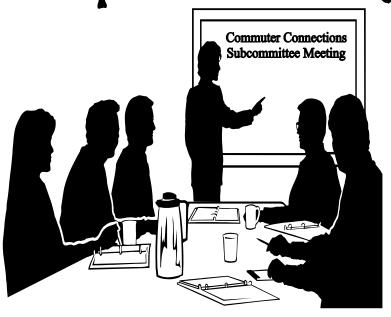
# HANDOUTS

from previous meeting



May 20, 2008

# Draft 2008 Congestion Management Process (CMP) Technical Report

Andrew J. Meese COG/TPB Staff

Commuter Connections Subcommittee May 20, 2008

#### Background

- A Congestion Management Process (CMP) is a requirement in metropolitan transportation planning
  - SAFETEA-LU
    - Federal regulations for metropolitan planning issued February 14, 2007 address CMP requirements
  - March 2006 Federal certification of the TPB process

- Metropolitan long-range plans developed after July 1, 2007 must have a CMP
  - CMP components were developed in concert with the updated 2007 CLRP

#### **Three Major FY2008 CMP Activities**

#### 1. CMP components of 2007 CLRP

- Identified congestion in the region, through Skycomp and other data
- Developed and documented a congestion management process
- TPB approved the 2007 CLRP January 16, 2008
- Status: Completed

#### 2. CMP documentation forms for the CLRP and TIP

- Supporting CMP reference material
- Reviewed and accepted by Travel Management Subcommittee and TPB Technical Committee April 2008
- Status: Completed

#### 3. 2008 CMP Technical Report

 Status: Currently under development and review for completion by June 30

#### **Development of Draft CMP Report**

- Report developed following an outline approved by the TPB Technical Committee in May 2007
  - Based upon SAFETEA-LU legislation and regulations and mid-1990's Congestion Management System (CMS) annual reports
- Two major sections:
  - Chapters 1 6 provide an overview of the CMP, where congestion occurs, and what strategies are being considered or pursued
  - Chapter 7 and Appendices delve into data and methodologies of major TPB studies

#### Chapter 1 – Executive Summary

- Summary of CMP Technical Report
- To be written

#### **Chapter 2 - Introduction**

- Need for a CMP Technical Report
  - Federal legislation
  - Federal certification of TPB planning process
- Institutional Context of CMP in the Washington region
  - Overview on the TPB and the Technical Committee
  - Previous CMP (CMS) activities

# Chapter 3 – Where Congestion Occurs or Will Occur in the Washington Metropolitan Area

- Congestion on Major Highways
  - Freeways (Skycomp)
  - Arterials (Arterial Monitoring Program)
- Safety and Congestion
- Congestion on the area's transit systems
- Park-and-Ride facilities
- Airport access (TPB Studies)
- National Comparison of the Washington region's congestion (TTI)

# Chapter 4 – Impacts of Previously Implemented Congestion Management Strategies

- Demand Management Strategies
  - Commuter Connections Programs
  - Local Jurisdictional Activities
- Operational Management Strategies
  - HOV Facilities
  - Variably Priced Lanes (VPLs)
  - Transit Systems
  - Bicycle and Pedestrian Transportation
  - Traffic Management

## **Chapter 5 – Recent Studies of Congestion Management Strategies**

- Project-related congestion management strategies
  - Woodrow Wilson Bridge
  - Springfield Interchange
  - 11<sup>th</sup> Street Bridges
  - South Capitol Street Project
- Congestion management impacts of Transportation Emissions Reduction Measures (TERMs)
- Regional Mobility and Accessibility Scenario Study

## Chapter 6 – How the Results of the CMP are Integrated into the CLRP

- Congestion analysis of the 2007 CLRP
- Demand management in the CLRP
- Roadway and systems management in the CLRP
- Interlinks in the on-line format of the 2007 CLRP provide connections between congestion management and other CLRP components

#### Chapter 7 – Data and Methodologies

- Details that support Chapters 1 through 6
- Definition of CMP network
- Performance measures
- Detailed review of congestion management strategies
  - Qualitative criteria long lists
- Monitoring activities
  - Summary of Travel Forecasting program activities
    - ■Congestion monitoring
    - Cordon counts
    - Household Travel Survey
    - Special Studies and programs
- Details of Highway Monitoring (freeway and arterials)

#### **Next Steps**

- Committee reviews during April, May, and June
  - Commuter Connections, Travel Management Subcommittee, MOITS
  - TPB Technical Committee first review June 6 and anticipated final review June 27
- Comments that cannot be accommodated this year will be looked at for a revised report during FY2009
  - Additional data and analyses
  - Beyond FY2009, frequency of update (e.g., annually, biennially) still under consideration
- CMP Technical Report anticipated to be completed and approved by July 2008

Comments and Feedback are welcome: Andrew Meese <a href="mailto:ameese@mwcog.org">ameese@mwcog.org</a>

# What do 11 million people in the Baltimore-Washington region have in common?





Suite 300

Non Profit Organization U.S. Postage PAID

Washington D.C. Permit No. 90770

44

Washington Gas is proud to be a founding member of Clean Air Partners. Through our membership we are able to promote clean air initiatives to our employees and the communities we serve.

