

A SYSTEM IN CRISIS

The Funding Shortfall
for the
Washington Area
Transportation System



NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

February 2001

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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The Washington region is facing a crisis in transportation funding. This is a crisis that even now is affecting our economy and quality of life. And unless we take action, the situation will just get worse.

Our region needs an increase of more than 50 percent in funding for highways and transit. We are facing a gap of \$1.74 billion per year—or \$43 billion over the next 25 years—between the funding we have available and what is needed to maintain our current transportation system and to accommodate the growth in travel that will be generated by our increasing population and growing economy.

This booklet provides some detailed information about the extent of the problem. This material was presented at a meeting with key regional leaders that the TPB hosted on November 30, 2000, at Union Station. A videotape from the meeting has been aired extensively by cable television stations throughout the region.

In general, the story presented here is not good news. But I hope we will not be discouraged, because if all levels of government work together with citizens, we can solve this problem.

The Washington area is unusual in that we have no dedicated regional sources of funding for regional transportation improvements. We on the Transportation Planning Board have committed ourselves to working with other regional leaders to establish a mechanism or mechanisms that will produce the additional funding we need to sustain our transportation system and our regional economy. We invite you to work with us on this very important effort.

Kathryn Porter
2000 Chair
National Capital Region
Transportation Planning Board

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Overview of the TPB and the Constrained Long-Range Plan (CLRP)

The TPB's Purpose and Membership

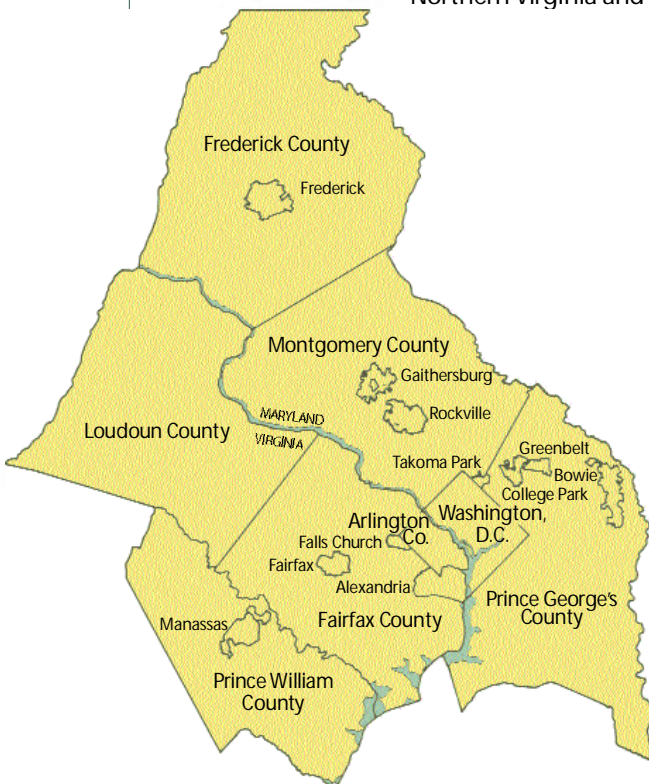
The Transportation Planning Board (TPB) is the organization that brings together key decision makers to coordinate planning and funding for the region's transportation system. The TPB is responsible for developing the 25-year regional transportation plan. The TPB also analyzes the plan for compliance with clean air regulations.

Members of the TPB include representatives of local governments, state transportation agencies, state and District of Columbia legislatures, and the Washington Metropolitan Area Transit Authority (WMATA).

TPB Planning Area

The TPB Planning Area includes suburban Maryland, Northern Virginia and the District of

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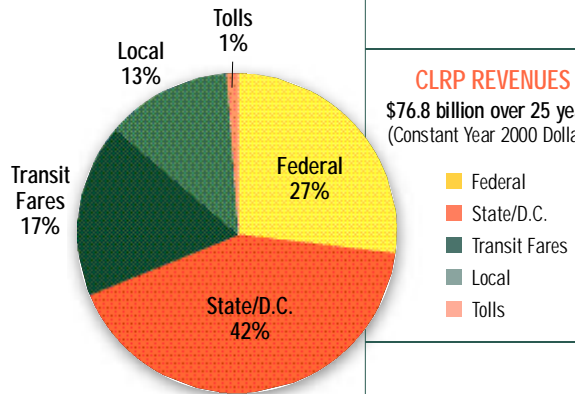
The Constrained Long-Range Plan (CLRP)

The Constrained Long-Range Plan, or CLRP, is the TPB's primary planning document. It has a 25-year planning horizon. Included in the plan are regionally significant transit and highway projects to be implemented over the next 25 years. By law the plan must meet federal planning and air quality requirements.

