity, less overhead and happier employees. Log on to [commuterconnections.org](http://commuterconnections.org) or call 1-800-745-RIDE to find a telework center near you. A flexible solution for a better commute.

COMMUTER CONNECTIONS QUARTERLY BUDGET  
COMMITMENTS AND EXPENDITURES  
FOR COG FY04 (July 1, 2003 - September 30, 2003)

	BUDGET TOTAL	FUNDS COMMITTED*	FUNDS EXPENDED**	%FUNDS EXPENDED***
<b>EMPLOYER OUTREACH****</b>	<b>\$1,003,550</b>	<b>\$1,003,152</b>	<b>\$31,009</b>	<b>3%</b>
Data & PC	\$2,397		\$0	0%
Contract Services/Consultants	\$161,000		\$1,693	1%
Pass-thru to local governments	\$682,000		\$0	0%
COG/TPB staff, indirect & direct costs	\$208,153		\$29,316	14%
<b>GUARANTEED RIDE HOME</b>	<b>\$1,678,500</b>	<b>\$1,678,175</b>	<b>\$85,315</b>	<b>5%</b>
Data & PC	\$25,000		\$0	0%
Contract Services/Consultants	\$454,302		\$8,270	2%
User Subsidies	\$165,000		\$13,401	8%
COG/TPB staff, indirect & direct costs	\$1,034,198		\$63,644	6%
<b>COMMUTER OPERATIONS CENTER*****</b>	<b>\$657,067</b>	<b>\$657,066</b>	<b>\$99,506</b>	<b>15%</b>
Data & PC	\$56,400		\$2,850	5%
Contract Services/Consultants	\$239,000		\$21,852	9%
COG/TPB staff, indirect & direct costs	\$361,667		\$74,804	21%
<b>TELECOMMUTING*****</b>	<b>\$805,000</b>	<b>\$805,000</b>	<b>\$56,341</b>	<b>7%</b>
Data & PC	\$1,500		\$0	0%
Contract Services/Consultants	\$237,000		\$0	0%
COG/TPB staff, indirect & direct costs	\$566,500		\$56,341	10%
<b>INTEGRATED RIDESHARING*****</b>	<b>\$177,000</b>	<b>\$177,200</b>	<b>\$29,367</b>	<b>17%</b>
Data & PC	\$20,000		\$2,153	11%
Contract Services/Consultants	\$18,500		\$0	0%
COG/TPB staff, indirect & direct costs	\$138,500		\$27,214	20%
<b>EMPLOYER OUTREACH FOR BICYCLING</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$0</b>	<b>0%</b>
Data & PC	\$275		\$0	0%
Contract Services/Consultants	\$2,623		\$0	0%
COG/TPB staff, indirect & direct costs	\$9,102		\$0	0%
<b>REGIONAL MASS MARKETING*****</b>	<b>\$1,895,576</b>	<b>\$1,769,034</b>	<b>\$115,185</b>	<b>6%</b>
Data & PC	\$2,000		\$0	0%
Contract Services/Consultants	\$486,764		\$68,544	14%
COG/TPB staff, indirect & direct costs	\$1,506,812		\$46,641	3%
<b>TOTAL</b>	<b>\$6,231,693</b>	<b>\$6,104,627</b>	<b>\$416,723</b>	<b>7%</b>

\* Committed Funds may include some rounding errors. The Mass Marketing funding commitment from the Maryland Department of Transportation for FY03 needs to be adjusted to FY04  
 \*\* Preliminary funds expended are through September 30, 2003  
 \*\*\* Percentage is based on Budget Total Column  
 \*\*\*\* Budget shown does not match TPB-adopted FY04 CCWP. VDOT elected to implement the Public Sector TERM and \$214,000 was removed from the budget through a TPB Program Committee Amendment on Sept. 5, 2003.  
 \*\*\*\*\* Employer Outreach budget also includes an additional \$56,000 to complete the SOC Survey.  
 \*\*\*\*\* The budget includes an additional \$99,000 to complete the SOC Survey. Budget includes \$54,000 in local membership fees  
 \*\*\*\*\* The budget includes an additional \$25,000 to complete the SOC Survey.

\*\*\*\*\*  
\$25,000 of the overall budget is a commitment from VDRPT for kiosk maintenance and promotion.  
Budget includes \$875,576 in unspent FY03 funds. Funding commitments from DDOT for FY03 need to be adjusted.  
FY04 budget amount from MDOT also needs to be adjusted. Unspent funds for FY03 will be used for media  
buys and consultant support.

20 OCT 2003

**ITEM 9 - Action**  
October 15, 2003

Release for Public Comment of  
Draft Air Quality Conformity Analysis of the  
2003 Update to the Constrained Long Range Plan (CLRP) and  
FY 2004-2009 Transportation Improvement Program (TIP)

**Staff**

**Recommendation:** Approve release for public comment of draft air quality conformity analysis for the 2003 CLRP and FY 2004-2009 TIP, which is scheduled to be adopted on November 19, 2003.

**Issues:**

TPB adoption of the 2003 CLRP and FY 2004-2009 TIP cannot occur until the new MOBILE6-based emissions budgets, which are necessary for the TPB to make an air quality conformity determination, are approved by the Environmental Protection Agency (EPA). Since the EPA approval process which normally takes 90 days began on September 10, 2003, it is possible that EPA approval will not be received until after November 19. Under these circumstances, the TPB conformity determination for the CLRP and TIP will have to be postponed until EPA approval is received.

**Background:**

At the September 17 meeting, the Board was briefed on the status of the draft 2003 CLRP and FY 2004-2009 TIP documents and the associated conformity analysis.

A draft summary of the analysis results is attached. Copies of the draft analysis report will be available at the TPB meeting. This report is

attached. Copies of the draft analysis report will be available at the TPB meeting. This report is also available on the COG website at [www.mwcog.org](http://www.mwcog.org).



Local governments working together for a better metropolitan region

## 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  
Prince William County

October 8, 2003

**To:** Transportation Planning Board

**From:** Michael J. Clifford *MC*  
Systems Planning Applications Director

**Subject:** Review of Draft Air Quality Conformity Assessment for the 2003 Update of the Constrained Long Range Plan (CLRP) and the FY2004-2009 Transportation Improvement Program (TIP)

## INTRODUCTION

This memo transmits summary results of the air quality conformity assessment of the 2003 CLRP and the FY2004-2009 TIP. The results contained in this summary memo and in the October 15, 2003 draft technical report, Air Quality Conformity Determination Of The 2003 Constrained Long Range Plan And The FY2004-2009 Transportation Improvement Program For The Washington Metropolitan Region, are being forwarded to the TPB for the Board's release for public comment and interagency consultation.

Comments will be accepted through close of business November 14, 2003, with final action by the TPB scheduled for its November 19, 2003 meeting.

## BACKGROUND

On May 21, 2003 the TPB approved the project submissions for inclusion in the conformity analysis, and on June 18, 2003 the Board approved the scope of work for the air quality conformity analysis for the year 2003 update of the CLRP and FY2004-2009 TIP. Key technical inputs to the analysis included: Round 6.3 Cooperative Forecasts; the Version 2.1C Travel Demand Model, utilizing the new project submissions and reflecting higher transit fares recently enacted by several transit operators in the region; EPA's Mobile6 Emissions Factor Model; and a Mobile Emissions Post-Processor, developed using latest travel demand and mobile emissions planning assumptions for specific use with the Version 2.1C and Mobile6 models.

Staff first applied the travel demand, emissions factor, and emissions post-processor models in the development of the region's 'severe area' ozone state air quality implementation plan (SIP), which was approved by the Metropolitan Washington Air Quality Committee in August 2003. District of Columbia, Maryland and Virginia air agencies subsequently submitted the SIP, and its associated mobile source emissions budgets, to EPA in fulfillment of air quality planning requirements for the Washington region. Since those submitted emissions budgets represent a key conformity evaluation criterion, EPA needs to determine that the budgets are adequate before the TPB can approve a conformity finding. Should this not occur by the November 19<sup>th</sup> TPB meeting, the Board action will need to be deferred.

Staff proceeded with the technical analyses described below to ascertain whether the draft plan and program would meet the specific conformity criteria.

## **WORK ACTIVITIES**

Technical work activities for the conformity assessment of the 2003 CLRP and FY2004-2009 TIP included the preparation of volatile organic compound (VOC) and nitrogen oxide (NO<sub>x</sub>) emissions inventories for specified forecast years associated with the plan and program (forecast years: 2005, 2015, 2025 and 2030). Wintertime carbon monoxide (CO) analysis for conformity, with near term forecast years of 2007 and 2016 consistent with SIP planning requirements, has also been conducted. In meeting the requirements for use of latest planning assumptions and methods, this effort marked the first production use in a conformity assessment of the updated travel demand, emissions factors, and emissions calculation methods referenced above. The work also utilized some recently developed methods and data which were applied in previous conformity assessments, such as airport passenger forecasts and transit capacity constraint procedures.

These inventories address a primary conformity assessment criterion to demonstrate that the plan and program adhere to mobile source emissions budgets. Such budgets were either previously established (in the case of wintertime CO) or are currently being established through EPA's SIP submission / conformity budget adequacy determination process (in the case of VOC and NO<sub>x</sub>). In anticipation of possible emissions increases associated with implementation of the plan and program, staff (in conjunction with the TPB Technical Committee and its Travel Management Subcommittee) conducted parallel analyses of potential transportation emissions reduction measures (TERM)s. The objective of this work was to develop potential additional plan and program elements which could be utilized to mitigate any such increases. These results are described in the October 6, 2003 draft report, Analysis Of Potential Transportation Emission Reduction Measures (TERMs) For The 2003 Constrained Long Range Plan And The FY2004-2009 Transportation Improvement Program. Completion of the conformity analyses, however, showed that the plan and program emissions estimates were within the budget for each pollutant for all forecast years.

Today's memo presents a "bottom line" summary of results of the conformity analysis, as

follows.

### **Plan Amendments and Program Elements**

There have been relatively few significant changes advanced for the CLRP / TIP in this year's approval cycle. Attachment A presents a listing of significant new projects since the 2002 CLRP and the FY2003-2008 TIP were approved by the Board on July 31, 2002.

### **Land Activity Forecasts**

On March 12, 2003 COG's Metropolitan Development Policy Committee approved Round 6.3 Cooperative Forecasts to be used for testing purposes in analysis of the CLRP and TIP. Data at the traffic zone level for Round 6.3 was made available to COG/TPB staff on June 9, 2003. Accordingly, these forecasts, summarized in Attachment B, provided the land activity assumptions which were used in the conformity assessment. On October 8, 2003 the COG Board adopted the Round 6.3 Cooperative Forecasts.

### **Travel Modeling Process**

Using the Version 2.1C model, COG/TPB staff prepared travel demand forecasts for each of the required forecast years. Exhibit 1 presents the geographic areas for modeling and for non-attainment reporting purposes. Exhibit 2 presents the resulting transit trips, vehicle trips, and vehicle miles traveled (VMT) results through time for each conformity analysis year. For 2005 the table also presents a comparison with travel demand results prepared for the severe area SIP, since that work is being used to set the mobile source emissions budgets to be used as part of the conformity assessment. This comparison reflects the combined effects of the following changes between the SIP and conformity analysis: higher transit fares, revised facilities, and land use changes. The model outputs show fewer transit trips, an increase in vehicle trips, and a slight decrease in VMT.

Changes in land activity inputs throughout the modeled area appear to have contributed significantly to the decline in VMT. The land activity input assumptions to the SIP work included the Round 6.2 Cooperative Forecasts factored to Round 6.3 control totals since traffic zone level data files specifically for Round 6.3 were not yet available for use in the modeling. This was done to reflect increases in land activity expected with Round 6.3, and to ensure that emissions were not understated. The conformity analysis is based upon the zone level Round 6.3 data, which reflect not only the forecast small area land use distributions throughout the Washington area, but also the latest planning assumptions for areas outside the Washington region. For example, the Baltimore land use input to Round 6.3 reflects the Baltimore Metropolitan Council's 'Round 5D' adopted figures, whereas their previous input to the COG Round 6.2 forecasts was their 'Round 5B' figures.

Attachment C documents this analysis on a jurisdictional basis, presenting tables comparing year 2005 households, jobs, vehicle trips, and VMT for the SIP and conformity cases. The most significant changes in the tables occur in Howard County, Maryland, in the Baltimore region. Between their Rounds 5B and 5D inputs, households drop by over 8,500 and jobs increase by nearly 27,000. In the travel modeling process, the fewer households and greater jobs / housing ratio result in fewer trips in the county overall (a drop of nearly 6,000 trips) and significantly less VMT in Howard County (a decrease of close to 500,000) and in Howard County trip interchange areas with Frederick, Montgomery, and Prince George's counties, and the District of Columbia.

The slight changes in transit, vehicle trips, and VMT (about one half of one percent throughout the MSA) are reasonable and appropriate in context of the overall transportation / land use planning perspective.