James H. DeGraffenreidt, Jr. Washington Gas Chairman and CEO

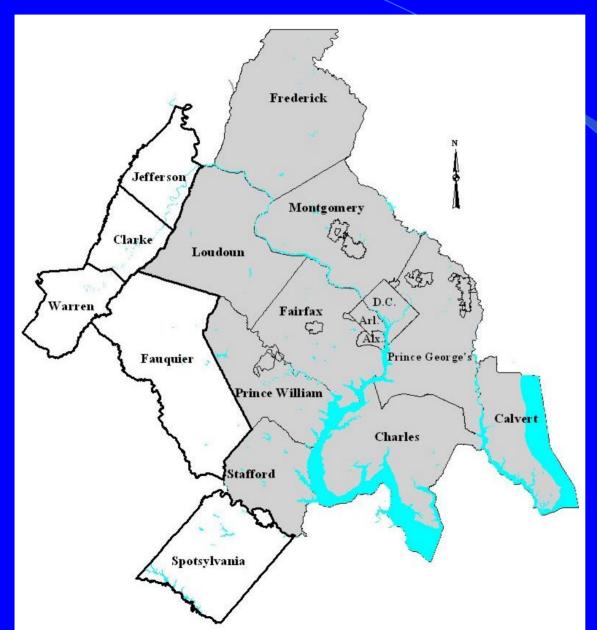
www.cleanairpartners.net

#### Regional Travel Trends 2000 - 2006

# Presentation to the Commuter Connections Subcommittee

Robert E. Griffiths
Technical Services Director
May 20, 2008

#### Washington DC-MD-VA-WV MSA (2003)



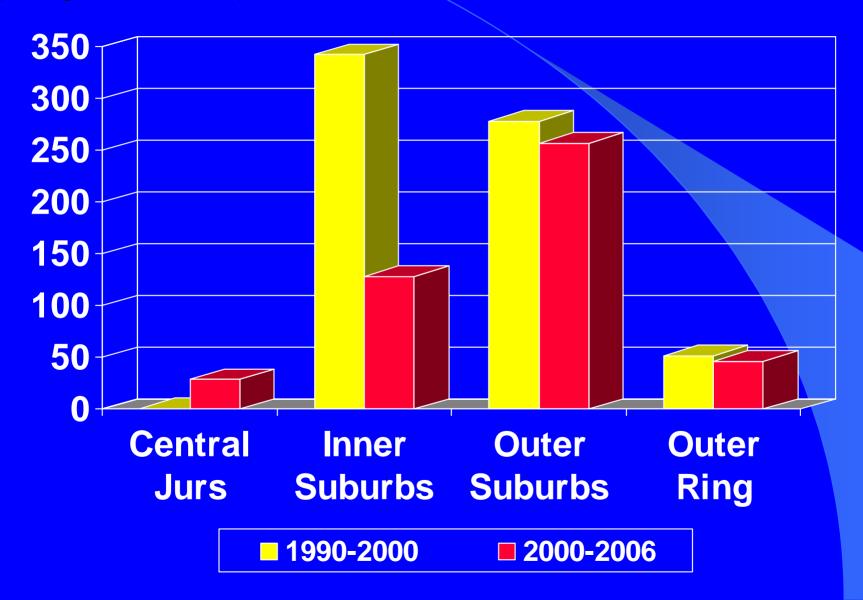
 22 Cities and Counties

5,600 SqMiles

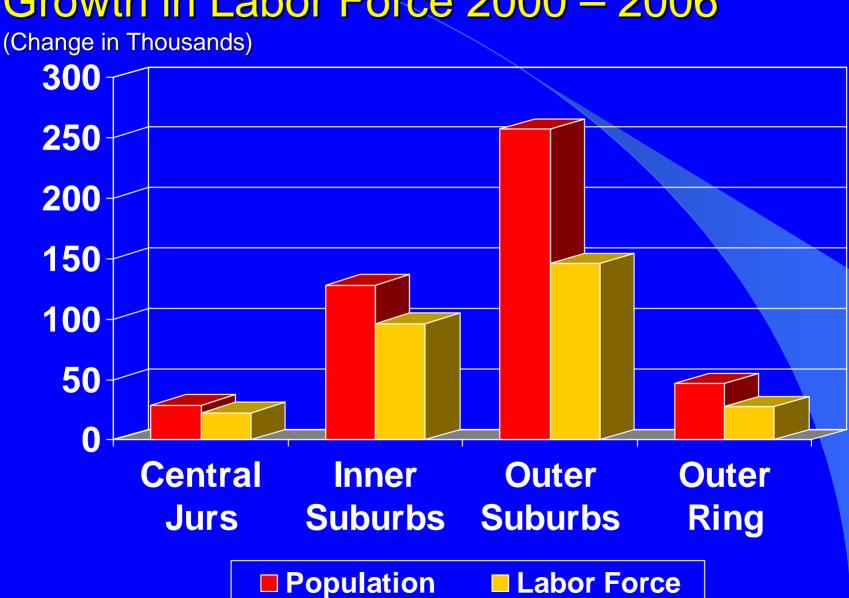
5.3 Million People

#### **Population Growth**

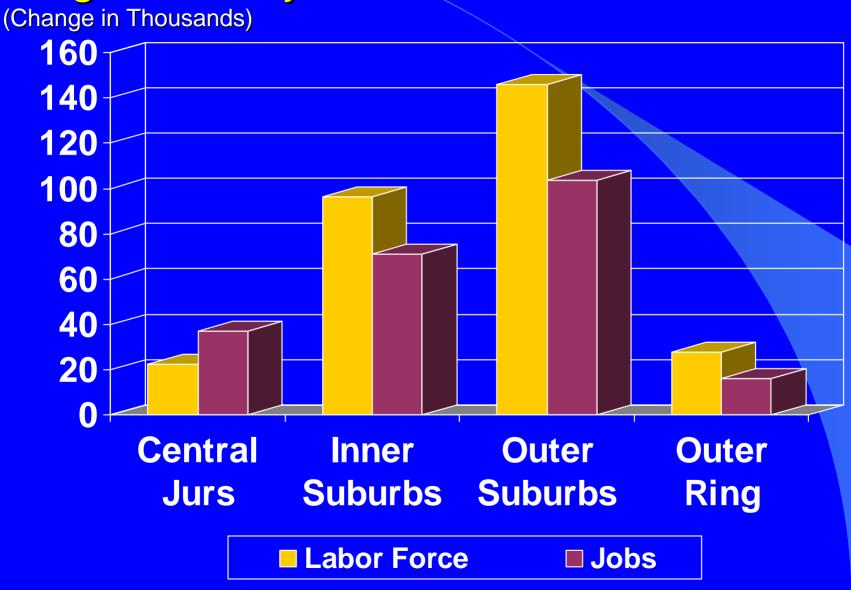
(Change in Thousands)



## Growth in Population Compared to Growth in Labor Force 2000 – 2006

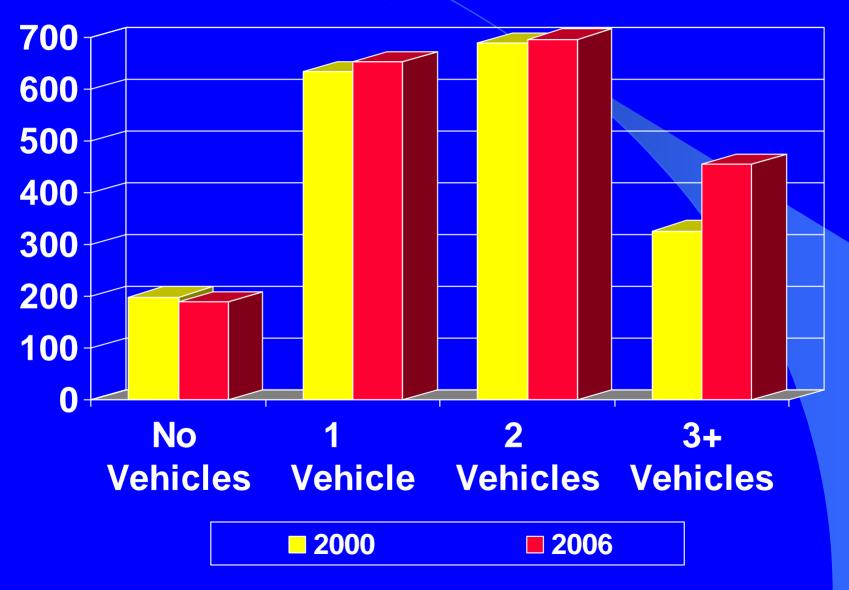


# Growth in Labor Force Compared to Wage & Salary Jobs Growth 2000 – 2006



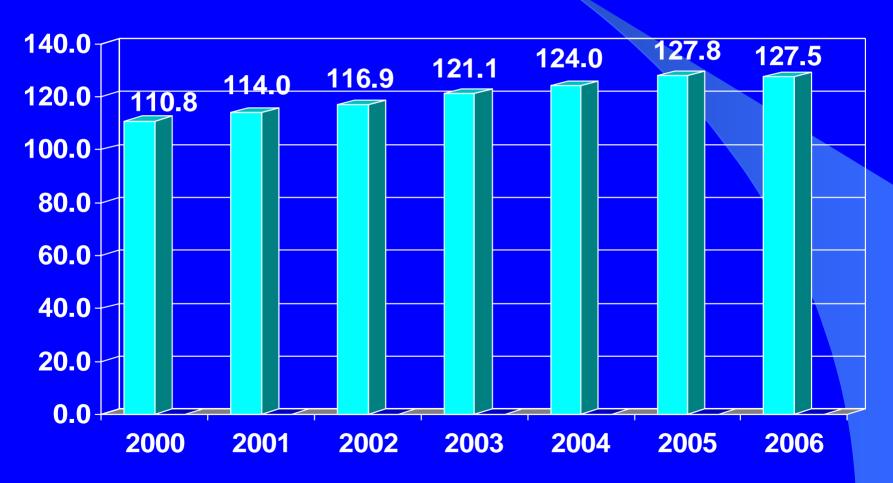
#### Household Vehicle Availability 2000 – 2006