One key federal requirement is that the long-range plan can only include projects and programs for which funding is "reasonably expected to be available." This means that no matter how important a new transportation project is, it can only be included in the Constrained Long-Range Plan if funding for the project can be identified.

CLRP Revenues

The chart at right displays revenue sources that currently fund the 25-year plan. The region expects to have \$76.8 billion available over the next 25 years—approximately \$3 billion per year. Most of the funds come from federal and state sources.

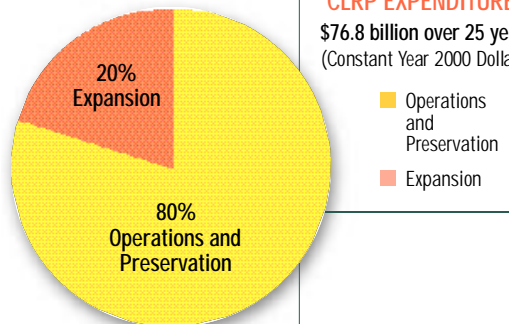


CLRP REVENUES
\$76.8 billion over 25 years
(Constant Year 2000 Dollars)

- Federal
- State/D.C.
- Transit Fares
- Local
- Tolls

CLRP Expenditures

Eighty percent of the CLRP's funding is needed for operating and preserving the region's transit and highway system. That leaves only 20 percent for expansion. In other words, out of the \$3 billion spent annually, \$2.4 billion goes for operations and preservation and \$600 million for expansion.



CLRP EXPENDITURES
\$76.8 billion over 25 years
(Constant Year 2000 Dollars)

- Operations and Preservation
- Expansion

Recent Trends

“Bad Traffic Grows Worse, Study Says”

Headline in the *Washington Post*, December 16, 1999

Trends in Highway Congestion: 1993 to 1999

Highway congestion in the region made the *Washington Post* front page in December 1999 when a TPB study of traffic quality showed dramatically degraded conditions over the past six years.

Below are two sets of aerial photographs from 1993 and 1999 that show the growth in congestion on roads in Maryland and Virginia.



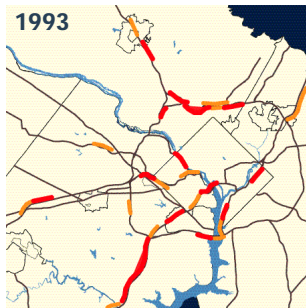
Evening Congestion on I-495 at VA 123



Morning Congestion on US 50 at MD 197

These maps show the widespread increase in the worst kinds of congestion between 1993 and 1999.

Evening Highway Congestion 1993-1999



- Congested Flow (average speed 30-50 mph)
- Stop and Go Conditions (average speed < 30 mph)

Transit Travel

A record number of riders has created “transit congestion” on the Metrorail system, a phenomenon which has been increasingly noted in the media



throughout the past year. Not only is the transit system more crowded, but more people are traveling both earlier and later, making the peak travel periods last longer.

Metro parking facilities are also crowded, which constrains ridership growth. If parking is unavailable, potential transit riders just keep on driving to their destinations.

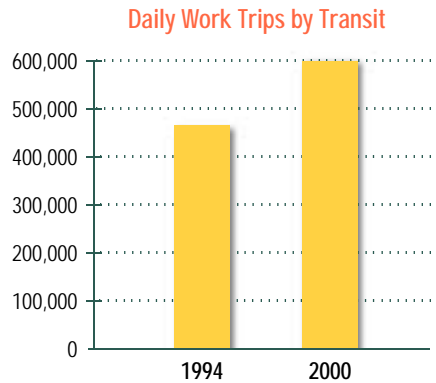
Additional transit ridership has numerous benefits for the region, including reducing highway congestion and improving air quality, but new transit facilities are needed to handle the additional ridership.

“Metro trains have been attracting thousands of new riders... resulting in loaded platforms and packed cars.”

