

# Regional Transportation Priorities Plan

For the National Capital Region





## DEDICATION

The Regional Transportation Priorities Plan is dedicated to the memory of Ronald F. Kirby, whose steadfast leadership helped guide and inform regional transportation decision-making in the Washington metropolitan region for more than 26 years. This Plan, which Ron worked tirelessly to develop, is a reflection of his innovative yet pragmatic approach to improving the region's transportation system and making the region a better place.



## Regional Transportation Priorities Plan

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# Regional Transportation Priorities Plan

for the National Capital Region

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GUS ESTRELLA, FLICKR CREATIVE COMMONS

# Executive Summary

**T**he Regional Transportation Priorities Plan aims to identify strategies with the greatest potential to respond to our most significant transportation challenges. It also aims to identify those strategies that are “within reach” both financially and politically—recognizing the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue.

The Plan calls for maintaining the region’s existing system of roadways and transit first, strengthening public confidence and ensuring fairness, and finding better, more efficient ways to move people throughout the region. Focusing our attention on these efforts will move us toward achieving our shared goals for the future.

Ultimately, the purpose of the Priorities Plan is to support efforts to incorporate into future updates of the region’s Constrained Long-Range Transportation Plan (CLRTP) specific projects and programs that support regional priorities. The Priorities Plan serves as a policy guide to assist local, state, and regional leaders in “thinking regionally and acting locally”—that is, in considering regional needs when identifying local transportation improvements to advance to implementation.

**The Priorities Plan aims to identify those strategies that are “within reach” both financially and politically.**

### **Background: The Metropolitan Washington Region and the TPB**

The metropolitan Washington region includes the District of Columbia plus parts of Maryland and Virginia. The region is home to more than 5.3 million people and 3.2 million jobs in hundreds of communities linked together by a system of roads, transit lines, and bicycle and pedestrian paths. Both population and employment in the region are expected to continue growing over coming decades, putting greater demand on the region’s transportation system. Competition for funds will continue to present challenges, especially for rehabilitation and maintenance of existing roadway and transit systems.

### **Developing the Regional Transportation Priorities Plan**

The Regional Transportation Priorities Plan is rooted in more than a decade of TPB planning, including the establishment of regional goals through the *TPB Vision* and *Region Forward*, analysis of a range of transportation and land-use scenarios using the adopted Constrained Long-Range Transportation Plan (CLRP) as a baseline, and various studies of the region’s transportation funding challenges.

The *TPB Vision*, adopted by the TPB in 1998, outlines a number of broad transportation-planning goals that provide policy guidance to shape the region’s transportation investments.

*Region Forward*, developed by the Metropolitan Washington Council of Governments and approved in 2010, lays out comprehensive regional planning goals in a variety of sectors to guide future planning in the region. *Region Forward* also identifies specific targets to help measure progress in achieving those goals. The strategies in this Plan are designed, collectively, to support and advance the comprehensive regional planning guidance provided both by the *TPB Vision* and *Region Forward*.

The idea to develop a priorities plan originated from the TPB’s Citizens Advisory Committee. In 2010, the CAC recommended that the TPB develop a financially-unconstrained regional vision for transportation operations and investment. The TPB convened regional stakeholders to participate in a regional “Conversation on Setting Regional Transportation Priorities,” an event that led to the development of a scope and process for developing the Regional Transportation Priorities Plan.

Since then, the TPB and its staff have engaged in extensive technical work and public outreach—including listening sessions with key stakeholder groups and engaged citizens, a citizens forum in June 2012, and a public opinion survey in spring 2013—to refine the challenges and strategies in the Plan and to identify the key priorities for moving the region closer to achieving its goals.



## Building on the TPB Vision

Development of the Regional Transportation Priorities Plan over the past two years has involved identifying the key continuing transportation challenges the Washington region faces in achieving six of the major policy goals articulated in the TPB Vision. Those goals are:

- Provide a comprehensive range of transportation options for everyone
- Promote a strong regional economy, including a healthy regional core and dynamic regional Activity Centers
- Ensure adequate maintenance, preservation, and safety of the existing system
- Maximize operational effectiveness and safety of the transportation system
- Enhance environmental quality, and protect natural and cultural resources
- Support international and inter-regional travel and commerce

Identifying the region's most pressing transportation challenges relied on using the adopted CLRP as a baseline. The adopted CLRP, which includes only those projects and programs what we realistically expect to build by 2040—and which takes into account forecasts of future population and job growth, and where that growth is expected to occur—provides the best assessment of what our transportation future will look like under current planning and funding trajectories.

## REGIONAL GOALS AND CHALLENGES

Development of the Regional Transportation Priorities Plan over the past two years has involved identifying the key continuing transportation challenges the Washington region faces in achieving six of the major policy goals articulated in the TPB Vision.

### GOAL 1: Provide a Comprehensive Range of Transportation Options

**Roadway Congestion:** The region's roadways are among the most congested in the nation, making it harder for people and goods to get where they need to go.

**Transit Crowding:** The Metrorail system currently experiences crowding during peak hours and lacks the capacity to support future population and job growth.

**Inadequate Bus Service:** Existing bus service is too limited in its coverage, frequency, and reliability, making transit a less viable option, especially for people with disabilities and limited incomes.

**Unsafe Walking and Biking:** Too few people have access to safe pedestrian and bicycle infrastructure or live in areas where walking and bicycling are not practical options for reaching nearby destinations.

### GOAL 2: Promote a Strong Regional Economy, Including a Healthy Regional Core and Dynamic Activity Centers

**Development around Metrorail:** Too many Metrorail stations, especially on the eastern side of the region, are surrounded by undeveloped or underdeveloped land, limiting the number of people who can live or work close to transit and leaving unused capacity in reverse-commute directions on several lines.

**Housing and Job Location:** Most housing, especially affordable housing, and many of the region's jobs are located in areas outside of activity centers where transit, bicycling, and walking are not safe and viable options.

### GOAL 3: Ensure Adequate System Maintenance, Preservation, and Safety

**Metrorail Repair Needs:** Deferred Metrorail maintenance over the years has led to unreliability, delays, and safety concerns today, as well as higher maintenance costs.

