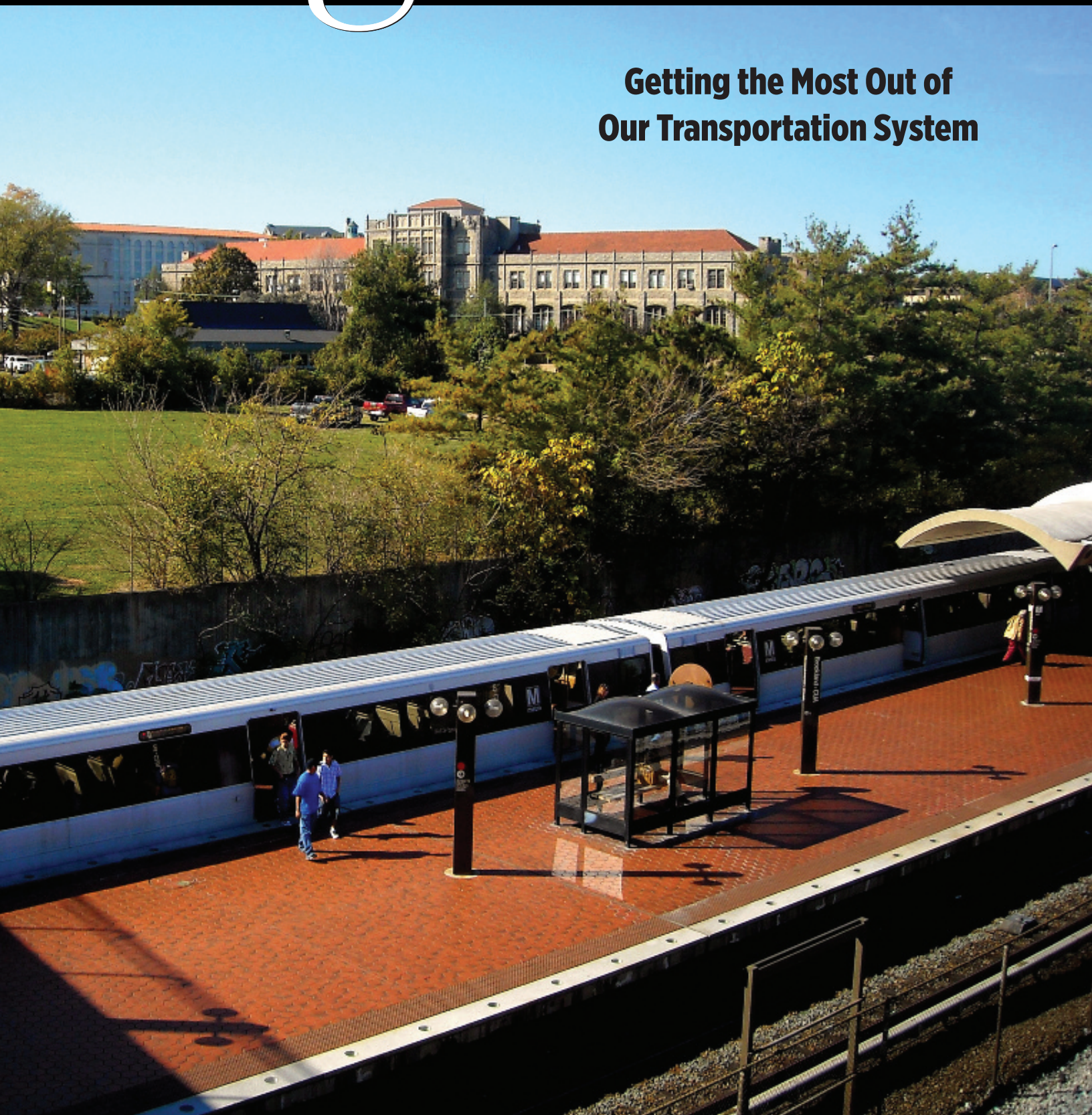
# The Region

VOLUME 51 2012

Annual Review of Transportation Issues in the Washington Metropolitan Region

## Getting the Most Out of Our Transportation System



NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

## What is the TPB?

Transportation planning at the regional level is coordinated in the Washington area by the National Capital Region Transportation Planning Board (TPB). The TPB is staffed by the Department of Transportation Planning of the Metropolitan Washington Council of Governments (COG).

Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia, and the District of Columbia, local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies.

The TPB was created in 1965 by local and state governments in the Washington region to respond to a requirement of 1962 highway legislation for establishment of official Metropolitan Planning Organizations (MPOs). The TPB became associated with the Metropolitan Washington Council of Governments in 1966, serving as COG's transportation policy committee. In consultation with its technical committee, the TPB is responsible for directing the continuing transportation planning process carried out cooperatively by the states and local communities in the region.

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## Getting the Most Out of Our Transportation System

PHOTO BY WAYNE THUME, FLICKR CREATIVE COMMONS

# Making Smart Decisions about Transportation

## Muriel Bowser, 2011 TPB Chair

In these tough economic times, regional leaders must be smart about decisions related to transportation. We need to squeeze as much efficiency as we can out of the existing system by keeping our infrastructure in a state of good repair and implementing programs to manage one-time events, like snow storms or accidents. We need to look to small-scale projects—such as improving pedestrian accessibility to transit or relieving bottlenecks on roads—to make big impacts in our communities. And we need to be sure that we are getting maximum payoff from our big transportation investments by making wise land use decisions about where and how we grow.

As 2011 Chair of the Transportation Planning Board at COG, I am proud that our region is taking a practical approach to the challenges of the future. This edition of *The Region* describes the TPB's work in a variety of pursuits including incident management, congestion monitoring, and programs to address the needs of disadvantaged populations. It also includes information on some of the TPB's long-range planning activities, including a major study on tolling and pricing, and the initiation of a new Regional Transportation Priorities Plan.

Regional coordination through the TPB is helping to make the Washington region a better place today and preparing us for a future that will be economically and environmentally sustainable. As the TPB prepares to conduct outreach for the new Regional Transportation Priorities Plan in 2012, I encourage everyone who cares about our future—whether you're already active or you're new to process—to get involved in helping us identify the most important steps we can take toward meeting our long-range goals.


PHOTO BY M. V. JANTZEN, FLICKR CREATIVE COMMONS

# Monitoring

## Current Transportation Conditions

You can't plan for the future if you don't understand conditions today. The TPB conducts surveys and studies on a continuing basis to develop a current baseline understanding for regional planning. Two studies in 2011—an aerial survey of traffic congestion and a "census" of vehicle registrations—provided new insights into how traffic conditions and the make-up of the region's vehicle fleet are changing.

### Aerial Survey Identifies Biggest Problem Spots for Congestion

Between 2008 and 2011, completion of a few key transportation improvement projects in the region appeared to have greatly reduced traffic congestion in those locations, according to a aerial traffic survey conducted by the firm Skycomp for the TPB in 2011.

But in other locations, construction projects and long-standing bottlenecks continue to contribute to lengthy delays for drivers. Overall, the number of freeway lane-miles in the Washington region with moderate or severe congestion was found to have increased by 31% between the 2008 and 2011 surveys.

The most significant reduction in peak-period congestion identified in the 2011 survey was in the vicinity of the Woodrow Wilson Bridge between Prince George's County, Maryland, and Alexandria, Virginia, where an aging 6-lane structure was replaced with a new 10-lane span.

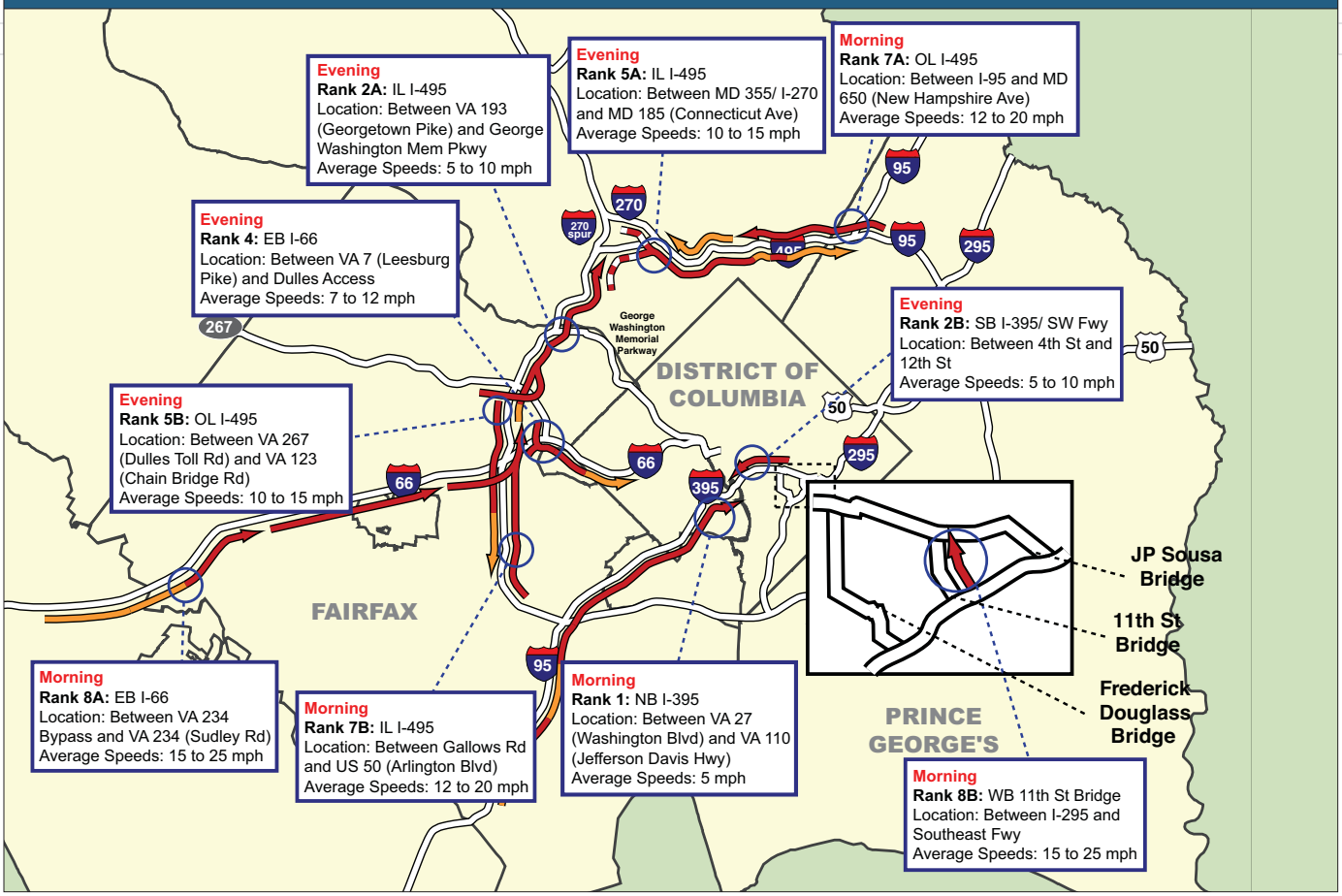
In the westbound direction during the morning peak, segments of the Capital Beltway on and near the Wilson Bridge that saw travel speeds frequently drop below 20 miles per hour in 2008 were found in 2011 to have free-flowing travel speeds of 55 to 65 miles per hour.

