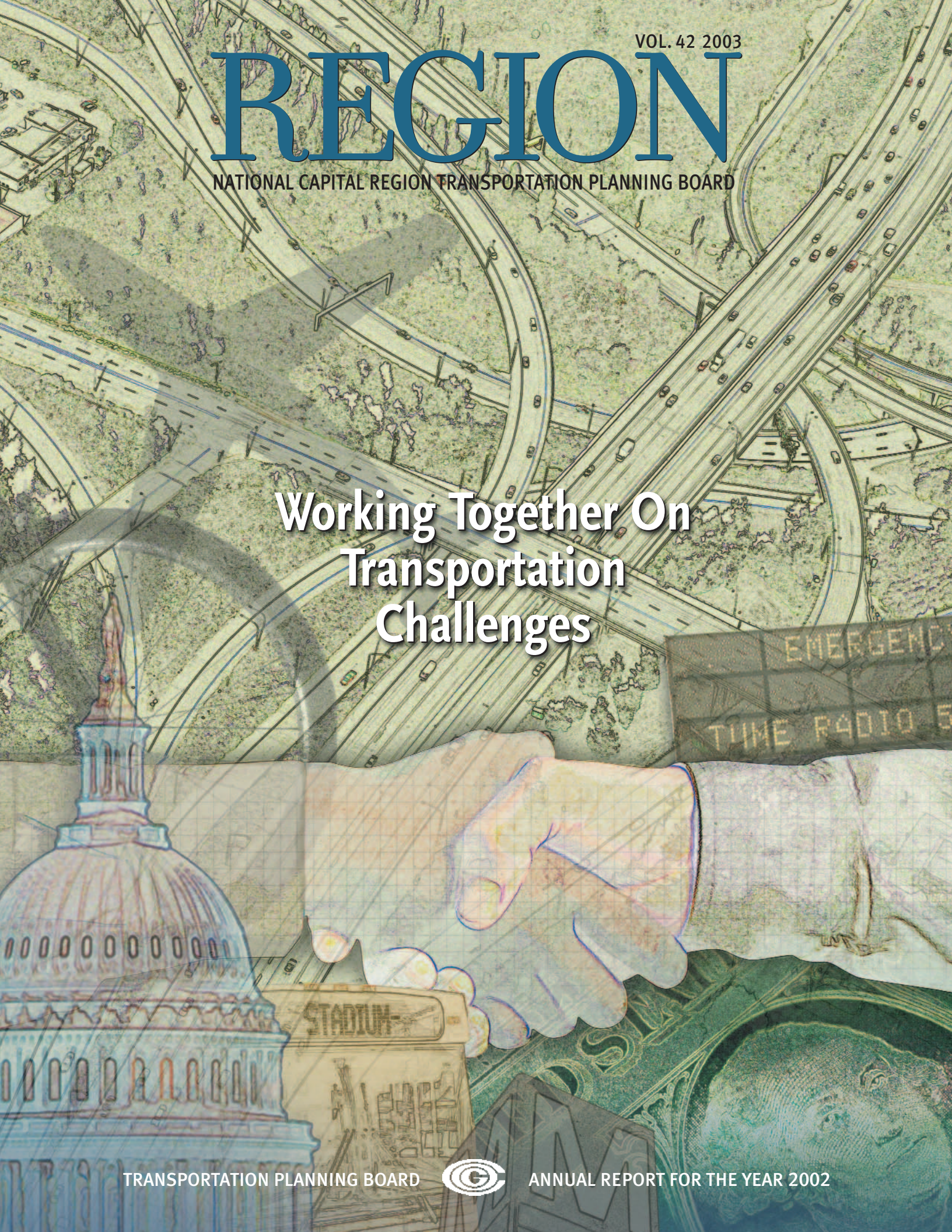
VOL. 42 2003

REGION

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD



Working Together On Transportation Challenges

TRANSPORTATION PLANNING BOARD ANNUAL REPORT FOR THE YEAR 2002

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 non-voting 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 on cooperatively by the states and local communities in the region.

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REGION

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

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THE REGION John Swanson, Managing Editor; Carla Badaracco, Design; Mark Pfoutz, Photography. The *Region* is published by the Metropolitan Washington Council of Governments, 777 N. Capitol St., N.E., Suite 300, Washington, D.C. 20002-4239; (202) 962-3200. This issue was funded, in part, by grants from the District of Columbia Department of Transportation, the Maryland Department of Transportation, the Virginia Department of Transportation, the Federal Highway Administration and the Federal Transit Administration. Publication No. 23603.

Regional Cooperation Has Never Been More Important

By Phil Mendelson
2002 TPB Chair

As an elected official, I know how satisfying it can be to cut ribbons on new projects. But I also know that most important problems cannot be wrapped up quite so neatly.

Regional transportation challenges require real diligence. Air quality is a continuing concern. Emergency preparedness issues demand constant attention. The need to improve coordination between land use and transportation cannot be ignored.

As 2002 chair of the National Capital Region Transportation Planning Board (TPB), I believe we are making real progress on these and other long-term challenges. By the end of last year, air quality improvements were in place, ensuring that emissions would be lowered while federal transportation funding would continue to flow. Emergency preparedness plans were approved, establishing a framework for coordinating transportation and evacuation systems with other emergency support functions. Land use/transportation coordination took a step forward with the development of maps defining regional activity centers as focal points for transportation linkages.

A lot of work. A lot more to be done.

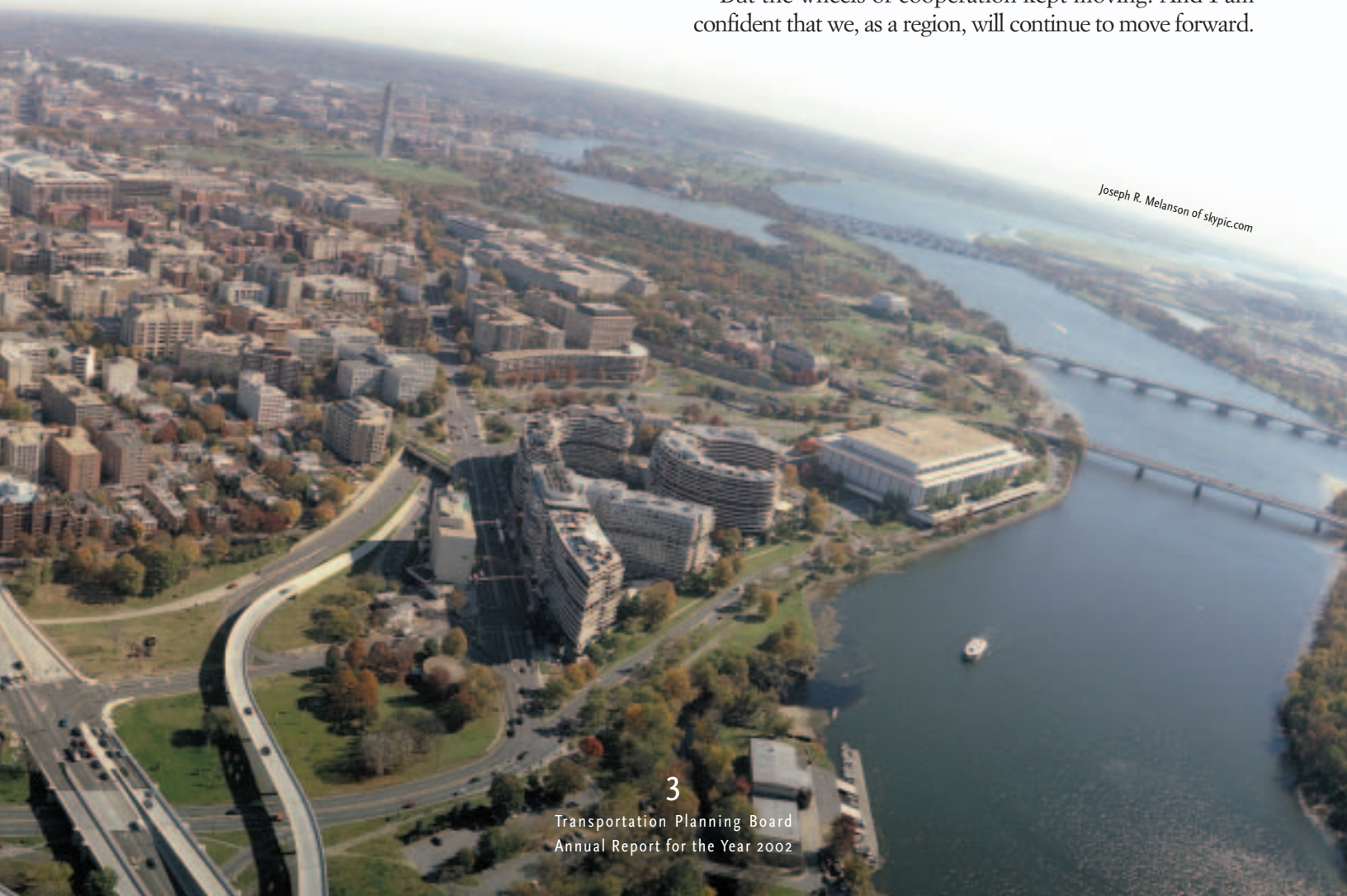
Phil Mendelson

Why do I, as a local official, choose to spend so much time on these regional issues? Because, like my colleagues on the TPB, I recognize that these challenges are important to the people I represent. My constituents include the working men and women of Washington who rely upon our region's Metro system to get around. They include African-American children in the District of Columbia who have the nation's highest incidence of childhood asthma, a problem triggered by regionwide air pollution. And they include anyone in the nation's capital who is jittery about emergency preparedness.

All these concerns—and so many more—require a process for regional problem solving. The TPB provides that essential forum.

At the end of my tenure as TPB chair, the challenges we faced were far from solved. I am pleased that some key hurdles were overcome. Other, new issues were just emerging and need to be confronted in the years to come.

But the wheels of cooperation kept moving. And I am confident that we, as a region, will continue to move forward.



Joseph R. Melanson of skypic.com

Addressing Continuing Policy Challenges

In 2002, ongoing challenges dominated the agenda of the Transportation Planning Board. By the end of the year, significant progress had been made on homeland security, air quality, and land use/transportation coordination.

As the TPB moved into 2003, much work remained, and new challenges were already emerging. But the efforts and achievements of 2002 affirmed the importance of regional coordination through the TPB and COG.

Ceremonies were held to commemorate the one-year anniversary of the September 11 attacks and the reconstruction of the Pentagon. Also on that day, the Council of Governments approved the new Regional Emergency Coordination Plan.

Improving Emergency Preparedness

On September 11, 2002, the first anniversary of the 2001 terrorist attacks, the COG Board of Directors approved the Regional Emergency Coordination Plan℠ (RECP). Included in this plan were extensive transportation and evacuation coordination components that were largely developed through the TPB's Management, Operations and Intelligent Transportation Systems (MOITS) Policy Task Force.

"Bureaucratic walls have fallen all over the place," said David Snyder, Falls Church City councilmember, in describing these planning efforts. "We've made significant improvements and yes, we are better off than we were a year ago."

Mr. Snyder, who chairs the MOITS Policy Task Force, said that immediately after the September 11 terrorist attacks, transportation agencies began analyzing what went right and what went wrong. Within three months, a conference-calling system was in place to facilitate emergency communications and decision making. The RECP institutionalizes these kinds of improvements.