### **Emissions Factors**

COG/DTP staff, in conjunction with COG Department of Environmental Programs staff and with the consultant assistance of E.H. Pechan and Associates, developed the motor vehicle emissions factors through the use of EPA's MOBILE6 emissions factor model (See Appendix D of the full technical report for model inputs and other details of the emissions factor development.) These rates for each pollutant, shown using District of Columbia data as an illustration in Exhibits 3 and 4 for VOC and NOx, respectively, were developed following execution of the model in 1 mph speed increments, by jurisdiction, for each analysis year. The charts show significantly reduced rates through time, primarily due to the impacts of having cleaner vehicles in the fleet.

### **Emissions Analyses**

#### **Mobile Emissions Inventories**

Staff applied the Mobile6 emissions factors to the travel demand forecasts to prepare mobile source emissions inventories for each forecast year. These emissions results are summarized in Exhibit 5 and indicate VOC and NOx emissions for network and off-network components for each analysis year. The table shows dramatic reductions between 2005 and 2015, with emissions leveling off at about 40 tons per day for both pollutants. The results reflect the impact of the cleaner fleet and related programs between now and 2015, with continuing fleet turnover balanced against VMT growth (and slowing growth rates through time) thereafter. Net emissions for each forecast year are shown as the bottom line of the summary. Emissions are seen to be slightly less than the mobile budgets in 2005 and well within the mobile budgets thereafter. Exhibits 6 and 7 present these VOC and NOx results in a graphical format. In recognition of the fact that estimated emissions are within the mobile source budget for each pollutant, no additional transportation emissions reduction measures are required to be programmed to demonstrate conformity.

## Net Emissions Analysis

The emissions inventory data contained in Exhibit 5 reflect total mobile source network and off-network emissions. However, there are also emissions benefits associated with certain transportation programs and projects. These benefits, estimated on an off-line basis, are also creditable in conformity analyses. Attachment D represents a summary table of these transportation emissions reduction measures, or TERMS, which have been previously planned or programmed by the TPB. They are arrayed in a "Tracking Sheet" format to document the implementation status of each. The summary result of these measures, seen on the last page of the attachment, amounts to additional reductions in 2005 of 3.8 tons per day of VOC and 7.7 tons per day of NOx. Only those projects which have been affirmed by the implementing agency as having been completed, or are on a realistic schedule towards implementation, are being credited in this emissions analysis. (Documentation from the implementation agencies regarding the status of each project is contained in Appendix K of the full conformity report.)

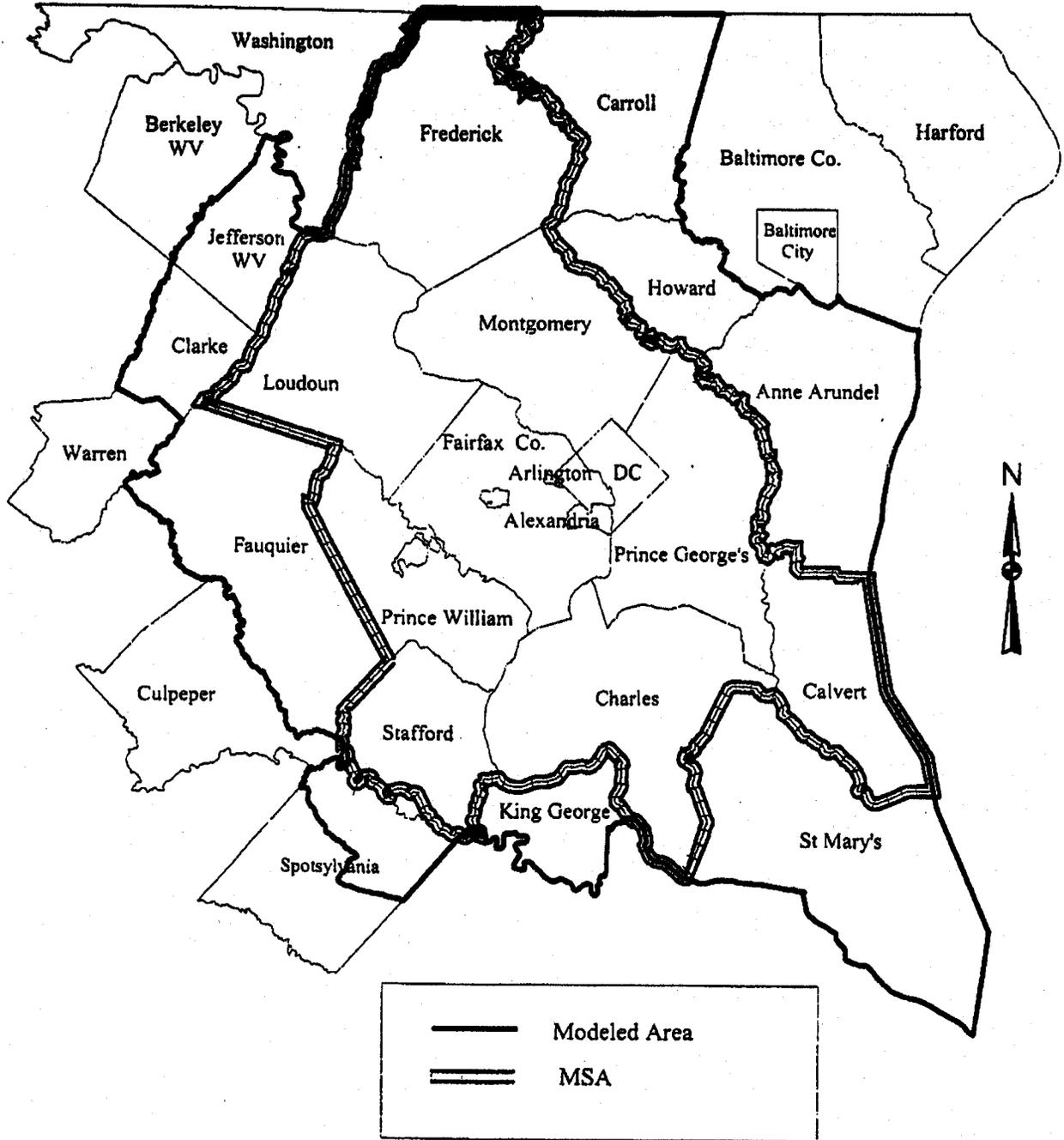
## **SUMMARY**

The analytical results described in this air quality assessment provide a basis for a determination by the TPB of conformity of the 2003 CLRP and the FY2004-2009 TIP.

Following: Exhibits 1-7  
Attachments A-D

EXHIBIT 1

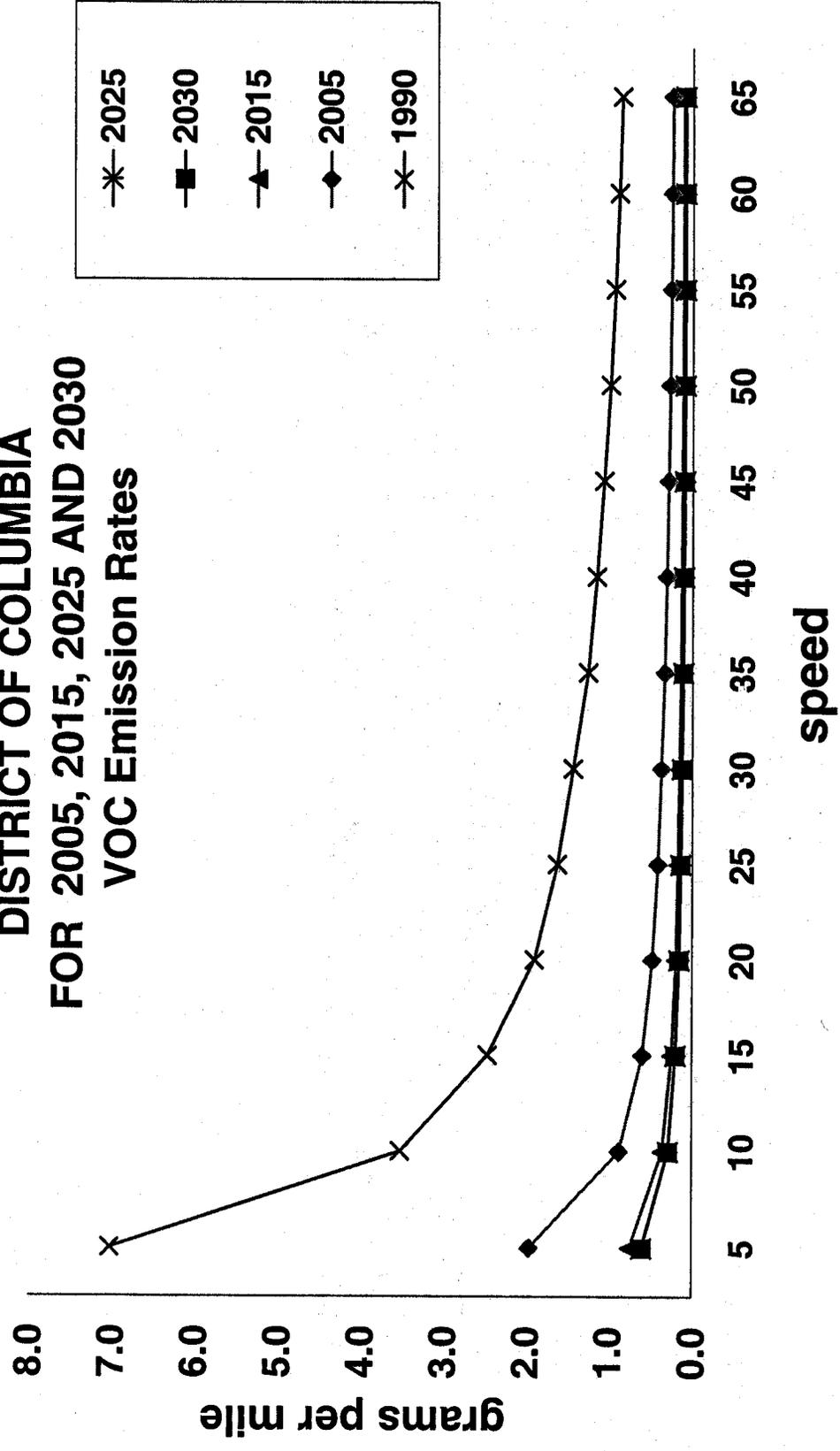
**Washington, D.C. - Maryland - Virginia  
Modeled Area  
and  
Metropolitan Statistical Area**



**Exhibit 2  
Travel Demand Summary  
Modeled Area Trips and Vehicle Miles Traveled (000's)**

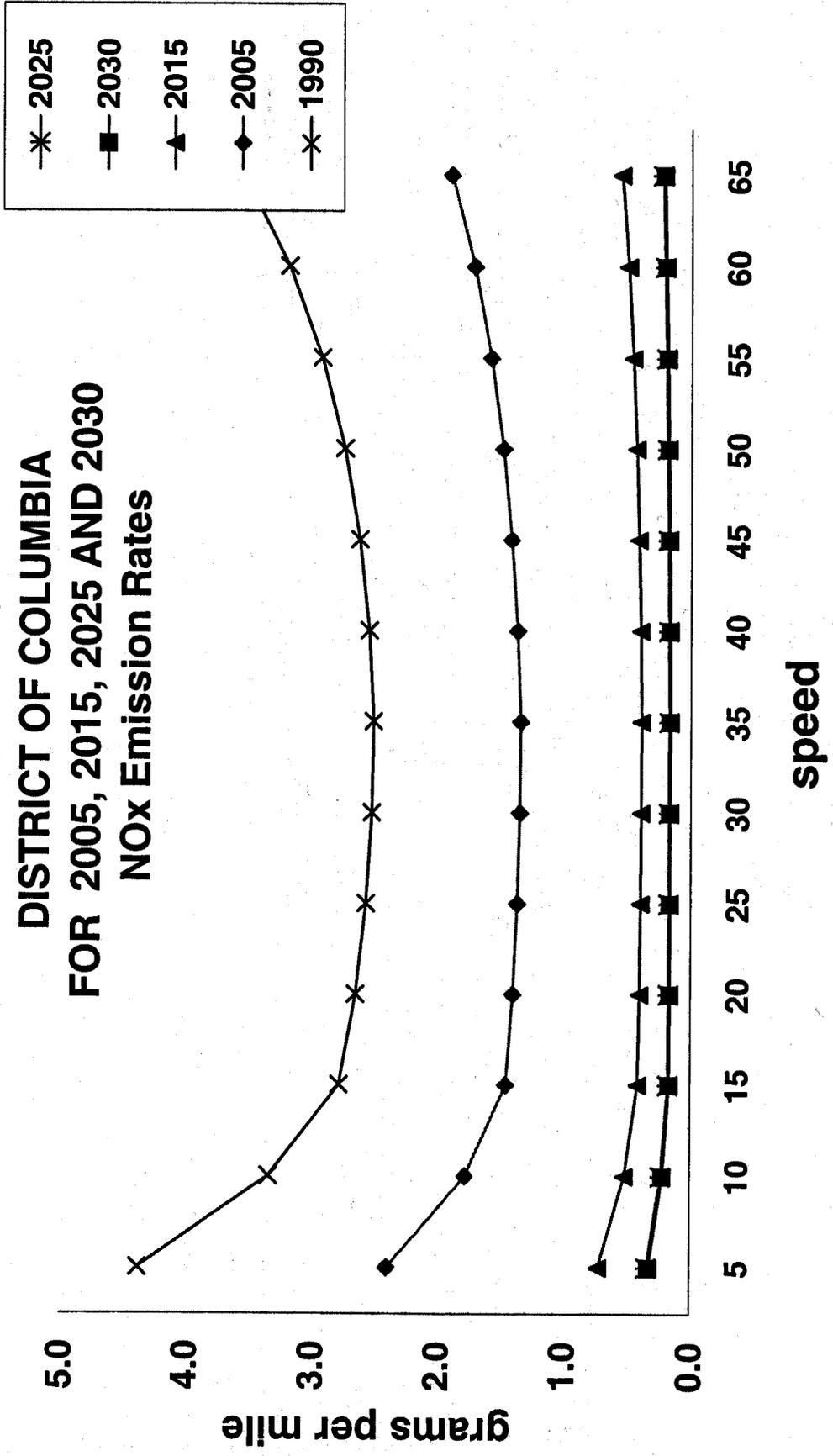
	SIP	2005			2015	2025	2030
		AQC	DIFFERENCE	% DIFF.			
Transit Trips	1,009.5	967.3	-42.2	-4.4	1,147.9	1,229.2	1,233.5
Vehicle Trips	20,259.5	20,374.8	115.3	0.6	23,224.4	25,565.5	26,405.2
VMT	167,332.5	166,547.6	-784.9	-0.5	194,121.7	218,164.7	228,502.3