**Roadway Repair Needs:** Older bridges and roads are deteriorating and in need of major rehabilitation to ensure safe, reliable, and comfortable travel for cars, trucks, and buses.

### GOAL 4: Maximize Operational Effectiveness and Safety of the Transportation System

**Incidents:** Major accidents and weather disruptions on roadways and transit systems cause severe delays and inconvenience.

**Pedestrian and Bicyclist Safety:** The number of bicycle and pedestrian fatalities each year is holding steady even as the number of vehicle fatalities has declined steadily.

### GOAL 5: Enhance Environmental Quality, and Protect Natural and Cultural Resources

**Environmental Quality:** Increasing amounts of vehicle travel resulting from population and job growth could threaten the quality of our region's air and water.

**Open Space Development:** Wildlife habitat, farmland, and other open spaces are threatened by construction of new transportation facilities and residential and commercial development.

### GOAL 6: Support Inter-Regional and International Travel and Commerce

**Bottlenecks:** Bottlenecks on the highway and rail systems cause delays in inter-regional travel for both freight and passengers, hurting the region's economic competitiveness.

**Travel Time Reliability:** Travel times to and from the region's airports are becoming less reliable for people and goods movement.

**The Plan calls for maintaining the region's existing system of roadways and transit first, strengthening public confidence and ensuring fairness, and finding better, more efficient ways to move people and goods.**

The public reviewed and commented on the challenges developed through the TPB's technical work in the early listening sessions, the citizens forum in June 2012, the public opinion survey in spring 2013, and in comment periods on the draft Plan.

### **Our Three Regional Priorities**

The priorities planning process led to the identification of three regional priorities that local, state, and regional agencies should consider when developing projects, especially those that will eventually be included in the region's Constrained Long-Range Transportation Plan (CLRP). The three priorities in this Plan are like building blocks, all essential in achieving our shared goals for the future. The three priorities and the

individual strategies they comprise aim to be "within reach" both financially and politically. And they aim to achieve greater efficiencies, in particular by making better use of the infrastructure already in place and by combining or packaging complementary strategies that offer mutually supportive benefits.

### **PRIORITY 1 Meet Our Existing Obligations Maintain the Transportation System We Already Have**

Meeting our existing obligations to maintain the transportation system we already have comes first among the three strategies in this Plan. Proper maintenance of our highways, bridges, and transit systems, especially Metro, is of primary importance; the success of all other strategies to improve transportation in our region relies on an existing system that functions properly and is safe.

For many years now, most transportation agencies in the region that are responsible for the upkeep of roadway facilities have had requirements and procedures in place to guarantee that adequate funds are dedicated to maintenance and preservation of the existing system before roadways are expanded or new facilities are built. Agencies also have robust systems in place to evaluate the condition of area roadways and bridges, including structural integrity, pavement condition, and time remaining before major reconstruction is needed.



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Transit agencies in the region also dedicate a significant portion of their budgets to maintenance. But a number of high-profile disruptions and accidents in recent years highlights the need for greater efforts to bring the system, especially Metrorail, into a state of good repair. The Washington Metropolitan Area Transit Authority (WAMTA) is pursuing such efforts through its ambitious six-year, \$5-billion Metro Forward reconstruction program. It has also proposed another multi-year effort, known as Metro 2025, to bring the system fully into a state of good repair.

New federal rules outlined in the latest surface transportation reauthorization, Moving Ahead for Progress in the 21st Century, or MAP-21, now require the region to bring its highways and transit systems into a state of good repair. The new law requires departments of transportation, transit agencies, and metropolitan planning organizations (MPOs) like the TPB to set performance targets for maintenance and to report regularly on progress in achieving those targets.

## PRIORITY 1 STRATEGIES

- Ensure Maintenance of the Transit System (OG1)
- Ensure Maintenance of Roads and Bridges (OG2)



LARRY LEVINE, WAMTA

## PRIORITY 2 Strengthen Public Confidence and Ensure Fairness

### Pursue Greater Accountability, Efficiency, and Accessibility

As a matter of institutional practice, we must take steps to strengthen public confidence and ensure fairness and equity throughout the region. Agencies need the public's confidence in order to make important decisions about transportation, including raising revenue. Agencies in the region should take steps to demonstrate their competence and that they are being managed effectively. This includes taking care of obvious things first, making common sense improvements, engaging citizens in the planning and decision-making process, and using technology to achieve greater efficiencies and communicate better with the public.

Ensuring greater fairness in our region means improving access to transportation services so that everyone can use the system and contribute to and benefit from the region's vibrant economy. It is especially important to ensure accessibility for traditional

## PRIORITY 2 STRATEGIES

- Ensure Accessibility for Persons with Disabilities (OG5)
- Engage and Communicate with the Public\*
- Promote System Efficiency Through Management and Operations, and the Appropriate Use of Technology\*

\* These strategies originated in public outreach during the development of the Plan. They are not described in the strategies in Chapter 3.

## PRIORITY 3 STRATEGIES

- Improve Access to Transit Stops and Stations [NT1]
- Alleviate Roadway Bottlenecks [NT2]
- Support and Promote Electric Vehicles [NT3]
- Promote Commute Alternatives [NT4]
- Expand Pedestrian Infrastructure [NT5]
- Expand Bicycle Infrastructure [NT6]
- Apply Priority Bus Treatments [OG3]
- Increase Roadway Efficiency [OG4]
- Update and Enforce Traffic Laws [OG6]
- More Capacity on the Existing Transit System [LT1]
- Concentrated Growth in Activity Centers [LT2]
- Enhanced Circulation within Activity Centers [LT3]
- Bus Rapid Transit (BRT) & Other Cost-Effective Transit Alternatives [LT4]
- Express Toll Lanes [LT5]

disadvantaged groups—persons with disabilities, low incomes, and limited English proficiency. Efforts to improve paratransit services, limit the negative effects of increases in transit fares, and provide important transit system information in multiple languages and formats all improve accessibility for traditionally disadvantaged groups. A number of other strategies in the Plan that reduce auto-dependency and expand transportation choice also greatly benefit these groups. Committing to providing more and better travel options and greater accessibility for everyone in our region is an essential step as we move forward both in maintaining our existing system and in developing new projects and programs to improve our transportation system.