The replacement of the Wilson Bridge had long been part of the region's financially constrained long-range transportation plan, or CLRP, which is maintained by the TPB and lists all "regionally-significant" transportation projects and programs that the Federal government and state and local governments in the region plan to build or implement in the coming decades.

A number of other major improvement projects in the CLRP—the Inter-County Connector (ICC) in Maryland, for example, and new High-Occupancy/Toll (HOT) lanes on the Capital Beltway in Virginia—were under construction when the 2011 survey

The most significant reduction in rush-hour congestion between 2008 and 2011 was found in the vicinity of the new Woodrow Wilson Bridge.

## Top Ten Congested Segments on the Metropolitan Washington Freeway System




**Overall, the number of freeway lanes miles with moderate or severe congestion increased 31% between 2008 and 2011.**

took place. Reconstruction of the 11th Street Bridge in the District of Columbia and the first phase of the Metrorail extension to Dulles Airport were also underway. The next aerial survey, planned for 2014, is expected to show that the completion of these projects has brought congestion relief to some additional corridors in the region.

Although construction activities associated with these and other projects contributed in part to the 31 percent increase in the total number of lane-miles of freeway congestion in the region between 2008 and 2011, the most recent survey found many ongoing trouble spots that will need attention in future updates to the CLRP.

In particular, the survey identified the region's "top ten" routes experiencing the greatest estimated travel delay during peak periods, as well as the region's "top ten" most congested bottlenecks.

The I-95/I-395 corridor from US 1 near Woodbridge, Virginia, north to the 14th Street Bridge was found to be the route with the greatest estimated travel delay. A trip along that route that would take approximately 18 minutes in free-flow conditions was found to take almost 63 minutes during the morning peak.

The northernmost segment of I-395 in Virginia, between Washington Boulevard and Jefferson Davis Highway, was found

to be the region's most congested bottleneck, with morning peak period speeds averaging just 5 miles per hour. A proposal to construct HOT lanes and to provide commuter bus service in the I-395 corridor from Edsall Road to Eads Street in Arlington was removed in the 2011 update to the CLRP.

While the 2011 aerial traffic survey revealed welcome relief of freeway congestion in some locations, continuing growth in the total number of congested lane-miles of freeway during the morning and evening peak periods underscores the ongoing transportation planning challenges facing the region.

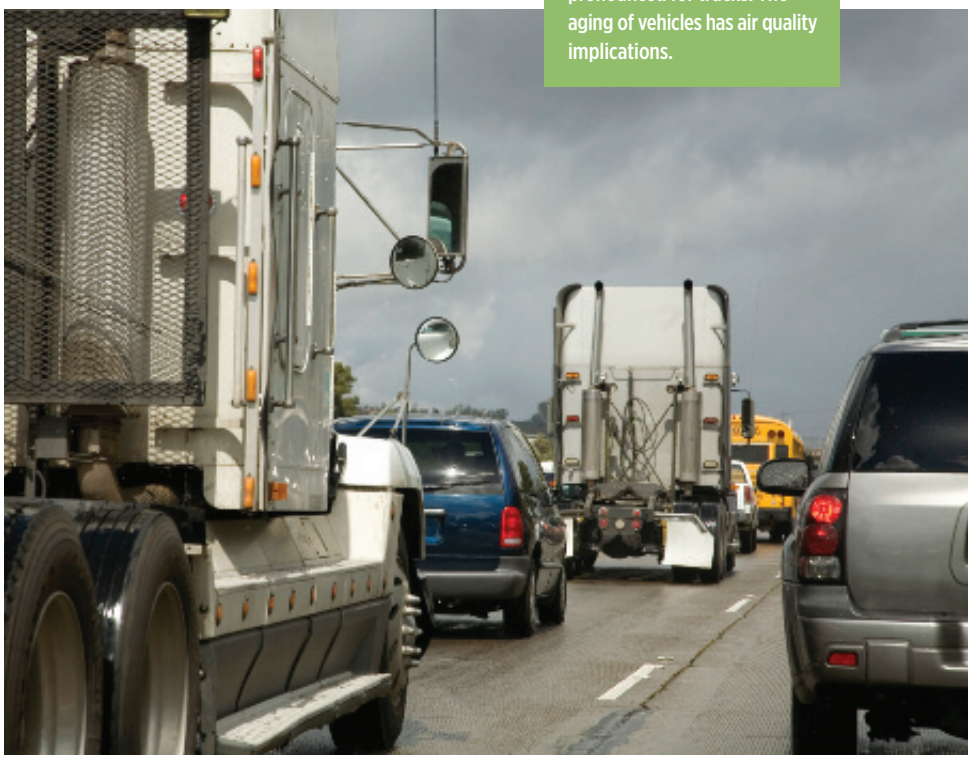
More than 11,000 photographs were taken of the region's 300-mile freeway system for the survey. This study has been conducted every three years since 1993.

## Vehicle "Census" Finds Region's Residents Waiting Longer to Replace Cars

The average age of vehicles on the road in the Washington region is on the rise, according to a vehicle "census" conducted by the TPB in 2011. According to the study, the average age was 1.21 years higher in 2011 than it was in 2005, suggesting that people are waiting longer to replace their cars and that the vehicle fleet is "turning over" at a slower rate. The recession is probably the most significant reason for this trend.

To calculate the average age of the vehicle fleet, the TPB's vehicle census uses the unique vehicle identification numbers (VINs) for vehicles registered by the departments of motor vehicles in the District of Columbia, Maryland and Virginia. TPB staff use computer software to decode the VINs, which produces information about the age and model of vehicles that staff then use to tabulate a "vehicle census" for the region.

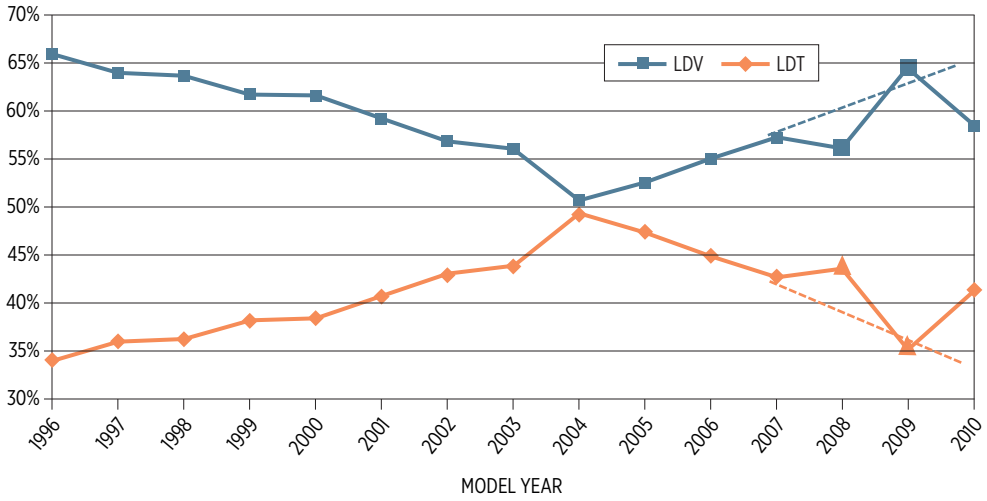
"We know just how many vehicles there are, how old they are, how big they are,



Vehicle aging was more pronounced for trucks. The aging of vehicles has air quality implications.

## Percentage of SUVs Peaked in 2004

### Light Duty Vehicles (LDV) vs. Light Duty Trucks (LDT) 1996-2010




In 2004, light-duty vehicles (which includes SUVs) accounted for nearly half of all registered vehicles. Since 2004, the percentage of SUVs has declined, although that trend has been uneven.

**People who own vehicles have delayed replacing them, which is probably a result of the economic downturn.**

and where they are located," said Ron Kirby, COG Transportation Planning Director. The primary purpose for obtaining the data is to forecast future vehicle emissions in the region more accurately.

The 2011 study showed that people who own vehicles have, in recent years, delayed replacing them, which is probably the result of the economic downturn. Unfortunately, this trend has negative consequences for the region's air quality. "We count on fleet turnover to bring cleaner and more fuel-efficient vehicles into our fleet," said Kirby. "If this turnover rate declines then emissions are not going to go down as fast as we had projected."

The aging of the region's vehicles is more severe for trucks and other heavy-duty vehicles, which disproportionately emit nitrogen oxides and fine particulates —pollutants that are regulated under the federal Clean Air Act.