(Number of Households in Thousands)

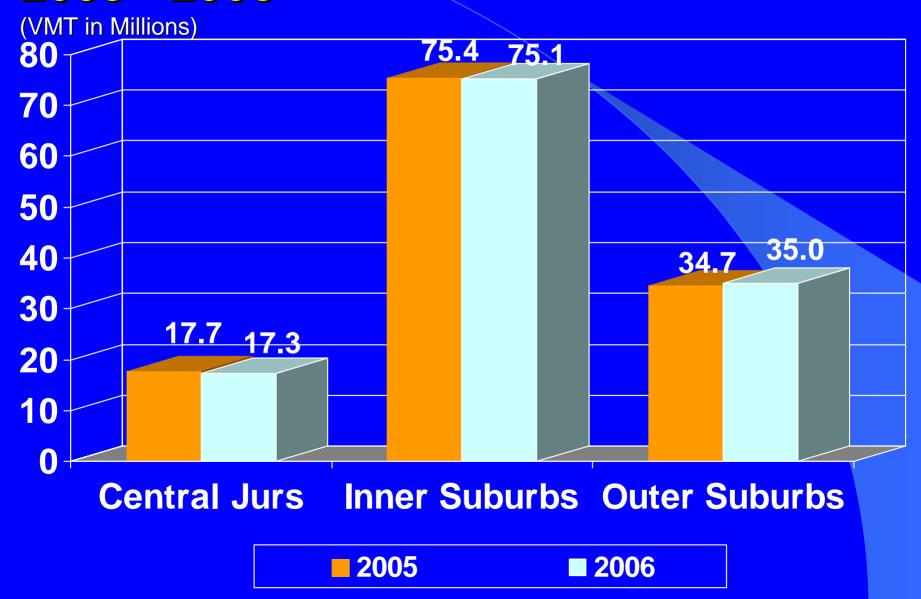


## Weekday Vehicle Miles of Travel 2000 – 2006

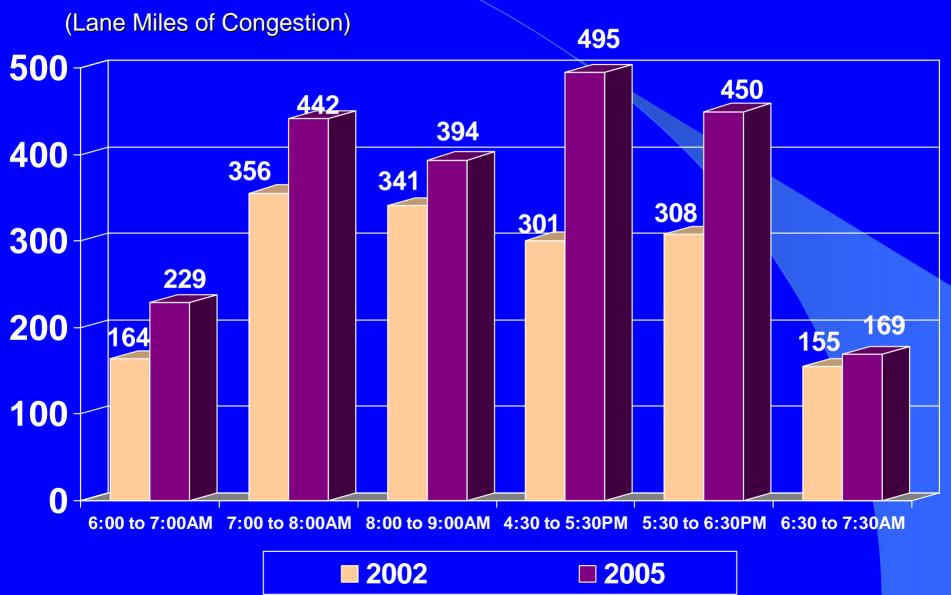
(VMT in Millions)