The RECP establishes a Regional Incident Communications and Coordination System℠ (RICCS), providing the technological backbone for emergency contact among jurisdictions and agencies. The system includes a communications process specific to transportation needs, so agencies will be able to coordinate actions better than they were on September 11, 2001.

The process also allows and encourages the involvement of other agencies and organizations as needed, such as the federal Office of Personnel Management, the Military District of Washington, and the Greater Washington Board of Trade. The role of the National Park Service, as an owner and operator of many key regional transportation facilities, is integrated into the process.

The main transportation component of the RECP was designed to facilitate communication and coordination among jurisdictions and agencies, which is critical because the effects of a regional emergency may affect transportation systems over wide areas.

A traffic management center in Montgomery County

This transportation component has been put into action a number of times, not only in drills and exercises, but in actual transportation situations in the region such as a chlorine spill on the Beltway in Montgomery County, and in preparations for Fourth of July traffic and transit management. Staff has been working to fully integrate technical aspects of the transportation communications concept into the RICCS, including updated contact information, notification procedures, and accommodations for conference calls.

Evacuation coordination is addressed in a separate annex to the Regional Emergency Coordination Plan. The objectives of this annex were:

- to address the transportation coordination aspects of evacuation situations;
- to provide a framework, through a structured questionnaire, for coordination among transportation system managers;

Walt Reiss/ CoasterQuest.com

Emergency preparedness measures will improve the region's ability to manage daily traffic, deal with major accidents and handle congestion during holidays and special events.

- to identify traffic and transit engineering issues for evacuations and similar surge demands;
- to identify traffic and transit strategies to help manage supply and demand;
- to develop specific example emergency or evacuation-related scenarios and strategies for responding to these scenarios; and
- to emphasize protecting people "in place," off the transportation system, if that is the safest strategy in a particular emergency.

In August 2002, more than 100 stakeholders attended a special workshop to begin developing contents for the evacuation annex. The annex preparation proceeded into 2003 at an expedited pace. "We have to maintain the momentum we have developed," said Councilmember Snyder.

Michelle Pourciau of the District Department of Transportation joined with other TPB members in complimenting this work. She noted that the improved communication systems are already paying off. "We in the implementing agencies are finding we are using a lot of this every day, even without an emergency situation."

Toward Cleaner Air

The Washington region's air quality continues to fall short of national standards. Yet over the past decade, we have made tremendous strides in cleaning up the air. The question now is whether the region is making progress fast enough to meet federal requirements.

Under the Clean Air Act, the region is classified as a "non-attainment area" for federal standards for ground-level ozone. Sometimes called smog, ozone is formed on hot summer days when nitrogen oxides (NOx) and volatile organic compounds (VOCs) are combined in sunlight. Motor vehicles emit VOCs and NOx, but power plants and other sources also emit these pollutants.

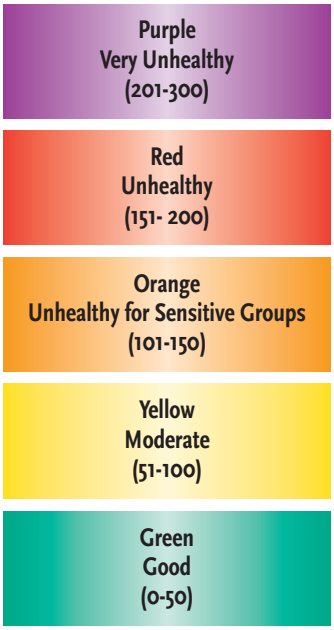
Science agrees that ozone is harmful to human health. It damages our lungs and airways, and is particularly threatening to sensitive populations, including children, the elderly and people with respiratory diseases.

The Washington area exceeded federal standards for ground-level ozone nine times in 2002, using EPA's "one-hour standard" for ozone monitoring. In large part, these exceedances were linked to the year's unusually hot, stagnant weather. In contrast, the Washington region exceeded the standard three times in 2001 and twice in 2000.

The Clean Air Act requires states to develop State Implementation Plans (SIPs) laying out steps to "attain" federal air quality standards. The Washington region must attain these standards by 2005.

AIR QUALITY INDEX

The Air Quality Index (AQI) is a scale used by air agencies to report and forecast air quality. Ground-level ozone is one pollutant reported. An AQI of 100 or less (green or yellow) is considered satisfactory for most people. Air quality values above 100 (orange, red, and purple) are considered unhealthy, first for sensitive groups, but then for everyone as the AQI gets higher.

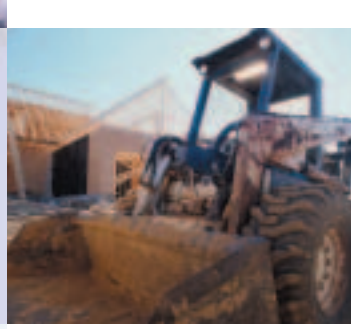


In our multi-state region, the Metropolitan Washington Air Quality Committee (MWAQC) is responsible for developing a regional air quality plan that contributes to the three SIPs produced by D.C., Virginia and Maryland. Like the TPB, MWAQC is an independent body at the Council of Governments including local and state representatives from across the region.

Transportation plays a big role in the push toward cleaner air. The regional air quality plan contains ceilings on transportation-related emissions ("mobile emissions budgets"). The Transportation Planning Board must show that the region's transportation system will not produce emissions exceeding these ceilings—now and in the future.

In other words, the TPB must show that its Constrained Long-Range Transportation Plan (CLRP) and six-year Transportation Improvement Program (TIP) will "conform" to the goals laid out in the regional air quality plan. This finding, based on computer-generated forecasts of travel and emissions over the next 25 years, is called a "conformity determination." Every time the TPB amends the CLRP and TIP in a way that might affect air quality, it must make a conformity determination.

Failure to pass this test carries a severe penalty. If the region's transportation plan and program do not conform to air quality limits, federal funding for new highway and transit projects can be cut off—except for projects that are exempt or are already under contract.



Regional Air Quality Planning

Vehicle emissions—called mobile source emissions—are just one source of the region's ozone problem. Other sources are stationary sources, including power plants; areawide sources such as drycleaners and lawnmowers; and off-road mobile sources, including farm and construction equipment.

The Metropolitan Washington Air Quality Committee (MWAQC) is responsible for developing a regional plan to meet "attainment" of federal air quality standards for ozone. The plan addresses all sources of ozone. After MWAQC approves the plan, relevant portions are incorporated into State Implementation Plans (SIPs) for D.C., Maryland and Virginia, which are required by federal law to show how air quality standards will be attained.

In 2003, MWAQC is scheduled to approve a new air quality plan. Part of this plan will establish new ceilings on mobile source emissions ("mobile budgets"). In what is called a "conformity determination," the Transportation Planning Board must show that forecasted emissions under its 27-year Constrained Long-Range Plan and six-year Transportation Improvement Program will "conform" to the ceilings in the air quality plan.

Conformity is not an idle threat. For more than a year, between 2001 and 2002, the TPB's planning process was put on hold because a conformity determination could not be made.

In the summer of 2001, as the TPB was preparing to amend the CLRP and TIP, a TPB staff analysis found that the region's transportation-related emissions would exceed limits on nitrogen oxides in 2005. This excess NOx was due largely to unanticipated rapid growth in the number of sport utility vehicles (SUVs) and light trucks. Prior to 2001, the data on vehicle types and vehicle miles of travel are thought to have undercounted SUVs.

Approval of a new TIP and CLRP was deferred in 2001 when the NOx problem became apparent. For a year, TPB members and staff worked intensively to find a solution to the NOx conformity problem. Staff analyzed more than a hundred potential measures to reduce emissions.

In July 2002, after a year of delay, the Transportation Planning Board finally took action to put the region back on track to attain federal air quality standards by 2005.

"It's a win-win," said Phil Mendelson, 2002 TPB chair. "We move forward with improving our transportation system while achieving better quality air."

The board approved a package of Transportation Emissions Reduction Measures (TERMs) to help mitigate an anticipated NOx exceedance in 2005. Among the measures approved by the TPB was a program for traffic signal "optimization" to improve traffic flow by coordinating and retiming signals along key corridors. The optimization proposal drew wide support, ranging from the Greater Washington Board of Trade to Walk D.C., a pedestrian advocacy group.

Maryland funded separate measures, costing $34.2 million, including transit improvements and incentives, clean-burning buses and government vehicles, and projects to encourage bicycling and walking. Virginia took substantial pollution credit for budget cuts in the state's six-year transportation program, eliminating more than 100 lane miles in Northern Virginia highway expansions. Virginia also provided more than a half million dollars to promote telecommuting and to encourage public sector employees not to drive alone. The District of Columbia took credit for programs already committed, including $5 million for sidewalks.

The conformity finding in July represented an achievement for regional cooperation. Although the path to conformity was frequently arduous, the TPB ultimately did bring regional leaders together to find a solution. As the region prepared to confront even tougher air quality challenges in the following months and years, the affirmation of this regional forum was vital.

A new regional air quality plan will include new ceilings on transportation-related emissions.

No sooner had the conformity issues been settled in July of 2002, than the TPB started working on new air quality challenges and deadlines.

The TPB is scheduled in 2003 to approve a comprehensive update to the Constrained Long-Range Transportation Plan (CLRP), required every three years. Of course, this CLRP update will require a new conformity finding, but this process has become even more challenging than in the past because the goals and the tools for reaching conformity are undergoing change.

A key difference in 2003 is that the targets for conformity are being revised. A new regional air quality plan, under development by MWAQC, will include new ceilings on transportation-related emissions.

This new regional air quality plan is being developed with the use of a new forecasting tool— the Mobile 6 emissions model—which the U.S. Environmental Protection Agency mandated in January 2002. Implementing Mobile 6 presents considerable challenges. The model is much more "data hungry" than its predecessor, Mobile 5b. For example, Mobile 6 differentiates among 28 different vehicle classes, compared to eight classes used in Mobile 5b.

An additional complication was the reclassification of the region's air quality status to a more acute level. In January 2003, U.S. EPA formally changed the non-attainment classification from "serious" to "severe," which requires more stringent controls. This reclassification was due to a federal court ruling in *Sierra Club v. EPA*, which found that EPA had exceeded its authority in 2000 when it granted an extension of the region's previous air quality attainment deadline from 1999 to 2005, without contemporaneous reclassification (a "bump-up") of the region's nonattainment classification from "serious" to "severe."

Traffic signal optimization is a cost-effective way to reduce congestion and emissions.

As regional leaders moved into a new year, they faced tight deadlines. In mid-2003, MWAQC was scheduled to approve a draft "severe area" regional air quality plan, containing new ceilings on transportation-related emissions. In the fall of 2003, the TPB is expected to release a draft conformity determination showing that the emissions forecast under the new long-range plan will not exceed the ceilings in the regional air quality plan.

In November of 2003, the TPB is scheduled to approve the new CLRP and FY 2004-09 Transportation Improvement Program (TIP), and the accompanying conformity determination. If the CLRP does not receive federal approval by January 2004, federal funding for new projects could be suspended, except for those that are exempt from air quality requirements or are already under contract.