The vehicle census also found that the popularity of sport utility vehicles (SUVs) has generally declined since 2004, the model year for which nearly half of all of the vehicles registered in 2011 were found to be "light-duty trucks" (which includes SUVs). Of all of the model year 2009 vehicles on the road, the share of SUVs was down to 35 percent. A slight uptick in the proportion of light-duty trucks among model year 2010 vehicles—to 42 percent—reflected an increase in the popularity of larger vehicles that was observed nationwide in 2009 and 2010.

One other interesting trend that emerged from the survey is that hybrid electric vehicles (HEVs) have continued to grow in popularity. While fewer than 5,000 HEVs from each model year between 2000 and 2004 were in the fleet in 2011, almost 15,000 model year 2010 HEVs were registered in the Washington region. The rate of HEV ownership in Northern Virginia is much higher than it is in Suburban Maryland or the District of Columbia, a fact that some have attributed to HEV access to advantageous high-occupancy vehicle (HOV) lanes in Virginia.

Overall, the study found that more than 3.85 million vehicles are registered in the region, which represents more than 1.9 vehicles per household.

# Forecasting

## Future Travel Patterns

PHOTO BY ALEX BARTH, FLICKR CREATIVE COMMONS

The TPB is in the business of forecasting the future. By 2040, for example, regional planners predict that the number of commute trips on public transit will grow by 43 percent. Driving on our roads, which planners measure in vehicle miles of travel (VMT), is forecast to increase by 22 percent.

Many people are unsure about what trips they will make tomorrow, or when and how they might make those trips. How can the TPB predict conditions 30 years from now?

Although it is impossible to predict with certainty the travel behavior of an *individual*, either for tomorrow or for 30 years in the future, it is possible to make fairly accurate predictions of the *aggregate* travel behavior of a population, such as the number of trips from one part of the region to another. This is what regional travel demand models do. Planners and engineers have developed such computer models using information about demographics, the transportation system, and statistical relationships. Using such models, analysts can forecast future transportation system conditions at an aggregate level. These models are designed to predict the aggregate result of millions of decisions that we all make when we travel around the region. Studies show that aggregate travel behavior is actually fairly predictable. Most of us follow regular patterns. And whether we know it or not, these patterns are very much influenced by the transportation options we have available and the ways that land has been developed in our region—where we live, work and shop.

**The TPB's travel forecasting process combines scientific theories, an enormous amount of data and a painstaking level of professional effort to yield a wealth of information about where, when, and how people in our region travel.**

Travel forecasting models enable planners to look at the effects of what has been planned and to test potential changes to land use, the transportation network, or policy variables, such as transit fares. How will new jobs at Fort Belvoir affect traffic? How many riders will use the Silver Line to Dulles? How will different toll levels on the Intercounty Connector affect how many people choose to drive on it? The travel models allow regional planners to consider local and immediate impacts, but also to examine region-wide and longer-term implications. We all make adjustments based on emerging conditions and these changes in travel behavior, which can seem random, are also quite predictable, at least in the aggregate.

## Essential Tools

The TPB's travel forecasting process combines scientific theories, an enormous amount of data and a painstaking level of professional effort to yield a wealth of information about where, when, and how people in our region travel. The modeling process also helps predict how our travel behaviors might change in the future.

The models are essential tools for the development of the TPB's Constrained Long-Range Transportation Plan (CLRP) and the six-year Transportation Improvement Program (TIP). Any time these documents are amended, the region's road and transit networks, including all new projects, are modeled. This process produces travel forecasts, including information on the number of miles people will be traveling (vehicle miles of travel), the way they will travel (mode choice), how fast they will be going, and many other pieces of information.

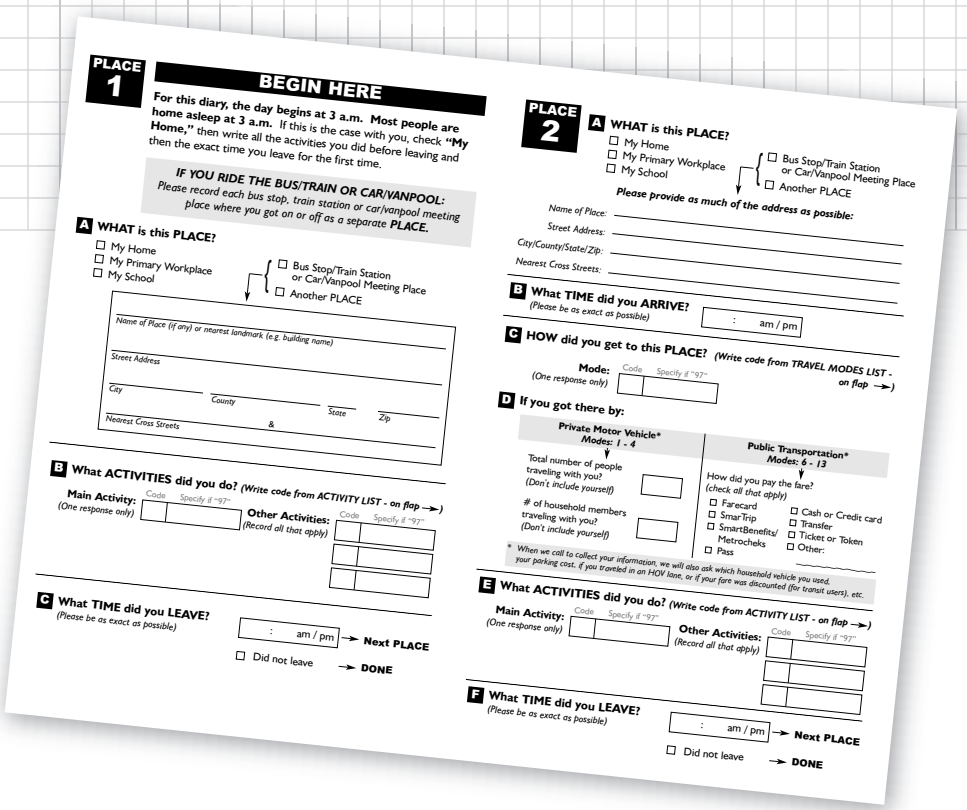
Modeling is required by federal law. Travel forecast data are fed into a separate model that forecasts vehicle emissions levels. This "mobile emissions" model is mandated by the U.S. Environmental Protection Agency. Under the Clean Air Act, the TPB must show the CLRP and TIP are "in conformity" with regional air quality improvement goals. A new conformity finding is required any time the CLRP and TIP are amended to include projects that affect air quality. The TPB's travel forecasting models are also used in various studies throughout the region. State departments of transportation, the Metro system and local transportation departments all use the models to produce corridor studies and other analyses.

## What Goes Into the Models?

The TPB maintains a staff of specially trained transportation engineers with expertise in developing, running and validating models. Staff also performs various types of surveys to obtain data for the models and to check the accuracy of their predictions.

The two basic inputs for applying the travel demand models are:

- *Land use inputs*, including forecasts of future population, households, and employment; and
- *Transportation inputs*, including the current transportation network, and planned or potential changes.



PLACE 1

BEGIN HERE

**For this diary, the day begins at 3 a.m. Most people are home asleep at 3 a.m.** If this is the case with you, check **"My Home,"** then write all the activities you did before leaving and then the exact time you leave for the first time.

*IF YOU RIDE THE BUS/TRAIN OR CAR/VANPOOL:*
*Please record each bus stop, train station or car/vanpool meeting place where you got on or off as a separate* ***PLACE.***

**A WHAT is this PLACE?**
☐ My Home
☐ My Primary Workplace
☐ My School
☐ Bus Stop/Train Station or Car/Vanpool Meeting Place
☐ Another PLACE

Name of Place (if any) or nearest landmark (e.g. building name)
Street Address
City | County | State | Zip
Nearest Cross Streets | &

**B What ACTIVITIES did you do?** *(Write code from ACTIVITY LIST - on flap →)*
**Main Activity:** *(One response only)* Code | Specify if "97"
**Other Activities:** *(Record all that apply)* Code | Specify if "97"

**C What TIME did you LEAVE?** *(Please be as exact as possible)*
: am / pm → **Next PLACE**
☐ Did not leave → **DONE**

PLACE 2

**A WHAT is this PLACE?**
☐ My Home
☐ My Primary Workplace
☐ My School
☐ Bus Stop/Train Station or Car/Vanpool Meeting Place
☐ Another PLACE

***Please provide as much of the address as possible:***
Name of Place:
Street Address:
City/County/State/Zip:
Nearest Cross Streets:

**B What TIME did you ARRIVE?** *(Please be as exact as possible)*
: am / pm

**C HOW did you get to this PLACE?** *(Write code from TRAVEL MODES LIST - on flap →)*
**Mode:** *(One response only)* Code | Specify if "97"

**D If you got there by:**

**Private Motor Vehicle* Modes: 1 - 4**
Total number of people traveling with you? *(Don't include yourself)*
# of household members traveling with you? *(Don't include yourself)*

**Public Transportation* Modes: 6 - 13**
How did you pay the fare? *(check all that apply)*
☐ Farecard
☐ SmarTrip
☐ SmartBenefits/ Metrocheks
☐ Pass
☐ Cash or Credit card
☐ Transfer
☐ Ticket or Token
☐ Other:

* *When we call to collect your information, we will also ask which household vehicle you used, your parking cost, if you traveled in an HOV lane, or if your fare was discounted (for transit users), etc.*

**E What ACTIVITIES did you do?** *(Write code from ACTIVITY LIST - on flap →)*
**Main Activity:** *(One response only)* Code | Specify if "97"
**Other Activities:** *(Record all that apply)* Code | Specify if "97"

**F What TIME did you LEAVE?** *(Please be as exact as possible)*
: am / pm → **Next PLACE**
☐ Did not leave → **DONE**

COG's Cooperative Forecasting Program develops the land use inputs. The data developed through this program, which reflect the best judgment of local planning officials, enable local and regional planning to be coordinated by using common assumptions about future growth. The Cooperative Forecasts combine regional data, which are based upon national economic trends and regional demographics, with local projections of population, households and employment. These local projections are based upon data about real estate development, market conditions, adopted land use plans and the effects of planned transportation improvements.