### PRIORITY 3 Move More People More Efficiently

#### Alleviate Congestion and Crowding, and Accommodate Future Growth

The region's economy and quality of life depend on the ability of our transportation system to move more people and goods, and to move them more efficiently. Priority Three focuses on the more technical aspects of transportation planning, decision-making, and investment—how to alleviate congestion and crowding on the existing system now, and how to accommodate growth in travel in the future.

This priority calls for:

- **A mix of supply- and demand-side strategies.** Expanding roadway and transit capacity goes a long way in alleviating congestion on the existing transportation system, but doing so can often be more expensive and less cost-effective than efforts to manage demand.
- **A multimodal approach.** Offering a wider variety of travel modes, and focusing attention on modes that can move more people at lower cost, is key to moving more people more efficiently. Making such options available to more people also takes pressure off currently crowded systems, especially the roadway network and the core of the transit system, and alleviates demand for expensive new infrastructure. Providing travelers with more options also results in an increase in quality of life, as they are more likely to be able to choose a mode that best suits their individual needs. Not all projects with a given mode deserve equal attention, however; some investments or projects support more regional goals and offer greater benefit relative to their costs than others.
- **A focus on concentrating future growth in mixed-use Activity Centers.** Land-use is a critical component in more effectively managing demand on our region's transportation system.



Concentrating growth in mixed-use Activity Centers can help make more effective use of existing facilities, and can improve socioeconomic imbalance in the region by supporting job growth and commercial activity in areas that currently lack it. These land-use principles are central tenets of *Region Forward* and the *TPB Vision*.

Together, the strategies outlined in Priority Three represent a shift in focus away from large-scale supply-side investments of the past to smarter, more strategic approaches to alleviating congestion and crowding, and to accommodating future growth.

### **Next Steps: Implementing Regional Priorities**

#### ***Thinking Regionally, Acting Locally***

Implementation of specific projects and programs is the responsibility of local, state, and regional agencies in the Washington region. These agencies are also responsible for conceiving and developing such initiatives. The purpose of the Regional Transportation Priorities Plan is to inform that project development process, by encouraging local, state, and regional leaders to consider regional needs in identifying projects to advance to implementation. Elected leaders and transportation officials who sit on the TPB should return to the jurisdictions, bodies, and agencies they represent and share the priorities and principles laid out in this Plan as a resource to use in developing projects.

**The Priorities Plan serves as a policy guide to assist local, state, and regional leaders in “thinking regionally and acting locally”—that is, in considering regional needs when identifying local transportation improvements to advance to implementation.**



**Pursuing the priorities and strategies outlined in this Plan will lead to greater economic vitality and a higher quality of life in the Washington region.**

### ***Updating the Constrained Long-Range Transportation Plan (CLRP)***

Locally-developed projects and programs that are deemed to be “regionally significant” must be included in the Constrained Long-Range Transportation Plan (CLRP). The CLRP includes all projects and programs that the region can afford to build, maintain, and operate with revenues that are reasonably expected to be available in the future.

When projects developed at the local, state, or regional level have enough specificity and are reasonably expected to be funded, they will come to the TPB for inclusion in the CLRP. Because the CLRP is a “check point” in the implementation process, updating it provides a clear opportunity to consider the priorities outlined in this Plan in making decisions about what projects and programs to advance, or what projects or programs already in the plan might need to be changed or removed in order to bring the region closer to achieving its goals.

As agencies submit projects and programs for inclusion in the CLRP, the TPB will have an opportunity to review, assess, and discuss the relationship of those submissions to the priorities in this Plan. The public will also have opportunities throughout the update process to comment on how well any of the submissions support regional priorities.

In the future, the TPB will work collaboratively with the region’s jurisdictions to develop a process by which each jurisdiction will describe—in a formal letter or other documentation—the ways in which the projects and programs they submit for inclusion in the CLRP address the priorities in this Plan. In advance of each four-year update to the CLRP, the TPB will revisit and update the Priorities Plan to reflect changes planned for the region, including new projects in the CLRP, new land-use developments and forecasts, and new challenges that will emerge as policy and political issues change over time.

### **Conclusion**

Pursuing the priorities and strategies outlined in this Plan will lead to greater economic vitality and a higher quality of life in the Washington region. Maintaining the existing system first, strengthening public confidence and ensuring fairness, and finding better, more efficient ways to move people throughout the region will move us toward achieving our shared goals for the future.