**Exhibit 3**  
**TOTAL COMPOSITE MOBILE6 RUNNING EMISSION**  
**FACTORS**  
**DISTRICT OF COLUMBIA**  
**FOR 2005, 2015, 2025 AND 2030**  
**VOC Emission Rates**



**Exhibit 4**  
**TOTAL COMPOSITE MOBILE6 RUNNING EMISSION**  
**FACTORS**

**DISTRICT OF COLUMBIA**  
**FOR 2005, 2015, 2025 AND 2030**  
**NOx Emission Rates**



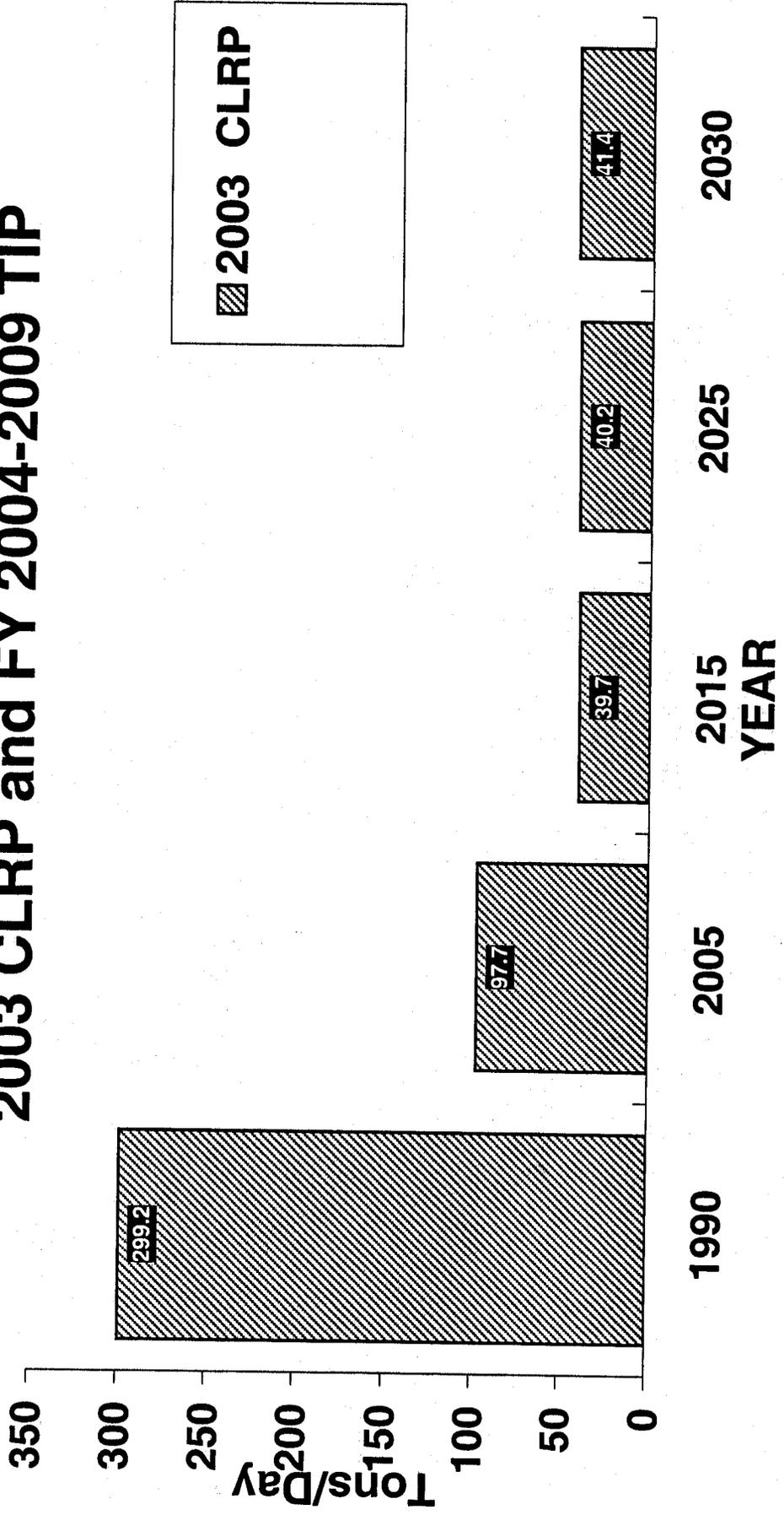
**EXHIBIT 5**  
**AIR QUALITY CONFORMITY**  
**Summary Table**  
**Mobile Emissions Inventories**  
**for 2003 CLRP and FY 2004-2009 TIP**  
**(Tons/Day)**

	2005		2015		2025		2030	
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
<b>I Network</b>								
Start	17.3	10.9	5.7	2.1	6.5	2.6	6.4	2.4
Running	46.8	202.1	19.2	28.7	21.7	34.3	22.6	32.7
Soak	11.2	-----	3.5	-----	3.8	-----	3.9	-----
<b>II Off-Network</b>								
Diurnal	2.8	-----	1.3	-----	0.7	-----	0.7	-----
Resting Loss	10.6	-----	4.6	-----	2.2	-----	2.3	-----
Local Roads	7.3	10.3	4.6	4.7	4.6	3.7	4.8	3.8
School Buses	0.4	5.5	0.2	1.8	0.2	0.3	0.2	0.3
Transit Buses	0.3	5.6	0.1	2.1	0.1	0.3	0.1	0.3
Auto Access	1.0	1.5	0.5	0.6	0.4	0.4	0.4	0.4
<b>Total</b>	<b>97.7</b>	<b>235.8</b>	<b>39.7</b>	<b>40.0</b>	<b>40.2</b>	<b>41.6</b>	<b>41.4</b>	<b>39.8</b>

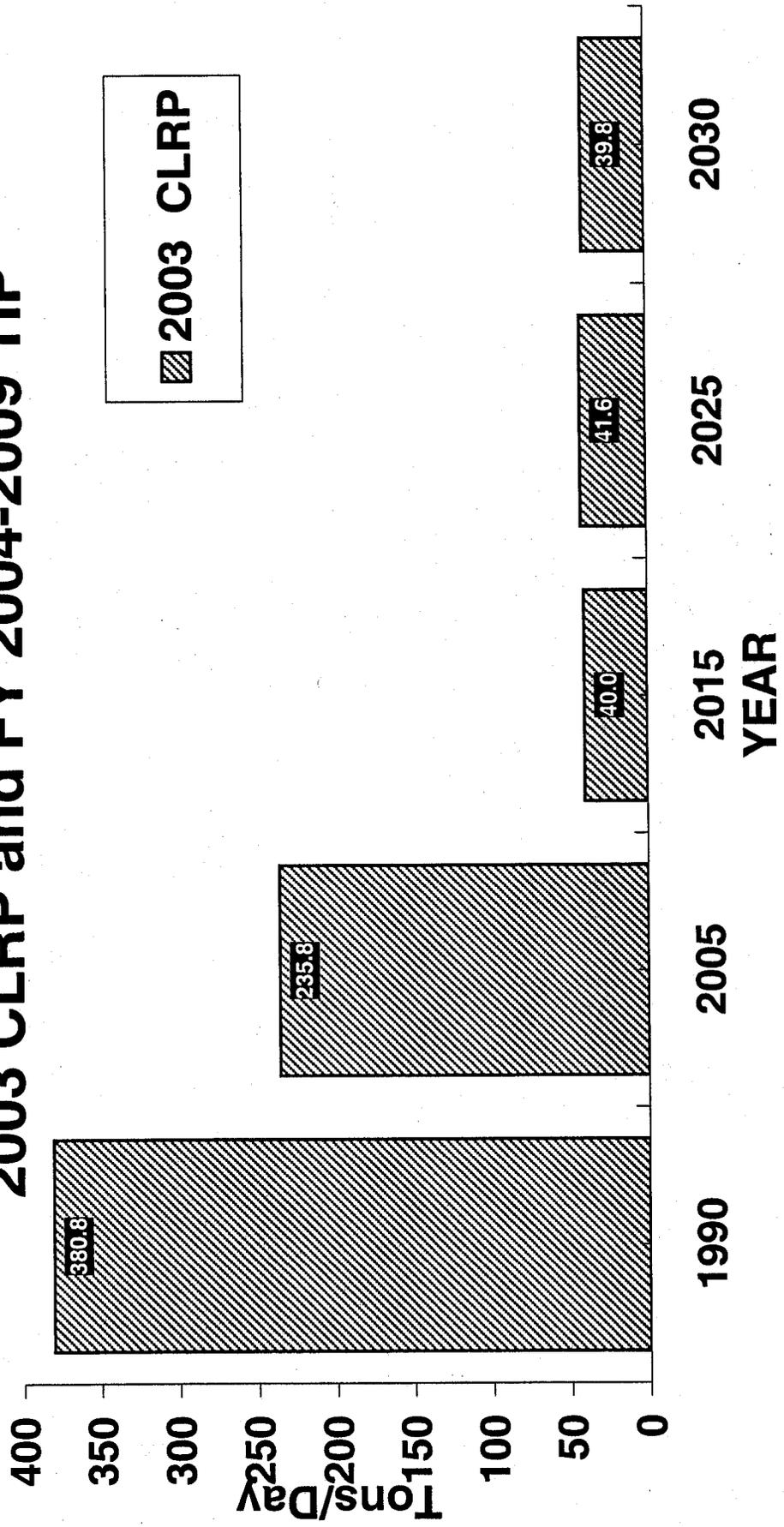
**Mobile Emissions Budgets:**      98.1      237.4

**Budget Adherence Margin:**      0.4      1.6

**EXHIBIT 6**  
**Mobile Source VOC Emissions**  
**Metropolitan Statistical Area**  
**2003 CLRP and FY 2004-2009 TIP**



**EXHIBIT 7**  
**Mobile Source NOx Emissions**  
**Metropolitan Statistical Area**  
**2003 CLRP and FY 2004-2009 TIP**



# ATTACHMENT A

Significant Changes For the 2003 CLRP and FY 2004 - 2009 TIP

ID	Agency	Facility	From/At	To	Complete Date	Improvement	Fac. Type		# Lanes	
							From	To	From	To
<b>DISTRICT OF COLUMBIA</b>										
1	DDOT	K Street Busway	Mount Vernon Square/7th Street NW	Washington Circle/23rd Street NW	2005	Reconstruct				
2	DDOT	Anacostia Light Rail	Pennsylvania Ave.	Bolling AFB	2004	Construct				