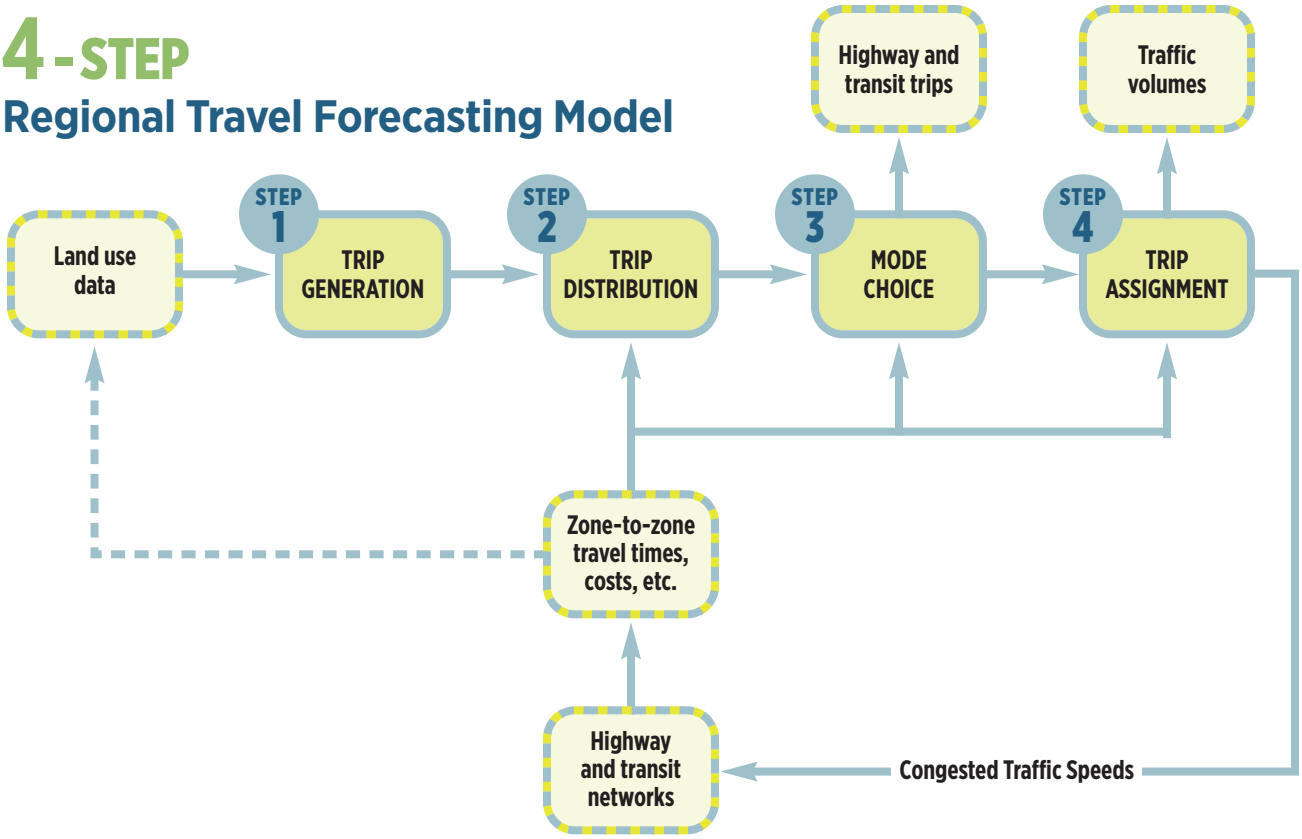
Transportation inputs are a little more straightforward. What facilities and policies, such as Metro fares, are now in place? What projects and other changes are planned? These are the kinds of inputs that are coded into the model. For example, modeling for the CLRP includes the existing transportation system along with changes planned across the region over the next 30 years. The model also can be coded for "what-if" scenarios, asking questions like: What would happen if we add extensive bus rapid transit services to the transit network?

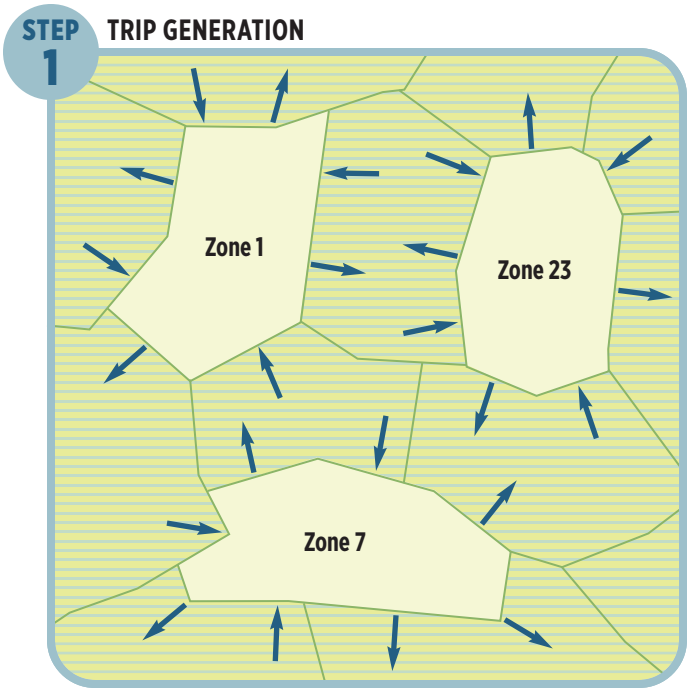
TPB staff performs a variety of surveys that provide data used to develop and validate the travel models. A household travel survey is based on "trip diaries" filled out by randomly selected individuals. For every trip they take, respondents fill out a page-long questionnaire recording where they went, how long it took, how they traveled, and other information. The respondent is also frequently telephoned for follow-up information. On-board transit surveys, such as the 2008 Metrorail Passenger Survey, also provide useful information for developing components of the travel model.

In addition, the TPB staff uses a wide variety of traffic counts to calibrate and validate the travel model. Some of these traffic counts are conducted by automated counters. Others require humans to do the counting, such as when planners need estimates of the average occupancy of vehicles entering the downtown cordon. Other studies focus on transportation demands for certain types of facilities. A freeway monitoring study, performed every three years, uses aerial photography to record the amount of traffic along every stretch of freeway in the region. A survey of travel times on arterial roads is performed using probe vehicles equipped with global positioning system (GPS) receivers. A series of airline passenger

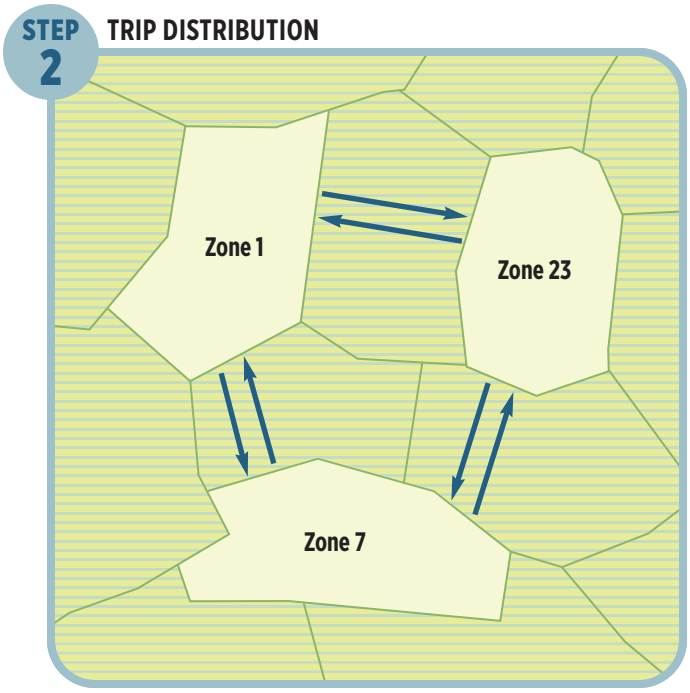
The TPB's Household Travel Survey is based upon "trip diaries" that are filled out by randomly selected individuals. The last survey, which was completed in 2008, surveyed more than 10,000 households.

# 4-STEP
## Regional Travel Forecasting Model




**TRIP GENERATION** in three fictitious traffic analysis zones:
This step estimates the number of trips produced by and attracted to each zone.



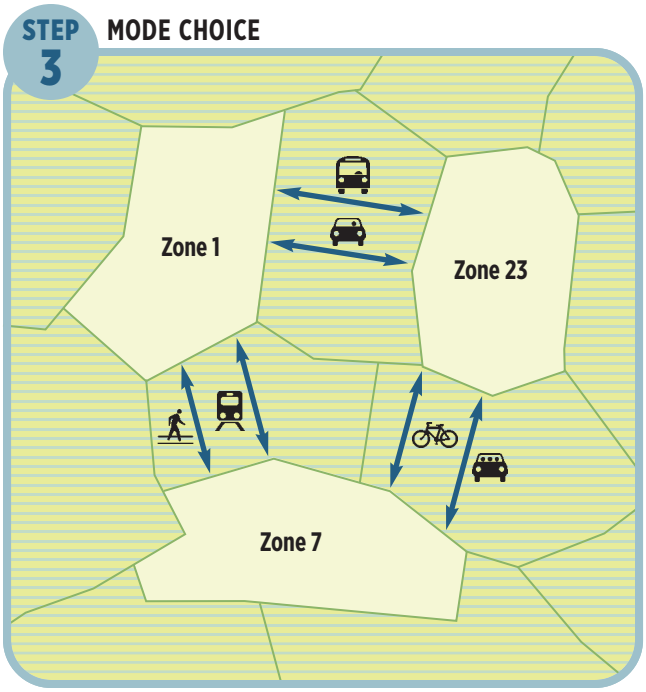

**TRIP DISTRIBUTION** among three fictitious zones:
This step estimates how many trips are going from zone to zone.

surveys, conducted about every two years, provides information on the number of ground access trips to and from the region's three commercial airports. These traffic counts and travel surveys are valuable tools for developing the TPB's travel forecasting model and validating its outputs.