Washington Post,
October 25, 2000

Daily Work Trips by Transit

Daily work trips by transit have increased 30 percent since 1994 on the region’s transit systems—the local bus systems, Metrorail and Metrobus, and commuter rail. Work trips by transit account for about 60 percent of the total number of transit trips made on an average weekday, and are important because they drive capacity needs for the transit system.



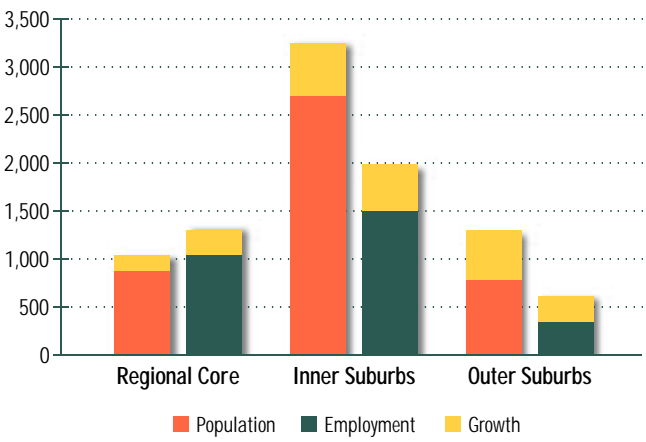
Future Conditions

Metropolitan Growth over the Next 25 Years

The region is forecast to grow by more than 1 million people and 1 million jobs over the next 25 years. This is a 31 percent increase in population and a 41 percent increase in employment.

The chart below shows that the regional core is growing at a slower rate than the outer suburbs, which are anticipating dramatic increases in population and employment. Despite the strong growth in the outer suburbs, the inner parts of the region are still expected to have the highest concentrations of jobs and people in 2025.

Metropolitan Growth over the Next 25 Years

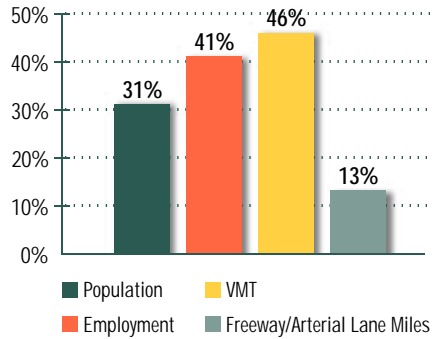


Regional Core: District of Columbia, Arlington, and Alexandria
 Inner Suburbs: Montgomery County, Prince George's County, Fairfax County, City of Fairfax, and the City of Falls Church
 Outer Suburbs: Loudoun County, Prince William County, and Frederick County

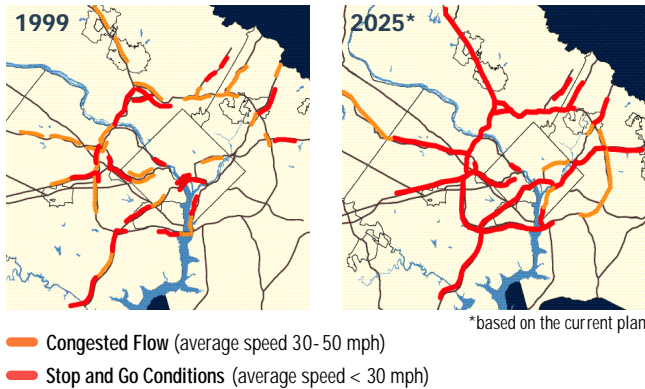
Vehicle Miles of Travel (VMT) and the CLRP: Growth Over 25 Years

Analysis of the CLRP shows that VMT is expected to increase faster than population and employment. This means that more people will be driving and traveling longer distances. The growth in VMT is partly due to where increases in population and employment are occurring, as shown in the metropolitan growth chart on page 6. When you combine this high VMT growth with low growth in roadway miles, the result is more congestion.

VMT and the CLRP: Growth Over 25 Years



Evening Highway Congestion in 2025



By 2025, severe stop-and-go congestion is expected to be prevalent on major roadways throughout the region, not just in isolated areas. If you have ever been stuck on some of the worst Washington routes today—like the Capital Beltway or I-95—then you understand the kind of congestion expected on the majority of the region's highways in 2025 under the current CLRP.