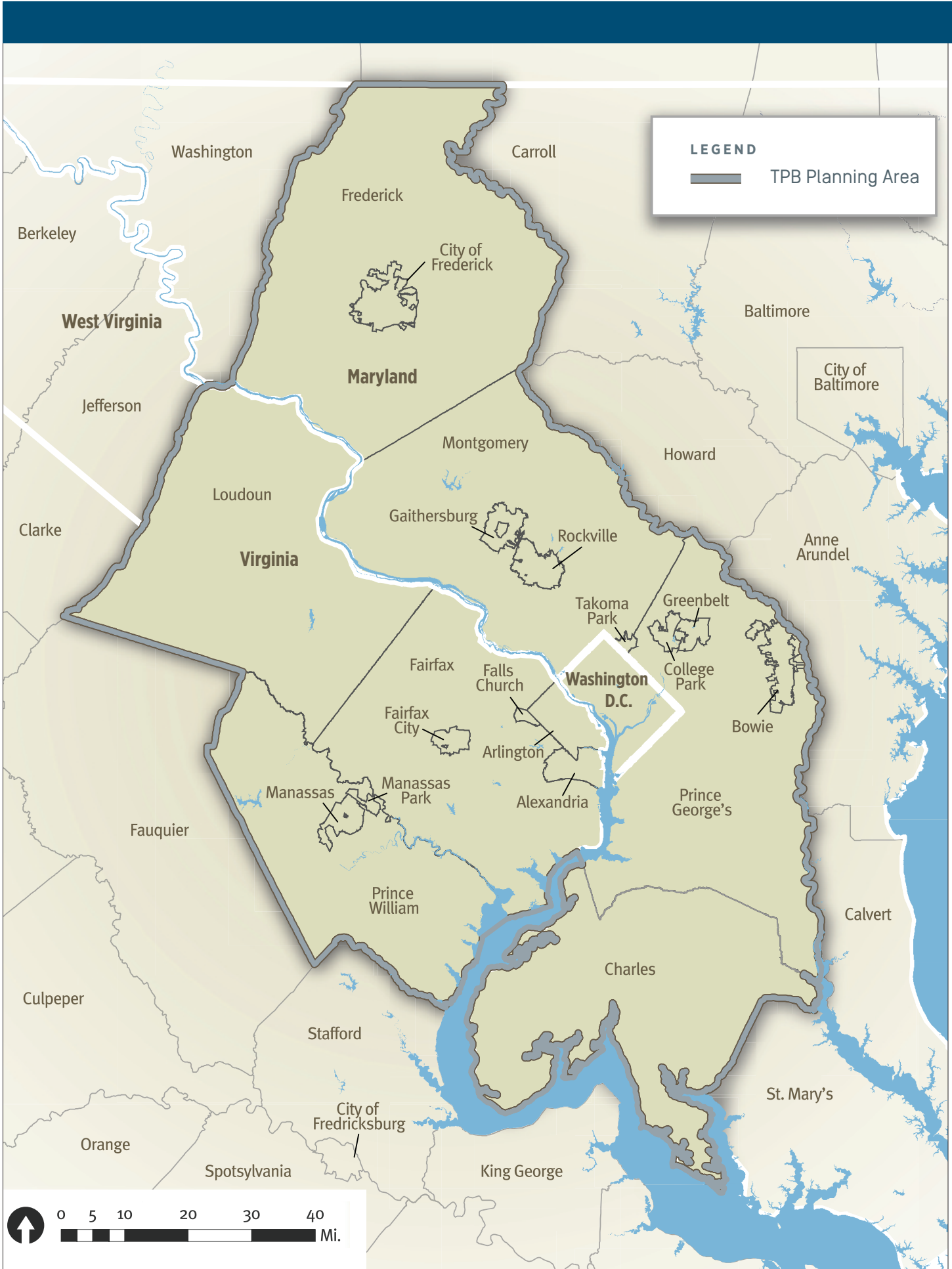


ASHLEY HIGGINS, FLICKR CREATIVE COMMONS

# Introduction and Purpose

The Regional Transportation Priorities Plan aims to identify strategies with the greatest potential to respond to our region’s most significant transportation challenges. It also aims to identify those strategies that are “within reach” both financially and politically—recognizing the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue. Development of the Priorities Plan included a unique public opinion survey element to help identify those strategies with the greatest likelihood of garnering broad public support.

Ultimately, the purpose of the Priorities Plan is to support efforts to incorporate into future updates of the region’s Constrained Long-Range Transportation Plan (CLRP) specific projects and programs that support regional priorities. The Plan serves as a policy guide to encourage local, state, and regional leaders to “think regionally while acting locally”—that is, to consider regional needs in identifying local projects to advance to implementation.





Ultimately, the Plan will support efforts to incorporate into future updates of the region's Constrained Long-Range Transportation Plan (CLRP) specific projects and programs that support those strategies.

### Background: The Metropolitan Washington Region and the TPB

The metropolitan Washington region is the area where most of us live, work, shop, and play. The region includes the District of Columbia plus parts of Maryland and Virginia. The entire area is approximately 3,000 square miles in size.

Within this region, there are more than 5.1 million people and 3.2 million jobs in hundreds of communities linked together by a system of roads, transit lines, and bicycle and pedestrian paths. Both population and employment in the region are expected to continue growing over the coming decades. By 2040, the population is expected to increase by 24 percent, to 6.4 million people, while employment is expected to increase by 36 percent, to 4.4 million jobs, compared to 2010.

Population and jobs are not evenly distributed throughout the region; inner jurisdictions have the greatest numbers of jobs and housing, but outer jurisdictions are experiencing the most rapid growth. As the region grows to accommodate more people and jobs, greater demand will be placed on the transportation system. Competition for funds will continue to present challenges, especially for rehabilitation and maintenance of existing roadway and transit systems.

### The Transportation Planning Board (TPB)

The National Capital Region Transportation Planning Board (TPB)

is the federally designated Metropolitan Planning Organization (MPO) for the region, and plays an important role as the regional forum for transportation planning. The TPB is responsible for carrying out a continuing, cooperative, and comprehensive planning process for regional transportation planning in the District of Columbia, Northern Virginia, and Suburban Maryland. The TPB prepares plans and programs that must receive federal approval in order for federal-aid transportation funds to flow to the Washington region.

Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia, 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 vast majority of transportation funding in the Washington region is controlled at the state and local levels. Although the TPB has crafted and supported some regional programs—for example, the Commuter Connections program to promote commute alternatives, and the Transportation/Land-Use Connections (TLC) Program to provide technical assistance to local jurisdictions—most of the project-selection and funding decisions reflected in the region's transportation plans and programs are made by the TPB's member agencies and jurisdictions.



### The TPB Vision

Adopted by the TPB in 1998, the *TPB Vision* provides a set of goals, objectives, and strategies to help the region develop the transportation system it needs to promote economic development, environmental protection, and a high quality of life. It is shaped by the following *Vision Statement*:

*In the 21st Century, the Washington metropolitan region remains a vibrant world capital, with a transportation system that provides efficient movement of people and goods. This system promotes the region's economy and environmental quality, and operates in an attractive and safe setting—it is a system that serves everyone. The system is fiscally sustainable, promotes areas of concentrated growth, manages both demand and capacity, employs the best technology, and joins rail, roadway, bus, air, water, pedestrian and bicycle facilities into a fully interconnected network.*

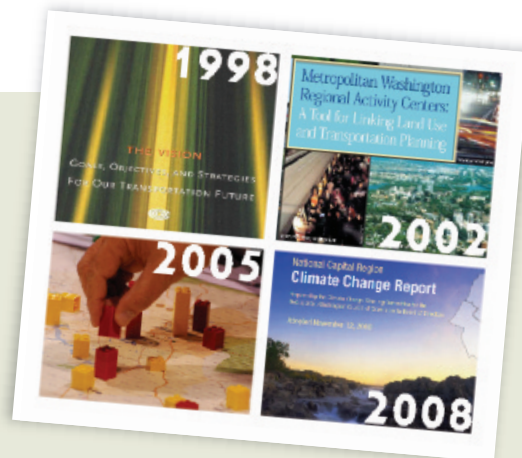
## Region Forward...