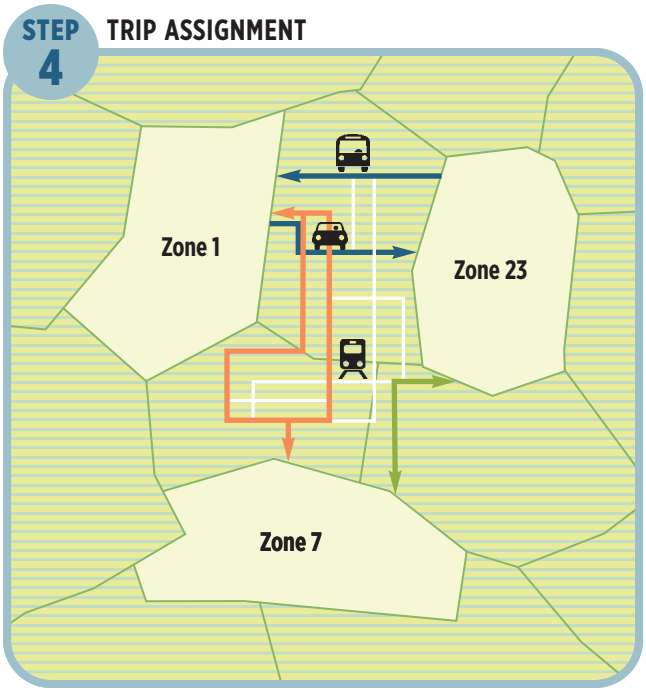
## How Do the Models Work?

Most metropolitan planning organizations (MPOs) in the U.S. that perform travel demand modeling use what is known as a trip-based model (TBM), and the TPB is no exception. These models are also known as "four-step models," since they are made up of four main steps to replicate regional travel behavior:

1. **Trip Generation:** How much travel? The TPB's modeled area extends beyond its member jurisdictions, covering about 6,800 square miles, including Washington, D.C., and counties in suburban Maryland, Virginia, and one county in West Virginia. The modeled area is divided into about 3,700 transportation analysis zones. A zone can be as small as a few city blocks in downtown Washington or as large as 45 square miles in rural areas outside of the TPB member jurisdictions. In trip generation, the model estimates the number of "trip ends" starting or ending in each zone. Each trip has two ends, but these are not connected into actual trips until the next modeling step (below). The model separates trip ends according to purpose—people going to work, shopping, and so forth. Each zone "produces" and "attracts" a certain number of trip ends. The model estimates the number of trip ends produced by and attracted to each zone, based on the residential and




**MODE CHOICE** between three fictitious traffic analysis zones: Estimating the way people get from zone to zone.




**TRIP ASSIGNMENT** between three fictitious traffic analysis zones: Selecting the fastest route between zones.

PHOTO BY ALEX BARTH, FLICKR CREATIVE COMMONS

employment characteristics of the zone. For example, a zone in downtown Washington would attract far more morning trips than it produces, since it has far more jobs than households.

2. **Trip Distribution:** Who goes where? This second step connects the trip ends estimated in the previous step into complete trips, from a production zone to an attraction zone. For example, after step one estimates the number of work trip ends produced by a zone in Gaithersburg, step two connects all those trip ends to other zones around the region—to downtown DC, to nearby suburbs, to Northern Virginia, and elsewhere. These trips are stored in zone-to-zone trip tables. Modelers invoke Newton's law of gravitational attraction at this point. In planetary science, this theory says that the greater two planets are in size, the greater the gravitational pull between them. Similarly, in transportation modeling, the larger two zones are (in terms of jobs, households or both), the more trips they will generate between them. By contrast, gravitational pull, or the number of trips between two zones, is inversely related to the distance between them. So, for example, a Falls Church resident feels more "gravitational pull" to Tysons Corner than to a shopping center in Montgomery County, since the latter is farther away.

3. **Mode Choice:** How do people travel? Drive or walk? Bus or train? In step three, the model determines how people are likely to get around based on the relative attractiveness and availability of each transportation option. The model considers factors like the accessibility of mass transit, automobile ownership and proximity to carpool lanes. It also factors in costs and time required to use the mode of travel. Cost variables include the price of gas and parking, transit fares, and other expenses. Time considerations include time waiting for trains and buses, time for transfers, time to drive and park, and time to walk to a final destination. These and numerous other factors are plugged into a series of equations estimating the probability of each traveler selecting each mode.

4. **Trip Assignment:** What routes do travelers take? Finally, the model selects the best "paths" for travelers to take. It assumes people will take the quickest route, avoiding traffic jams and bottlenecks where they may occur. The model looks at each type of trip and determines the best path—in terms of both time and distance—to get from zone to zone.

The whole modeling process takes a lot of time, both to develop the models and to run them. The models currently include computerized representations of more than 45,000 "links" representing road segments, hundreds of transit lines, and travel data for more than 13 million ($3{,}700^2$) zone-to-zone pairs. Depending on the application, each model "run" can take as much as 30-40 hours of computer processing time, which does not include time to set up the

## A Finer Grain of Detail in Forecasting Travel: Tysons Corner

By increasing the number of traffic analysis zones, the new TPB model will more accurately predict non-motorized travel in places like Tysons Corner, which will become dense, walkable activity centers in the coming years.

model run and analyze its results.

### Enhanced Model, More and Better Outputs

In 2011, the TPB launched an updated travel demand model, known as the Version 2.3 Travel Model. The enhanced model has been developed using the TPB's 2007/2008 Household Travel Survey and several on-board transit surveys. It has also been developed with a finer detailed zone system than the previous model. The zone system is an arrangement of small geographic areas that are used to generate travel patterns. The new model features 3,722 "transportation analysis zones" (TAZs) compared to 2,191 TAZs under the previous model. This new model is also better able to model bicycle and walking trips, non-work transit use, and the time of day when trips are made.

Speaking before the TPB in January of 2011, Ron Milone of the TPB staff said the improvements in the model were designed to provide more detailed information related to the region's goals, including those articulated in the TPB Vision and COG's Region Forward policy document from 2009. "Decision makers are interested in providing a broad range of transportation choices, maximizing accessibility, minimizing reliance on single-occupant autos, creating dynamic mixed-use activity centers. These are all very important goals that we're aspiring to, and the Version 2.3 model was really developed with these types of goals in mind," said Milone.

In particular, Milone emphasized the importance of increasing the number of traffic analysis zones—almost twice the number of zones compared to the earlier model—and the fact that the new zones are now much smaller in size on average. He said the new zones were heavily influenced by the TPB's interest in promoting concentrated development in activity centers. "We're able to get the regional model to be more sensitive to development patterns," said Milone. "We're able to look at finer densities, which is the basis of understanding non-motorized travel, for the most part. It's pretty clear from the research, if you want to do better at modeling bicycle and walking, you really have to have more zones."

Chris Zimmerman, Arlington County Board Member, spoke in support of the model enhancements. "I'm very encouraged by the tremendous increase in fine-grain detail," he said. "I think it has potential to really enhance the quality of the data and its usefulness."

# Preparing
## for Disruptive Weather and Unexpected Events

In the wake of the late-afternoon snowfall of January 26, 2011, which brought traffic on the region's roadways to a standstill during the evening commute and left thousands of homes and businesses without power, the Transportation Planning Board supported regional actions to strengthen coordination and preparedness protocols for such disruptive events.

A number of actions were recommended as part of an eight-month-long review by the Steering Committee on Incident Management and Response (IMR), a group formed by the Metropolitan Washington Council of Governments in the weeks following the January 26 storm. A number of TPB member agencies participated on the Steering Committee.

The IMR committee was charged with reviewing the region's response to the storm and making recommendations that would enable transportation and other agencies to coordinate more effectively just before and during expected disruptive weather events, and to coordinate better during and just after other unexpected events like the unanticipated earthquake that hit the region on August 23, 2011.

The committee's main overall recommendation was the creation of a new Regional Incident Coordination (RIC) program. The key role of the RIC program is to monitor and communicate important information on a 24/7 basis to relevant government agencies that are responsible for responding to disasters and other major incidents, including disruptive weather events. The RIC program was initiated in April 2012, hosted by the District of Columbia Homeland Security and Emergency Management Agency.

The IMR committee's main transportation-related recommendation was that the Metropolitan Area Transportation Operations Coordination (MATOC) program, which is dedicated to monitoring traffic and weather conditions on the region's roadways and coordinating responses to major incidents, expand its hours of operation to 24 hours a day, seven days a week.

MATOC has typically operated 16 hours a day, five days a week, with the ability to "ramp up" to temporary 24/7 operations on an as-needed basis, which it did during the January 26 storm.

The MATOC Steering Committee, which oversees MATOC operations, has said that

**MATOC is dedicated to monitoring traffic and weather conditions on the region's roadways, and coordinating responses to major incidents.**

supporting permanent 24/7 operations is one of several options still under consideration.

However, the initiation of the RIC program provides 24/7 monitoring of the region for potential incidents, including the opportunity for RIC to request off-hours activation of MATOC on an on-call basis even without permanent 24/7 operations for MATOC itself. Since its creation, RIC has worked closely with MATOC on coordinating activities and operations.

In addition to expanded hours of operation, the IMR committee also recommended that MATOC play a bigger role in providing up-to-date information on developing traffic and weather conditions to those making decisions about such things as the release of schools and office personnel just before or during major weather events.

The MATOC Severe Weather Mobilization Coordination Effort, conducted at the direction of the MATOC Steering Committee, convenes key snow response managers from the major transportation agencies in the region to discuss what MATOC staff can do to help the agencies coordinate their response to major weather events and to communicate with other officials and the public about developing weather conditions.

The effort developed consistent terminology to describe roadway and transit conditions throughout the region, protocols for sharing weather information from different agency-specific sources and detection systems, testing of coordinated messaging systems, and better ways to advise the overall regional winter storm decision-making process.