ID	Agency	Facility	From/At	To	Complete Date	Improvement	Fac. Type		# Lanes	
							From	To	From	To
<b>MARYLAND</b>										
1	SHA	I-95/495	Interchange at Arena Drive		2010	Construct	1	1	8	8
2	SHA	I-95/495	Interchange at Greenbelt Metro		2010	Construct	1	1	8	8
3	SHA	University of Maryland Connector	I-95/495	UMD Campus	2025	Study				
4	SHA	US 15	at MD 26		2010	Construct	5	5	4	4
5	SHA	East-West Link Improvements	I-370	US 1	TBD	Study, Not Coded				
6	SHA	I-95/495	Branch Ave. Metro	MD 5 and I-95/495	2020	Construct	1	1	8	8
7	SHA	I-270	Interchange at Watkins Mill Road Extended		2025	Construct	1	1	4	6+2
8	SHA	I-270/US 15 w/ HOV	Shady Grove Metro	Biggs Ford Road I-70	TBD	Study Construct	1	1	varies	
9	SHA	MD 3	US 50	Anne Arundel County Line	TBD	Study Widen	2	2	4	6
10	SHA	MD 28 / MD 198	MD 97	I-95	TBD	Study Construct	2	2	2/4	4/6
11	SHA	MD 97 (Brookville Bypass)	South of Brookville	North of Brookville	TBD	Study Construct	0	2	0	2
12	SHA	MD 201 Extended, US 1	Sunnyside Avenue I-95/495		2020	Construct Study, Not Coded	0	2	0	4
13	SHA	MD 204 (Kenilworth Avenue)	Ritterhouse Road		WITHDRAWN FROM PLAN					
14	SHA	MD 210 (HOV)	MD 228	I-95/495	2007	Reconstruct Widen	2	2	6	6+2
15	SHA	US 301	south of MD 5 at T.B.	US-50 Mount Oak Road	2020	Study, Not Coded	2	5	4/6	6+2
16	SHA	US 301	Mount Oak Road	US 50	2020	Upgrade/Widen	2	5	4 to 6	6+2
17	SHA	MD 450	Stoneybrook Dr.	West of MD 3	2010	Widen	2	2	2	4
18	Mont. Co.	Middlebrook Road Ext. Widening	MD 355	M-83	2020	Widen	2	2	3	6
19	Mont. Co.	Father Hurley Blvd.	Wisteria	MD 118 Relocated	2020	Construct		2		4
20	Mont. Co.	M-83 - Midcounty Highway Extended	MD 27 (Ridge Road)	Middlebrook Road	2025	Construct		2	0	4-6
21		BI-County Transitway								
22	MTA	BI-County Transitway	Silver Spring	New Carrolton	2015	Study/PE, Not Coded				
23	MTA	Corridor Cities Transitway	Metropolitan Grove	COMSAT	2020	Construct				
24	MTA	Corridor Cities Transitway	Shady Grove	Metropolitan Grove	2012	Construct				

Strikeout - Deletion/Change  
**Bold** - New/Change

Significant Changes For the 2003 CLRP and FY 2004 - 2009 TIP

ID	Agency	Facility	From/At	To	Complete Date	Improvement	Fac. Type		# Lanes	
							From	To	From	To
<b>VIRGINIA</b>										
1	VDOT	Duflles Greenway	VA715 Bypass	Goose Creek Bridge	2006	Widen	1	1	4	6
2	VDOT	Duflles Greenway	Goose Creek Bridge at Seminary Road	VA 901 (Claiborne Parkway)	2004	Widen	1	1	4	6
3	VDOT	I-396 HOV Connection	Route 235 North	I-495	2025	Widen	2	2	6	8
4	VDOT	US 1 (HOV Lanes) w/ bus/right-turn lanes	VA 898 (Old Centerville Road)	WCL of Fairfax County	2003	Study Construct	2	2	4	6
5	VDOT	US 29	Arlington County/Fairfax County Line	Washington Blvd.	2020	Upgrade Reconstruct	2	2	6	6
6	VDOT	US 50	Pershing Drive	Ft. Myer Drive	2020	Upgrade Reconstruct	2	2	6	6
7	VDOT	US 50	Route 9	Market Street (Leesburg)	2004	Study	2	1	4	4
8	VDOT	VA 7			2015	Widen/Upgrade			4	6
9	VDOT	VA 7 (King Street) - RR underpass	Commonwealth Ave.	Russell Rd.	WITHDRAWN FROM PLAN					
10	VDOT	VA 28 Bypass 411 (Tri-County Parkway)	I-66	VA 620 @ VA 613	2004	Study Construct	2	2	3	4
11	VDOT	VA 641 (Old Bridge Rd.)	VA 3000 (Prince-William Parkway)	VA 640 (Minnieville Rd.)	2020	Study Construct	-	2	-	4
12	VDOT	VA 7100 (Fairfax Co Pkwy HOV)	I-66	VA 7735 (Fair Lakes Pkwy)	WITHDRAWN FROM PLAN					
13	VDOT	VA 7100 (Fairfax Co Pkwy HOV)	VA 7735 (Fair Lakes Pkwy)	US 50	2010	Upgrade / Widen	2	2	4	6
14	VDOT	VA 7100 (Fairfax Co Pkwy HOV)	US 50	VA 5320 (Sunrise Valley Dr.)	2015	Widen	5	5	4	6-6+2
15	VDOT	Proposed Metro and VRE Station(e)	Wilson Blvd.	George Mason Drive	2015	Widen	5	5	4	6-6+2
16	VDOT	Wilson Blvd.	N. Quincy St.	Washington Blvd.	2010	Construct	2	2	4	6
17	VDOT	Wilson Blvd.	4-mile west of Middleburg west city limit	US-60 (Middleburg Bypass)	2004	Widen Reconstruct	2	2	4	6
18	VDOT	US-60 (Middleburg Bypass)	Middleburg Bypass	VA-616 (Geocher Road)	2010	Widen Reconstruct	2	2	4	6
19*	VDOT	US-60			WITHDRAWN FROM PLAN					
20*	VDOT	I-95 HOV Extension			WITHDRAWN FROM PLAN					
21	FAMPO	Strikeout - Correction/Deletion			2015	Construct	2	1	4	2

\* This project was withdrawn from the CLRP by the TPB at their May 21, 2003 meeting.

# ATTACHMENT B

**Summary of Intermediate Employment Forecasts  
Round 6.3 Cooperative Forecasts  
(Thousands)**

JURISDICTION	1990	1995	2000	2005	2010	2015	2020	2025	2030	2000 to 2030		Regional Share
										Number	% Change	
District of Columbia	747.3	701.9	678.0	720.4	752.0	783.7	807.1	831.2	831.2	153.2	22.6%	11.7%
Arlington County	183.1	195.8	201.7	209.7	236.0	255.0	274.1	293.2	301.9	100.2	49.7%	7.6%
City of Alexandria	93.2	91.9	98.6	104.1	120.7	128.3	137.0	141.9	148.1	49.5	50.3%	3.8%
<b>Central Jurisdictions</b>	<b>1,023.6</b>	<b>989.6</b>	<b>978.3</b>	<b>1,034.2</b>	<b>1,108.7</b>	<b>1,167.0</b>	<b>1,218.2</b>	<b>1,266.3</b>	<b>1,281.2</b>	<b>302.9</b>	<b>31.0%</b>	<b>23.1%</b>
Montgomery County (1)	466.0	462.5	545.0	585.0	630.0	660.0	680.0	695.0	705.0	160.0	29.4%	12.2%
Rockville (2)	56.9	62.7	68.7	80.6	92.8	98.3	101.3	102.4	103.5	34.8	50.7%	2.7%
Prince George's County	310.4	301.3	327.5	357.9	399.9	426.4	465.0	516.8	550.0	222.5	67.9%	17.0%
Fairfax County (3)	403.7	459.6	532.8	595.0	653.2	678.4	708.5	736.5	758.9	226.1	42.4%	17.3%
City of Fairfax	26.9	29.7	32.9	33.1	33.9	33.9	33.9	33.8	33.8	0.9	2.7%	0.1%
City of Falls Church	9.2	9.3	9.4	9.5	10.0	10.3	10.5	10.6	10.7	1.3	13.8%	0.1%
<b>Inner Suburbs</b>	<b>1,216.1</b>	<b>1,262.4</b>	<b>1,447.6</b>	<b>1,580.5</b>	<b>1,727.0</b>	<b>1,809.0</b>	<b>1,897.9</b>	<b>1,992.7</b>	<b>2,058.4</b>	<b>610.8</b>	<b>42.2%</b>	<b>46.6%</b>
Loudoun County	39.3	53.2	87.0	109.9	137.1	166.2	195.3	224.0	253.6	166.6	191.5%	12.7%
Prince William County	68.8	78.0	91.6	106.3	124.0	139.4	152.8	164.4	173.5	81.9	89.4%	6.3%
City of Manassas	17.2	18.5	19.9	21.5	23.0	23.7	24.1	24.1	24.2	4.3	21.6%	0.3%
City of Manassas Park	2.3	2.5	2.7	3.0	4.7	4.9	5.1	5.2	5.2	2.5	92.6%	0.2%
Calvert County (4)	18.1	21.5	25.9	29.4	32.9	33.7	34.5	35.1	35.6	9.7	37.5%	0.7%
Charles County (4)	38.7	44.6	50.1	56.5	62.9	64.8	66.8	67.9	69.1	19.0	37.9%	1.5%
Frederick County	54.0	68.0	99.7	109.2	120.7	134.6	148.5	162.5	177.8	78.1	78.3%	6.0%
Stafford County (5)	11.0	13.9	25.3	31.8	38.4	43.8	49.2	54.5	59.7	34.4	136.0%	2.6%
Anne Arundel County (6)	249.4	258.3	291.7	302.0	312.0	317.5	322.0	326.0	330.1	38.4	13.2%	n/a
Howard County (6)	106.3	123.6	160.0	180.0	200.0	215.0	230.0	245.0	249.9	89.9	56.2%	n/a
<b>Outer Suburbs (6)</b>	<b>249.4</b>	<b>300.2</b>	<b>402.2</b>	<b>467.6</b>	<b>543.7</b>	<b>611.1</b>	<b>676.3</b>	<b>737.7</b>	<b>798.7</b>	<b>396.5</b>	<b>98.6%</b>	<b>30.3%</b>
<b>Northern Virginia</b>	<b>854.7</b>	<b>952.4</b>	<b>1,101.9</b>	<b>1,223.9</b>	<b>1,381.0</b>	<b>1,483.9</b>	<b>1,590.5</b>	<b>1,688.2</b>	<b>1,769.6</b>	<b>667.7</b>	<b>60.6%</b>	<b>51.0%</b>
<b>Suburban Maryland (6)</b>	<b>887.1</b>	<b>897.9</b>	<b>1,048.2</b>	<b>1,138.0</b>	<b>1,246.4</b>	<b>1,319.5</b>	<b>1,394.8</b>	<b>1,477.3</b>	<b>1,537.5</b>	<b>489.3</b>	<b>46.7%</b>	<b>37.3%</b>
<b>REGIONAL TOTAL (6)</b>	<b>2,489.1</b>	<b>2,552.2</b>	<b>2,828.1</b>	<b>3,082.3</b>	<b>3,379.4</b>	<b>3,587.1</b>	<b>3,792.4</b>	<b>3,996.7</b>	<b>4,138.3</b>	<b>1,310.2</b>	<b>46.3%</b>	<b>100.0%</b>

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

(2) Included in Montgomery County total.

(3) Totals for all years include Fairfax County Government employees working in the Massey Complex.

(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) Baltimore Metropolitan Council (BMC) Round 5-D Forecasts (2000 to 2025) for Anne Arundel and Howard counties are shown for reference purposes only and are not included in any other totals. Howard County and Anne Arundel County provided 2000 to 2025 projections and the Metropolitan Washington Council of Governments extrapolated their data to 2030. The official forecasts for Anne Arundel County for 2030 will not be available until January 2004.