# Daily Vehicle Mile of Travel by Subarea 2005 - 2006

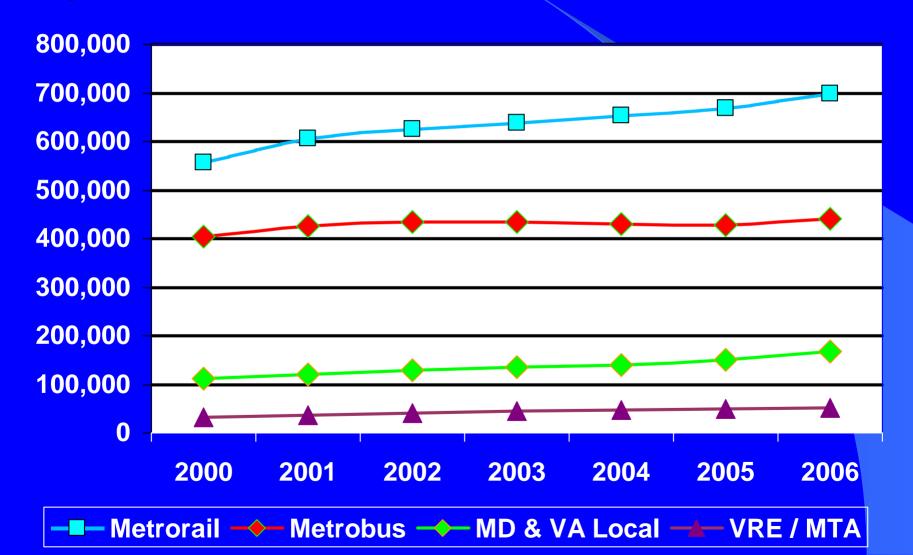


# Increase in Freeway Congestion 2002 – 2005

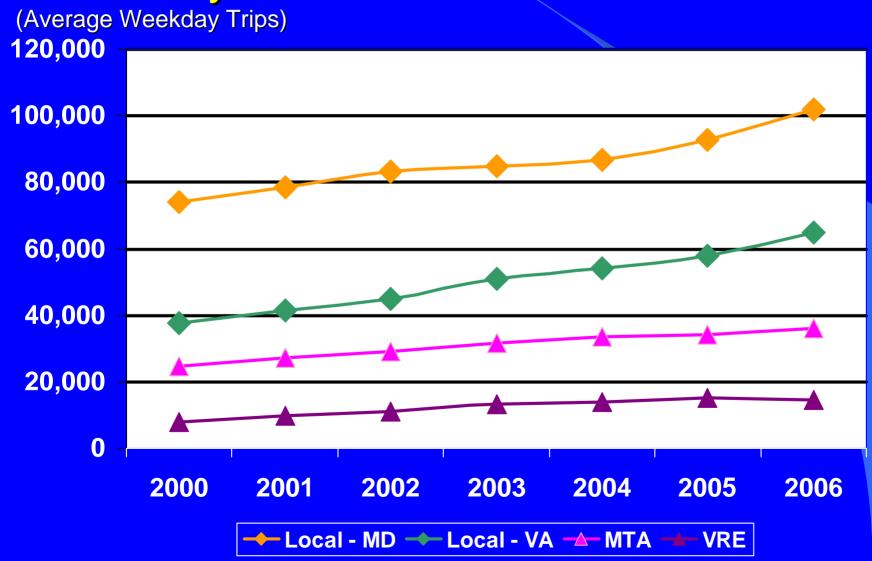


# Growth in Weekday Metrorail, Metrobus and Local Transit Ridership FY 2000 - 2006

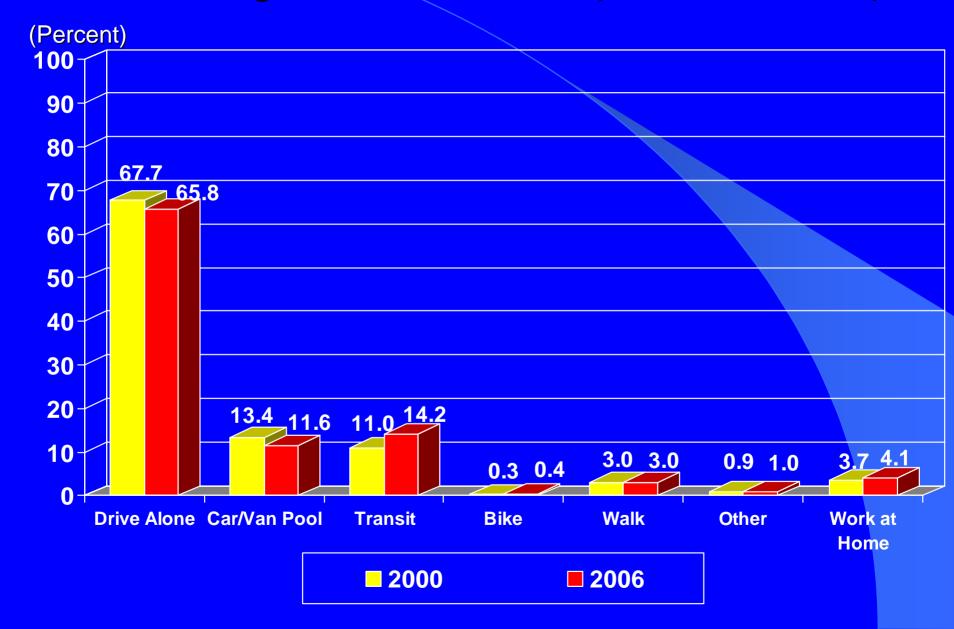
(Average Weekday Trips)



#### Growth in Ridership on Local Jurisdiction Transit Systems FY 2000 - 2006

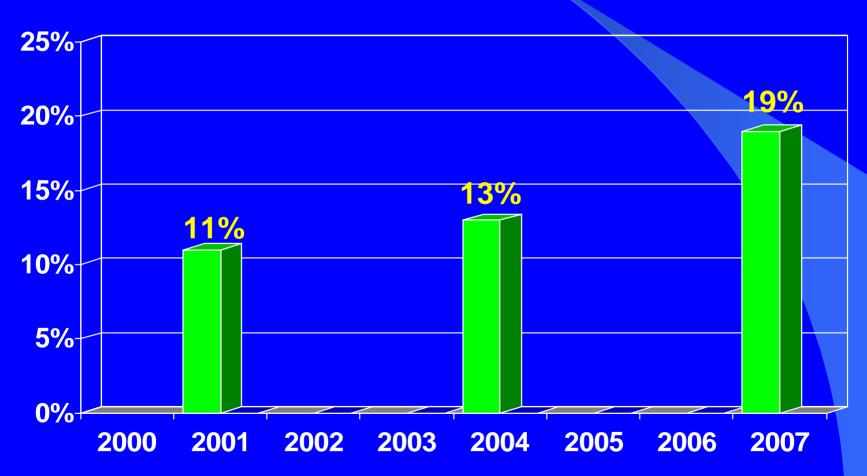


#### Commuting Mode Shares (2000 – 2006)



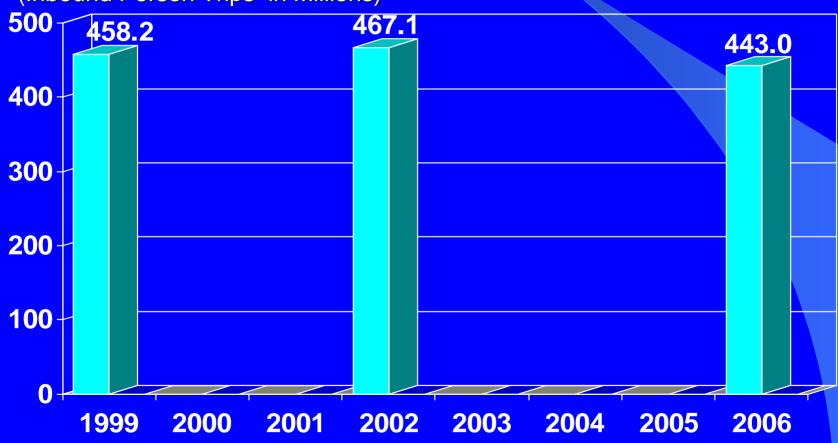
### Increase in Teleworking 2001 – 2007

(% of Commuters Telecommuting 1 or more days per week)

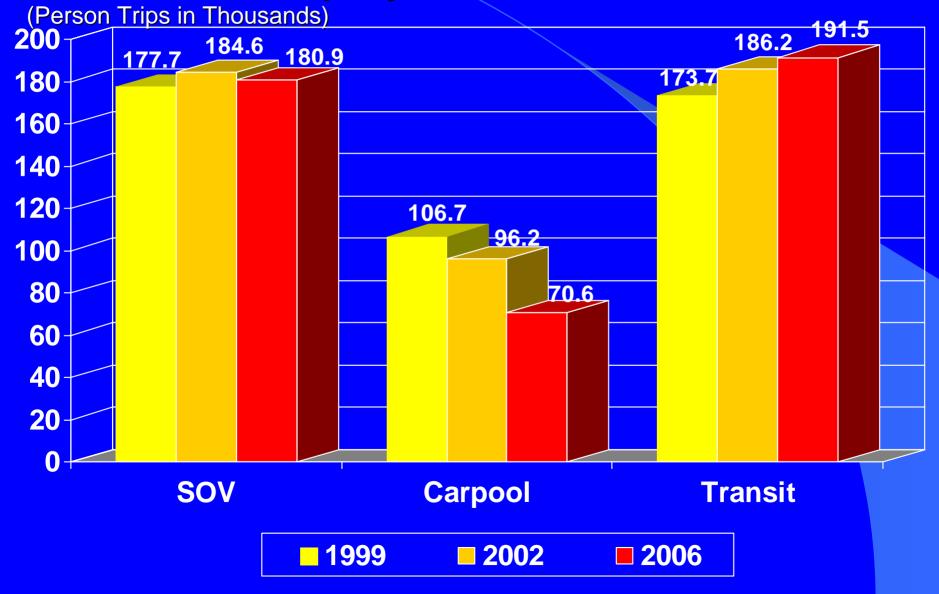


#### AM Peak Period Travel to and through the Central Employment Area 1999 – 2006

(Inbound Person Trips in Millions)



# AM Peak Period Modal Shares to Central Employment Area



#### Major Findings and Conclusions

- Locus of Population and Employment Growth has shifted to Outer Suburbs
- Turn Around in Population and Employment Growth in DC
- Saturation in Vehicle Availability
- VMT Growth Still Faster than Pop and Jobs
- Increase in Freeway Congestion
- Modal Shift to Transit
- Decline in Percent of Commuters Driving Alone and Carpooling
- Trends Moving toward TPB Vision Goals

# We ALL breathe the same air.

# **About Clean Air Partners**

Air quality affects us all. Our region's air quality has improved steadily over the past 10 years, but we still experience a significant number of days where poor air quality presents a health risk. Those most susceptible to poor air quality are children, older adults, and those with heart and lung conditions. More than likely, you or someone you know feels the effects of poor air quality. Clean Air Partners and its members are dedicated to changing that.