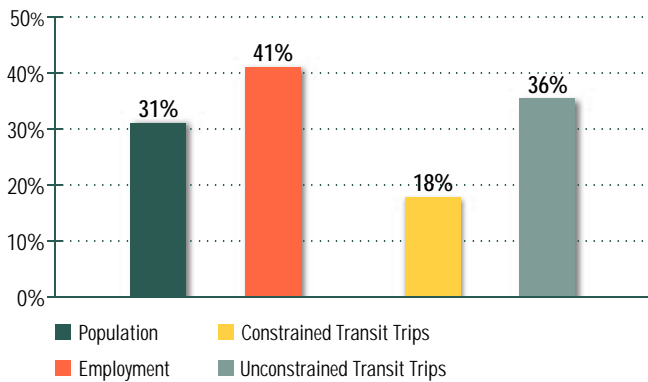
Truck traffic is a major factor in highway congestion and will continue to be a challenge for the region. Trucks account for 12 to 15 percent of the traffic on the southern portion of the Beltway, for example.



Transit Work Trips and the CLRP: Growth Over 25 Years

Due to the lack of funding in the CLRP to accommodate additional riders on the transit system, the TPB's recent air quality analysis constrained the number of transit trips into and through the core area after 2005. Transit work trips are forecast to increase only by 18 percent in 2025 under this constraint, but would increase 36 percent without the constraint. The capacity constraint would cause 104,000 additional daily trips to be absorbed by the highway system, causing an increase in emissions.

Transit Work Trips and the CLRP: Growth Over 25 Years

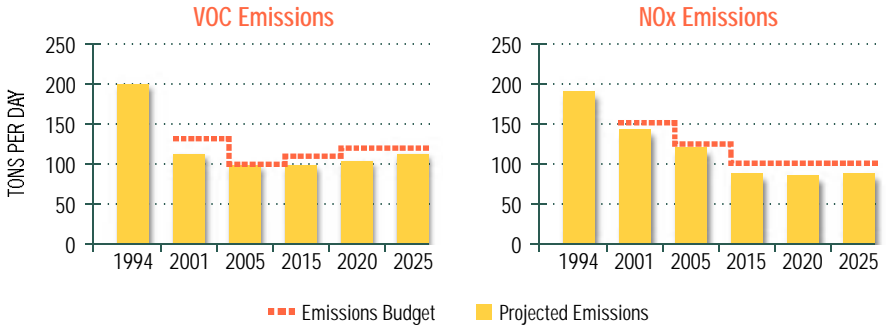


Transit Congestion in the Next 25 Years

More crowding on Metrorail can be expected during peak hours.

Air Quality: Mobile Source Emissions

Air quality is one of the issues the TPB is required to address. This region does not currently meet national air quality standards for ground-level ozone.



The TPB's air quality conformity analysis measures the projected mobile source emissions based on the CLRP against emissions ceilings ("budgets") established by the region's air quality plan. VOC and NOx are included in the conformity analysis because they are the precursors that combine to form ground-level ozone. While the region has made great progress in reducing emissions since 1994, the margins between the emissions budgets and the projected emissions are tight, especially in 2005.

With such tight margins for both VOC and NOx, there is little room for VMT to increase more than is currently projected.

Funding Challenges

The Washington region is at a crossroads. Our region is prosperous and continued dynamic growth is forecast. But conditions on the transportation system are expected to deteriorate rapidly because of limited new transit and highway facilities. Air quality will be a continuing challenge.

During the 2000 update of the CLRP, the TPB found that a significant portion of the region's transportation needs cannot be funded through existing revenue sources. The TPB has identified two immediate funding challenges that must be addressed:

- A) Identify reliable sources of funding to rehabilitate and maintain the region's transportation system adequately.
- B) Address the projected gridlock on transit and highway networks.

A) Identify Reliable Sources of Funding to Rehabilitate and Maintain the Region's Transportation System Adequately

The region currently spends 80 percent of its transportation revenues, or approximately \$2.4 billion per year, on operating and preserving the system.

To meet long-term rehabilitation and maintenance needs for both highways and transit, approximately \$200 million more per year is needed.

Transit Rehabilitation is a Major Priority

Transit rehabilitation and maintenance is a growing unmet need in this region. As transportation systems age, more funding is required to rehabilitate and maintain them. The CLRPP could not identify adequate funding for WMATA's Infrastructure Renewal Program (IRP) for the 103-mile Metrorail system.