**Summary of Intermediate Population Forecasts  
Round 6.3 Cooperative Forecasts  
(Thousands)**

JURISDICTION	1990	1995	2000	2005	2010	2015	2020	2025	2030	2000 to 2030		Regional Share
										Number	% Change	
District of Columbia (1)	606.9	554.3	572.1	607.0	627.0	673.7	688.1	702.4	702.4	130.3	22.8%	8.4%
Arlington County	170.9	187.9	189.5	197.4	202.5	209.1	215.5	219.5	221.9	32.4	17.1%	2.1%
City of Alexandria	111.2	117.3	128.3	136.5	142.9	145.9	147.8	150.0	151.7	23.4	18.2%	1.5%
<b>Central Jurisdictions</b>	<b>889.0</b>	<b>859.4</b>	<b>889.9</b>	<b>940.9</b>	<b>972.4</b>	<b>1,028.7</b>	<b>1,051.4</b>	<b>1,071.9</b>	<b>1,076.0</b>	<b>186.1</b>	<b>20.9%</b>	<b>12.0%</b>
Montgomery County (2)	757.0	810.0	873.3	925.0	975.0	1,020.0	1,050.0	1,070.0	1,080.0	206.7	23.7%	13.4%
Rockville (3)	44.8	47.0	47.4	53.7	60.4	62.8	63.3	63.5	64.4	17.0	35.9%	1.1%
Prince George's County	729.3	767.0	808.0	856.6	881.1	907.7	932.3	952.1	967.8	159.8	19.8%	10.3%
Fairfax County (4)	818.6	879.4	969.8	1,045.0	1,114.1	1,149.8	1,174.6	1,187.4	1,197.4	227.6	23.5%	14.7%
City of Fairfax	19.6	20.4	22.9	23.5	24.1	24.4	24.7	24.5	24.3	1.4	6.1%	0.1%
City of Falls Church	9.6	10.0	10.4	10.6	11.3	11.6	11.9	12.1	12.2	1.8	17.3%	0.1%
<b>Inner Suburbs</b>	<b>2,334.1</b>	<b>2,486.8</b>	<b>2,684.4</b>	<b>2,860.7</b>	<b>3,005.6</b>	<b>3,113.5</b>	<b>3,193.5</b>	<b>3,246.1</b>	<b>3,281.7</b>	<b>597.3</b>	<b>22.3%</b>	<b>38.6%</b>
Loudoun County	86.1	112.8	169.6	239.3	300.4	351.2	393.7	423.0	441.9	272.3	160.6%	17.6%
Prince William County	215.7	249.9	280.8	339.9	376.2	400.6	414.8	425.9	433.1	152.3	54.2%	9.8%
City of Manassas	28.0	32.0	35.1	36.2	36.9	37.0	37.1	37.4	37.5	2.4	6.8%	0.2%
City of Manassas Park	6.7	7.6	10.3	14.8	15.3	15.5	15.7	15.7	15.8	5.5	53.4%	0.4%
Calvert County (5)	51.4	63.9	74.6	80.6	86.6	91.1	95.6	100.0	104.4	29.8	39.9%	1.9%
Charles County (5)	101.2	111.1	120.5	134.0	147.4	165.2	183.0	194.0	205.0	84.5	70.1%	5.5%
Frederick County	150.2	174.2	195.3	216.6	238.3	260.0	281.9	299.6	324.6	129.3	66.2%	8.4%
Stafford County (6)	61.2	80.2	92.5	107.1	121.7	136.4	151.0	165.7	180.4	87.9	95.0%	5.7%
Anne Arundel County (7)	427.2	459.7	489.7	520.0	532.2	542.5	552.7	563.0	572.0	82.3	16.8%	n/a
Howard County (7)	187.3	220.0	250.7	261.7	274.2	286.2	294.6	296.8	292.1	41.4	16.5%	n/a
<b>Outer Suburbs (7)</b>	<b>700.5</b>	<b>831.8</b>	<b>978.7</b>	<b>1,168.5</b>	<b>1,322.8</b>	<b>1,457.0</b>	<b>1,572.8</b>	<b>1,661.3</b>	<b>1,742.7</b>	<b>764.0</b>	<b>78.1%</b>	<b>49.4%</b>
<b>Northern Virginia</b>	<b>1,527.7</b>	<b>1,697.5</b>	<b>1,909.2</b>	<b>2,150.3</b>	<b>2,345.4</b>	<b>2,481.5</b>	<b>2,586.8</b>	<b>2,661.2</b>	<b>2,716.2</b>	<b>807.0</b>	<b>42.3%</b>	<b>52.2%</b>
<b>Suburban Maryland (7)</b>	<b>1,789.0</b>	<b>1,926.2</b>	<b>2,071.7</b>	<b>2,212.8</b>	<b>2,328.4</b>	<b>2,444.0</b>	<b>2,542.8</b>	<b>2,615.7</b>	<b>2,681.8</b>	<b>610.1</b>	<b>29.4%</b>	<b>39.4%</b>
<b>REGIONAL TOTAL (7)</b>	<b>3,923.6</b>	<b>4,178.0</b>	<b>4,553.0</b>	<b>4,970.1</b>	<b>5,300.8</b>	<b>5,599.2</b>	<b>5,817.7</b>	<b>5,979.3</b>	<b>6,100.4</b>	<b>1,547.4</b>	<b>34.0%</b>	<b>100.0%</b>

(1) The Round 6.3 population and household forecasts for the District of Columbia reflect Census 2000 counts which showed the city's population to be higher than estimated in Round 6.2.

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

(3) Included in Montgomery County total.

(4) Includes Fairfax County group quarters population in the Massey Complex.

(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 totals provided by the Virginia Employment Commission (VEC) and should only be used for transportation planning purposes. Incremental five-year estimates (2005, 2015, and 2025) have been developed by MWCOG for the purpose of transportation modeling and air quality analysis.

(7) Baltimore Metropolitan Council (BMC) Round 5-D Forecasts (2000 to 2025) for Anne Arundel and Howard counties are shown for reference purposes only and are not included in any other totals. Howard County and Anne Arundel County provided 2000 to 2025 projections and the Metropolitan Washington Council of Governments extrapolated their data to 2030. The official forecasts for Anne Arundel County for 2030 will not be available until January 2004.

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**Summary of Intermediate Household Forecasts  
Round 6.3 Cooperative Forecasts  
(Thousands)**

JURISDICTION	1990	1995	2000	2005	2010	2015	2020	2025	2030	2000 to 2030		Regional Share
										Number	% Change	
District of Columbia (1)	249.6	232.1	248.3	263.9	272.2	292.9	298.7	304.4	304.4	56.1	22.6%	8.7%
Arlington County	78.5	86.9	86.4	90.9	94.6	98.7	102.5	104.9	106.2	19.8	22.9%	3.1%
City of Alexandria	53.3	56.4	61.9	66.2	70.0	71.8	73.0	74.3	75.3	13.4	21.6%	2.1%
<b>Central Jurisdictions</b>	<b>381.4</b>	<b>375.4</b>	<b>396.6</b>	<b>421.0</b>	<b>436.8</b>	<b>463.4</b>	<b>474.2</b>	<b>483.6</b>	<b>485.9</b>	<b>89.3</b>	<b>22.5%</b>	<b>13.9%</b>
Montgomery County (2)	282.0	299.0	324.6	346.5	370.0	390.0	405.0	415.0	420.0	95.4	29.4%	14.9%
Rockville (3)	15.7	16.1	17.2	20.0	22.8	24.0	24.2	24.3	24.7	7.5	43.6%	1.2%
Prince George's County	258.0	278.1	288.6	304.5	319.0	333.6	346.7	359.6	369.8	81.2	28.1%	12.7%
Fairfax County	292.3	317.0	350.7	381.2	408.7	421.8	430.5	435.0	438.4	87.7	25.0%	13.7%
City of Fairfax	7.4	7.7	8.5	9.0	9.3	9.4	9.5	9.6	9.7	1.2	14.1%	0.2%
City of Falls Church	4.2	4.4	4.5	4.6	4.9	5.1	5.2	5.3	5.4	0.9	20.0%	0.1%
<b>Inner Suburbs</b>	<b>843.9</b>	<b>906.2</b>	<b>976.9</b>	<b>1,045.8</b>	<b>1,111.9</b>	<b>1,159.9</b>	<b>1,196.9</b>	<b>1,224.5</b>	<b>1,243.3</b>	<b>266.4</b>	<b>27.3%</b>	<b>41.5%</b>
Loudoun County	30.7	40.9	59.9	84.9	106.6	124.6	139.6	150.0	156.7	96.8	161.6%	15.1%
Prince William County	69.7	82.2	94.6	113.4	127.3	137.2	143.4	148.3	152.1	57.5	60.8%	9.0%
City of Manassas	9.5	13.4	11.8	12.3	12.7	13.1	13.2	13.5	13.6	1.8	15.3%	0.3%
City of Manassas Park	2.2	2.5	3.3	4.2	4.2	4.3	4.3	4.3	4.3	1.0	8.5%	0.2%
Calvert County (4)	17.0	21.1	25.4	27.3	29.1	31.0	33.0	34.8	36.6	11.2	44.1%	1.7%
Charles County (4)	33.0	36.3	41.7	46.5	51.3	58.9	66.4	71.3	76.1	34.4	82.5%	5.4%
Frederick County	52.6	62.4	70.1	76.2	84.7	93.2	101.7	110.1	120.2	50.1	71.5%	7.8%
Stafford County (5)	19.4	26.9	30.7	36.1	41.4	46.9	52.4	58.0	63.5	32.8	106.8%	5.1%
Anne Arundel County (6)	149.1	162.7	178.7	193.1	202.1	210.1	217.0	223.2	229.8	51.1	28.6%	n/a
Howard County (6)	68.3	81.2	91.0	100.0	107.5	115.0	121.0	121.7	121.7	30.7	33.7%	n/a
<b>Outer Suburbs (6)</b>	<b>234.0</b>	<b>285.6</b>	<b>337.5</b>	<b>400.9</b>	<b>457.3</b>	<b>509.2</b>	<b>554.0</b>	<b>590.3</b>	<b>623.1</b>	<b>285.6</b>	<b>84.6%</b>	<b>44.5%</b>
<b>Northern Virginia</b>	<b>567.2</b>	<b>638.2</b>	<b>712.3</b>	<b>802.8</b>	<b>879.7</b>	<b>932.9</b>	<b>973.6</b>	<b>1,003.2</b>	<b>1,025.2</b>	<b>312.9</b>	<b>43.9%</b>	<b>48.8%</b>
<b>Suburban Maryland (6)</b>	<b>642.5</b>	<b>696.9</b>	<b>750.4</b>	<b>801.0</b>	<b>854.1</b>	<b>906.7</b>	<b>952.8</b>	<b>990.8</b>	<b>1,022.7</b>	<b>272.3</b>	<b>36.3%</b>	<b>42.5%</b>
<b>REGIONAL TOTAL (6)</b>	<b>1,459.3</b>	<b>1,567.2</b>	<b>1,711.0</b>	<b>1,867.7</b>	<b>2,006.0</b>	<b>2,132.5</b>	<b>2,225.1</b>	<b>2,298.4</b>	<b>2,352.3</b>	<b>641.3</b>	<b>37.5%</b>	<b>100.0%</b>

(1) The Round 6.3 population and household forecasts for the District of Columbia reflect Census 2000 counts which showed the city's population to be higher than estimated in Round 6.2.

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

(3) Included in Montgomery County total.

(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) Baltimore Metropolitan Council (BMC) Round 5-D Forecasts (2000 to 2025) for Anne Arundel and Howard counties are shown for reference purposes only and are not included in any other totals. Howard County and Anne Arundel County provided 2000 to 2025 projections and the Metropolitan Washington Council of Governments extrapolated their data to 2030. The official forecasts for Anne Arundel County for 2030 will not be available until January 2004.

10/9/2003 8:44

# ATTACHMENT C

Table 1. Comparison of HHs, Employment, Vehicle Trips and VMTs between '05 SIP and '05 Conformity (Part 1)  
Version 2.1C Model; 2,191 Zones; LU 6.3 Preliminary for 05 SIP and LU 6.3 Final for 05 Conformity

Jurisdiction	Households			Employment				
	SIP	Conformity	Difference	% Difference	SIP	Conformity	Difference	% Difference
District of Columbia	263,937	263,937	0	0.00%	720,407	720,407	0	0.00%
Montgomery Co., MD	343,926	343,849	-77	-0.02%	581,558	581,429	-129	-0.02%
Prince George's Co., MD	307,163	307,143	-20	-0.01%	361,296	361,461	165	0.05%
Arlington Co., VA	90,900	90,871	-29	-0.03%	209,644	209,683	39	0.02%
City of Alexandria, VA	66,225	66,194	-31	-0.05%	104,094	104,057	-37	-0.04%
Fairfax Co., VA	394,273	395,433	1,160	0.29%	636,897	635,248	-1,649	-0.26%
Loudoun Co., VA	84,905	84,855	-50	-0.06%	109,878	109,926	48	0.04%
Prince William Co., VA	130,107	129,934	-173	-0.13%	130,106	130,846	740	0.57%
Frederick Co., MD	76,221	76,223	2	0.00%	109,206	109,206	0	0.00%
Howard Co., MD	108,600	99,950	-8,650	-7.97%	153,105	180,010	26,905	17.57%
Anne Arundel Co., MD	188,500	193,143	4,643	2.46%	289,796	301,990	12,194	4.21%
Charles Co., MD	51,975	46,497	-5,478	-10.54%	56,657	56,451	-206	-0.36%
Carroll Co., MD	58,201	57,450	-751	-1.29%	65,797	73,516	7,719	11.73%
Calvert Co., MD	29,498	27,258	-2,240	-7.59%	29,725	29,397	-328	-1.10%
St. Mary's Co., MD	32,926	33,542	616	1.87%	58,514	55,753	-2,761	-4.72%
King George Co., VA	5,830	7,338	1,508	25.87%	9,886	11,253	1,367	13.83%
City of Fredericksburg, VA	8,520	9,951	1,431	16.80%	28,757	26,645	-2,112	-7.34%
Stafford Co., VA	36,530	36,060	-470	-1.29%	28,957	31,838	2,881	9.95%
Spotsylvania Co., VA	18,880	29,684	10,804	57.22%	20,140	27,224	7,084	35.17%
Fauquier Co., VA	23,311	23,303	-8	-0.03%	19,722	19,722	0	0.00%
Clarke Co., VA	4,948	5,438	490	9.90%	4,722	4,722	0	0.00%
Jefferson Co., WVA	16,974	18,295	1,321	7.78%	14,769	14,769	0	0.00%
MSA								
DC	263,937	263,937	0	0.00%	720,407	720,407	0	0.00%
VA	802,940	803,347	407	0.05%	1,219,576	1,221,598	2,022	0.17%
MD	808,783	800,970	-7,813	-0.97%	1,138,442	1,137,944	-498	-0.04%
MSA Total	1,875,660	1,868,254	-7,406	-0.39%	3,078,425	3,079,949	1,524	0.05%
Total	2,342,350	2,346,348	3,998	0.17%	3,743,633	3,795,553	51,920	1.39%