For more than 10 years, Clean Air Partners has been providing the public with simple steps on how to improve air quality. Hundreds of organizations throughout the metropolitan Washington, northern Virginia, and Baltimore region have joined us in our efforts to raise awareness about the environmental and health effects of air pollution, including ground-level ozone, particle pollution and greenhouse gases.



Join our efforts to increase public awareness of the health and environmental effects of air pollution and take simple actions to improve our region's air quality.

# Become a Member

Become a member of Clean Air Partners and you'll support our efforts to improve the region's air quality through:

- · Our annual public awareness campaign which reaches millions of people in the Washington-Baltimore region.
- · Timely and reliable air quality forecast information.
- Our new air quality curriculum (On The Air: Exploring Air Pollution Sources and Solutions), being introduced into schools in 2008.

# Member Benefits

As a member, your organization will receive the following:

- Daily Clean Air Partners' AirAlerts: Timely and accurate air quality forecasts which you can distribute by email to your employees.
- Air Quality Action Guide: Our easy-to-read guide provides your employees and customers with simple steps to improve air quality.
- Fact Sheet and Tips: Information on how your organization and employees can reduce air pollution.
- Template Materials: Template newsletter articles for employees and customers and press releases announcing your organization's commitment to improving air quality.
- Website Link: Members are hyperlinked on Clean Air Partners' website, which receives several million hits each year

www.cleanairpartners.net

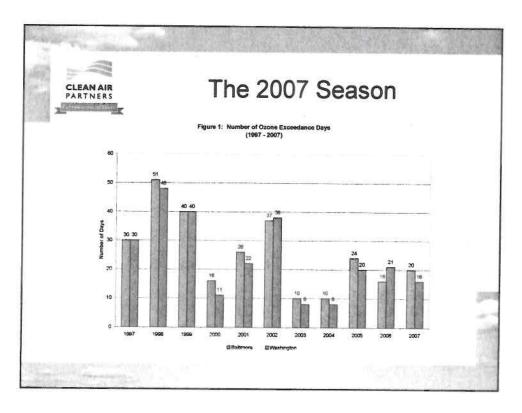
YES, I want to do my share for cleaner air by becoming a member of Clean Air Partners!

Name:		
Address:		
City:	State:	Zip:
Phone:	E-mail:	
THANK YOU for your support	t, and nonprofits with 100 or r t! An invoice will be sent to y al offer, your membership will	you after your membership
□ Sponsorship	ditional information you are in	nterested in receiving:
<ul><li>☐ Sign up to receive daily A</li><li>☐ How to start a workplace</li></ul>		
	ality curriculum for regional sc	chools

What in the









#### New EPA Standard for Ozone

#### Increase in Code Orange and Code Red Air Quality Days Expected Throughout Region

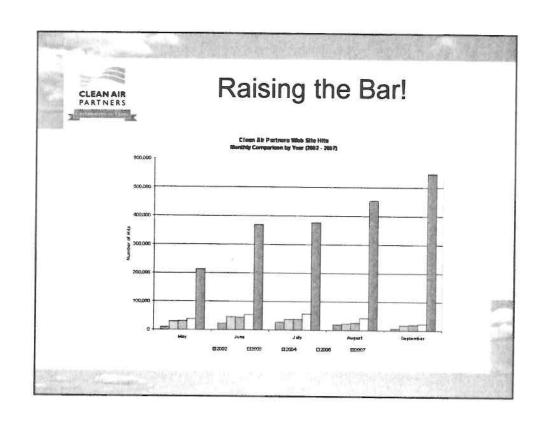
"According to Clean Air Partners, a regional partnership committed to improving air quality and protecting public health throughout the metropolitan Washington-Baltimore region, the number of **Code Orange** days will likely **double** this season. This increase will require residents to take action more frequently in order to reduce air pollution and protect the health of area residents."

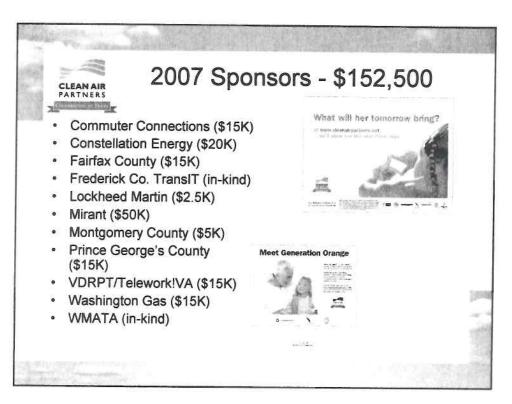


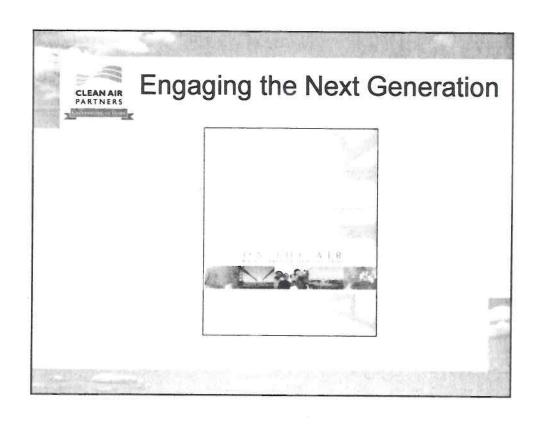


#### **Major Accomplishments**

- · Raising the bar on air quality awareness.
- · Engaging the next generation.
- · Launching new industry initiatives.
- Expanding Clean Air Partners' role.









#### **Engaging the Next Generation**

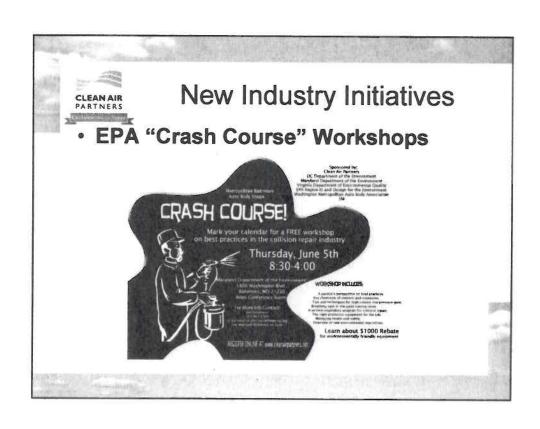
- Hired Rebecca Davis as part-time Education Coordinator in Nov 07.
- Finalized "On the Air" education materials (Feb 08).
- Identified target audience 500+ middle and elementary schools, upwards of 2,000 sixth-grade science teachers.
- · Extensive networking and outreach.
- Dissemination strategy: top-down and bottom-up approach.
- Collaboration with environmental educators and other nonprofit environmental education organizations in DC, MD, and VA.



### **Engaging the Next Generation**

- Swanson Middle School, Arlington, VA (80 students).
- W.B. Patterson Elementary School, DC (40 students).
- Mayfield Intermediary School, Manassas, VA (150 students).
- Roberto Clemente Middle School, Germantown, MD (100 students).