Strategies in the Regional Transportation Priorities Plan support many of the goals and objectives contained in “Region Forward: A Comprehensive Guide for Regional Planning and Measuring Progress in the 21st Century.” *Region Forward* was developed by the Metropolitan Washington Council of Governments and approved by the COG Board of Directors in 2010. *Region Forward* includes goals, targets, and a compact agreement to guide future planning and help measure progress in nine goal categories: land use; transportation; environment; climate and energy; economy; housing; health and human services; education; and public safety. The goals are designed to help “shape a more accessible, sustainable, prosperous, and livable National Capital Region.” By the end of 2010, all of COG’s member jurisdictions had signed the regional compact established in *Region Forward*.

*Region Forward* explicitly builds upon past planning activities, including the *TPB Vision*, the basis of the Regional Transportation Priorities Plan. According to the final report, “rather than launch a new visioning process that could take several years, the Coalition’s challenge was to tie together earlier work in a comprehensive way.” The report cites the following four building blocks that the Coalition integrated into *Region Forward*:

- “The *TPB Vision* [1998] created a framework to guide regional transportation investments in the 21st Century.”
- “Regional Activity Centers maps [2002] transformed how leaders thought about regional planning and concentrating development around jobs.”
- “The ‘Reality Check on Growth’ event [2005] challenged area leaders to find a place in the region for millions of new regional jobs and residents.”
- “The ‘Climate Change Report’ [2008] created recommendations for sustainable growth and reducing greenhouse gas emissions.”

Using the policies put forth through these four existing resources, *Region Forward* identified a number of targets for assessing progress toward achieving the transportation goals outlined in the document:



- Reducing daily vehicle miles travelled per capita
- Giving priority to management, performance, maintenance, and safety of all transportation modes and facilities
- Pursuing transportation projects that aim to better connect Regional Activity Centers [See page 23 for map]
- Increasing the rate of construction of new pedestrian and bicycle facilities
- Increasing the share of transit, walk, and bicycle trips throughout the region
- Ensuring that all Regional Activity Centers have access to transit
- Reducing CO2 emissions

The strategies in the Regional Transportation Priorities Plan are designed, collectively, to support and advance the comprehensive regional planning guidance provided by *Region Forward*, particularly the targets related to transportation. However, the strategies in the Priorities Plan are not specific or detailed enough to quantify their individual contributions to achieving the targets.

## ...and Economy Forward

The Priorities Plan is also one of five key recommendations made in a 2012 COG report, *Economy Forward*, which focuses on the Washington region’s key economic needs and identifies steps to strengthen the region’s economic competitiveness and spur and sustain job growth. *Economy Forward* was approved by the COG Board of Directors in September 2012.

The *Vision* outlines a number of broad transportation-planning goals that provide policy guidance to shape the region's transportation investments. Identifying challenges—that is, the obstacles and shortcomings—in realizing these goals shows us where we must focus and prioritize our efforts. By developing a list of priorities that address regional challenges, we will make important strides toward improving our regional transportation system.

The following six goals derived from the *TPB Vision* provide a foundation for the Regional Transportation Priorities Plan process:

- Provide a comprehensive range of transportation options for everyone
- Promote a strong regional economy, including a healthy regional core and dynamic regional activity centers
- Ensure adequate maintenance, preservation, and safety of the existing system
- Maximize operational effectiveness and safety of the transportation system
- Enhance environmental quality, and protect natural and cultural resources
- Support international and inter-regional travel and commerce

### ***The Financially Constrained Long-Range Transportation Plan (CLR)***

The Financially-Constrained Long-Range Transportation Plan (CLR) identifies regionally significant transportation projects and programs that are planned in the Washington metropolitan area through 2040. A key feature of the CLR is that it must be financially constrained: the plan includes only those projects that the region can afford to build, maintain, and operate with revenues that are reasonably expected

to be available in the future. By definition, the CLR may not include projects that are not anticipated to be funded, even if those projects are considered priorities by the region's jurisdictions.

The CLR contains more than 750 projects, ranging from simple highway landscaping to billion-dollar highway and transit projects. The projects and programs that go into the plan are developed cooperatively by governmental bodies and agencies represented on the TPB. Some of the projects will be completed in the near future, while others are in the initial planning stages and are scheduled for completion over the longer-term. Because the adopted CLR includes only what we realistically expect to be built by 2040—and because it takes into account forecasts of future population and job growth, and where that growth is expected to occur—it provides a baseline for assessing challenges our region faces in achieving our regional transportation goals.

### ***Developing the Regional Transportation Priorities Plan***

The concept of a priorities plan has its roots in more than a decade of TPB planning, including the establishment of regional goals through the TPB Vision and Region Forward, analysis of transportation and land-use scenarios using the adopted Constrained Long-Range Plan (CLR) as a baseline, and various studies of the region's transportation funding challenges. In recent years, the TPB has extensively discussed how these activities might be applied to defining priorities for improving the regional transportation system.

The ultimate purpose of the Regional Transportation Priorities Plan is to highlight priorities that should be funded and included in the CLR. Because projects cannot be part of the

CLR if funding is not anticipated, and because the TPB has little direct control over funding, the actual implementation of priorities, in most cases, will occur at the state and local levels. The Plan aims to inform the development of projects for inclusion in the CLR by encouraging local, state, and regional leaders to consider regional needs in identifying projects to advance to implementation. While many worthwhile transportation strategies are developed in response to state, sub-regional, or local challenges, not all of these strategies will contribute significantly to addressing regional challenges. Similarly, some strategies for providing facilities and services across regional or jurisdictional boundaries, such as adding “missing links” in the bicycle trail network, may contribute significantly to addressing regional challenges while not being the highest priority for addressing individual state, sub-regional, or local challenges.