Key Milestones Related to Air Quality Conformity

	2000	2001
2000-2025 CLRP Triennial Update	**10/00**— TPB approves 2000 CLRP Update.	**1/01**—Federal transportation agencies approve 2000 CLRP Update. The update's validity lasts three years.
2001-2025 CLRP Amendments and FY2002-07 TIP renamed **2002-2025 CLRP Amendments and FY2003-08 TIP**		**6/01**—Drafts put on hold due to an inability to make an air quality conformity determination.
2003-2030 CLRP Triennial Update and FY2004-09 TIP		
Regional Air Quality Plan (State Implementation Plans—SIPs—for Attainment of Federal Air Quality Standards) The TPB must show that the CLRP and TIP will "conform" to the emissions limits established in the Regional Air Quality Plan.		

According to federal requirements, the TPB's Constrained Long-Range Plan (CLRP) must be comprehensively updated every three years. A new 6-year Transportation Improvement Program (TIP) must be approved every two years. Typically, however, the CLRP and TIP have been amended every year. Each new CLRP and TIP requires an air quality conformity finding. In 2001-02, the amendments were delayed for a year because of difficulty in finding conformity. In 2003, the conformity finding will be tied to the development of a new regional air quality plan.

Making the Transportation/Land Use Connection

The TPB and COG strengthened the linkage between land use and transportation planning in 2002 with the development of six maps depicting regional activity centers.

According to a resolution passed by the TPB, "the maps and accompanying information have been developed for use by local jurisdictions, the TPB and other regional bodies to encourage mixed-use development and to increase significantly the percentage of jobs and households found in regional activity centers."

Phil Mendelson, the 2002 TPB chair, called the maps and data a "valuable tool" that will "greatly enhance discussions in this region about the complex relationship between land use and transportation planning."

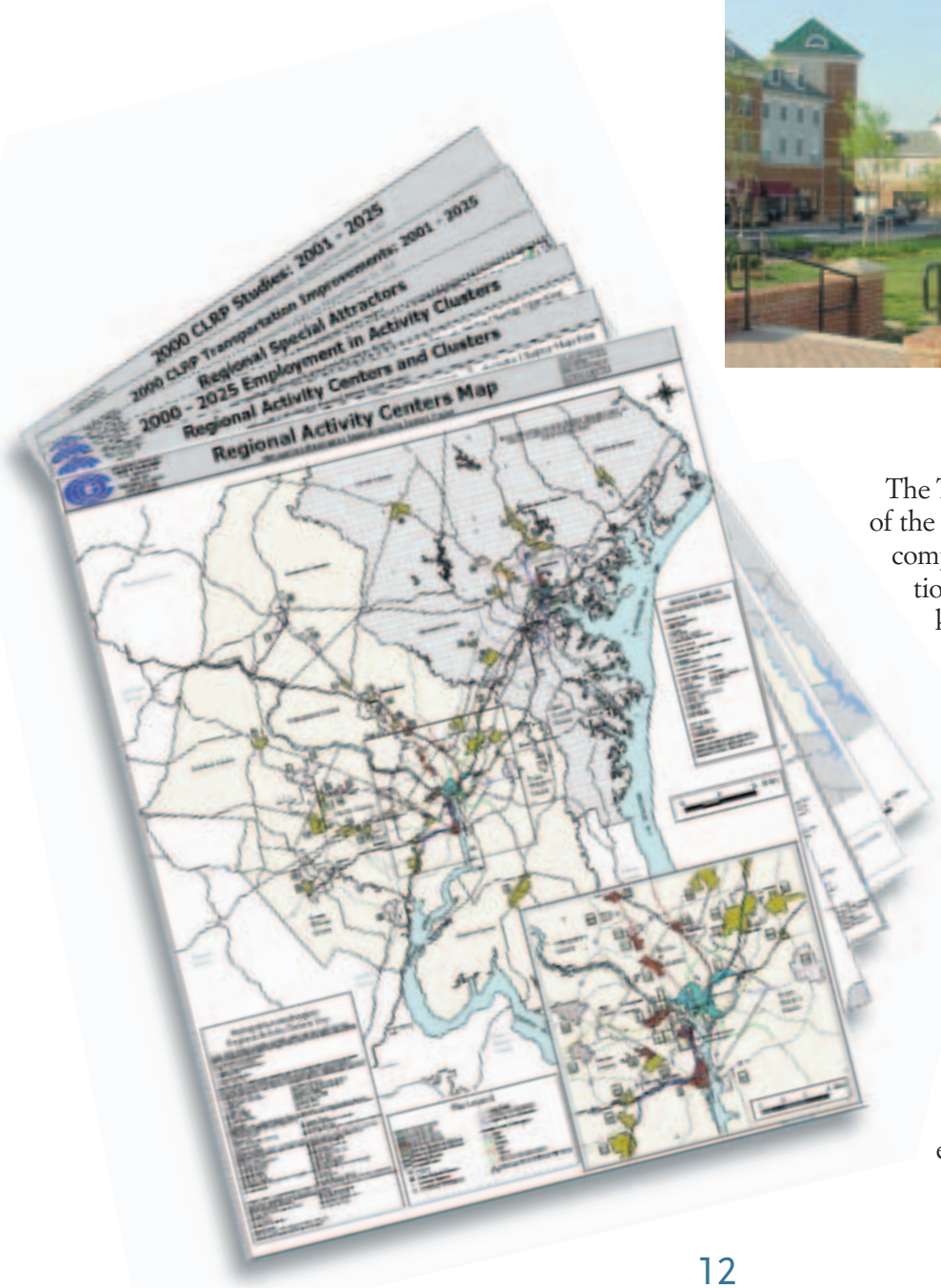
The TPB first endorsed the concept of "regional activity centers," in the Vision, the regional transportation policy framework adopted in 1998. According to the Vision, regional activity centers are intended to have "a mix of jobs, housing and services in a walkable environment."

The Vision also encouraged strong transportation links, of different modes, among regional activity centers. Goal 2, Objective 3 of the Vision called for "a web of multi-modal transportation connections that provide convenient access (including improved mobility with reduced reliance on the automobile) between the regional core and regional activity centers, reinforcing existing transportation connections and creating new connections where appropriate."

2002	2003	2004
		1/04—2000 CLRP Update will expire.
7/02—TPB approves CLRP amendments and TIP, along with TransportationEmissions Reduction Measures (TERMs) and conformity finding.		
10/02—Federal transportation agencies approve 2002 CLRP and FY 2003-08 TIP.		
Fall 2002—Development process begins for 2003 CLRP Update.	**Fall 2003**—TPB scheduled to approve 2003 CLRP Update & FY 2004-09 TIP. This approval requires a conformity finding.	**1/04**—CLRP Update and TIP scheduled to be approved by federal transportation agencies.
	1/03— U.S. EPA redesignates the region as a "severe nonattainment area" for ozone. Redesignation requires development of new SIP.	**Summer 2003** — Metropolitan Washington Air Quality Committee scheduled to approve severe area SIP.
	Fall 2003—EPA scheduled to determine the transportation emissions ceilings in the SIP are adequate for conformity. EPA must make this finding in order for the TPB to make a conformity finding for the 2003 CLRP Update and FY 2004-09 TIP.	

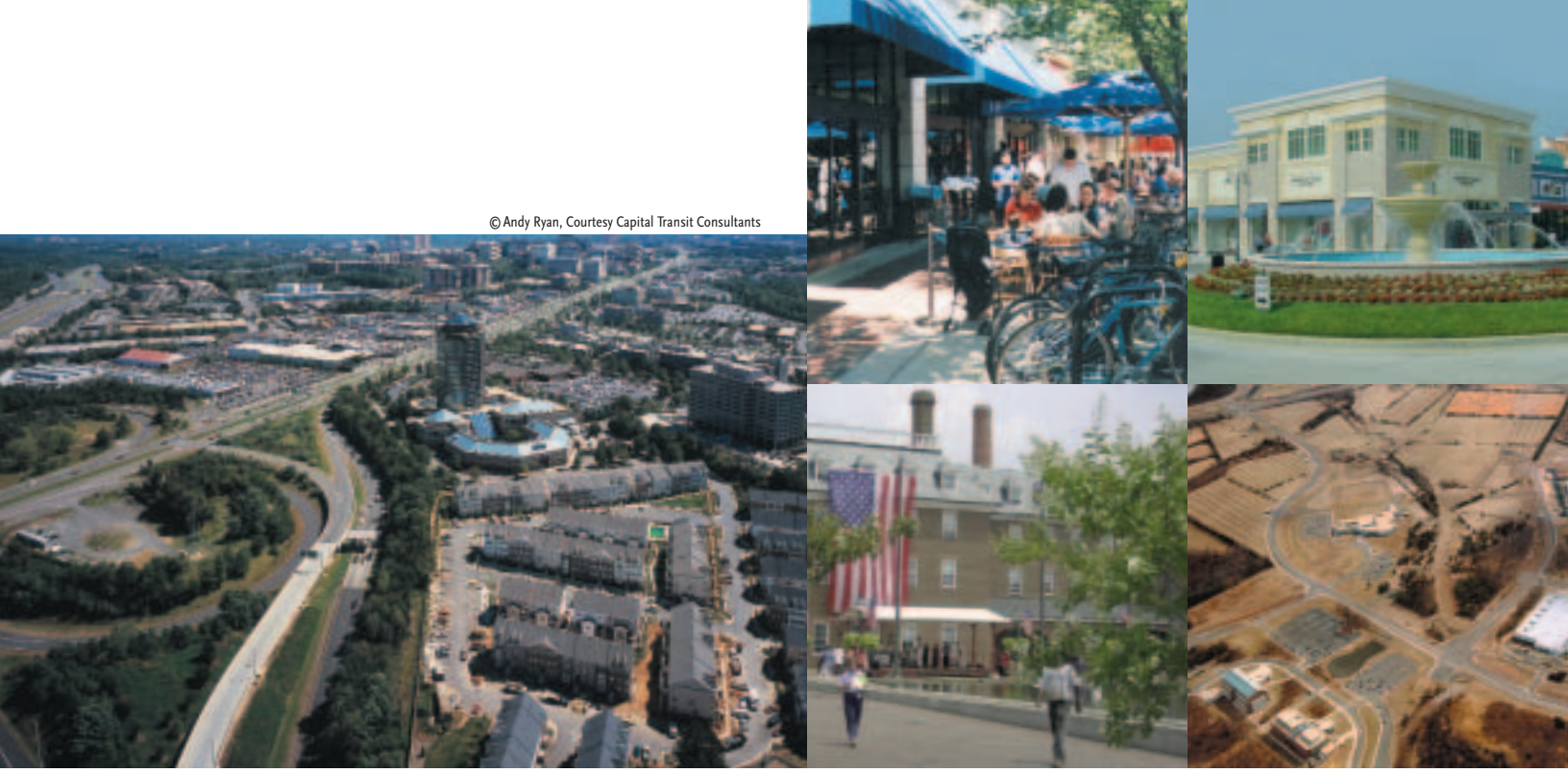
Regional activity centers are intended to have a mix of jobs, housing and services in a walkable environment.

This page: clockwise from upper left: Rosslyn-Ballston Corridor, Arlington, VA; Frederick, MD; Farragut North, Washington, DC; King Farm, Rockville, MD



The TPB Vision instigated the development of the activity centers maps by calling for "A composite general land use and transportation map of the region that identifies the key elements needed for regional transportation planning—regional activity centers, principal transportation corridors and facilities, and designated 'green space'." (Goal 6, Objective 1).