### **Expanding Our Role**

- Prince George's County Air Quality Strategic Plan
  - -Employee Survey (1,565 surveys completed 26% response rate)
  - -Customized Messaging
  - -Participation Programs





### **Expanding Our Role**

- Clean Air Teleworking
  - -Telework Took Kit
  - -Pilots encouraging teleworking on Code

Orange+ days



### **Expanding Our Role**

- Climate Change
  - -Board amended by-laws to include







### AirAlerts Participants Survey

- Nearly half use the information for personal use ("me and my family").
- 59% use the information year-round, while 45% use info during summer only.
- Most (65%) are likely to begin taking voluntary actions at Code Orange.
- Actions taken refuel after dusk (68%), drive less (66%), and conserve energy at home (57%).

AIRALERT



### AirAlerts Participants Survey

- Future actions carpool or take public transit (50%), telework (33%), use an electric lawnmower (19%).
- What they liked convenient, easy to use, reliable, and informative.
- Recommendations provide additional content, make it more user friendly.

AIRALERT



### FY 2009 Priorities

- Communicate new ozone standard.
- Incorporate environmental effects of climate change with current messaging.
- Expand new initiatives curriculum/outreach and voluntary business initiatives.
- Measure awareness/change in behavior, especially at Code Orange.
- Market the web site engage the public.



### For More Information

Harriet West
Managing Director

harrietwest@verizon.net

703/431-8463



### **ATTENTION TEACHERS:**

Clean Air Partners is pleased to announce the development of an exciting new air quality education program:

### On the Air: Exploring Air Pollution Sources and Solutions

On the Air is an interactive teaching kit. On the Air engages students in the exploration of their environment as they study important air pollution topics such as Criteria Air Pollutants, the Air Quality Index, Ozone, Particulate Matter, Our Lungs and Health, Community Sources and Solutions and what is on every one's mind Climate Change.

The On the Air kit includes seven units that are:

- tied to and cross referenced to both your required curriculum and your state's education standards
- interactive--including hands-on activities, labs, and investigations
- inquiry based and designed to develop critical thinking skills
- complete with background information, student worksheets, teaching props, and visual aids
- relevant, fun, and engaging for students

In addition to addressing important science concepts, *On the Air* addresses math, technology, social studies, language arts, and health education standards. *On the Air* was developed specifically for sixth grade students in Washington D.C., Virginia, and Maryland and includes relevant and local data, examples, and issues.

Understanding air pollution is an important part of maintaining a clean, healthy environment!

If you are interested in using this engaging kit of air quality education materials or if you have any questions, please contact:

Rebecca Davis
Science Education Coordinator
Clean Air Partners
(703) 340-6875
rdavis@cleanairpartners.net
www.cleanairpartners.net



### ATTENTION SUMMER CAMPS & SUMMER SCHOOLS:

Clean Air Partners is proud to offer a new exciting air quality summer outreach program:

### On the Air: Exploring Air Pollution Sources and Solutions

On the Air is an interactive outreach program. On the Air engages young people ages 10-14 in the exploration of their environment as they study important air pollution topics such as Criteria Air Pollutants, Ozone, the Air Quality Index, Particulate Matter, Our Lungs and Health, Exploring Air Pollution Solutions and what is on every one's mind Climate Change.

The On the Air interactive outreach program focuses on the following questions:

- What are the six- criteria air pollutants?
- How ground level Ozone is created?
- What is Particulate Matter and how do PM affect our lungs?
- What is the impact of pollution on our lungs and our health?
- What is the AQI? How is air quality measured? What actions should we take?
- What are some solutions to air pollution?
- What is Climate Change? And what are our responsibilities?

### Understanding air pollution is an important part of maintaining a clean, healthy environment!

Students will participate, with a specially trained presenter from Clean Air Partners, in a classroom based interactive program for over an hour of fun and learning. For additional information please contact:

Rebecca Davis
Science Education Coordinator
Clean Air Partners
(703) 340-6875
rdavis@cleanairpartners.net
www.cleanairpartners.net

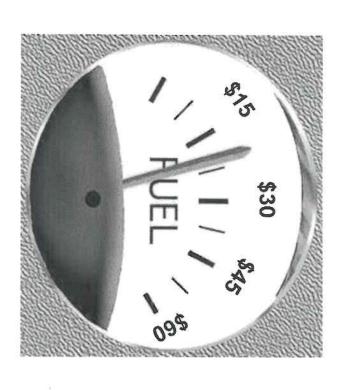
ITEM #9

### COMMUTER CONNECTIONS QUARTERLY BUDGET COMMITMENTS AND EXPENDITURES FOR COG FY08 (July 1, 2007 - March 31, 2008)

53%	\$2,642,126	\$4,998,737	\$4,998,737	TOTAL
0% 0% 45%	\$0 \$0 \$2,687		\$25,000 \$6,031	Data & PC Contract Services/Consultants COG/TPB staff, indirect & direct costs
9%	\$2,687	\$31,031	\$31,031	DC KIOSKS
0% 3% 51%	\$0 \$3,540 \$21,351		\$0 \$120,000 \$42,126	Data & PC Contract Services/Consultants COG/TPB staff, indirect & direct costs
15%	\$24,891	\$162,126	\$162,126	MD & VA TELEWORK
173% 0% 36% 44%	\$5,204 \$0 \$267,606 \$110,586		\$3,000 \$15,000 \$752,664 \$249,057	Data & PC Contract Services/Consultants Pass-thru to local governments COG/TPB staff, indirect & direct costs
38%	\$383,396	\$1,019,721	\$1,019,721	EMPLOYER OUTREACH
0% 28% 65%	\$60,068 \$133,540		\$0 \$216,500 \$205,230	Data & PC Contract Services/Consultants COG/TPB staff, indirect & direct costs
46%	\$193,608	\$421,730	\$421,730	MONITORING AND EVALUATION
111% 63% 46%	\$3,340 \$355,232 \$734,370		\$3,000 \$560,000 \$1,611,084	Data & PC Contract Services/Consultants COG/TPB staft, indirect & direct costs
50%	\$1,092,942	\$2,174,084	\$2,174,084	MARKETING
171% 67% 77% 69%	\$5,994 \$81,039 \$131,154 \$173,299		\$3,500 \$121,487 \$170,500 \$250,097	Data & PC Contract Services/Consultants User Subsidies COG/TPB staff, indirect & direct costs
72%	\$391,486	\$545,584	\$545,584	GUARANTEED RIDE HOME
87% 100% 75%	\$43,001 \$249,999 \$260,115		\$49,500 \$249,999 \$344,962	Data & PC Contract Services/Consultants COG/TPB staff, indirect & direct costs
86%	\$553,115	\$644,461	\$644,461	COMMUTER OPERATIONS CENTER
%FUNDS EXPENDED***	FUNDS EXPENDED**	FUNDS COMMITTED*	BUDGET	

Committed funds are based on funding commitment letters received.
 Preliminary funds expended are through March 31, 2008.
 Percentage is based on Budget Total Column

### COMMUTER CONNECTIONS



Responses to Rising Gasoline Prices Nicholas Ramfos

National Capital Region Transportation Planning Board May 21, 2008

# High Gas Prices Policy Responses

- To drill or not to drill in Arctic National Wildlife Refuge?
- Ethanol, wind, coal, nuclear energy?
- Wave the Federal Gas Tax for summer?
- Bi-partisanship halt to adding to the Strategic Oil Reserve!