In general, the implementation of regional priorities will mean that additional funding must be identified in order to include new projects in the CLR. In some cases, however, the region's jurisdictions could choose to fund these regional priorities by reallocating funding currently assigned to projects in the CLR that are deemed to be of relatively lower priority.

The release of the final Priorities Plan in early 2014 is designed to ensure that the priorities identified in the Plan are available for consideration in developing the next four-year update of CLR, due at the end of 2014. The Plan should be revisited and updated in advance of each four-year update of the CLR to reflect changes in existing and forecast future conditions, including new projects and programs in the CLR, new land use developments and

**The scope specified that the purpose of the Plan would be to identify transportation strategies that could be recognized throughout the region as offering the greatest potential contributions to addressing continuing regional challenges, and to provide support for efforts to incorporate those strategies into future updates of the CLRP in the form of specific programs and projects.**

forecasts, and new challenges which will occur as policy issues change over time.

### ***Getting Started***

In May 2010, the TPB hosted an event called the “Conversation on Setting Regional Transportation Priorities,” which addressed the possibilities for more explicitly establishing regional priorities. The impetus for that event was a request by the TPB’s Citizens Advisory Committee (CAC) for the TPB to develop a “Regional Priorities Plan” that would serve as a financially unconstrained regional vision for transportation operations and investment.

The Conversation generated broad interest among TPB stakeholders in developing a priorities plan. As a result, in July 2010, the TPB voted to form a task force to determine the scope and process for developing such a plan. The task force included approximately 20 stakeholders in the TPB process—members of the TPB, CAC, Access for All (AFA) Committee and the TPB Technical Committee. All Task Force members had also participated in the Conversation. Between October 2010 and April 2011, the TPB Priorities Plan Scoping Task Force met four times and discussed planning processes and activities in the region, reasons for enhancing the current process, and options for change. At its first

meeting, the task force also learned about the priorities planning activities of other metropolitan planning organizations (MPOs) around the country.

### ***Scope of Work***

In July 2011, a year after the Scoping Task Force began its work, the TPB approved a work scope for developing the Regional Transportation Priorities Plan. The scope specified that the purpose of the Plan would be to identify transportation strategies that could be recognized throughout the region as offering the greatest potential contributions to addressing continuing regional challenges, and to provide support for efforts to incorporate those strategies into future updates of the CLRP in the form of specific programs and projects. The list of high-priority strategies identified in the Plan would also provide a source of specific programs and projects that could be advanced in response to particular discretionary funding opportunities, such as the federal TIGER grant program for which the TPB submitted a successful \$59 million regional priority bus project application in September 2009.

The relationship between regional strategies and specific programs and projects was considered and discussed at some length in the development of

the work scope for the Priorities Plan. Highly-ranked strategies in the Plan can eventually be developed into more specific programs and projects, including those aimed at system maintenance and safety, as well as location-specific improvements in system capacity. An in-depth review of benefits and costs, based on quantification of specific program components and location-specific factors, will be necessary for this level of assessment. A study of the potential of “bus-on-shoulder” operations in the region conducted by a TPB task force in 2013 illustrated the complexity and effort involved in taking a broad strategy like “bus-on-shoulder” to the level of location-specific projects.

The Regional Transportation Priorities Plan was designed to build consensus around key strategies that people from all corners of the region can get behind. The work scope for the Priorities Plan said that the Plan would outline long-range strategies for the region’s transportation system, and would also identify more immediate strategies which the region should aggressively pursue in the near future. It also said that strategies would draw upon ongoing planning activities at the state, regional, sub-regional and local levels. In addition, the scope said that the Plan would focus on a limited number of regional priorities, perhaps 10 to 15 in total, in order to encourage concentrated regional efforts on addressing the most pressing regional challenges at the time. And it said that public participation would be sought at every stage of the two-year development process.

### ***Public Outreach***

In order to ensure that the ideas identified in the Regional Transportation Priorities Plan could

garner broad-based support, public outreach played a major role in the development of the Plan. The first public outreach activities were a series of listening sessions and a citizens forum focused on figuring out how to best communicate the sometimes complex ideas in the Plan. Once the communications questions were answered, TPB staff performed a web-based public opinion survey of regional residents to determine whether the elements of the plan resonated with the public. With this information, the Plan was drafted and further refined through a series of public comment periods during which TPB members, other regional stakeholders, and the public were invited to comment each time a new draft was produced. A combination of all of these outreach steps were used to identify the regional priorities put forth by the Plan.

#### ■ Listening Sessions

In January and February of 2012, TPB staff convened five listening sessions with regional stakeholders and citizen representatives to solicit feedback on the initial set of challenges and strategies being developed as part of the Priorities Plan. The listening sessions were also intended to provide guidance and input on framing identified challenges for the public during subsequent outreach phases.

In these sessions, staff used a technically-oriented planning approach highlighting regional challenges through the use of performance measurements. In general, participants found the use of performance measures to be too technical, and did not understand their significance. Responding to this feedback, TPB staff determined that greater emphasis should be placed on the use of narrative text, simple charts,



and pictures to describe challenges and potential strategies to address them.

Following the listening sessions, TPB staff worked to frame new outreach materials in a form that could be readily understood and commented upon by members of the general public. To do this, staff used a range of technical data and forecasting resources, the input of the TPB and its committees and subcommittees, and feedback heard from citizen and stakeholder groups. This process produced a revised set of significant challenges standing in the way of achieving the six goals included in the TPB Vision, along with a draft set of strategies designed to overcome these challenges.

#### ■ Citizen Forum

A Citizens Forum was conducted on June 2, 2012 to assess whether the draft challenges and strategies refined by staff were meaningful to the public, and if there were any additional challenges or strategies that participants could suggest. Qualitative narrative, simple charts, and pictures, which were developed as a result of the listening sessions, were used at the forum to describe the regional goals, challenges, and strategies.

The format of the event utilized a

public outreach model called a deliberative forum, which allows citizens to learn about issues, share their thoughts via small-group discussions and real-time polling, and hear from their peers. TPB staff contracted with AmericaSpeaks, a non-profit public outreach organization that specializes in the deliberative forum format, to help design and facilitate the forum. A group of 41 people that were fairly representative of the region participated in the forum. They each received a stipend for attending the session.