The COG Planning Directors Technical Advisory Committee developed the maps, with review by a joint task force including members of the TPB and the COG Board of Directors. The data source for the activity centers maps is COG's Cooperative Forecasts, which are based on the local jurisdictions' projections of population, households and employment. The data for the activity



© Andy Ryan, Courtesy Capital Transit Consultants

Clockwise from above: Tysons Corner, VA; Bethesda, MD; Bowie Town Center, MD; Innovation, Prince William, VA; City Hall, Alexandria, VA

centers project was organized and depicted according to criteria and presentation tools approved by the Planning Directors Technical Advisory Committee. Although the data are not new—the COG Board approved the data in 2000 as Cooperative Forecast Round 6.2—the maps do depict the data in new, graphic ways. The package of maps also includes two transportation maps that are based on the TPB's 2000 Constrained Long-Range Plan (CLRP).

Early in the process, several jurisdictions expressed concerns that the maps could be construed to be an endorsement of current land use patterns. These jurisdictions indicated that their plans to develop activity centers in the future might be hampered by the fact that such sites did not currently meet the criteria for designation as activity centers.

In response to these concerns, the COG board and the TPB emphasized that the maps would be "descriptive not prescriptive." This meant that, while the maps reflected currently approved land use forecasts, this portrayal was not intended to imply the future "should" look this way. In addition, regional leaders made a commitment to revise the maps and data when the Cooperative Forecasts are updated in 2003.

The six approved activity centers maps depict:

- **Regional Activity Centers**—58 in all—organized according to six categories: downtown core, mixed-use centers, employment centers, suburban employment centers, emerging employment centers and regional airports.
- **Regional Activity Centers and Clusters**
- **2000-2025 Employment in Activity Centers**
- **Regional Special Attractors**
- **2000 Constrained Long-Range Transportation Plan (CLRP) Improvements,** 2001-2025
- **2000 CLRP Studies,** 2001-2025

The maps define *activity clusters* as groups of activity centers along transportation corridors. The 24 activity clusters constitute about 455 square miles—13 percent of the region's total land area. The clusters contain 70 percent of the region's jobs and 31 percent of the region's households. They include 60 of the region's 83 Metrorail stations. Fourteen activity clusters have no Metrorail station.

The activity centers maps are integral to the development of the TPB's Regional Mobility and Accessibility Study, which is another important analytical effort to improve regional coordination between land use and transportation. The study is a multi-year initiative looking at the effects of alternative long-term scenarios for transportation and land use development. For example, the study will consider the effects of a greater concentration of jobs and/or housing in regional activity centers and clusters, and examine the impacts of a High Occupancy Toll (HOT) lane network. The study will also examine a "congestion management system," featuring a package of improvements to manage demand for the region's highway and transit systems.

Tracking Bottlenecks and Traffic Flow

From aerial photography to personal interviews, the TPB uses a variety of methods to track changes in travel demand.

Several important studies were released in 2002. An aerial survey of freeway traffic, conducted every three years, measured congestion on the major highways. A study of arterial roads, using global positioning systems, identified key bottlenecks. And an airport passenger survey compared usage of the region's three commercial airports.

Freeway Monitoring Reveals Some Good News

A study of freeway congestion released in 2002 offered some hope that major bottlenecks can be relieved with relatively modest road improvements. Using aerial photography, the study showed that since 1999, traffic flow at several congestion points had been reduced after improvements occurred.

However, in a number of other locations, the study supported the pervasive view that the region's highways are getting more congested.

The TPB released the study "Traffic Quality on the Metropolitan Washington Area Freeway System" in October. This was the fourth round of the study, which uses aircraft to photograph every mile of the Interstate Highway system on 12 separate days. The first survey was performed in 1993 and was repeated in 1996, 1999 and in the spring of 2002.

The TPB's freeway congestion survey, conducted with aerial photography, has been repeated every three years since 1993. The photos above, from 1999 (left) and 2002 (right), show I-95 approaching the Beltway from the north in Maryland. Southbound traffic flow improved at this location after a second lane was added to the Beltway entrance ramp.

"The good news is that we are able to address conditions in some areas with road improvements," said Phil Mendelson, TPB chair and D.C. councilmember. "It's imperative that we continue to develop creative strategies including new transit and other options in areas where there is no more capacity for new roads."

In his presentation to the TPB, Greg Jordan of Skycomp, Inc., which performs the study, described several locations where road improvements improved traffic flow. At the I-295/Southeast Freeway interchange, for example, vehicles previously backed up on I-295 between South Capitol Street and the 11th Street Bridge northbound in the morning. Since 1999, a lane reconfiguration eliminated a weaving pattern that caused the tie-up.

On the George Washington Memorial Parkway at Spout Run, congestion in the past was heavy in the westbound direction between the Roosevelt Bridge and Spout Run—largely because of traffic entering from Fort Myer Drive in Rosslyn. After the roadway was widened from two lanes to three, only marginal intermittent congestion was found in 2002.

In 1999, a backup on southbound I-95 at the Beltway in Prince George's County frequently extended as far as six miles north. Since 1999, adding a second lane to the Beltway entrance ramp has lessened the extent and duration of congestion.

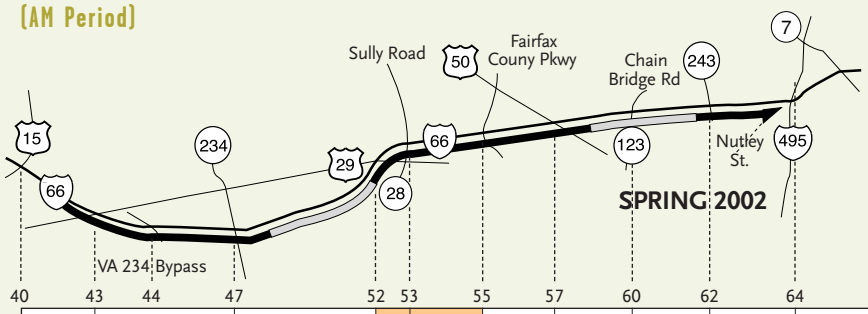
Other findings support the pervasive view that traffic in the Washington area is bad and gradually is getting worse.

Greg Jordan highlighted some places experiencing increases in congestion since the 1999 survey: 1) I-66 outside the Beltway, particularly west of Route 234 (Manassas) eastbound in the morning and westbound in the evening; 2) Dulles Toll Road eastbound in the morning (Adding HOV lanes improved conditions, as shown in the 1999 survey, but the 2002 survey showed that congestion had worsened again); 3) Baltimore-Washington Parkway in Prince George's County northbound between MD 450 and MD 197 in the evening.

Perennial bottlenecks on the Beltway also appear to be worsening. These include: 1) the Outer Loop in Maryland from I-95 to I-270 in the morning and the reverse (Inner Loop) in the evening; 2) the Inner Loop approaching the Wilson Bridge from Prince George's County (a.m.) and the Outer Loop (p.m.); and 3) the Inner Loop in Virginia from Braddock Road to Tyson's Corner (a.m.) and the Outer Loop in the opposite direction (p.m.).

TPB Vice Chair Kate Hanley focused on the I-66 congestion. "It's not just the western part that's worse, it's all of 66 that's worse, " said Ms. Hanley, who chairs the Fairfax County Board of Supervisors. She suggested that congestion might be reduced significantly on both I-66 and the Beltway by making improvements on the interchange to eliminate weaving during merging. She noted that such

I-66 BETWEEN US 15 AND THE BELTWAY
(AM Period)



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	A	B	C	E	F (46)	D	D	D	F (70)	7:00-8:00 A.M.
	A	B	C	D	C	C	E	D	F (65)	8:00-9:00 A.M.
2002	F (55)	F (90)	F (50)	E	F (55)	E	E	F (60)	F (55)	D	6:00-7:00 A.M.
	B	F (70)	F (85)	F (65)	F (70)	F (55)	F (75)	F (65)	F (50)	F (50)	7:00-8:00 A.M.
	A	F (60)	F (55)	F (50)	F (70)	F (65)	F (75)	F (55)	F (60)	F (85)	8:00-9:00 A.M.

EASTBOUND →

Much of the TPB's freeway congestion survey confirms what people already know: congestion is getting worse. The graphic at left shows crowding on I-66. Level of service (LOS) "F" is the most severe congestion. The numbers in parentheses indicate traffic density (cars per lane-mile).

improvements had made a positive impact at other interchanges cited elsewhere in the Skycomp report. "That one interchange is causing a lot of that red [on the charts, red indicated the highest levels of congestion] both on I-66 and on the Beltway," Ms. Hanley said.

Arterial Roads Study Identifies Bottlenecks

Driving up and down the same congested road for seven hours a day may sound boring. But if your car is hooked up to a Global Positioning System (GPS), it can be a good way to find out where and when bottlenecks occur on arterial roads, according to a recent TPB study.

For the past three years, TPB staff has conducted a traffic survey using GPS technology to identify choke points on 42 sections of arterial roads throughout the region. Overall, 363 miles were studied.

Temporary workers were hired to drive continuously up and down the road segments under investigation. Their cars were hooked up to GPS units recording speeds and locations every two seconds. GPS technology is a satellite navigation system.


Satellites Help Point the Way to a Speedi

Using the Global Positioning System to determine where and why traffic jams occur.

The *New York Times* and *Washington Post* featured articles on the TPB's use of technology to pinpoint bottlenecks on arterial roads.

Two cars, spread 10 minutes apart, drove the same stretches of road between 1:00 p.m. and 8:00 p.m. Usually the drivers fit in three "runs" on the same stretch of road within an hour. Drivers took breaks every two hours.

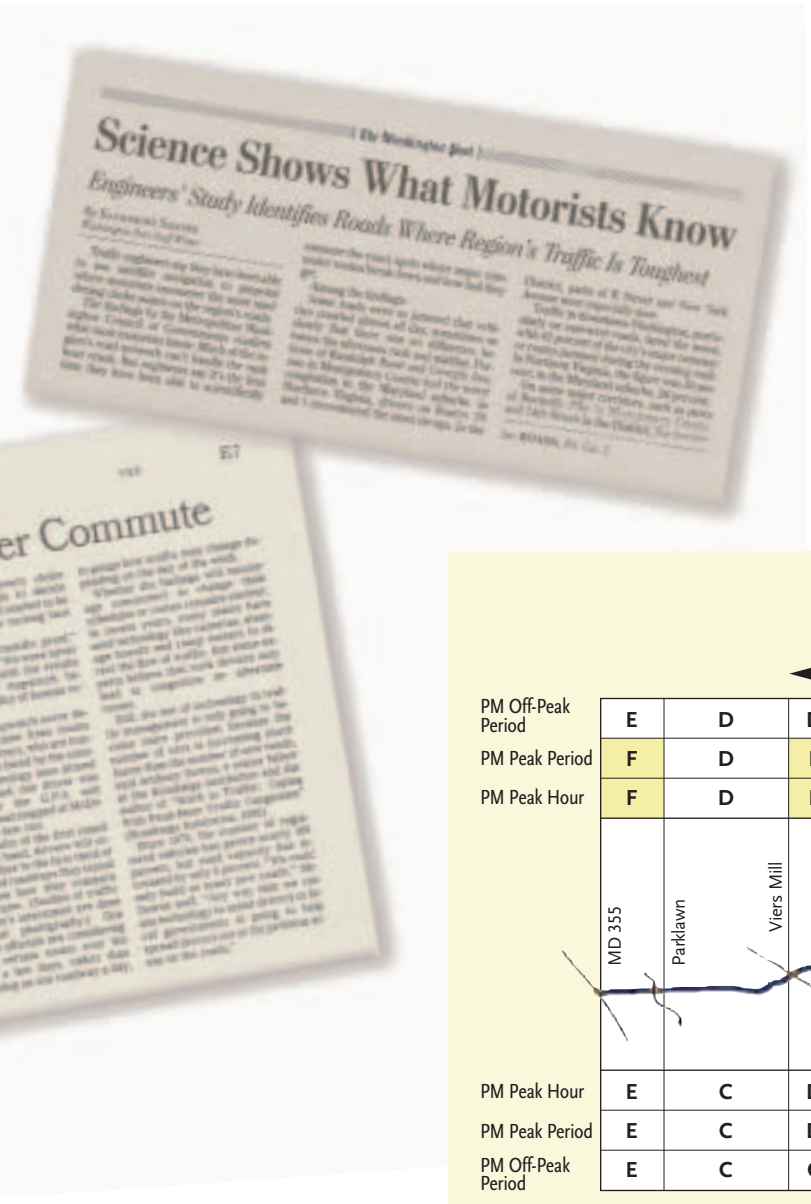
TPB staff carefully monitored the study. On one occasion, when a driver took an unauthorized detour at a McDonald's drive-through, the GPS system picked up an erroneous "bottleneck." The run had to be redone—with a different driver.