The other main transportation-related recommendation identified in the IMR report was to determine how many of the region's traffic signals currently have back-up power sources and to ensure that all major traffic signals have back-up systems in place.

A survey by TPB staff of 20 agencies and jurisdictions in the region found that, of more than 5,400 traffic signals surveyed, approximately 20 percent were equipped with some sort of power back-up system as of early 2012.

A majority of the signals with power back-ups are battery-based systems that engage immediately following a power outage but have limited duration. The remaining signals are capable of being powered by mobile generators that must be brought to the site but that can operate for longer periods of time.

The share of traffic signals with power back-up systems in place varies significantly across agencies and jurisdictions, with many reporting no or very few signals with back-up power, a few with between one-quarter and two-thirds of signals with such systems, and two—Prince George's County and the City of Bowie—reporting that 100


PHOTO COURTESY OF FAIRFAX COUNTY

Virginia Railway Express (VRE) conducts a disaster exercise which simulates a train derailment resulting from a terrorist attack.

percent of the signals they maintain are equipped with back-up power systems.

The TPB's Traffic Signals Subcommittee has reported that agencies responsible for traffic signals have long been aware of the importance of back-up power, and have been installing systems as budgets have allowed. But, they said, the ongoing maintenance responsibilities and costs for back-up systems has been of concern given limited operations budgets.

The Subcommittee plans to continue focusing on critical intersections at which operating traffic signals would most be needed during widespread power outages.

The TPB will continue to address key IMR transportation recommendations, including MATOC and RIC staffing and operating hours, the MATOC Severe Weather Mobilization Coordination Effort, and the Traffic Signals Subcommittee concentration on priority signals in need of back-up power.

But already, the changes that have been made and the plans that have been put in place as a result of the January 26, 2011 snow storm will improve the region's ability to respond to future extreme weather disruptions, as well as unexpected events.

inBrief

# Rising Gas Prices

## Encourage Commuting Alternatives

When prices at the gas pump are on the rise, more Washington area commuters turn to the region's Commuter Connections program in search of information about joining carpools or vanpools or finding other ways to save money on their monthly commuting costs.

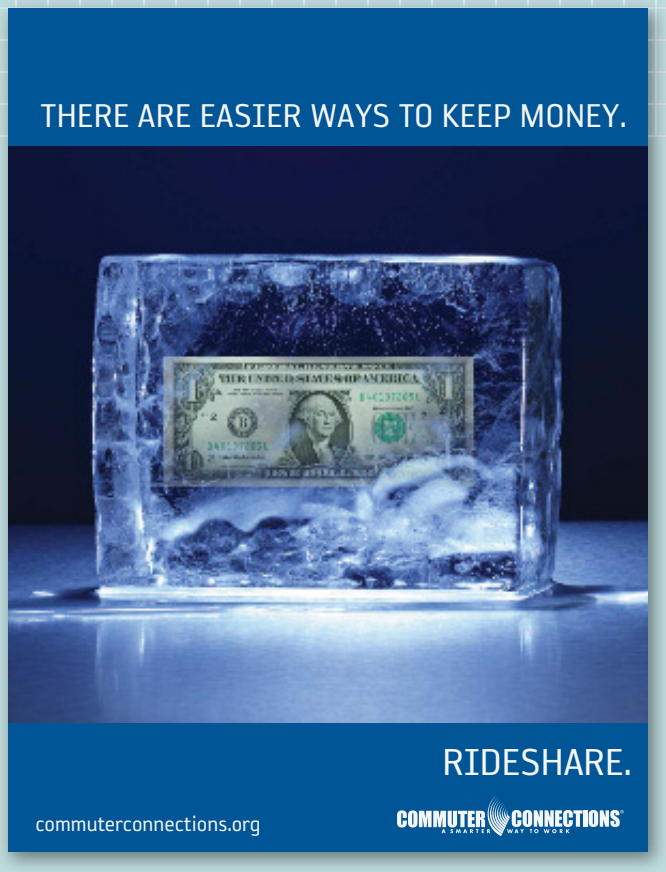
In 2011, Commuter Connections received 20% more applications from commuters interested in carpooling or vanpooling than it did in 2010. In 2011, the average price of a gallon of gas in metropolitan Washington was 27% higher than it was in the previous year.

Because spending on transportation is the second largest monthly expense for an average household behind housing, economizing on commuting costs can result in significant monthly savings for individuals and families. And because changes in travel behavior are often much easier to make in the short run than changes in housing arrangements, finding cheaper alternatives to driving alone can mean immediate savings.


According to the American Automobile Association (AAA), in 2011 the average cost of owning and operating a personal vehicle was 58.5 cents per mile. Of that, 17.7 cents was spent on fuel and maintenance expenses, while the other 40.8 cents was spent on ownership costs—insurance, licensing, registration, taxes, depreciation, and finance charges.

For a commuter with a one-way commute of 20 miles, fuel and maintenance costs alone add up to nearly $150 a month. By joining a carpool with just one other person, an individual could reduce those commuting costs by half. And being part of a three-person carpool would cut monthly spending on commuting by two-thirds.

Those with longer commutes and those who frequently must waste time and gas sitting in traffic—like on I-395 northbound, where the TPB's 2011 aerial traffic survey found that travel speeds averaged just five miles per hour during the morning commute—stand to save significantly more,




especially if they can avoid congestion by using high-occupancy vehicle (HOV) lanes.

And individuals who are able to give up a vehicle altogether as a result of finding alternatives to driving alone to work could save an additional $500 a month or more, according to AAA.

Since 1974, the Commuter Connections program has been helping Washington area commuters find better ways to get to work. What began as a program to help commuters find potential carpool partners in their area today helps people organize or join vanpools, provides information about transit options and tips on commuting by bicycle or on foot, and works with employers to set up telework and other commute benefit programs for their employees.

Commuter Connections also offers the Guaranteed Ride Home (GRH) Program, which provides free taxi rides home up to four times a year for commuters who rideshare or take transit and need to get home in the middle of the day due to unexpected emergencies like personal illness or a sick child. The program can also be used for unexpected overtime when an employee is required to stay late at work.

And Commuter Connections benefits more than just those individual commuters who take advantage of its free services.

In 2011, the cumulative effects of Commuter Connections helping more people share the ride to work, take transit, or bicycle, walk, or telework, reduced the number of vehicles on Washington area roadways each day by 126,000. That amounted to a daily reduction in driving of 2.4 million miles, significant reductions in emissions of harmful, smog-forming pollutants, and less congestion on the region's roadways.

In uncertain economic times, and when gas prices are prone to steep rises with little notice, the immediate savings offered by carpooling, vanpooling, and other commute alternatives can make a big difference in household budgets. And when more people choose modes other than driving alone to work, the entire region enjoys reduced congestion and improved air quality.

inBrief

# Grant Programs

## Help Make Transportation Connections for Vulnerable Communities


PHOTO COURTESY OF EASTER SEALS PROJECT ACTION

Travel training programs help people with disabilities learn to use Metrorail and Metrobus.

The results of a 2011 review of the TPB's Job Access and Reverse Commute (JARC) and New Freedom federal grant programs, presented to the TPB in January 2012, offered praise for the TPB but also some suggestions for changes in project selection, grant administration and project monitoring.

The two programs, which support job-related transportation for low-income workers and improved access for persons with disabilities, are sponsored by the Federal Transit Administration (FTA). Since 2007, the TPB has awarded 35 JARC and New Freedom grants in the region totaling $10.3 million.

Board Member Patrick Wojahn, who chairs the TPB's Human Service Transportation Coordination Task Force, explained that the 2011 review of the JARC and New Freedom programs had three purposes: to review the TPB's administration and oversight of the program; to assess the grants that have been funded to date; and to compare the TPB's program with those of nine peer agencies and organizations around the country.

Wendy Klancher of TPB staff presented the major findings and recommendations of the review, which included especially good marks for the variety of projects and organizations funded through the programs, ranging from fixed-route services, travel training for people with disabilities on how to use Metrorail and Metrobus, and auto loan programs for low-income individuals who don't have good access to transit. The review also praised the TPB's proactive role in administering the programs, successful obligation of all available funds from FTA, and the robust project selection process employed by the TPB.

The review found that some of the grant applications overestimated the number of people they thought they could serve. The review also identified challenges posed by Federal requirements and uncertain future funding. For example, there is a reluctance among potential applicants to start new programs when future funding under the two-year, competitive selection process is uncertain. The review also found that potential applicants often encounter difficulty securing the local match required to receive federal grant dollars.

Wheelchair accessible taxicabs were put into service in November 2009. Pictured, left to right: Bobby Coward, president of DC Adapt; Judy Heumann, Director, DC Department of Disability Services; DC Councilmember Muriel Bowser, chair of the Human Service Transportation Coordination Task Force; and David Sharp, president of Crossroads for Accessible Living.

In response, the TPB's Human Service Transportation Coordination Task Force has proposed the following changes in the coming year:

- making project application templates available to applicants to help them develop more robust applications,
- rotating selection committee members more often,
- strengthening grant performance measurements and monitoring to help identify recipients in need of additional assistance, and
- soliciting for projects every two years rather than annually.

The benefit of moving to a biennial solicitation, Klancher explained, is that there would be a bigger pot of money for grantees. "They still have to come up with a match, which is a challenge, but the task force would have more time to help develop regional projects…and help find the matching funds," she said.

Board Member Paul Smith, from Frederick County, expressed interest in maintaining the annual solicitation process, explaining that "having the more frequent grants would give an opportunity for more grants around the region."

Klancher explained that such concerns should be directed to the Human Services Transportation Coordination Task Force, which will be deciding on the possible changes. Finally, in light of ongoing discussions about reauthorization of the federal transportation program, the TPB voted to send letters to the Association of Metropolitan Planning Organizations (AMPO) and the American Public Transportation Association (APTA) outlining changes to the federal program that were also recommended in the review.