Overall, the feedback suggested that the draft materials should use more simplified language, include examples whenever possible, and should provide explanations that are thorough but at an appropriate level of specificity.

The forum attendees identified some important new ideas and themes that were incorporated into future outreach materials. Participants also called attention to the importance of funding, noting that project costs and potential revenue mechanisms should be suggested for each strategy. Overall, the feedback suggested that the materials used for outreach should contain more simplified language, include examples whenever possible, and should provide explanations that

**Overall, the feedback suggested that the draft materials should use more simplified language, include examples whenever possible, and should provide explanations that are thorough but at an appropriate level of specificity.**

are thorough but at an appropriate level of specificity.

Based upon feedback from the forum, staff developed a revised narrative describing the goals, challenges, and strategies, which was included in an Interim Report presented to the TPB in July 2012.

#### ■ Online Survey

In a continuing effort to get input from a representative sample of the region's population, TPB staff conducted an online survey on regional transportation priorities in the spring of 2013. TPB staff opted to use MetroQuest public engagement software, developed by the firm Envision Sustainability Tools Inc., to carry out the survey. A controlled sample of 660 people took the survey between April and July 2013, and participants received a stipend for their efforts.

The MetroQuest survey was built to convey large amounts of complex information in an attractive, engaging visual interface. The survey allowed TPB staff to solicit feedback using a variety of input devices, including rating and ranking systems, traditional survey questions, and open-ended responses.

The public opinion survey highlighted what average citizens find to be the greatest continuing transportation challenges, and which strategies were broadly supported to address those issues.

The survey results and comments that were offered by participants helped in the process of reviewing and refining many of the goals, challenges, and strategies that were ultimately included in the Plan, and helped to shape the three priorities identified in Chapter 5.

#### ■ Public Comment on Earlier Drafts of the Plan

Following a work session and briefing on the results of the online survey at the July 2013 TPB meeting, a draft version of the Priorities Plan was released for a 30-day public comment period on July 24. Comments received during this period were posted on the TPB's "Regional Transportation Priorities Plan" website. In addition to these comments, TPB staff assembled and reviewed comments submitted by respondents to the survey—both the control group of 660 individuals and numerous other individuals who took the survey after it was later made available to the general public. All of these comments are available for review on the Priorities Plan website.

The TPB was briefed on the comments received on the draft Regional Transportation Priorities Plan at its September 2013 meeting, as well as on potential revisions to the Plan. Staff developed a revised draft of the Plan for release on October 10, 2013, and the TPB discussed the draft at its meeting on

October 16. Additional comments were received on this October 10 draft during a second 30-day public comment period that ran through November 10, 2013. Following additional stakeholder outreach in late November and early December, a revised draft of the Plan was released on December 12. Following a 30-day public comment period, the TPB was asked to consider the Plan for final action on January 15, 2014.

### Document Framework

The remainder of this Plan is devoted to the following:

- **Chapter 2:** A discussion of the six policy goals on which the Priorities Plan was built, as well as the key challenges the region faces in achieving those goals
- **Chapter 3:** Descriptions of each of a set of near-term, ongoing, and long-term regional strategies for addressing the region's continuing transportation challenges
- **Chapter 4:** A summary of the results of a public opinion survey about the challenges and strategies in the Plan, used to help highlight which challenges matter most to the region's residents and which of the strategies have the greatest promise of garnering broad-based public support
- **Chapter 5:** Descriptions of three key priority areas for local, state, and regional transportation agencies to consider when developing projects and programs to advance to implementation, especially those which must be included in the CLRP.



DAVID MADISON

# Regional Goals and Challenges

The *TPB Vision*, developed collaboratively over several years in the late 1990s, paints a picture of what the region wants its transportation system to be like in the future. The *Vision* outlines a number of broad transportation-planning goals that provide policy guidance to shape the region's transportation investments. To identify the region's top transportation investment priorities, this Plan identifies the most significant challenges that stand in the way of achieving our shared regional goals, to help show us where we must focus and prioritize our efforts.

This chapter describes each of the six goal areas, where we are now, and where we're headed based on current planning and funding trajectories outlined in the region's Constrained Long-Range Transportation Plan, or CLRP. Under each goal area, the top challenges to achieving the goal have been identified and briefly described.

The basis of the Regional Transportation Priorities Plan (RTPP) is a set of six broad transportation-planning goals developed by the TPB in 1998 to guide future transportation investments. Together, the goals aim to expand economic opportunity, support environmental stewardship, and improve quality of life in the Washington region. The goals, which are described in greater detail in the following pages, are:



### GOAL 1

Provide a Comprehensive Range of Transportation Options



### GOAL 2

Promote a Strong Regional Economy, Including a Healthy Regional Core and Dynamic Activity Centers



### GOAL 3

Ensure Adequate System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety of the Transportation System



### GOAL 5

Enhance Environmental Quality, and Protect Natural and Cultural Resources



### GOAL 6

Support Inter-Regional and International Travel and Commerce



## GOAL 1

# Provide a Comprehensive Range of Transportation Options



LARRY LEVINE, WMATA

Having more transportation options to choose from makes it easier for people to find the travel mode that works best for them in meeting their daily needs. This includes providing options for driving, carpooling, vanpooling, taking transit, bicycling, and walking to reach one's destination.