The study included all arterial roads in the region that are part of the National Highway System (NHS) designated by Congress, as well as other important roads. According to standard definitions, arterial roads have stoplights, while freeways have limited access with entrance and exit ramps. Estimates indicate that freeways account for roughly 40 percent of the region's vehicle miles of travel (VMT). All other roads, including arterials, collector roads and local streets, handle 60 percent of the region's VMT.

Portions of Randolph Road and Georgia Avenue were the worst arterials in Maryland. In the District of Columbia, K Street and New York Avenue had the worst congestion. US 29 and US 1 had the most bottlenecks in Virginia.

The monitoring only measured "recurring" congestion. The survey stopped when weather turned bad or when accidents occurred. This means some roads having high accident rates, such as Route 15 in Virginia, may not have recorded the high levels of congestion that the public perceives.

The study can be used to identify exact locations where management and operations improvements, including signal retiming, might be beneficial. The results also will calibrate the TPB's travel demand modeling to improve the accuracy of forecasting. Because this was the first round of the study using GPS technology, staff could not identify congestion trends. The new round began in the fall of 2002.


Science Shows What Motorists Know

Engineers' Study Identifies Roads Where Region's Traffic Is Toughest

er Commute

The arterial travel time survey identified exact spots where operations or engineering improvements might unsnarl traffic. The chart below identifies bottlenecks on Randolph Road in Montgomery County.

RANDOLPH ROAD BETWEEN MD 355 AND COLUMBIA PIKE (PM Period)

WESTBOUND

	MD 355	Parklawn	Viers Mill	Connecticut	Georgia Ave.	Kemp Mill	New Hampshire	Fairland	Tamarack	Old Columbia	Columbia Pike
PM Off-Peak Period	E	D	D	F	A	B	B	A	A		F
PM Peak Period	F	D	F	F	A	B	B	A	A		F
PM Peak Hour	F	D	F	F	A	B	B	A	A		F
PM Peak Hour	E	C	D	E	B	A	F	B	A		F
PM Peak Period	E	C	D	E	B	A	F	A	A		F
PM Off-Peak Period	E	C	C	E	B	A	E	A	A		F

EASTBOUND

According to a TPB survey, Baltimore-Washington International (BWI) Airport is now the most popular airport for local passengers.

Low Fares Are Increasingly Important In Airport Selection, Survey Finds

Location or price? How do people choose which airport to use? Passengers in the Washington region are increasingly answering this question based on ticket price.

According to a recent TPB survey, Baltimore-Washington International (BWI) Airport is now the most popular airport for local passengers. And many of these passengers are choosing BWI because of lower fares.

Most passengers still reported that "closest airport" was their primary reason for choosing an airport. However, 32 percent of BWI users and 16 percent of Dulles users said their primary reason was "lowest fare." In 1992 only three percent of passengers at each of those airports reported that "lowest fare" was their primary reason.

The TPB examined the results of the 2000 Washington-Baltimore Regional Air Passenger Survey at its June 19 meeting. This was the fifth in a series of air passenger surveys conducted at the region's three major airports—BWI, Dulles and Reagan National.

The surveys provide data for air systems and master planning processes at the airports. The data are also incorporated into the regional travel demand model, which is used to forecast vehicle emissions, among other things.

Since 1992, air travel in the region has increased 55 percent. In 2000, BWI had 38 percent of trips originating in the Washington-Baltimore region, up from 25 percent in 1992. Reagan National had 34 percent of the region's trips (down from 43 percent in 1992) and Dulles had 28 percent (down from 32 percent in 1992).

"Particularly for BWI, the survey shows that lower air fares are having dramatic impacts on where people are choosing to take their flights," said Bob Griffiths of the COG/TPB staff.

The most common way of getting to the airport continued to be the private car— accounting for 63 percent (up from 60 percent in 1992) of all arriving passengers. In 2000, 12 percent of passengers leaving from National Airport used Metrorail, which continued to be one of the highest proportions of public transit usage at any airport in the country. Approximately one percent of trips at BWI were made using Amtrak/MARC or light rail.

Forecasting Future Travel

When the front page of the *Washington Post* Metro section featured a story on regional travel forecasting, it seemed a clear sign of the increased—and somewhat unusual—attention that has focused in recent years on the TPB's analytical work.

"Usually, the calculations end up in technical reports seen by only a handful of politicians, air quality experts and transportation planners," wrote *Post* reporter Katherine Shaver on January 8, 2002. "Now those estimates could jeopardize billions of dollars in new road and transit projects across the region—and, suddenly a lot more people are noticing."

The *Post* was referring to a potential cutoff in federal funding that could happen if the region failed to meet air quality improvement goals for 2005. Emissions estimates caught a lot of attention in 2002, but these forecasts are really just the tip of an iceberg of data produced through the regional transportation modeling process.

The TPB's travel forecasting process combines scientific theories, an enormous amount of data and a painstaking level of professional effort. Ultimately, this process yields a wealth of information reflecting the transportation choices we make every day, and predicting how our travel behaviors might change down the road.

Finding Patterns in Human Behavior

Across the region, similar scenes are taking place every morning in thousands of places:

Jane leaves her Silver Spring home at 7:15 a.m. She drops off her kids at school and weaves her way through traffic to her job in Rockville. Over the years, she generally has figured out which route is fastest, although she's always looking for better options.

Near Bailey's Crossroads, Jim dashes out the door to catch the 7:48 bus. If he gets on the express bus, he knows he will be at the Pentagon early enough to find a seat on the Yellow Line train, and get downtown 20 minutes earlier.

In their daily commutes, Jane and Jim follow regular patterns, although they frequently make adjustments based on emerging conditions. A lot of "Janes" are going to Rockville every day; as certain roads become progressively worse or better, a certain number of these commuters can be expected to change their routes. And a lot of "Jims" are taking buses to the Pentagon every morning. Crowds on trains, bus availability, and the prices of different trips are among the many factors that will persuade a certain number of these workers to travel earlier or later, or find some other way to get downtown.

These small changes in travel behavior, which often seem random, actually follow fairly predictable patterns. Collectively, they can add up to big changes in traffic flow and congestion.

Planners and engineers working for the Transportation Planning Board have developed computer models that reflect the millions of decisions that, in combination, cause traffic at different points in the region to move at various speeds—and sometimes not to move at all. These travel forecasting models enable planners to look at the effects of what has been planned and to test potential changes. What if a road is widened? How about a new rail line? How will new jobs affect traffic?

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.

Travel forecasting is not a crystal ball that can precisely predict traffic patterns in small areas, especially over a longer time frame. Instead, its greatest value is comparative. The travel forecasting models offer a means by which decision makers can look at different transportation options and see the potential effects they might have at the regional or corridor level.

What Goes Into the Models?

The Transportation Planning Board 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.

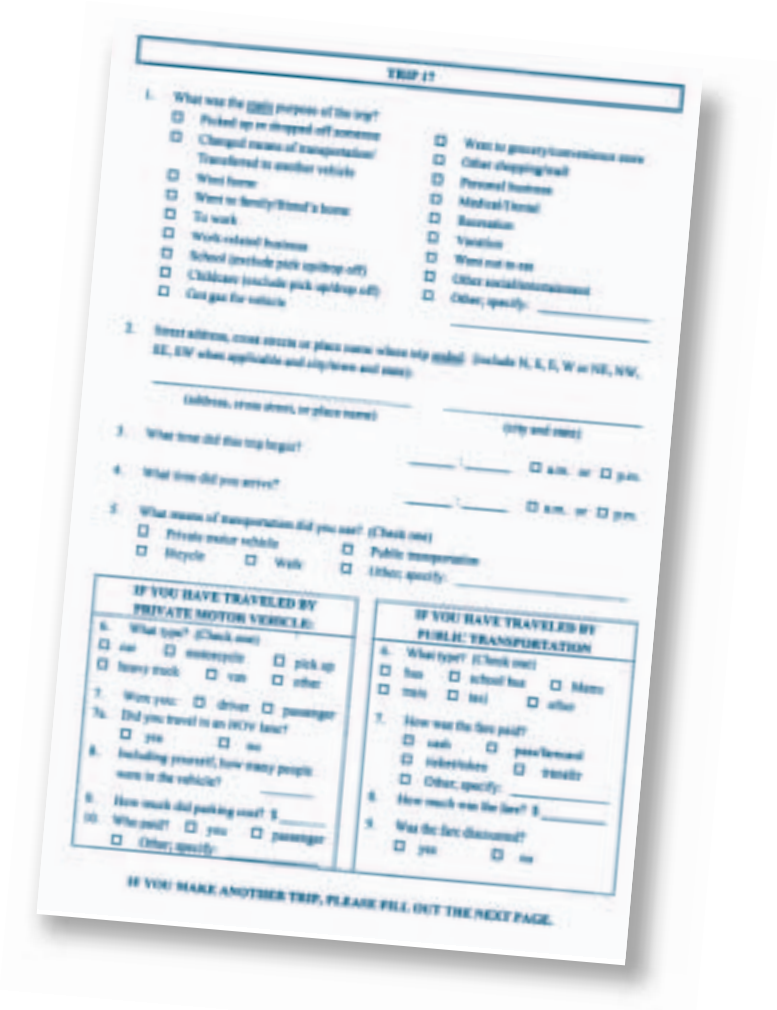
Modeling is not cheap. In a four-month period in 2002, modeling to test the air quality conformity of the proposed CLRP and TIP cost more than $400,000 for staff and other resources. Overall, maintaining and applying the models requires approximately 36 percent of the TPB's transportation planning budget, or about $2.9 million per year.

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

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

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 straight-forward. 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 25 years. The model also can be coded for "what-if" scenarios, asking questions like: What would happen if we upgrade a local bus route to express service?


TRIP 1?