\* The Compaq computer was used to execute '05 SIP model run while the HP Workstation was used to '05 Conformity run.  
\*\* Summarized from final trip tables (IZAM.VTT, IZPM.VTT & IZOP.VTT)

**Table 1. Comparison of HHs, Employment, Vehicle Trips and VMTs between '05 SIP and '05 Conformity (Part 2)**  
**Version 2.1C Model; 2,191 Zones; LU 6.3 Preliminary for 05 SIP and LU 6.3 Final for 05 Conformity**

Jurisdiction	Vehicle Trips			VMTs (in 000s)				
	SIP	Conformity	Difference	% Difference	SIP	Conformity	Difference	% Difference
District of Columbia	1,491,709	1,499,152	7,443	0.50%	10,203,832	10,078,685	-125,147	-1.23%
Montgomery Co., MD	3,187,258	3,187,779	521	0.02%	22,905,207	22,881,162	-24,045	-0.10%
Prince George's Co., MD	2,450,236	2,418,810	-31,426	-1.28%	24,364,260	24,032,742	-331,518	-1.36%
Arlington Co., VA	712,409	724,344	11,935	1.68%	4,820,365	4,781,395	-38,970	-0.81%
City of Alexandria, VA	476,474	471,062	-5,412	-1.14%	2,432,012	2,406,335	-25,677	-1.06%
Fairfax Co., VA	3,746,030	3,681,948	-64,082	-1.71%	30,196,102	29,916,436	-279,666	-0.93%
Loudoun Co., VA	728,174	742,964	14,790	2.03%	6,466,164	6,452,091	-14,073	-0.22%
Prince William Co., VA	950,831	946,586	-4,245	-0.45%	8,640,213	8,636,545	-3,668	-0.04%
Frederick Co., MD	666,632	659,279	-7,353	-1.10%	8,783,793	8,738,423	-45,370	-0.52%
Howard Co., MD	744,169	738,271	-5,898	-0.79%	12,288,771	11,794,275	-494,496	-4.02%
Anne Arundel Co., MD	1,548,340	1,594,599	46,259	2.99%	14,941,340	15,252,348	311,008	2.08%
Charles Co., MD	421,880	406,570	-15,310	-3.63%	2,738,491	2,649,844	-88,647	-3.24%
Carroll Co., MD	425,806	427,746	1,940	0.46%	3,275,273	3,294,883	19,610	0.60%
Calvert Co., MD	245,920	236,666	-9,254	-3.76%	1,559,577	1,555,694	-3,883	-0.25%
St. Mary's Co., MD	309,088	304,100	-4,988	-1.61%	1,804,395	1,760,785	-43,610	-2.42%
King George Co., VA	48,943	55,365	6,422	13.12%	695,724	734,918	39,194	5.63%
City of Fredericksburg, VA	114,619	114,233	-386	-0.34%	362,796	385,752	22,956	6.33%
Stafford Co., VA	231,159	254,847	23,688	10.25%	4,130,106	4,324,263	194,157	4.70%
Spotsylvania Co., VA	166,245	240,245	74,000	44.51%	1,909,300	1,974,155	64,855	3.40%
Fauquier Co., VA	144,765	143,582	-1,183	-0.82%	2,736,651	2,796,087	59,436	2.17%
Clarke Co., VA	41,093	40,725	-368	-0.90%	815,488	831,513	16,025	1.97%
Jefferson Co., WVA	135,677	138,360	2,683	1.98%	1,262,614	1,269,232	6,618	0.52%
MSA								
DC	1,491,709	1,499,152	7,443	0.50%	10,203,832	10,078,685	-125,147	-1.23%
VA	6,845,077	6,821,751	-23,326	-0.34%	56,684,962	56,517,065	-167,897	-0.30%
MD	6,971,926	6,909,104	-62,822	-0.90%	60,351,328	59,857,865	-493,463	-0.82%
MSA Total	15,308,712	15,230,007	-78,705	-0.51%	127,240,122	126,453,615	-786,507	-0.62%
Total	18,987,457	19,027,233	39,776	0.21%	167,332,474	166,547,563	-784,911	-0.47%

\* The Compaq computer was used to execute '05 SIP model run while the HP Workstation was used to '05 Conformity run.  
 \*\* Summarized from final tri \*\* Summarized from final trip tables (I2AM.VTT, I2PM.VTT & I2OP.VTT)

# ATTACHMENT D

**PREVIOUSLY IMPLEMENTED TERMS**  
**TRANSPORTATION EMISSION REDUCTION MEASURES (TIP)**  
 Credited in Air Quality Conformity Analyses (calendar years 1995-2002)  
 (TRACKING SHEET)

\* Project Category: TR - Traffic Stream, C - Commute, H - Heavy Duty Vehicles (Engine Technology), SP - Specific Vehicle Type

CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS			ORIGINAL COMPLETION DATE	ACTUAL COMPLETION DATE	TONSDAY REDUCTION CREDITED												Projected Category*				
				FULL	SCALED-BACK	UNDER-WAY			2005			2015			2025			2030							
									VOC	NOX	CO	VOC	NOX	CO	VOC	NOX	CO	VOC	NOX	CO					
1	X	1994-99 TIP	MDDOT	Signal Systems - MD 3, MD 450 to Waugh Chapel	X			1994	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	TR	
2	X	1994-99 TIP	MDDOT	Signal Systems - MD 450, 568h to MD 564	X			1994	0.003	-0.003	0.0014	-0.0014	0.0012	-0.0008	0.0012	-0.0008	0.0012	-0.0007	0.0012	-0.0007	0.0012	-0.0007	0.0012	-0.0007	TR
3	X	1994-99 TIP	MDDOT	Signal Systems - MD 193, Rhode Island to Harover	X			1994	0.002	-0.003	0.0009	-0.0014	0.0008	-0.0004	0.0008	-0.0004	0.0008	-0.0003	0.0008	-0.0003	0.0008	-0.0003	0.0008	-0.0003	TR
4	X	1994-99 TIP	MDDOT	Signal Systems - MD 197, S. Laurel to Chubhouse	X			1994	0.002	-0.002	0.0005	-0.0007	0.0000	-0.0004	0.0000	-0.0004	0.0000	-0.0003	0.0000	-0.0003	0.0000	-0.0003	0.0000	-0.0003	TR
5	X	1994-99 TIP	MDDOT	Signal Systems - MD 5, 15th to Metzertott	X			1994	0.002	-0.002	0.0009	-0.0007	0.0008	-0.0004	0.0008	-0.0004	0.0008	-0.0003	0.0008	-0.0003	0.0008	-0.0003	0.0008	-0.0003	TR
6	X	1994-99 TIP	MDDOT	Signal Systems - Marlow Heights to MD 657	X			1994	0.001	-0.002	0.0005	-0.0007	0.0004	-0.0004	0.0004	-0.0004	0.0004	-0.0003	0.0004	-0.0003	0.0004	-0.0003	0.0004	-0.0003	TR
7		1994-99 TIP	MDDOT	Safety and Geometric Improvements			X	1994	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
8		1994-99 TIP	MDDOT	Park & Ride Lot - MD 355/ MD 187			X	1993	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
9	X	1994-99 TIP	MDDOT	Park & Ride Lot - MD 210/ MD 373			X	2000	0.001	0.003	0.0005	0.0013	0.0004	0.0004	0.0006	0.0004	0.0004	0.0006	0.0004	0.0006	0.0004	0.0006	0.0004	C	
11	X	1994-99 TIP	MDDOT	Georgetown Garage Parking Exp. (add 1000 spaces)			X	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
12	X	1994-99 TIP	VDOT	Signal Systems			X	1994	0.437	-0.322	0.2074	-0.1357	0.1551	-0.0722	0.1525	-0.0655	0.1525	-0.0655	0.1525	-0.0655	0.1525	-0.0655	0.1525	-0.0655	TR
14	X	1994-99 TIP	VDOT	Ridesharing (Regional & PRTC)			X	ongoing	0.061	0.141	0.0289	0.0672	0.0217	0.0424	0.0213	0.0402	0.0213	0.0402	0.0213	0.0402	0.0213	0.0402	0.0213	C	
15	X	1994-99 TIP	LOUD	VA 28 Corridor Park & Ride Lot (add 100 spaces)			X	1995	0.001	0.003	0.0005	0.0013	0.0004	0.0009	0.0004	0.0009	0.0004	0.0009	0.0004	0.0009	0.0004	0.0009	0.0004	C	
16	X	1994-99 TIP	PRTC	VRE Signalization			X	Summer 97	0.007	0.021	0.0033	0.0069	0.0024	0.0069	0.0023	0.0065	0.0023	0.0065	0.0023	0.0065	0.0023	0.0065	0.0023	C	
17	X	1994-99 TIP	PRTC	VRE Locomotive Purchases (2)			X	1994	0.018	0.048	0.0084	0.0233	0.0063	0.0159	0.0062	0.0151	0.0062	0.0151	0.0062	0.0151	0.0062	0.0151	0.0062	C	
18	X	1994-99 TIP	PRTC	PRTC Feeder Vehicle Purchase			X	1994	0.009	0.017	0.0042	0.0081	0.0031	0.0056	0.0031	0.0053	0.0031	0.0053	0.0031	0.0053	0.0031	0.0053	0.0031	C	
19		1994-99 TIP	PRTC	VRE Woodbridge Parking Expansion (add 500 spaces)			X	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
20	X	1994-99 TIP	ALEX	King St. Metrorail access improvements			X	n/a	0.002	0.003	0.0009	0.0013	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	C
21	X	1994-99 TIP	WMATA	WMATA Bus Replacement (45 buses)			X	1995	0.017	0.065	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP	
22		1995-00 TIP	MDDOT	Park & Ride Lot - F70 at Walsler Dr. (new, 900+ spaces)			X	1997	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
23		1995-00 TIP	MDDOT	Park & Ride Lot - MD 117/ MD 118 (new, 75 spaces)			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
24		1995-00 TIP	MDDOT	Park & Ride Lot - I-270/ MD 80 (add 100 spaces)			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
25	X	1995-00 TIP	MDDOT	Park & Ride Lot - Brunswick MARC (add 300 spaces)			X	1999	0.010	0.029	0.0047	0.0143	0.0031	0.0080	0.0031	0.0230	0.0080	0.0031	0.0230	0.0080	0.0031	0.0230	0.0080	C	
26	X	1995-00 TIP	MDDOT	Signal Systems - MD 202, 57th Ave. to Fire House Rd.			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
27	X	1995-00 TIP	MDDOT	Signal Systems - MD 4, Forestville Rd. to Shady Side Dr.			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
28	X	1995-00 TIP	MDDOT	Signal Systems - US 1, Fitz Way to Murrick Rd.			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
29	X	1995-00 TIP	MDDOT	Signal Systems - MD 193, Harover Pkwy to Prospect Hill Rd.			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
30	X	1995-00 TIP	MDDOT	Signal Systems - MD 212, Cherry Hill Rd. to Old Gumpdr. Rd.			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
31	X	1995-00 TIP	MDDOT	Signal Systems - MD 198, Van Dusen Rd. to US 1			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
32		1995-00 TIP	MDDOT	Signal Systems - MD 450, MD 197 to Race Track Rd.			X	2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
33		1995-00 TIP	MDDOT	Signal Systems - MD 450, MD 564 to Carter Ave.			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
34		1995-00 TIP	MDDOT	Signal Systems - MD 450, US 1 All. to MD 202			X	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
35		1995-00 TIP	MDDOT	Signal Systems - MD 458, MD 414 to Walker Mill Rd.			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
36	X	1995-00 TIP	MDDOT	Signal Systems - MD 214, MD 193 to Campus Way			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
37	X	1995-00 TIP	MDDOT	Signal Systems - MD 223, Steed Rd. to Dangersfield Rd.			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
38	X	1995-00 TIP	MDDOT	Signal Systems - MD 85 Executive Way to MD 355			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
39	X	1995-00 TIP	MDDOT	Signal Systems - MD 355, I-70 ramps to Grove Rd.			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
40	X	1995-00 TIP	MDDOT	Signal Systems - US 301, Excalibur Rd. to Governor Bridge			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
41	X	1995-00 TIP	MDDOT	Signal Systems - US 301, MD 382 to Reservoir Rd.			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
42	X	1995-00 TIP	MDDOT	Signal Systems - MD 650, Sheridan St. to Metzertott Rd.			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
43		1995-00 TIP	MDDOT	Signal Systems - MD 410, MD 212, to Taylor Ave.			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
44		1995-00 TIP	MDDOT	Signal Systems - MD 410, 62nd Ave. to Riverdale Rd.			X	1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
45	X	1995-00 TIP	MDDOT	Signal Systems - MD 202, Campus Way to Whitehouse Rd.			X	1996	0.01638	-0.02119	0.0069	-0.0063	0.00643	-0.003	0.0063	-0.003	0.0063	-0.003	0.0063	-0.003	0.0063	-0.003	0.0063	-0.003	TR
46	X	1995-00 TIP	MDDOT	Signal Systems - TOTAL CREDITED PROJECTS			X	see above	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	TR
47		1995-00 TIP	MDDOT	Geometric Improvements			X	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
48	X	1995-00 TIP	MDDOT	MARC Replacement Coaches			X	1999	0.001	0.003	0.0009	0.0027	0.0012	0.0019	0.0012	0.0018	0.0012	0.0018	0.0012	0.0018	0.0012	0.0018	0.0012	C	
49	X	1995-00 TIP	MDDOT	MARC Expansion Coaches			X	1999	0.006	0.024	0.0074	0.0242	0.0055	0.0153	0.0054	0.0145	0.0054	0.0145	0.0054	0.0145	0.0054	0.0145	0.0054	C	
50	X	1995-00 TIP	VDOT	Park & Ride Facilities - PRTC Public Transit Support - 1 year			X	1995	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C