Rehabilitation and Maintenance is Essential on Highways and Bridges

The CLRPP does not currently include reliable sources of funding to adequately maintain and rehabilitate highways and bridges in the next 25 years.

B) Address Projected Gridlock on Transit and Roadway Networks

The region currently plans to spend 20 percent of its transportation revenues, or \$600 million per year, on expansion.

To address projected gridlock on the highway and transit networks, a major infusion of funding is needed for the three elements described below.

1) Accommodate the Demand for Transit Ridership

Funding must be provided to accommodate the future demand for transit ridership growth. The current CLRPP allows for only an 18 percent increase in transit trips. Full funding would allow for a 36 percent increase in transit trips. An additional \$140 million per year is needed to accommodate this projected transit ridership growth.





2) Make Incremental Improvements

Incremental improvements, ranging from basic upgrades of intersections to applications of new technologies, need to be funded. Intelligent Transportation Systems (ITS) include new traffic signal systems, automatic vehicle location (AVL) for buses, and expanded Web-based information for ridesharing and transit. An additional \$200 million per year is needed to make these incremental improvements.

3) Add New Road and Transit Capacity

New road and transit capacity is needed to address growing congestion. Suburban Maryland, Northern Virginia, the District of Columbia, and WMATA have identified long-range transportation needs in the following plans:

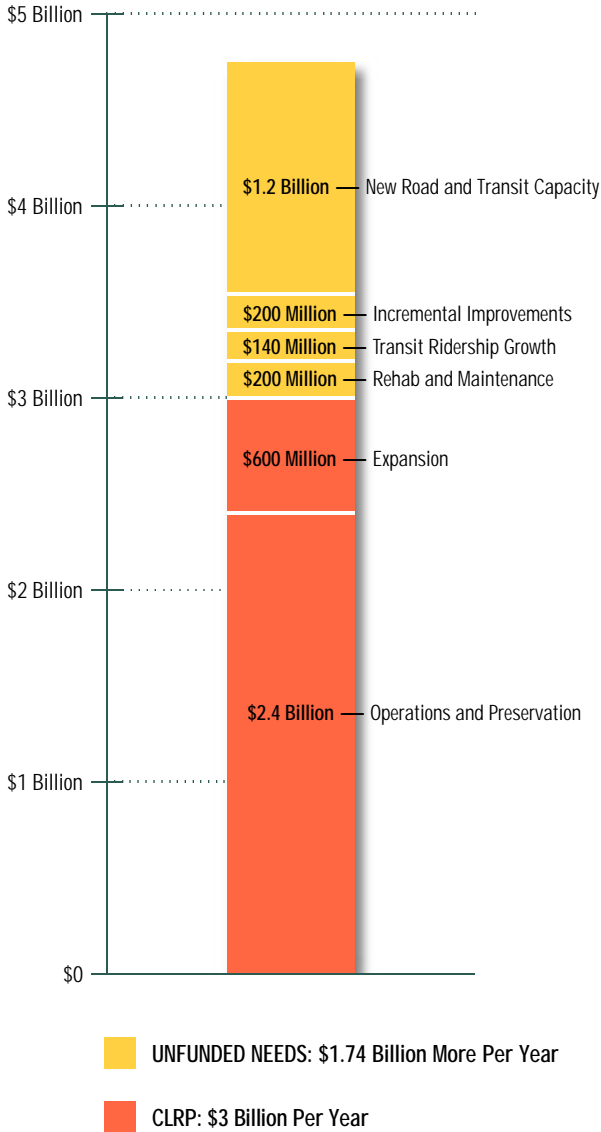


- *A Transportation Vision, Strategy and Action Plan for the Nation's Capital*
- *1999 Maryland Transportation Plan*
- *Northern Virginia 2020 Transportation Plan*
- *WMATA Transit Service Expansion Plan*

However, the agencies have not been able to include these needs in the CLRP due to a lack of funding. An additional \$1.2 billion per year is needed for new road and transit capacity.

Total Funding Needs

The total of these unfunded needs is an additional \$1.74 billion per year. Funding these needs would require an increase of more than 50 percent in current revenues.



A Fiscally Sustainable Transportation System

In 1998, after three years of discussion with citizens and community leaders, the TPB adopted a regional transportation Vision. The Vision contains eight fundamental goals (see inside back cover), and accompanying objectives and strategies, to guide our transportation investments into the 21st century.