IF YOU HAVE TRAVELED BY PRIVATE MOTOR VEHICLE:

IF YOU HAVE TRAVELED BY PUBLIC TRANSPORTATION

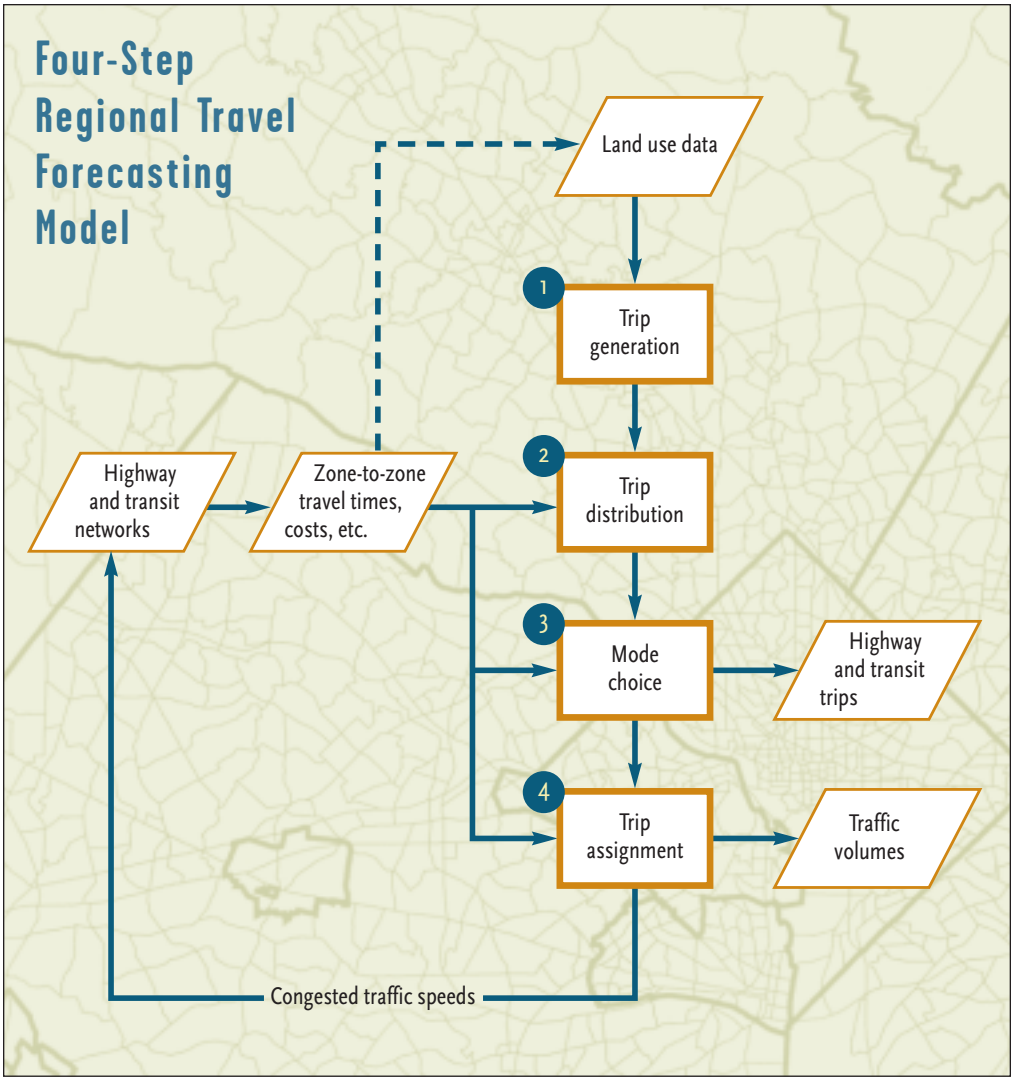
IF YOU MAKE ANOTHER TRIP, PLEASE FILL OUT THE NEXT PAGE.

The TPB's Household Travel Survey is a primary source of data for travel demand modeling. Survey respondents fill out trip diaries, pictured above.

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 followup information.

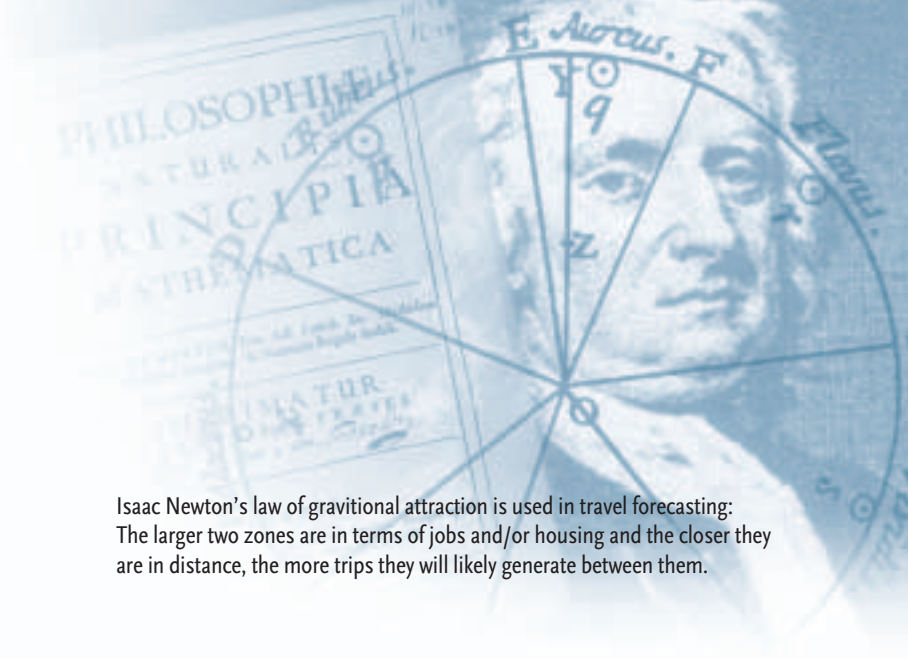
U.S. Census data is another important source of information for developing and validating the models. Transportation "journey to work" information is derived from the Census long form, distributed to one out of six Census respondents. It is limited, however, to information about work trips only.



In addition, the TPB staff performs various traffic counts. Temporary workers do much of the basic work for these surveys, which requires them to sit by the sides of roads and actually count the number of cars that pass and how many people are in each car.

Other studies focus on transportation demands for certain types of facilities. A freeway monitoring study, performed every three years, uses aerial photography to record traffic along every stretch of freeway in the region. A survey of travel times on arterial roads is performed using global positioning systems hooked up to conventional automobiles. An airline passenger survey provides information about traffic coming in and out of the region's three major airports. These surveys are valuable tools for developing the TPB's travel forecasting model and validating its outputs. (See the previous chapter for recent results from the freeway, arterial and airport surveys.)

Traffic counts and truck surveys are two more sources of data for the TPB's travel forecasting process.



Isaac Newton's law of gravitional attraction is used in travel forecasting: The larger two zones are in terms of jobs and/or housing and the closer they are in distance, the more trips they will likely generate between them.

How Do the Models Work?

Virtually all U.S. metropolitan areas use a similar "four-step process" to replicate regional travel behavior:

1. Trip Generation: How much travel?

First, the TPB's modelers divide the region into 2,200 traffic analysis zones. A zone can be as small as a few city blocks in downtown Washington or bigger than 100 square miles in rural areas.

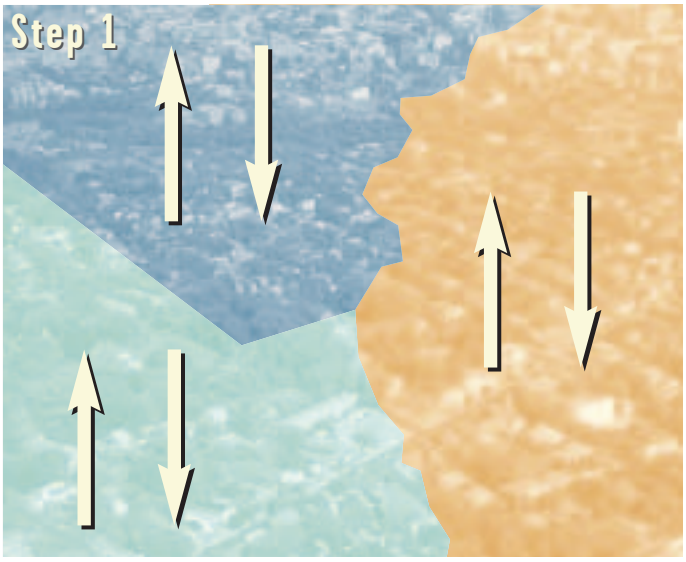
Then the modelers estimate the number of trips to and from each zone. The model separates trips according to purpose—people going to work, shopping, and so forth. Each zone "produces" and "attracts" a certain number of trips. The model estimates the number of trips produced by and attracted to each zone, based on the residential and employment characteristics of the zone. For example, a zone in downtown Washington would attract far more morning trips than it produces.

2. Trip Distribution: Who goes where?

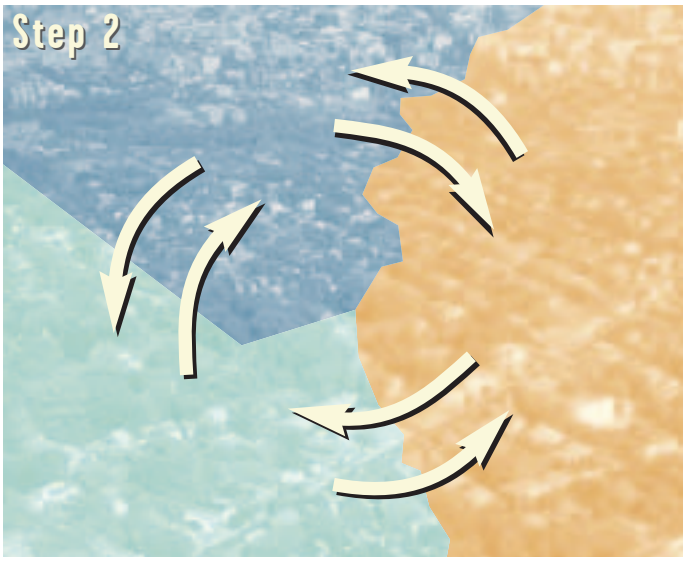
This second step matches the trips produced in each zone with the zones to which they are attracted. For example, after step one estimates the number of work trips produced by a zone in Gaithersburg, step two matches all those trips to other zones around the region — to downtown DC, to nearby suburbs, to Northern Virginia, and elsewhere. These linkages are counted as origin/destination pairs.

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.

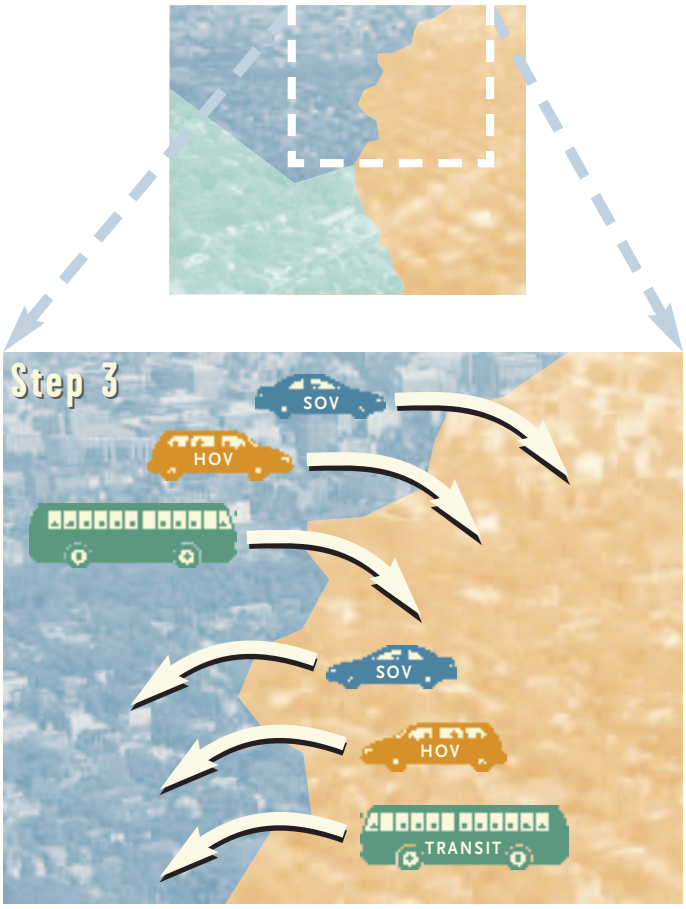
Distance is also key. A Fall Church resident feels more "gravitational pull" to Tysons Corner than to a shopping center in Montgomery County.