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				FULL	SCALED-BACK	UNDERWAY			2005		2015		2025		2030						
									VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX					
99	X	MDOT	Hagerstown Telework Center (Wash. MSA Benefits)	X			1997	0.001	0.007	0.0005	0.0031	0.0004	0.0022	0.0004	0.0021	C					
100	X	PG	Anacostia Bicycle Trail	X			1998	0.007	0.001	0.0037	0.0004	0.0031	0.0003	0.0031	0.0003	C					
101	X	MOG	Montgomery County Bus Replacement	X				0.003	0.011					0.0000	0.0000	SP					
102	X	PG	Prince George's County Bus Replacement	X			1998	0.003	0.009					0.0000	0.0000	SP					
103	X	PG	Prince George's County Bus Service		X		1998	0.004	0.009	0.0014	0.0040	0.0012	0.0028	0.0012	0.0027	C					
104	X	VDOT	I-66 Park and Ride at VA 234 / Portsmouth	X			1996	0.009	0.024	0.0061	0.0179	0.0067	0.0159	0.0066	0.0151	C					
105	X	VDOT	Alt. Co. Transit Ridership Develop. Initiative Program	X			1998	0.019	0.039	0.0088	0.0170	0.0071	0.0109	0.0070	0.0103	C					
106	X	VDOT	PRTC Employer Commuting Outreach Program	X			on going	0.002	0.000	0.000	0.000	0.001	0.000	0.001	0.000	C					
107	X	VDOT	PRTC Multimodal Strategic Marketing Implementation Plan	X			on going	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C					
108	X	MDOT	M-103 Taxi Cab Replacement in Maryland		X		1999	0.080	0.268	0.145	0.215	0.123	0.150	0.312	0.481	SP					
109	X	REGION	M-70b Employer Outreach for Bicycles	X			1998	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	C					
110	X	VDOT	M-77b Vanpool Incentive Programs in Virginia		X		1999	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	C					
111	X	WMATA	Bus Replacement (108 buses)	X			1999	0.045	0.162	0.000	0.000	0.000	0.000	0.000	0.0000	SP					
112	X	MOG	Montgomery County Bus Replacement	X				0.008	0.027	0.002	0.007	0.000	0.000	0.000	0.0000	SP					
113	X	PG	Prince George's County Bus Replacement	X			1998	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.0000	SP					
114	X	FDC	Frederick County Bus Replacement	X				0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	SP					
115	X	FDC	Frederick County Shuttles	X				0.000	0.001	0.0000	0.0004	0.0000	0.0003	0.0000	0.0003	C					
116	X	VDOT	PRTC Ridesharing	X			on-going	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C					
117	X	VDOT	Arlington County Four Mile Run Bike Trail		X		1999	0.001	0.001	0.0005	0.0004	0.00039	0.0003	0.0004	0.0003	C					
118	X	VDOT	Northern Virginia Turn Bays	X			2000	0.001	0.002	0.0009	0.0007	0.0008	0.0004	0.0008	0.0003	TR					
119	X	VDOT	Fairfax City Bus Replacement		X		2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	SP					
120	X	VDOT	Alternative Fueled Vehicles		X		1999	0.001	0.001	0.001	0.001	0.001	0.001	0.0010	0.0010	H					
121	X	VDOT	WMATA Bus Replacement (252 buses)	X			2001	0.106	0.386	0.090	0.342	0.000	0.000	0.0000	0.0000	SP					
122	X	REGION	M-101a Mass Marketing Campaign (Consumer)				ongoing	0.119	0.212	0.102	0.159	0.098	0.107	0.0752	0.0807	C					
123	X	MDOT	Various Park and Ride Lots (270MD124, 450 & I-170MD-75, 54 and	X			2001/1999	0.007	0.031	0.0047	0.0188	0.00384	0.0143	0.0039	0.0136	C					
124	X	MDOT	Signal Systems (197MD-198, MD-382 TO US-301, US301)	x			2002	0.011	-0.093	0.0061	-0.0021	0.00603	-0.002	0.0079	-0.0014	TR					
125	X	VDOT	Transit Center at 7 Corners				2002	0.001	0.002	0.0005	0.0009	0.00039	0.0006	0.0004	0.0006	C					
126	X	VDOT	Falls Church Clean Diesel Bus Service				2000	0.004	0.005	0.000	0.000	0.000	0.000	0.0000	0.0000	SP					
127	X	VDOT	VA 234 Bike Trail				2001	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.0000	C					
128	X	VDOT	PRTC Ridesharing	X			on-going	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.0000	C					
129	X	MDOT	MD 202, MD 85, US 301 Signal Systemization				2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-					
130	X	VDOT	M-14 I-66 Feeder Bus Fare Buy Down	X			2002	0.023	0.047	0.0102	0.0206	0.00827	0.0131	0.0081	0.0124	C					
131	X	MDOT	Various park and Ride Lots	X			2003	0.006	0.028	0.0043	0.0175	0.0038	0.0140	0.0038	0.0119	C					
132	X	MDOT	Signal Systems	X			Varies	0.003	0.000	0.0012	0.0000	0.0007	0.0000	0.0007	0.0000	TR					
133	X	VDOT	450 Spaces at Gambell/Hoopes Rds. Park and Ride		X		2002	0.006	0.015	0.0028	0.0069	0.00217	0.0043	0.0021	0.0041	C					
134	X	VDOT	300 Spaces at Backlick Rd		X		2003	0.005	0.011	0.0024	0.0049	0.00148	0.0031	0.0015	0.0030	C					
135	X	VDOT	Accotink-Gateway Connector Trail				2002	0.006	0.009	0.0028	0.0038	0.00185	0.0021	0.0018	0.0020	C					
136	X	VDOT	Columbia Pike Trail				2000	0.006	0.007	0.0023	0.0029	0.00146	0.0016	0.0014	0.0015	C					
137	X	VDOT	Lee Highway trail				2000	0.003	0.003	0.0012	0.0016	0.00061	0.0008	0.0006	0.0008	C					
138	X	VDOT	Arlington Bus Shelter Improvements		X		2005	0.001	0.001	0.0005	0.0004	0.00024	0.0002	0.0002	0.0002	C					
139	X	VDOT	Pentagon Metrostation Improvements	X			n/a	0.007	0.015	0.0033	0.0063	0.00224	0.0035	0.0022	0.0033	C					
140	X	MDOT	EastWest Intersection Improvements				2005	0.038	0.021	0.064	0.0327	0.06741	0.0355	0.0659	0.0337	C					
141	X	Feds	Federal Transit/Ridesharing subsidy	X			on-going	0.094	0.164	0.0386	0.0555	0.02914	0.033	0.0286	0.0313	C					
142	X	WMATA	100 CNG buses		X		2002	0.000	0.136	0.00	0.136			0.0000	0.0000	SP					
143	X	WMATA	ULSD with CRT filters		X		on-going	0.210	0.000	0.43	0.000	0.43	0.000	0.4300	0.0000	H					
144	X	DC	Replace 23 Taxicabs with CNG cabs				2005	0.0177	0.031							H					
145	X	DC	D.C. Incident Response & Traffic Management System				2005	0.0254	0.075		0.034		0.019		0.0168	TR					
146	X	DC	Bicycle Lane in D. C. (35 Mile)				2005	0.0154	0.015	0.01	0.005	0.00	0.003	0.0046	0.0029	C					