Goal 7 of the TPB Vision calls for an enhanced funding mechanism(s) for transportation priorities:

“The Washington Metropolitan Region will achieve an enhanced funding mechanism(s) for regional and local transportation system priorities that cannot be implemented with current and forecasted federal, state, and local funding.”

— TPB Vision, Goal 7

Existing federal, state, and local sources provide substantial amounts of money, but not enough. Other regions rely on a variety of dedicated funding sources that we lack in the Washington region.

Revenues That Could Be Generated by Alternative Sources

Here are some examples of the revenues generated by a few enhanced funding mechanisms.

Meeting the region's transportation needs will require some combination of these and possibly other revenue sources.

Revenues Generated by Alternative Sources	
RATE	REGION-WIDE REVENUES (per year)
5 Cent Per Gallon Gas Tax	\$100 Million
\$1 Toll Per Trip on New Highway Facilities	\$20-\$40 Million Per Facility
1 Percent Sales Tax	\$400 Million
1 Percent Income Tax	\$900 Million
\$6 Payroll Tax Per Employee Per Month	\$100 Million

Finding Solutions

On November 30, 2000, the TPB brought together key regional leaders at Union Station to discuss the funding shortfall described in this booklet. The meeting was attended by members of Congress, state legislators, and key local officials, as well as top transportation officials from Virginia, Maryland, and the District of Columbia.

After participants spent the morning discussing the funding crisis, John Mason, the incoming TPB Chairman, sought to end the meeting on a positive note. "We don't want to leave this session with just the frustration that all of us feel," he said.

Chairman Mason pledged that the TPB would pursue two actions in 2001:

- The identification of key regional transportation priorities, including both rehabilitation and expansion.
- The identification of an agreed upon approach for the funding of these established priorities.

Accomplishing these actions will require a dedicated effort from a wide spectrum of regional decision makers, including state legislators and members of Congress. Opinion leaders and citizens from throughout the region will be asked to help identify and support realistic solutions.

Throughout the coming year, the TPB will be engaged in efforts to tackle this crisis. Solving the problem will require an unprecedented level of cooperation among the numerous jurisdictions across the region. Only with a concerted effort can the region begin to tackle the critical rehabilitation and capacity needs of the region's transit and highway networks.

For More Information

The information in this booklet summarizes presentations that were made at the TPB's meeting with key regional leaders on November 30, 2000, at Union Station.

An hour-long videotape from the meeting was extensively shown on local cable television stations in the early months of 2001. The videotape features the meeting's presentations and also includes comments by congressional representatives, state legislators, local elected officials, and agency representatives.

To obtain a copy of the videotape or register your opinions about the information presented in this pamphlet, contact:

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202/962-3200
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cogdtp@mwcog.org (public comment e-mail)

Concerned citizens may also make a statement during the public comment period at the beginning of each TPB meeting, which is held at 12 noon on the third Wednesday of every month except August at COG.

Credits

Charts: Wendy Klancher

Design: Carla Badaracco

Photos: Larry Levine, WMATA photos

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Publication No. 21604, © 2001

The Vision Goals

The Vision was adopted by the National Capital Region Transportation Planning Board on October 21, 1998.

1. The Washington metropolitan region's transportation system will provide **reasonable access at reasonable cost** to everyone in the region.
2. The Washington metropolitan region will develop, implement, and maintain an interconnected transportation system that enhances quality of life and promotes a strong and growing economy throughout the entire region, including **a healthy regional core and dynamic regional activity centers** with a mix of jobs, housing, and services in a walkable environment.
3. The Washington metropolitan region's transportation system will give priority to **management, performance, maintenance, and safety of all modes and facilities**.
4. The Washington metropolitan region will use the **best available technology** to maximize system effectiveness.
5. The Washington metropolitan region will plan and develop a transportation system that enhances and protects the region's **natural environmental quality, cultural and historic resources, and communities**.
6. The Washington metropolitan region will achieve better inter-jurisdictional **coordination of transportation and land use planning**.
7. The Washington metropolitan region will achieve an **enhanced funding mechanism(s)** for regional and local transportation system priorities that cannot be implemented with current and forecasted federal, state, and local funding.
8. The Washington metropolitan region will support options for **international and inter-regional travel and commerce**.