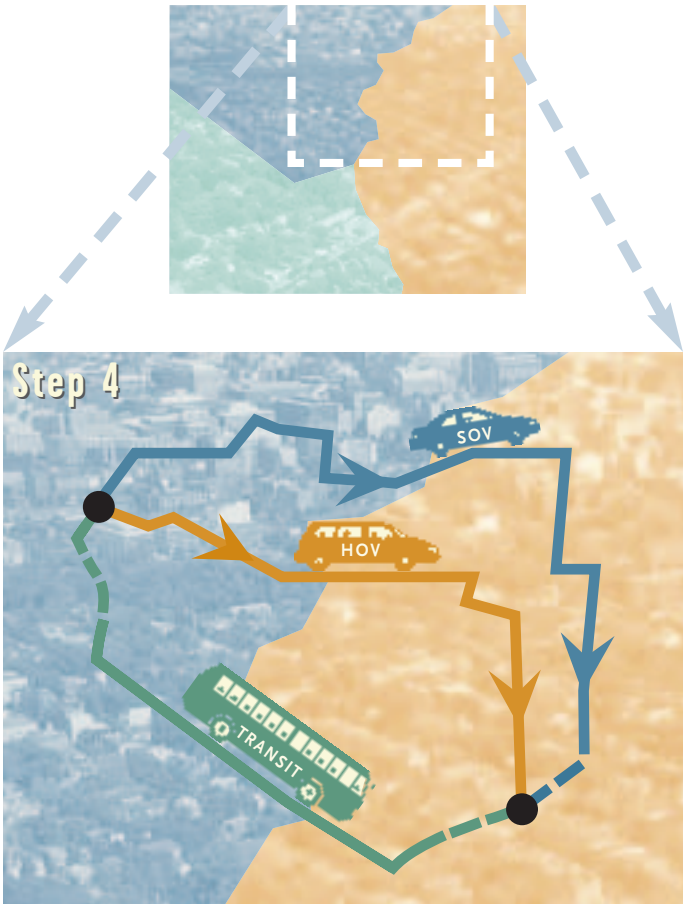
Trip generation in three fictitious traffic analysis zones: This step estimates the number of trips produced by and attracted to each zone.



Trip distribution among three fictitious zones: This step estimates how many trips are going from zone to zone.



Mode choice between two fictitious traffic analysis zones: Estimating the way people get from zone to zone.



Trip assignment between two fictitious traffic analysis zones: Selecting the fastest route between zones.

3. Mode Choice: How do people travel?

Drive or walk? Bus or train? In step 3, 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.

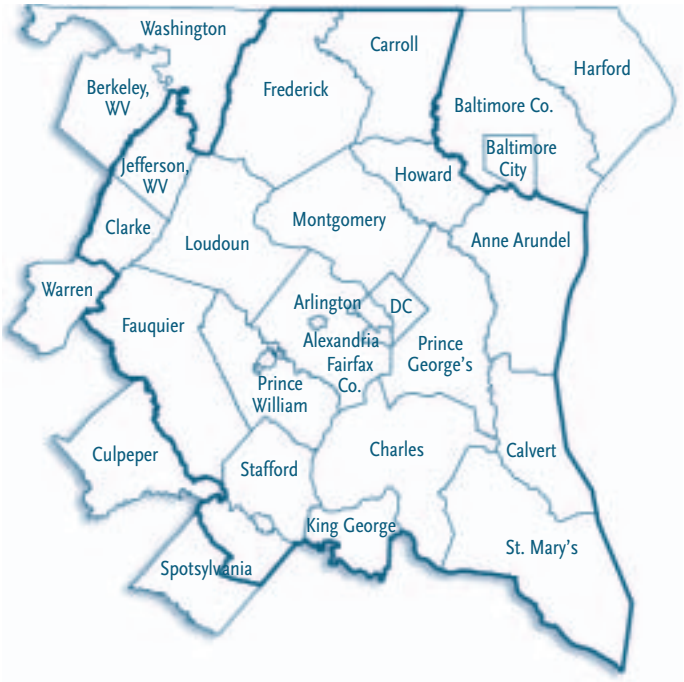
4. Trip Assignment: What routes do travelers take?

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, determining the best path—both in terms of time and distance—to get from zone to zone.

The model also predicts factors that might trigger changes in travel behavior. If Jim is frustrated by the growing congestion on his drive to work, he may find an alternative place to live or work. If Jane gets a Metrochek transit subsidy from her employer, she might take Metrorail instead of driving.

The whole modeling process takes a lot of time. The models currently include computerized representations of more than 28,000 road segments, hundreds of transit lines, and travel data for 2,200 geographic zones. Depending on the application, each model "run" can take as much as eight hours of processing time on a personal computer (11 hours with the new Version 2 model).

The area used for travel forecasting, shown by the heavy blue line, extends beyond the boundaries of the TPB's member jusridictions.



New Tools, More and Better Outputs

An updated travel demand model, known as Version 2, has been developed by TPB staff. This new model is more sensitive to things like household size and income, bicycle and walking trips, non-work transit use, and the time of day when trips are made. The TPB staff is planning a number of other enhancements, both in terms of inputs and applications of the model.

Emissions forecasting is also undergoing major changes with the introduction of another new model, which was mandated by U.S. EPA. This mobile emissions model, known as Mobile 6, requires substantial new data and relies on a new understanding of vehicle emissions.

Models Under Scrutiny

The TPB's computer models took on a heightened relevance in 2001 when the region's regular transportation planning process was put on hold after forecasts predicted that transportation-related emissions would exceed the region's air quality improvement goals in 2005.

TPB staff spent months reexamining and documenting the analysis predicting the region would exceed its 2005 limits on nitrogen oxides (NOx), a component of ground-level ozone. Facing an indefinite delay of new transportation projects, state and local officials, and their staffs, closely examined the findings that created the deadlock and worked with TPB staff to develop solutions.

The TPB's technical work came under added scrutiny in December 2001 when a coalition of environmental groups issued a critique of the TPB's modeling. Although staff found no basis for the coalition's assertions, the TPB agreed this was a good time to conduct an independent peer review of the region's transportation modeling process. In April 2002, the board authorized staff to proceed with organizing this review.

The Transportation Research Board of the National Academies will conduct the peer review in 2003. In this process, national experts on travel forecasting will provide comments on the model's effectiveness, and advice on how to refine it further.

TPB members and staff welcomed the opportunity to find new ways to enhance the modeling process. "I think COG has been known in the past for having a state of the art model," said Marsha Kaiser who represents the Maryland Department of Transportation on the TPB. "I'd hope that Version 2 continues to keep us on the leading edge."

As a basis for travel forecasting, TPB staff develop detailed computerized networks that include current and future transportation facilities.

Listening to Citizens, Promoting Transportation Options

The TPB continued to develop and implement programs in 2002 that broadened outreach and expanded travel choices.

The pedestrian safety campaign urged drivers to "imagine the impact."

"Street Smart" Campaign Aims to Improve Pedestrian/Bike Safety

Regional leaders launched a public education and outreach campaign in October 2002 to reduce pedestrian deaths and injuries throughout the Washington region. With pedestrian fatalities outnumbering homicides in many jurisdictions, leaders vowed to work together on a multi-year effort to heighten awareness about pedestrian safety and change the behavior of drivers.

The campaign, titled "Street Smart," is aimed at young drivers who are involved in the majority of pedestrian collisions. The campaign features Metrorail and Metrobus ads, radio ads, television public service announcements and posters. The campaign materials urge drivers to "Imagine the Impact" of traffic accidents on the lives and families of both pedestrians and drivers.

A special task force of the TPB's Bicycle and Pedestrian Subcommittee developed the regional concept for the campaign and launched it at a news conference on October 1.

Phil Mendelson, D.C. Councilmember

Citizens Committee Reaches Out

The TPB's Citizens Advisory Committee continued to host public meetings across the region in 2002. The sessions focused on projects reflecting strong local interest, but with important regional implications. Topics included the Dulles rapid transit extension in Fairfax and Loudoun counties, the Corridor Cities Transitway in Montgomery County, updates to the Prince George's County Master Plan and D.C. Strategic Transportation Plan, and pedestrian safety concerns along Route 1 in Fairfax County.

Montgomery County provided the seed money for the Street Smart campaign, along with the state of Maryland. Montgomery County Executive Douglas Duncan established a blue ribbon panel in 2000 to improve pedestrian safety. That year pedestrian fatalities exceeded the number of homicides in the county.

The District of Columbia, Virginia and Maryland each contributed federal funds to the project. Fairfax and Montgomery counties, and the City of Alexandria, provided local funding.

In December an evaluation of the campaign's effectiveness reported an increased awareness of messages featured in the campaign. One message reported to be particularly memorable was "Every seven minutes a pedestrian is injured or killed."

A regional forum on pedestrian safety issues was held on November 12 on Richmond Highway (Route 1) in Fairfax County. Dana Kauffman, Fairfax county supervisor, moderated the meeting. It was co-hosted by the TPB's Citizens Advisory Committee and the Safe Crossings Coalition, a group promoting pedestrian safety improvements along Route 1 in Virginia.

Katherine Hanley, Chair, Fairfax County Board of Supervisors

Peter Shapiro, Chair, Prince George's County Council

Commuter Assistance and Advertising Make an Impact

Commuter assistance programs and advertising appear to be having an impact on how people travel, according to the TPB's 2001 State of the Commute Survey.

The survey, conducted by the Commuter Connections program and presented to the TPB on June 19, 2002, polled a random sample of 7,200 employed persons in the 12-county Washington region (the area used for air quality conformity analysis). Planners will use the survey to improve commuter assistance activities and to provide inputs to the TPB's travel forecasting process.

In the survey, 55 percent of respondents said they had seen, heard or read advertising for ridesharing, HOV lanes or telecommuting in the last six months. More than a quarter of respondents said they would consider alternative commuting because of this advertising.

One-third of respondents said they were aware of a website or telephone number they could use to obtain information on alternative commuting. About 10 percent said they had used a commuter assistance number or website in the past year. In 1999 only six percent of respondents had used such a number or website.

Twenty-nine percent of respondents said their employers offered Metrochek or other transit subsidies. Other employer-provided commuter assistance included: information on commuter transportation options (25%), preferential parking for carpools and vanpools (19%) and Guaranteed Ride Home (19%), which is a Commuter Connections program furnishing free rides to commuters in the event of an emergency. Sixty-eight percent of respondents reported their employers offered free parking, a drop from 72 percent in 1999.

The Commuter Connections programs, which are administered through the TPB, provide services designed to reduce congestion and improve air quality in the short-term. They include ridematching services, the "Guaranteed Ride Home" program, promoting telecommuting (including telework resource centers), and assisting employers in setting up commuter programs.