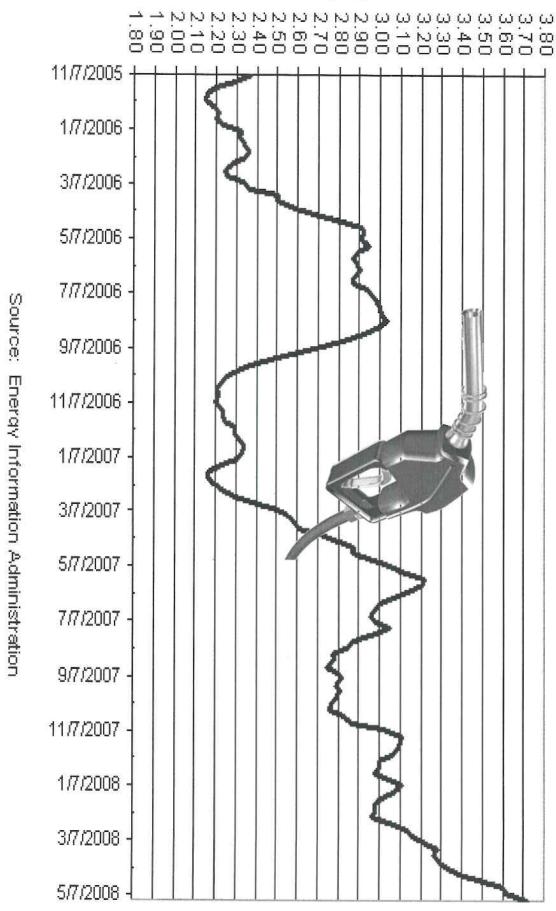
# High Gas Prices Public Reactions

SUV sales slumping, Hybrid car sales soaring!

Big Oil Company price gouging?

What is the breaking point that will change SOV behavior?

### Dollars per gallon



## Per Regular Gallon of Gasoline Weekly U.S. Retail Prices

# Gas Consumption and Production

- The US consumes about 21 million barrels of petroleum products each day.
- Over 10 million barrels in the form of gasoline used each day
- For 210 million motor vehicles
- Traveling over 7 billion VMT's per day
- Crude oil prices avg \$72 per barrel in 2007 and over \$110 per barrel in 2008.

# Gas Consumption and Production

- The cost of crude oil now accounts for
- Projected gas prices approaching \$4 per gallon. almost 70% of the gasoline pump price.
- World crude oil prices are at record highs due to:
- High worldwide oil demand relative to supply
- Conflicts in some major oil producing regions
- Declining value of the U.S. dollar (the currency in which crude oil is traded globally).

# Gas Prices and Commuting

- In 2007 and 2008, Americans have been faced offering ridesharing services. when Commuter Connections first began which have not been seen since the 1970s, with sky rocketing gasoline prices, the likes of
- In the 1990s, the average commute time rose by accounted for more than 3 out of 4 American workers, according to the 2000 Census. about 15 percent, and the share of SOV drivers

### Management Marketing Campaign Transportation Demand 2008 Spring



### Radio



WTOP (News/Talk 103.5FM)

WBIG (BIG 100 100.3FM)

WRQX (Mix 107.3FM)

WASH (Soft Rock 97.1FM)

WMZQ (Today¹s Country 98.7FM)

WMAL (News/Talk 630AM)

WMMJ (102.3FM

WWDC (DC101)

WAFY (Key 103.1FM) WJZW (Smooth

WPGC (Urban AC)

Urban AC)
WFLS (93.3FM
Real Country,
Fredericksburg)

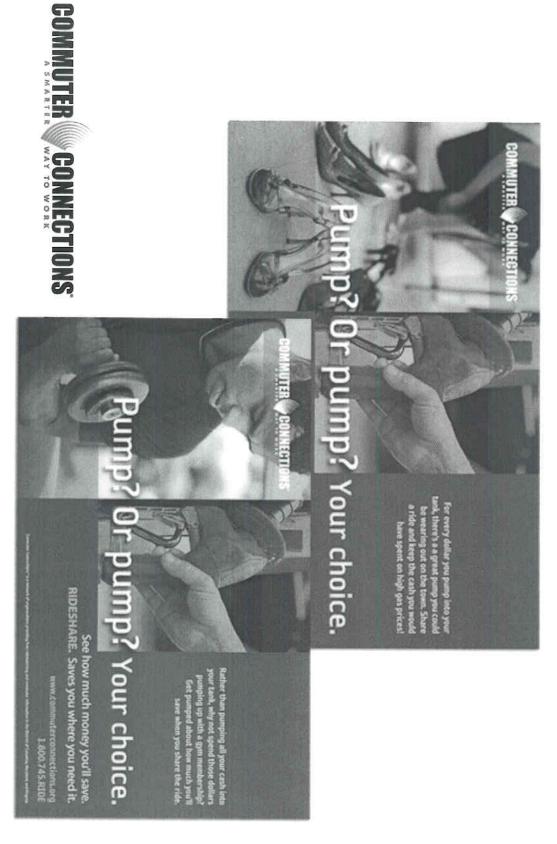
WFRE (99.9 Free Country, Frederick)

WBQB (B101.5FM Fredericksburg)

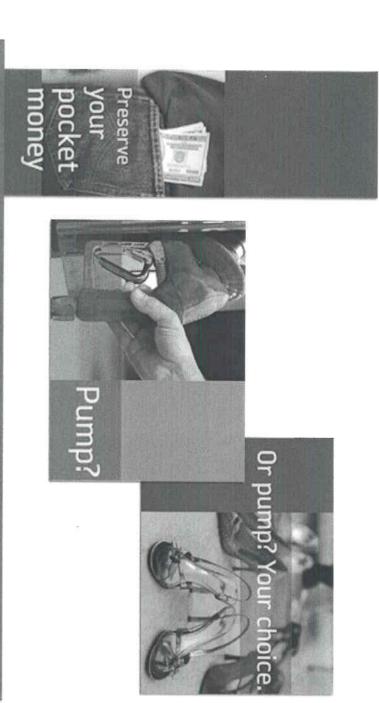
Jazz 105.9FM)

WSMD (Star 98.3FM Mechanicsburg)