"These organizations…are engaged in discussions with federal legislators about reauthorization of the surface transportation program, and those recommendations could be useful to them while they're doing their work," explained Board Member Jonathan Way, of the City of Manassas.

inBrief

# TPB Freight Group

## Highlights Top-Ten Needed Improvements

### Top 10 Freight Transportation Projects

| | Railroad/Jurisdiction | Long/Short Term |
|---|---|---|
| | **RAIL** | |
| | **CSX** | |
| 1 | CSX National Gateway Corridor | Long-Term |
| 2 | CSX Virginia Avenue Tunnel | Short-Term |
| | **Norfolk Southern** | |
| 3 | NS Crescent Corridor | Long-Term |
| 4 | NS 5.8 Mile B-Line Expansion | Short-Term |
| | **HIGHWAY** | |
| | **DC** | |
| 5 | Weigh Station within DC Boundaries | Long-Term |
| 6 | Uniform Commercial Curbside Loading Zone Program | Short-Term |
| | **MD** | |
| 7 | Relieve congestion along I-95/I-495 from Woodrow Wilson Bridge to Howard County Boundary | Long-Term |
| 8 | I-70 Phase 4 | Short-Term |
| | **VA** | |
| 9 | Relieve congestion along I-95 from Prince William County Southern Boundary to MD Boundary | Long-Term |
| 10 | I/66 and I/495 Access Improvements | Short-Term |

Nine major highway and rail improvements throughout metropolitan Washington and one ongoing program to facilitate better curbside commercial loading in the District of Columbia make up a list of ten key freight-related transportation improvements that are needed to better accommodate increasing truck and freight rail traffic in the region.

The list of "Ten Highlighted Freight Projects" was assembled in 2011 by the TPB's Freight Subcommittee, a group of regional stakeholders representing state and local departments of transportation and the rail, truck, and air freight industries. The list includes projects or programs in each of the region's three state-level jurisdictions, a mixture of rail and highway improvement projects, and a combination of specific, short-term projects and longer-term improvements for major freight corridors.

Because freight traffic shares many of the region's roads and railways with passenger traffic, and because the Washington region's service-based economy relies so heavily on the efficient delivery of goods to retail outlets, offices, residences, and schools, the Transportation Planning Board established a freight planning program in 2007 dedicated to integrating freight issues into the regional transportation planning process. In 2008, the TPB established a Freight Subcommittee to address regional freight transportation concerns, and in 2010 and 2011 that committee worked to develop a set of highlighted improvements.

In terms of cost, the biggest short-term improvement on the list is reconstruction of the rail tunnel under Virginia Avenue SE in the District of Columbia to accommodate double-track, double-stack freight rail movements through the city.

Currently, freight trains carrying double-stacked cargo containers are unable to use the 100-year-old tunnel, while single-stack trains that can use the tunnel must often queue for long periods of time at either end while they wait to use the tunnel's single track. Trains queuing at the western end of the tunnel interfere with Amtrak and Virginia Railway Express (VRE) passenger traffic leaving from or approaching Union Station.

The $160 million Virginia Avenue Tunnel project is one of CSX Corporation's many priorities in carrying out its National Gateway program,

a $774 million effort to clear 61 obstacles or bottlenecks in six mid-Atlantic and Midwestern states in advance of a 2014 widening of the Panama Canal. The widening will allow ships capable of carrying twice as many cargo containers to reach East Coast ports like Baltimore and Norfolk, driving up demand for double-stack trains that can carry twice as many cargo containers to inland destinations.

Norfolk Southern, the other major freight rail operator in the Washington region, is pursuing a similar effort to increase capacity and efficiency on its major East Coast routes. One key local project in its $2.3 billion, 13-state Crescent Corridor program is expansion of a 5.8-mile rail link between Manassas and Balls Ford Road in Prince William County that will relieve a major chokepoint for freight traffic as well as for Amtrak and VRE passenger trains.

Reconstruction of the rail tunnel under Virginia Avenue SE will cost $160 million. Double-stacked cargo containers are currently unable to use the 100-year old tunnel, while single-stacked trains often queue for long periods to use the tunnel's single track.

A number of short- and long-term highway improvements are also on the region's list of highlighted freight-related transportation projects.

The key short-term improvement in Maryland is to increase capacity along a four-mile stretch of I-70 in Frederick County. In Virginia, construction of a new exit ramp from eastbound I-66 to northbound I-495, which is currently underway, will relieve a major bottleneck for trucks at the interchange.

In both states, major long-term improvements to the I-95 corridor were identified as important because they would relieve existing congestion and accommodate anticipated growth in truck traffic traveling through the region, as well truck traffic serving needs within the region. The improvements to I-95 in Maryland are projected to cost between $3 billion and $5 billion.

Finally, the list includes two efforts to better accommodate future increases in road-based freight traffic in the District of Columbia: one, a uniform commercial curbside loading zone program that would clearly designate areas for loading and unloading of commercial vehicles; and two, construction of a weigh station within the city limits to enforce size and weight standards along one or more of the District's high-volume truck routes. The curbside loading program would cost $300,000 a year, while construction of the weigh station would cost at least $8 million.

# Street Smart Campaign

## Raises Awareness of Safety Laws


The TPB's Street Smart campaign used absurd and ironic imagery in 2011 to call attention to the region's pedestrian and bicycle safety problems. Under the headline "A Giant Pedestrian Safety Problem," the campaigns ads featured a huge pedestrian foot or a huge bicycle with cars and buses crashing into them. "It's edgy, it's visually striking, and it gets your attention," said George Branyan, pedestrian safety coordinator for the District Department of Transportation.

The TPB's "Street Smart" campaign uses mass media to educate motorists, pedestrians, and bicyclists about the region's traffic safety laws. During the campaign period, area jurisdictions also step up enforcement of the laws in areas with higher-than-normal accident rates. The TPB, in partnership with the Council of Governments, conducts the month-long campaign twice annually, in the spring and fall.

Street Smart is a cooperative effort by numerous local, state, and federal agencies to reduce the number of pedestrian and bicyclist injuries and deaths in the Washington region. In 2011, there were 68 pedestrian fatalities in the region resulting from collisions with vehicles and five reported bicyclist fatalities. Both numbers have remained relatively constant on a year-to-year basis since the late 1990s.

By comparison, the number of motorists and vehicle passengers killed in traffic accidents has declined steadily since 2001—from 351 to 184. As a result, pedestrian and bicyclist fatalities have, in recent years, come to represent nearly 30 percent of all traffic-related deaths in the region, compared to just 19 percent in 2001.

To be most effective, Street Smart aims to reach those who engage in the riskiest behavior, whether they're on foot, on a bicycle, or behind the wheel of a car. In particular, the campaigns seek to reach pedestrians who fail to use crosswalks or don't follow pedestrian signals, cyclists who ignore traffic signs and rules, and drivers who drive too fast, ignore crosswalk laws, or are distracted by cell phones or other electronic devices.

Two groups—immigrants who live in the region and tourists who are


visiting—are especially at risk, as they are often less familiar with local roads and traffic rules.

A variety of communication platforms bring the Street Smart message to its target audience, including radio, television, the Internet, and outdoor advertising.

For two weeks of the month-long campaign, audio spots play on several of the region's radio stations, including a few Spanish-language stations. Video spots play during primetime on a handful of cable networks, while printed promotional materials fill advertising space on the sides, backs, and interiors of buses and on bus shelters. A website and social media—including Facebook and Twitter—are also used to spread the word.

To complement the mass media campaign, enhanced enforcement of local safety laws helps raise public awareness even further. In 2011, the Prince George's County Police Department was the latest law enforcement agency to join the regional campaign. Numerous police and emergency response officials from the County attended a media event on March 28, 2012, in District Heights, Maryland, to promote Street Smart and to conduct "live enforcement" of traffic safety laws there.

Since it began in 2002, the Street Smart program has relied mostly on federal funds made available through various state agencies interested in promoting bicycle and pedestrian safety. Several local jurisdictions have also supported the campaign on a voluntary basis. Beginning in July 2012, however, the Metropolitan Washington Council of Governments will provide a dedicated source of funding for Street Smart using contributions from each of COG's member jurisdictions.

The Washington region continues to make bicycling and walking more desirable and practical, through efforts like Capital Bikeshare and promoting walkable, mixed-use development patterns. The semi-annual Street Smart campaign supports those efforts by raising awareness of traffic safety laws and reducing the number of bicycle and pedestrian fatalities that occur each year.

.inBrief

# TPB Adopts Regional "Complete Streets" Policy

DAN BURDEN, WALKABLE AND LIVABLE COMMUNITIES INSTITUTE, INC.

Complete Streets are safe, comfortable, and convenient for travel for everyone, regardless of age or ability— motorists, pedestrians, bicyclists, and public transportation riders.

The elected officials and transportation agency representatives who sit on the Transportation Planning Board agree: designing, building, and operating streets that enable safe access for all users and potential users, including pedestrians, bicyclists, motorists, and transit riders of diverse ages and abilities, should be a goal of every local jurisdiction and transportation agency in the Washington region.

In May of 2012 the TPB adopted a resolution officially endorsing the elements of an approach to roadway design known as "Complete Streets," and encouraging local jurisdictions and transportation agencies to adopt new implementation policies or to revise existing policies to include the core elements and best practices associated with the approach.