Bike/Ped Priorities Endorsed

Washington Regional Network for Livable Communities

www.pedbikeimages.org / dan burden

The TPB endorsed nine pedestrian and bicycle projects as regional priorities at its meeting in December. The projects, estimated to cost $26.2 million over six years, range from new trail construction to safety improvements. The Bicycle/ Pedestrian Subcommittee of the TPB's Technical Committee developed the list.

John Wetmore

The priorities reflected a growing regional emphasis on pedestrian safety. Fairfax County officials have singled out Richmond Highway (Route 1) as a particularly dangerous stretch of road. The list of priority projects included a request for $8 million in sidewalks, crosswalks, and other improvements for bicycling and walking along Route 1.

"On Richmond Highway, just catching the bus in most places is a death-defying experience," said Dave Lyons, director of the Safe Crossings Campaign, a group pushing for safety improvements along Route 1.

In addition to pedestrian safety, key criteria in selecting the projects included transit access and bicycle network connectivity. The projects can all be completed by 2009 and are considered priorities by the jurisdictions where they are located. Although some projects have already been funded for study, none has received a full funding commitment.

The biggest project on the list of priorities is the Metropolitan Branch Trail, which would run nearly 8 miles from Union Station to Silver Spring, where it will connect with the Crescent Trail, creating a complete arc around the District of Columbia. At Fort Totten, it will connect with the Prince George's Connector Trail.

The TPB will forward the list of priority projects to local and state jurisdictions with the recommendation that they should be funded in the region's fiscal 2004-09 Transportation Improvement Program (TIP). In order to receive federal funding, any transportation project must be included in the TIP, which is approved by the TPB.

The nine priority projects are:

- **Metropolitan Branch Trail** (D.C.) stretching 7.7 miles from Union Station to Silver Spring, parallel to the Metro's Red Line.
- **Matthew Henson Trail** (Montgomery County) running four miles from Rock Creek Trail to the Northwest Branch Park.
- **Henson Creek Trail** (Prince George's County) extending north and south of the existing trail.
- **Holmes Run Stream Crossing** (Alexandria) connecting the north and south ends of Chambliss Street at the Holmes Run Trail. Regionally, the trail crossing will connect to Fairfax County's Stream Valley Trail system.
- **Pentagon Area Bicycle Access Improvements** (Arlington County) including the East Wall of Arlington Cemetery. The improvements would provide access to the Route 110 Trail, the Washington Boulevard Trail, the Mount Vernon Trail and Boundary Drive.
- **Route 1 Pedestrian and Bicycle Safety Improvements** (Fairfax County) including sidewalks, pedestrian crossing, and other pedestrian safety improvements.
- **Centreville Road Underpass** at Dulles Airport Access Road (Herndon) connecting the existing sidewalk networks in Fairfax County and the Town of Herndon.
- **Trail construction parallel to Loudoun County Parkway** (Loudoun County) from Route 7 to Waxpool Road, a distance of 4.4 miles.
- **Trail construction along Dumfries Road** (Prince William County), 1.2 miles, from the Lake Jackson Drive intersection to the Prince William Parkway West intersection.

The Bicycle/Pedestrian Subcommittee's last set of priorities, developed in 2000, has been more than 90 percent funded. A total of $17.6 million, out of $19.3 million requested, has been spent on eight out of the 11 projects on the 2000 list. The subcommittee emphasized that many other worthy projects deserve funding.

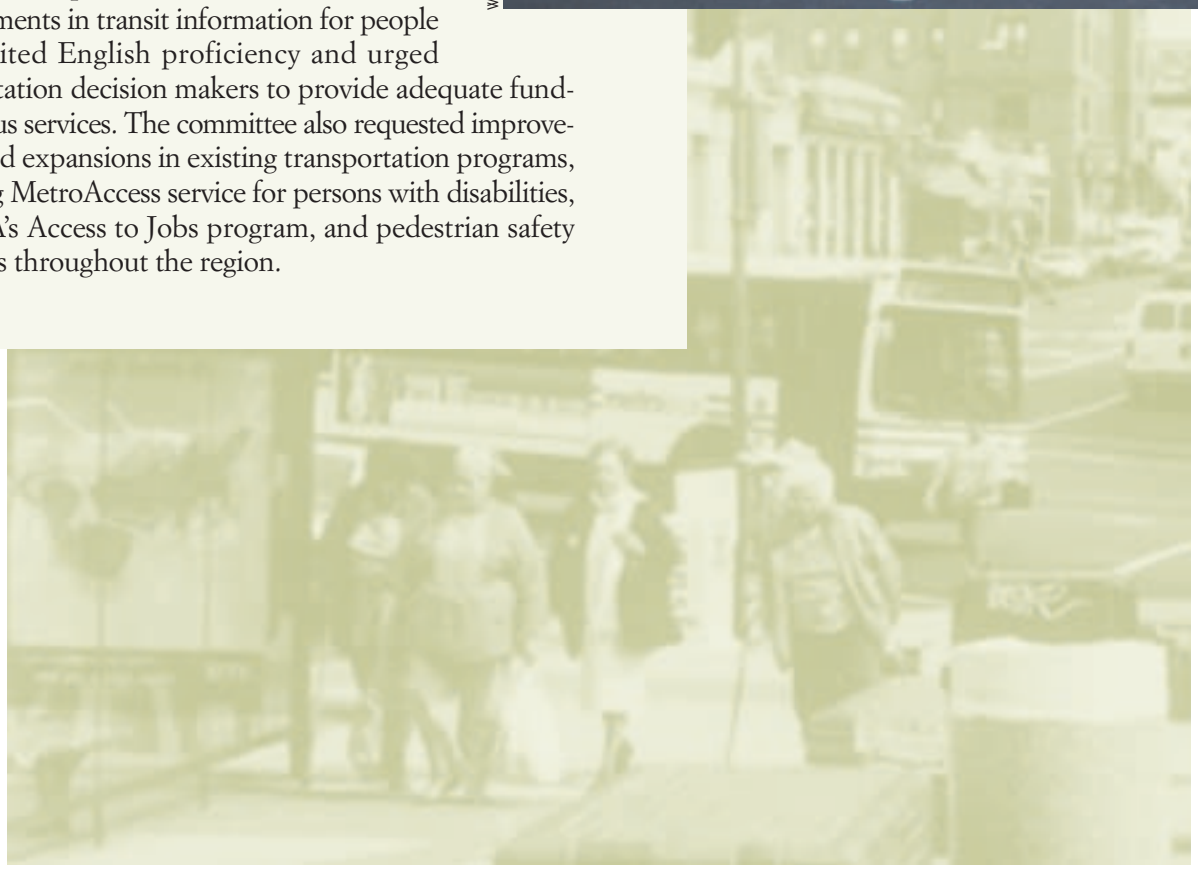
An updated Regional Bicycle and Pedestrian Plan currently is under development by the Subcommittee. The new plan will include a statement of policy principles and a database of all planned bicycle and pedestrian projects, along with reference information on where and how much people are walking and bicycling in the region. The last regional bicycle plan was approved in 1995.

Washington Regional Network for Livable Communities

WMATA

Access for All: Promoting Concerns of the Disadvantaged

The TPB's Access for All Advisory Committee continued to highlight transportation issues of concern to low-income and minority communities and persons with disabilities. The committee's first report to the TPB recommended improvements in transit information for people with limited English proficiency and urged transportation decision makers to provide adequate funding for bus services. The committee also requested improvements and expansions in existing transportation programs, including MetroAccess service for persons with disabilities, WMATA's Access to Jobs program, and pedestrian safety programs throughout the region.



Shining a Spotlight on Federal Funding Priorities

As Congress prepares to enact major transportation legislation in 2003, regional leaders issued a call in 2002 for increased federal funding to meet the region's unique transportation priorities.

At a press conference on November 20, leaders from the TPB presented a set of policy principles for Congress to consider in 2003 when it takes up the reauthorization of the federal surface transportation programs. The TPB's policy positions support regional "must-do" transportation priorities, including emergency preparedness, system rehabilitation and maintenance, and air quality improvement measures.

"I want to thank you for laying out our regional priorities," said Congresswoman Eleanor Holmes-Norton of the District of Columbia at the TPB's press conference. "This gives us a head start."

Congresswoman Eleanor Holmes-Norton of the District of Columbia.

The TPB reauthorization principles stressed the region's unique relationship with the federal government.

"Quite simply, our region's transportation system keeps the federal government moving," said Phil Mendelson, TPB chair and at-large member of the Council of the District of Columbia. "Our roads, trains and buses are the vital arteries connecting federal facilities across the region."

"Forty-seven percent of Metrorail's daily peak period riders are federal employees," emphasized Katherine Hanley, TPB vice-chairman and chairman of the Fairfax County

"Quite simply, our region's transportation system keeps the federal government moving. Our roads, trains and buses are the vital arteries connecting federal facilities across the region."

Phil Mendelson, 2002 TPB Chair

Board of Supervisors. "Metro clearly is not just a regional priority, but a federal one also. We need to work together to fund essential Metro programs that will keep the system running safely and efficiently."

Regional leaders stressed that since September 11, the region's transportation system has become a matter of national security. For possible future emergencies, they said, the region urgently needs enhanced capabilities for traffic management, traveler information and transit responsiveness.

"The Washington region is at a critical crossroads," said 2002 TPB Vice Chairman Peter Shapiro, who chairs the Prince George's County Council. "Our safety and economic vitality will be seriously threatened if we fail to rehabilitate our transportation infrastructure, implement vital emergency and security requirements, and improve air quality."

Unmet transportation needs are estimated at $1.74 billion per year over 25 years, according to a TPB analysis in 2000. The TPB has projected that 80 percent of forecasted revenues will be needed to maintain and rehabilitate the region's existing transportation system, leaving only 20 percent for expanding capacity.

With state and local governments facing growing financial shortfalls, regional leaders emphasized that federal transportation funding has become more vital than ever.

Every six years, Congress reauthorizes the multi-billion dollar federal surface transportation programs that fund highway and transit systems across the country. The last reauthorization occurred in 1998, with the Transportation Equity Act for the 21st Century, known as "TEA-21." Congress is scheduled to complete the next reauthorization legislation in the fall of 2003.

"The federal government has a clear interest in ensuring the National Capital Region's security and vitality," said Chairman Mendelson. "But it is clear that the growth of the federal surface transportation program has been inadequate to meet the critical needs of the region."

The TPB's federal reauthorization principles endorsed four major areas of emphasis:

- Protect the already substantial federal and non-federal investment in the existing transportation infrastructure by encouraging a strong federal/state/local partnership, with enhanced participation by all parties, to generate the necessary resources to meet the region's roadway and transit needs.
- Implement transportation improvements to meet emergency and security requirements in the National Capital Region, including enhanced capabilities for transit responsiveness, traffic management and traveler information.
- Address unmet preservation, rehabilitation, and capacity expansion needs for the existing Metro system, a regional priority.
- Address the special challenges of the District of Columbia in meeting its transportation requirements.

The TPB also called for a 15 percent annual increase nationwide in the overall funding level for federal transportation programs.

"I am pleased that regional leaders have united around the reauthorization principles," said Chairman Mendelson. "We look forward to working with our local, state and federal partners on these tough funding challenges."

Membership of the National Capital Region Transportation Planning Board

*TPB member as of July 2003

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