## Placed at 120 Service Stations Gas Pump Topper Ads



## Internet Advertising

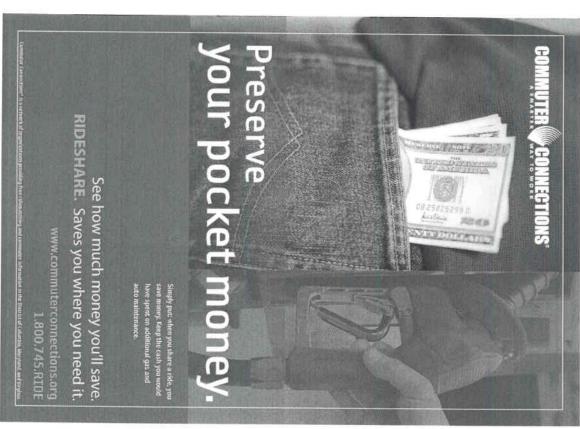


money you'll save when you RIDESHARE



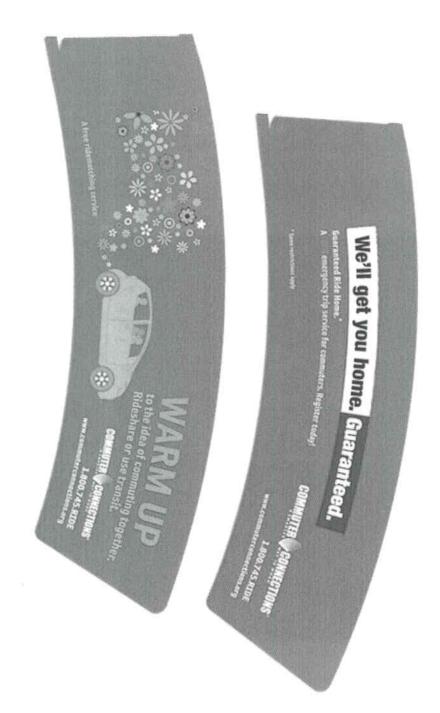


### **Bus Shelters**

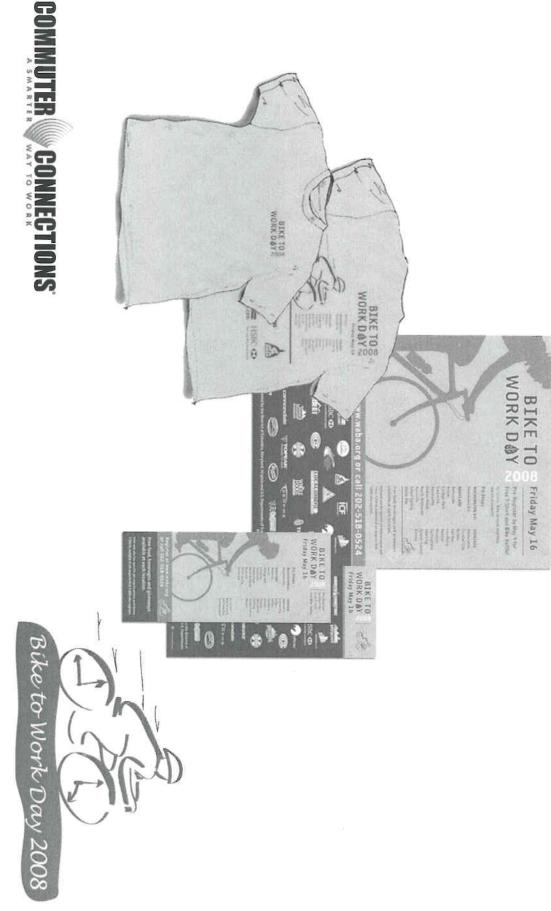




### Distributed at 145 Venues Coffee Cup Sleeves

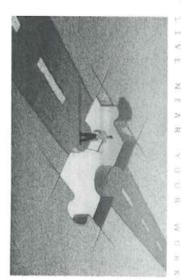


# Bike to Work Day 2008



## Live Near Your Work

- Commuter Connections can assist employers WORK. with programs that enable them to live closer to housing needs, and help connect employees with finding the right solutions for workforce
- Events held in the District of Columbia, Bethesda, Prince George's, and Fairfax in FY 2007
- Events in Arlington, Frederick, Prince George's, Prince William, and the District of Columbia during FY 2008



# Gas Related Earned Media Efforts

## ➤ High Gas Prices PSA copy

Tired of paying too much at the pump? Try alternatives free information visit CommuterConnections.org today"! like carpooling, transit, bicycling and teleworking. For

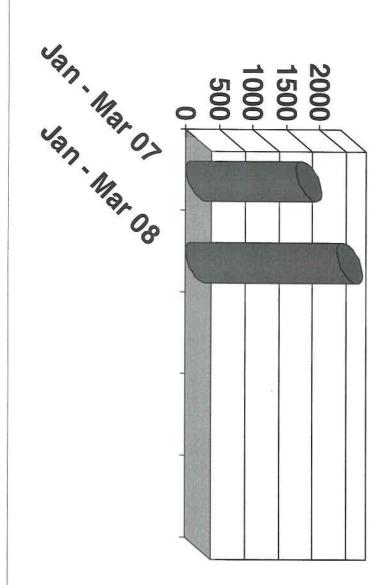
### > Press Release

Provide Relief From High Gas Prices". "Commuter Connections Services



# GONNECTIONS

Rideshare Applicants: Jan - March 2007 vs. 2008



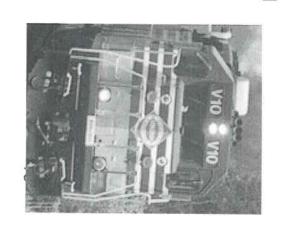
# Ridesharing Bulletin Board

from Loudoun and Fairfax Counties have increased by 87.5%. on Commuter Connections Bulletin Board



## Impact on Transit

- Ridership on Virginia Railway Express increased 12 percent over last April.
- VRE reported its 10th consecutive month of increased use
- MARC Commuter Rail service is up 7% in the past nine months.
- "The high gas prices have now suddenly Anderson, AAA Mid-Atlantic. made mass transit more attractive" Lon Washington Examiner, May 16, 2008



## Impact on Transit

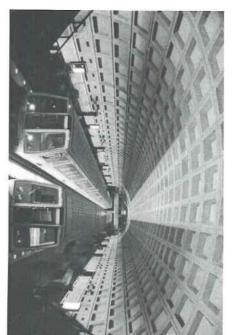
WMATA Press Release, May 5, 2008

"Ridership up Three Months After Fare Increase"

Average weekday rail ridership grew 6% in January, 4% periods last year. in February and 3% in March compared to the same

WTOP, May 20, 2008

WMATA looking to spread out commutes over a longer period of time to ease overcrowding.



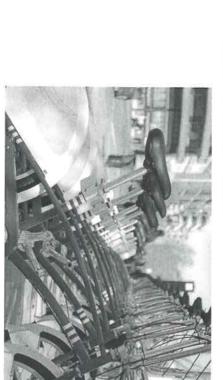
# Commuter Bicycle Sales Rising

- Bicycle Product Suppliers Association annual report -January 2008
- Sales of "hybrid" commuteroriented bikes saw an increase of 6% in sales for '07."
- The National Bicycle Dealers this year. shops across the country are Association indicate bike reporting strong sales so far
- More people are also bringing in bikes for tune-ups that have been idling at home.



### Bike Sharing

- District of Columbia automated bicycle rental system supported by Clear Channel
- 120 red four-speed "SmartBikes", at ten stations between Georgetown and Chinatown.
- Other jurisdictions in the region are exploring the concept
- Participants in the program join online and pay an annual subscriber fee
- Cards are issued and swiped to calculate the hourly rental fee





### Car Sharing

- Car Sharing can eliminate the need to own a vehicle.
- Reduce or augment current company vehicle expenses. fleets and associated maintenance and gasoline
- Companies should consider Car Sharing as an option for employees that have mid-day business appointments.
- Many Car Sharing vehicles are hybrids, which will have a more positive impact on pollution levels compared to non-hybrid vehicles within

### Telework

- In 2004, 13% of the Workforce Teleworked on Average 1.3 days per Week
- 320,000 Teleworkers
- In 2007, 19% of the Workforce Teleworked an Average of 1.5 days per Week
- 456,000 Teleworkers



# Telework Potential in the Region

Of Non-Telecommuters in 2007:

≥ 30% Have Telework Appropriate Job Responsibilities

≥24% "Could and Would" Telework if Offered the Opportunity

570,000 potential new Teleworkers



## Commuting Costs

# ≥ 20 mile Round-Trip Commute

(Based on 22 work days per month, 30 mpg, and maintenance costs)

- In December 2005 gas @ \$2.25 per gallon would have cost \$3,168 per year.
- \$3,440 per year. Today @ \$3.80 per gallon cost will be
- Commuter could have saved \$1,584 in carpooling with one other person. 2006 and could save \$1,720 this year by

### Call To Action

- Encourage formation of carpools and vanpools in the region.
- Encourage teleworking.
- Encourage transit use.
- Encourage bicycling and walking.
- Issue statements on these services to the media and to constituents.



## How Drivers Feel