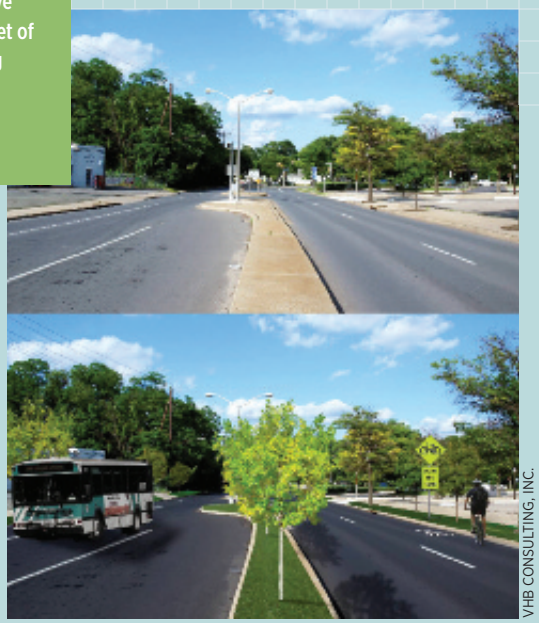
The term "Complete Streets" has been part of the national conversation on transportation since 2005, when the National Complete Streets Coalition began promoting the approach under that name. Some laws requiring that roadways be built to accommodate users of modes other than automobile —especially bicycling and walking—have been in place since as far back as 1971 when the state of Oregon passed its "Bicycle Bill" stipulating that "footpaths and bicycle trails... shall be provided" as part of every transportation project.

Today, 26 states have adopted policies reflecting the spirit or core principles of "Complete Streets," as have 31 metropolitan planning organizations (MPOs) like the TPB.

The TPB's pursuit of a regional "Complete Streets" policy began in June 2011, when its Citizens Advisory Committee (CAC) requested that the TPB work to develop and approve a policy to encourage local jurisdictions to adopt polices calling for the safe accommodation of a range of users, where appropriate and feasible, in designing new roadways and making major improvements to existing roadways.

The CAC cited the value of "Complete Streets" in supporting already-established regional goals related to creating walkable, mixed-use communities, promoting public health and fitness, supporting economic activity and tourism, protecting the environment, and ensuring equitable access to the region's transportation system. It also pointed out that

The TPB funded a TLC project in 2009 that developed Complete Streets standards for the City of Rockville. The pictures above illustrate a recommended set of standards, including adding sidewalks with buffers and landscaping, for a business district road.



VHB CONSULTING, INC.

jurisdictions and transportation agencies could save money in the long run by integrating multi-modal accommodations into the design of transportation facilities from the beginning rather than facing expensive retrofits later.

While several local jurisdictions in the Washington region have a "Complete Streets" policy in place already—or an implementation policy that includes key elements similar to those associated with "Complete Streets"—some do not. So, in addition to its official policy statement endorsing the "Complete Streets" approach, the TPB approved a policy template that jurisdictions can use to take advantage of best practices in developing or revising their own policies.

To help the public follow the progress of local jurisdictions in adopting and implementing "Complete Streets" policies, the regional TPB policy also calls for local jurisdictions and the TPB to document and report which jurisdictions have adopted policies, which have built or made significant improvements to bicycle and pedestrian facilities, and whether new projects slated for construction conform to locally-adopted policies.

In adopting a regional "Complete Streets" policy, the TPB has taken a significant step toward making roadways in the Washington region safer and friendlier for travelers of diverse ages and abilities to get to work, to school, to medical appointments, or to any number of other important destinations.

## TLC Program Promotes Streets Designed for All Users

Since 2007, the TPB's Transportation/Land-Use Connections (TLC) Program has funded nearly 60 small planning projects among the TPB's member jurisdictions. Many of these projects have supported a "complete streets" approach by enhancing pedestrian and bicycle connectivity and safety, access to transit, and accessibility for people with disabilities. Two TLC projects, in Rockville and Prince George's, have specifically funded the development of complete streets policies at the jurisdictional level.

In Rockville, a TLC project in 2009 was used to recommend revisions to the city's "Standards and Details for Construction" which now reflect the most current multimodal design standards for new and retrofit road projects. Like many suburbs, many streets in Rockville were designed for automobile transportation, and lack facilities such as sidewalks, bus shelters, and bicycle lanes.

A 2008 TLC planning study for Prince George's Plaza provided recommendations for pedestrian and bicycle access and safety around the Metro station area, which has been the site of recent transit-oriented development (TOD). Complete streets principles developed for this study became the basis for the county-wide Complete Streets Policy of the new Prince George's Master Plan of Transportation, adopted in 2009.

inBrief

# Talking with the Public about Congestion Pricing

It's a familiar idea: If you use something when it's in high demand, you often pay more. We pay more to fly during the holidays and less for movies during matinee hours. Should that same principle apply to road use? Last year, the TPB conducted a series of forums to see what average citizens think about that question.

The citizen forums focused on "congestion pricing," an approach to road tolling in which drivers pay more in places and at times when congestion is worse. Public officials, planners and academics increasingly see congestion pricing as a useful tool for making driving on our roads more predictable and to provide funding for necessary transportation improvements. Needless to say, the public is less enthusiastic.

The TPB, in partnership with the Brookings Institution, conducted five forums—two in Maryland, two in Virginia and one in the District of Columbia —between October 2011 and January 2012 for this study, which was funded through a grant from the Federal Highway Administration's (FHWA) Value Pricing Program (VPP).

The project builds upon the TPB's past work on pricing, including scenario analysis of regional variably-priced lane networks combined with high-quality bus services and concentrated land-use patterns. The project also is directly linked to a report released in June 2009 by the Brookings Institution titled, "Road-use Pricing: How Would You Like to Spend Less Time in Traffic?" in which authors Alice Rivlin and Benjamin Orr proposed an experiment to implement a comprehensive GPS-based road-use pricing initiative in the Washington metropolitan region.

A series of invitation-based *deliberative forums* was used in the TPB study to explore attitudes toward a variety of hypothetical pricing options. The nationally-known non-profit AmericaSpeaks was engaged to conduct the forums, each of which lasted 4½ hours and included 60 to 70 members of the general public.

Presentations at the forums provided background on the current and projected state of transportation funding and congestion, and asked participants to consider three scenarios for congestion pricing. These

scenarios included: 1) a regional network of variably-priced lanes on all freeways and some other major roadways; 2) variable pricing on all streets and roads (based upon Brookings' 2009 proposal) using vehicle-based GPS systems; and 3) zone-based charges in which drivers pay a fee to enter (or to drive within) a designated area or zone (a "cordon") similar to the system implemented in London.

Participant opinions about these scenarios were documented through keypad voting and through notes that were taken at each discussion table by scribes. These notes were synthesized in real time by a "theme team" that prepared distilled summaries that were presented to participants throughout the forums. Paper surveys were also used to measure the relative impact of key factors (such as concerns about privacy or equity) in determining the intensity of participant reactions to various scenarios. Participants, who were each paid a stipend, were recruited to reflect a representative sampling of the region's population.

By engaging the public in an extended exchange of ideas, opinions and reactions, the project sought to identify challenges and opportunities that decision makers would face if they were to move forward with implementing options for road-use pricing.

TPB staff were still in the process of analyzing the results of the forums in the spring of 2012. However, preliminary review of the data suggests that the public has doubts about congestion pricing's effectiveness in relieving congestion, and tends to assume it is primarily a mechanism to increase revenues, an activity about which they are suspicious. Over the course of the forums, participants did come to accept that transportation funding shortfalls are a growing problem, but they did not come to view congestion pricing as a reasonable solution to that problem. Overall, people are more comfortable supporting solutions that are familiar, such as gas tax increases and simpler highway tolls. They also seem to prefer incremental approaches, such as a priced highway network in which drivers would have the option of using non-tolled lanes. Bolder congestion pricing systems, such as a GPS-based pricing system that would price most vehicle use while replacing the gas tax, were deeply unpopular.

The final results of the study are expected to be released in the fall of 2012.

inBrief

# TPB Begins Priorities Planning Process

## Priorities Plan Goals

1. **Provide** a Comprehensive Range of Transportation Options for Everyone
2. **Promote** a Strong Regional Economy, including a Healthy Regional Core and Dynamic Regional Activity Centers
3. **Ensure** Adequate Maintenance, Preservation, and Safety of the Existing System
4. **Maximize** Operational Effectiveness and Safety of the Transportation System
5. **Enhance** Environmental Quality, and Protect Natural and Cultural Resources
6. **Support** International and Inter-regional Travel and Commerce

What are the biggest transportation challenges facing the Washington metropolitan region? And what are the best strategies for addressing them?

In 2011, the TPB began working on a "Regional Transportation Priorities Plan" that will use performance-based planning techniques to answer those questions. The plan will identify projects and programs that offer the greatest potential contributions to addressing ongoing regional transportation challenges like increasing highway and transit congestion and the reliability and safety of existing roadway and transit systems.

Performance measures derived from broad, visionary goals adopted by the TPB in 1998 will be used to identify the region's biggest transportation challenges. The measures will then be used to evaluate the impact of potential strategies in addressing those needs and advancing regional goals for economic opportunity, environmental stewardship, and quality of life.

In addition to considering projects and programs already slated for completion or implementation in the region's financially constrained long-range transportation plan, the planning process will evaluate "unfunded" strategies suggested by the public or included in planning scenarios developed by the TPB or its member agencies.

Including such unfunded but potentially effective projects or programs will help put the region's existing long-range plan in context, drawing attention to the process by which new projects are (or are not) chosen for construction or implementation.

The TPB's current priority-planning effort is the result of recommendations by its Citizens Advisory Committee (CAC) to develop a more transparent and strategic process for determining which projects and programs in the region should be built or implemented.

In particular, the CAC called for greater consideration of the TPB Vision and regional goals in development of the region's long-range plan. Tying the project-selection process more closely to a compelling regional vision for transportation would help the general public see how projects contribute to achieving goals.

It would also, the CAC noted, shape the public's view of the ability of leadership to bring about positive change and influence the public's willingness to fund transportation improvements.

At its meeting on January 18, 2012, the TPB received the first of four interim reports on progress in developing the Regional Transportation Priorities Plan.

The interim report included background on using performance measures to guide transportation decision-making, as well as proposed performance measures for the Washington region and an initial list of identified regional challenges and strategies to address them.

The full Plan is scheduled to be completed by Summer 2013, in time for the next major update to the financially-constrained long-range plan due in 2014. Numerous opportunities for public input into the development of the RTPP have already been scheduled, with more to come.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