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				FULL	SCALED-BACK	UNDERWAY			2005			2015			2025			2030			
									VOC	NOX	PM	VOC	NOX	PM	VOC	NOX	PM	VOC	NOX	PM	
147	X	2003-08 TIP	DC	Bicycle Racks in D. C. (500) *					0.0021	0.002	0.001	0.001	0.001	0.000	0.000	0.0006	0.0003	C			
148	X	2003-08 TIP	DC	External Bicycle Racks on WMATA Buses in D. C. (600) *					0.0081	0.006	0.002	0.002	0.001	0.001	0.0010	0.0011	C				
149	X	2003-08 TIP	DC	CNG Rental Cars (18) *					0.00003	0.0002							SP				
150	X	2003-08 TIP	DC	Sidewalks in D.C. (\$ 5 million)					0.0578	0.101	0.02	0.033	0.02	0.020	0.0182	0.0192	C				
151	X	2003-08 TIP	DC	CNG Refuse Haulers (2) *					0.0001	0.002	0.00	0.002					H				
152	X	2003-08 TIP	DC	Circulator/Feeder Bus Routes			n/a		0.0211	0.036	0.01	0.012	0.01	0.007	0.0056	0.0069	C				
153	X	2003-08 TIP	MDOT	Commuter Tax Credit					0.1282	0.2219	0.05	0.074	0.04		0.0388		C				
155	X	2003-08 TIP	MDOT	Employer Vanpool Program (WVPE)					0.0030	0.0075	0.00	0.002	0.00				C				
156	X	2003-08 TIP	MDOT	Green Line Link					0.0041	0.0065	0.00	0.003	0.00	0.002	0.0013	0.0016	C				
157	X	2003-08 TIP	MDOT	Park & Ride Lots - Southern Maryland *			2003		0.0080	0.0187	0.00	0.006	0.00	0.004	0.0028	0.0038	C				
158	X	2003-08 TIP	MDOT	Prince George's County - Bus Exp			n/a		0.0578	0.1181	0.02	0.039	0.02	0.024	0.0186	0.0228	C				
159	X	2003-08 TIP	MDOT	MTA - Bus Service Expansion			n/a		0.0191	0.0286	0.01	0.009	0.00	0.006	0.0042	0.0054	C				
160	X	2003-08 TIP	MDOT	Ride-On - Super Discount			n/a		0.0015	0.0028	0.00	0.001	0.00	0.001	0.0005	0.0005	C				
161	X	2003-08 TIP	Regional	Regional Traveler Information Systems					0.1588	0.3730	0.08	0.445	0.07	0.242	0.0686	0.2195	TR				
162	X	2003-08 TIP	MDOT	Universal Transportation Access (MD + WMATA) *D37					0.0259	0.0462	0.01	0.015	0.01	0.009	0.0082	0.0086	C				
163	X	2003-08 TIP	MCG	Garage					0.0074	0.0189	0.00	0.006	0.00	0.004	0.0025	0.0036	C				
164	X	2003-08 TIP	MCG	Bethesda Shuttle Bus Services					0.0050	0.0087	0.00	0.003	0.00	0.002	0.0016	0.0016	C				
165	X	2003-08 TIP	MCG	External Bicycle Racks on Ride-On Buses in Montgomery County					0.0010	0.0017	0.00	0.001	0.00	0.000	0.0003	0.0003	C				
166	X	2003-08 TIP	MCG	New CNG Powered Light Duty Vehicle fleet in the County					0.00002	0.0001							SP				
167	X	2003-08 TIP	MCG	Free Bus Service on Selected Routes on I-270					0.0017	0.0039	0.00	0.001	0.00	0.001	0.0005	0.0006	C				
168	X	2003-08 TIP	MCG	Annual Sidewalk Program					0.0275	0.0490	0.01	0.016	0.01	0.010	0.0087	0.0091	C				
169	X	2003-08 TIP	MDOT	Bethesda Breeze/International Express Metrobus					0.0060	0.0087	0.003	0.003	0.002	0.002	0.0019	0.0018	C				
170	X	2003-08 TIP	MDOT	Bethesda-8, Silver Spring Downtown Dasher and Prince Georges Co. Shuttles at 3 PNR lot					0.0142	0.0189	0.006	0.006	0.004	0.004	0.0043	0.0036	C				
171	X	2003-08 TIP	MDOT	Proposed Transportation Management District in Montgomery County (Rockville and Gaithersburg)					0.0093	0.0142	0.004	0.005	0.003	0.003	0.0029	0.0027	C				
172	X	2003-08 TIP	MDOT	Sidewalks (Bikes/Pedestrian) at / near Rail Stations					0.0150	0.0287	0.006	0.009	0.005	0.005	0.0047	0.0051	C				
173	X	2003-08 TIP	MDOT	Neighborhood Sidewalks Improvements (Bike/Pedestrian)					0.0052	0.0090	0.002	0.001	0.002	0.001	0.0015	0.0005	C				
174	X	2003-08 TIP	MDOT	Neighborhood Conservation Program - Neighborhood Sidewalks Improvements (Bikes/Pedestrian)					0.0046	0.0028	0.002	0.001	0.001	0.001	0.0013	0.0005	C				
175	X	2003-08 TIP	MDOT	Maryland bus Transit Service Expansion					0.0228	0.0588	0.009	0.019	0.008	0.012	0.0076	0.0112	C				
176	X	2003-08 TIP	VDOT	Universal Transportation Access Program					0.0019	0.0034	0.0008	0.001	0.000	0.001	0.0006	0.0006	C				
177	X	2003-08 TIP	VDOT	Interactive Rideshare & Kiosk Initiative					0.0008	0.0019	0.0003	0.000	0.000	0.000	0.0002	0.0002	C				
178	X	2003-08 TIP	VDOT	Mobile Commuter Stores					0.0035	0.0071	0.0014	0.002	0.000	0.001	0.0011	0.0014	C				
179	X	2003-08 TIP	VDOT	Telework Incentive Program					0.0012	0.0022	0.0005	0.001	0.000	0.000	0.0004	0.0004	C				
180	X	2003-08 TIP	VDOT	Commuter Choice					0.0015	0.0025	0.0007	0.001	0.000	0.001	0.0005	0.0005	C				
181	X	2003-08 TIP	VDOT	Employer Shuttle Services					0.0184	0.0301	0.0077	0.010	0.01	0.006	0.0057	0.0057	C				
183	X	2003-08 TIP	VDOT	Park-and-Ride Lots					0.0175	0.0382	0.0073	0.013	0.01	0.008	0.0057	0.0073	C				
184	X	2003-08 TIP	VDOT	Van Start / Van Save					0.0022	0.0047	0.0009	0.002	0.000	0.001	0.0007	0.0009	C				
185	X	2003-08 TIP	VDOT	Metro Shuttle Bus					0.0019	0.0047	0.0008	0.002	0.000	0.001	0.0006	0.0009	C				
186	X	2003-08 TIP	VDOT	VRE Early (PM) Train Service					0.0138	0.0277	0.0058	0.009	0.000	0.000	0.0043	0.0053	C				
187	X	2003-08 TIP	VDOT	VRE Mid-Day Train Service					0.0025	0.0053	0.0011	0.002	0.000	0.001	0.0008	0.0010	C				
188	X	2003-08 TIP	VDOT	PRTC Express Bus Service					0.0007	0.0015	0.0003	0.000	0.000	0.000	0.0002	0.0003	C				
190	X	2003-08 TIP	VDOT	Employer Vanpool Program (VA)					0.0015	0.0034	0.0006	0.000	0.000	0.000	0.0000	0.0000	C				
191	X	2003-08 TIP	VDOT	Town of Leesburg P&R Lot					0.0051	0.0071	0.0013	0.002	0.000	0.001	0.0010	0.0014	C				
192	X	2003-08 TIP	VDOT	District-wide P&R Lots					0.0182	0.0406	0.0076	0.013	0.01	0.008	0.0059	0.0078	C				
193	X	2003-08 TIP	VDOT	Additional Parking at 4 Metro stations					0.0235	0.0504	0.0087	0.020	0.01	0.012	0.0078	0.0116	C				

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				FULL	SCALED-BACK	UNDERWAY			REMOVED	2005 VOC	2005 NOX	2015 VOC	2015 NOX	2025 VOC	2025 NOX	2030 VOC	2030 NOX				
194	X	VDOT	Loudoun County Transit Services				2005		0.0022	0.0037	0.0009	0.001	0.001	0.001	0.0007	0.0007	C				
195		VDOT	VDOT - Travel Management System				2005										C				
196	X	WMATA	64 CNG Buses (Purchased in 2001)				2005		0.0021	0.0070	0.0021	0.007					SP				
197	X	WMATA	250 CNG Buses (To be purchased in 2002)				2005		0.0063	0.0400	0.0093	0.040					SP				
198	X	WMATA	100 Engine Replacement (58 MY, 1992&42, 1993 MY buses)				2005		0.0230	0.1238	0.0230	0.126					SP				
199	X	WMATA	Car Sharing Program				2005		0.0013	0.0063	0.0005	0.001	0.0004	0.0004	0.0006	0.0006	C				
200	X	WMATA	Bikes Racks on WMATA Buses in VA (372 Bike Racks)				2005		0.0020	0.0065	0.0008	0.001	0.0006	0.001	0.0006	0.0007	C				
202		MDOT	Fleet Replacement (state auto fleet, gas to hybrid, 250 vehicles)				2005		0.0055	0.013	0.0055	0.013					SP				
203	X	MDOT	Replace 55 Montgomery County 10 yr. old buses w/ new CNG buses		X		2005		0.0121	0.286	0.0051	0.007	0.004	0.004	0.0038	0.0042	C				
204		MDOT	Neighborhood Bus Shuttle (5 circulator routes)				2005		0.0042	0.0108	0.0017	0.004	0.002	0.002	0.0014	0.0021	C				
205	X	MDOT	New Surface Parking at Transit Centers (500 spaces)		X		2005		0.0213	0.0879	0.0090	0.013	0.01	0.008	0.0067	0.0072	C				
206	X	MDOT	Additional Bike Lockers at Metro Stations		X		2005		0.0150	0.0300	0.0063	0.010	0.00	0.006	0.0048	0.0057	C				
207	X	MDOT	Bike Facilities at Park Lots or other similar location		X		2005		0.1270	0.1170							SP				
208	X	MDOT	CNG Fueling Stations		X		2005		NA	NA							SP				
209		MDOT	Gas cap replacements (ROP Credit)				2005		NA	NA							SP				
210		MDOT	Gas can turnover (ROP Credit)		X		2005		NA	NA							SP				
211	X	MDOT	External Bicycle Racks on WMATA Buses (486 MD buses)	X			2005	2002	0.0028	0.0040	0.0009	0.001	0.001	0.001	0.0007	0.0008	C				
212	X	MDOT	Bike 1 Pedestrian Trail - Anacostia River Walk				2005	n/a	0.0009	0.0008	0.0004	0.000	0.000	0.000	0.0003	0.0002	C				
213		MDOT	Transit Prioritization - Queue Jumps				2005		0.0050	0.0088	0.0021	0.002	0.002	0.001	0.0015	0.0013	C				
214	X	MDOT	Commuter Choices Benefit/Tax Credit - Meritfield Expansion		X		2005	n/a	0.0681	0.1558	0.0370	0.052	0.028	0.031	0.0278	0.0297	C				
215	X	MDOT	Improvements to Pedestrian Access in TOD areas (4 locations)		X		2005	n/a	0.0086	0.0158	0.0040	0.005	0.003	0.003	0.0030	0.0030	C				
216	X	MDOT	Telecommuting Expansion		X		2005	n/a	0.1041	0.2182	0.0435	0.072	0.034	0.044	0.0336	0.0419	C				
217	X	MDOT	Replace older Diesel Engine in Public Sector vehicles		X		2005	n/a	0.0237	0.130	0.0237	0.130					H				
218	X	VDOT	MV-82 Telecommuting Program - Expanded				2005		0.1112	0.2341	0.05	0.077	0.036	0.047	0.0359	0.0447	C				
219	X	VDOT	MV-123 Employer Outreach for Public Sector Employees				2005		0.0247	0.0439	0.01	0.014	0.008	0.009	0.0078	0.0082	C				
220	X	REGION	Signal System Optimization				2005		0.674	0.272	0.3447	0.1244	0.29446	0.0678	0.2896	0.0613	TR				
			Projects completed before to 2000						4.714	8.550	2.651	4.144	2.140	1.659	2.280	1.893					
			Projects completed in 2000 or after 2000						0.882	0.802	0.366	0.160	0.272	0.131	0.267	0.141					
			<b>Total (Excluding Removed Projects)</b>						<b>3.639</b>	<b>7.748</b>	<b>2.285</b>	<b>3.084</b>	<b>1.888</b>	<b>1.528</b>	<b>2.013</b>	<b>1.782</b>					

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 (TRACKING SHEET)

Project Category	TR - Traffic Stream	C - Commute	H - Engine Technology (Heavy Duty Vehicles)	SP - Specific Vehicle Type	PROJECT	IMPLEMENTATION STATUS				ACTUAL COMPLETION DATE	TONSDAY REDUCTION CREDITED								Project Category	
						CREDIT TAKEN	TIP CREDITED	AGENCY REGION	PROJECT		FULL	SCALED-BACK	UNDERWAY	REMOVED	PROJ. COMPLETION DATE	2015		2025		2030
											VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX		
221	X				M-24 Speed Limit Adherence						0.1129	0.8378	0.1286	0.5905	0.0465	0.1828	n/a	n/a	TR	
222	X				Rock Spring Park Pedestrian Amenities						0.0010	0.0040	n/a	n/a	n/a	n/a	n/a	n/a		
223	X				Olney Transit Center Park and Ride				X		0.0009	0.0038	0.0008	0.0025	0.0003	0.0007			C	
224	X				Damascus Park and Ride						0.0005	0.0018	0.0004	0.0012	0.0001	0.0003			C	
225	X				M-103 Interchange Replacement								0.2490	0.6000	0.3490	0.6000			H	
226	X				Taniguchi Replacement								0.1590	0.2400	0.1560	0.2400			H	
227	X				Shady Grove West Transit Center Park and Ride						0.0000	0.0045	0.0000	0.0031	0.0000	0.0009			C	
228	X				Olney Transit Center Park and Ride						0.0000	0.0060	0.0000	0.0025	0.0003	0.0007			C	
229	X				White Oak Park and Ride						0.0000	0.0060	0.0000	0.0062	0.0000	0.0017			C	
230	X				Damascus Park and Ride						0.0000	0.0004	0.0004	0.0009	0.0001	0.0003			C	
231	X				Four Corners Transit Center						0.0000	0.0004	0.0000	0.0003	0.0000	0.0001			C	
232	X				Burtonville Transit Center						0.0000	0.0004	0.0000	0.0003	0.0000	0.0001			C	
233	X				Silver Spring Transit Access				X				n/a	n/a	n/a	n/a				
234	X				Shady Grove Parking Construction						0.0023	0.0965	0.0020	0.0059	0.0007	0.0017			C	
<b>PLAN TOTAL</b>											0.117	0.865	0.838	1.454	0.558	1.829				
<b>GRAND TOTAL (program past 2000 + plan)</b>											2.482	4.850	2.508	2.982	2.570	2.781				

**DEFINITIONS:**

**CREDIT TAKEN (X means emissions reduction credits taken):**  
 TIP - Emissions credits are taken for projects being implemented, according to the progress reporting schedules provided by the implementing agencies (contained in Appendix L). No credit has been taken for projects in which only some components of the measure have been implemented. (The status of these projects will be reassessed next year).  
 CLRP - Credit is taken for each of these elements of the CLRP, according to the schedule provided by the implementing agency.

**IMPLEMENTATION STATUS:**  
 FULL - project is completed as planned at the time of analysis.  
 SCALED BACK - project is completed, but at a different level than assumed at the time of analysis (i.e., purchased 50 buses instead of 100).  
 UNDERWAY - project is not complete, but is close enough that credit may be taken (i.e., under construction, NOT just out for bid).  
 REMOVED - project no longer expected to be implemented or constructed.

**COMPLETION DATE:**  
 PROJECTED = project completion date originally expected (i.e., at time of emissions analysis).  
 ACTUAL = actual year project was open for use, or expected to be open for use if under construction.

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 Reflects instances where emissions reductions previously credited are no longer appropriate to the indicated forecast year, due to schedule slippage.  
 Delayed - Project Delayed