### Where are we now and where are we headed?

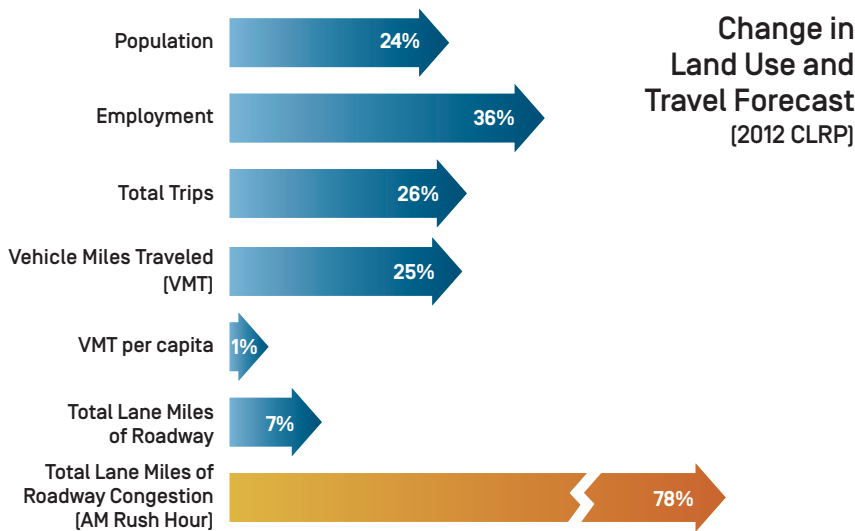
Our region has an extensive transportation network of roads, rail, bus routes, bike paths, and pedestrian infrastructure that provides a range of choices for travelers. However, access to these options varies depending on where in the region you are and your physical, psychological, or financial ability to use them: public transit has a

limited geographical reach; many neighborhoods are not bicycle and pedestrian friendly; and some modes of transportation are difficult for people with disabilities and low-income residents to use.

Regional data show that most daily trips in the region rely on the automobile, and forecasts indicate this will continue well into the future. Today, the highway system in metropolitan Washington ranks as one of the most congested in the country and conditions are only forecast to get worse. Population and job growth will cause rising demand on the region's roads to outpace increases in supply, leading to a significant increase in congestion through 2040.

Many residents in the region have





## Most Significant CHALLENGES

### Roadway Congestion (G1C1)

The region’s roadways are among the most congested in the nation, making it harder for people and goods to get where they need to go.

### Transit Crowding (G1C2)

The Metrorail system currently experiences crowding during peak hours and lacks the capacity to support future population and job growth.

### Inadequate Bus Service (G1C3)

Existing bus service is too limited in its coverage, frequency, and reliability, making transit a less viable option, especially for people with disabilities and limited incomes.

### Unsafe Walking and Biking (G1C4)

Too few people have access to safe pedestrian and bicycle infrastructure or live in areas where walking and bicycling are not practical options for reaching nearby destinations.

little choice but to endure this congestion to get to work, school, or other important destinations. Though we have a robust public transit system, it suffers from crowding and limited coverage and reliability. The Metrorail system is already operating at close to capacity during peak hours in certain areas and will continue to get more crowded as the region grows. Though Metrobus and other local and express bus services provide another option for many travelers, not everyone lives within close proximity to a bus stop and many routes have limited frequencies. Currently, about 55% of the region’s population lives within a quarter-mile of bus transit.

People with disabilities and older adults are often highly reliant on transportation options that can accommodate travelers with limited mobility or hearing or visual impairments. Unfortunately, the region’s transit stations do not all have such accommodations and current public paratransit services have limited coverage and reliability. In addition, those with limited incomes face barriers to accessing transportation options

because of rising public transit fares and a lack of adequate financial resources to purchase a personal vehicle.

To achieve our goal of providing transportation options for all individuals, improvements to all modes are needed. This includes maintenance and expansion of current systems, programs, and services, as well as new ones, that guarantee that all residents can fulfill their mobility needs regardless of income, age, ability, ethnicity, or language spoken.

### M MetroRail Congestion | AM rush hour (2010 WMATA analysis)

Line	2011	2040 with 50% 8-car*	2040 with 100% 8-car
Red	Satisfactory (<100 people per car)	Congested (100-120 people per car)	Satisfactory (<100 people per car)
Blue	Satisfactory (<100 people per car)	Satisfactory (<100 people per car)	Satisfactory (<100 people per car)
Orange/Silver	Congested (100-120 people per car)	Highly Congested (>120 people per car)	Congested (100-120 people per car)
Yellow	Satisfactory (<100 people per car)	Highly Congested (>120 people per car)	Congested (100-120 people per car)
Green	Satisfactory (<100 people per car)	Highly Congested (>120 people per car)	Congested (100-120 people per car)

\*The 2012 CLRP assumes 50% 8-car trains in 2040



## GOAL 2

# Promote a Strong Regional Economy, Including a Healthy Regional Core and Dynamic Activity Centers



**O**ur region's economy is supported largely by the economic activity that occurs in major housing and jobs centers, known as Activity Centers. Strengthening these areas, including the regional core, and connecting them with good transportation options bolsters the economy, allows us to grow and use land more wisely, and creates numerous opportunities to move people and goods more efficiently.

### Where are we now and where are we headed?

The region has many examples of successful Activity Centers, including the NoMa neighborhood in the District of Columbia, Silver Spring in Maryland,

and Rosslyn in Virginia. Better coordinating transportation and land-use elsewhere in the region could lead to greater opportunity to achieve similar successes in more places.

Many Activity Centers currently lack access to high-capacity public transit—Metrorail, bus rapid transit, commuter rail, or light rail. About seven in ten Activity Centers are currently served by high capacity transit or will be by 2040 thanks to investments like the Purple Line in Maryland and the Silver Line in Virginia that are in the CLRP. Some Metrorail stations serve areas that are not currently Activity Centers and represent unrealized opportunities to strengthen the regional economy and gain greater efficiency by attracting higher-density development nearby. This is especially true on the eastern side of the region, particularly in Prince George's County.

Data collected by the TPB shows that transit, bicycling, and walking rates are significantly higher in areas with high-quality transit, adequate bicycling and walking facilities, and development patterns that make it safe and easy to travel by modes other than automobile. For example, in the Metro-accessible and pedestrian- and bicycle-friendly neighborhoods of Logan Circle in the District and Crystal City in Virginia, automobile trips only account for about a quarter of all trips, compared to places like Largo, Maryland, or Reston, Virginia, where 80 to 90 percent of trips are taken in automobiles. Higher

## 2013 Activity Centers Update

rates of non-automotive travel result in less congestion, more options, improved air quality, and reduced greenhouse gas emissions but many Activity Centers currently lack the necessary pedestrian and bicycle infrastructure to support this kind of non-automotive, short-distance circulation.

Though we are making progress, there still remain many unrealized opportunities to coordinate land-use and transportation in more efficient ways, and to improve the jobs and housing balance in the region's Activity Centers.

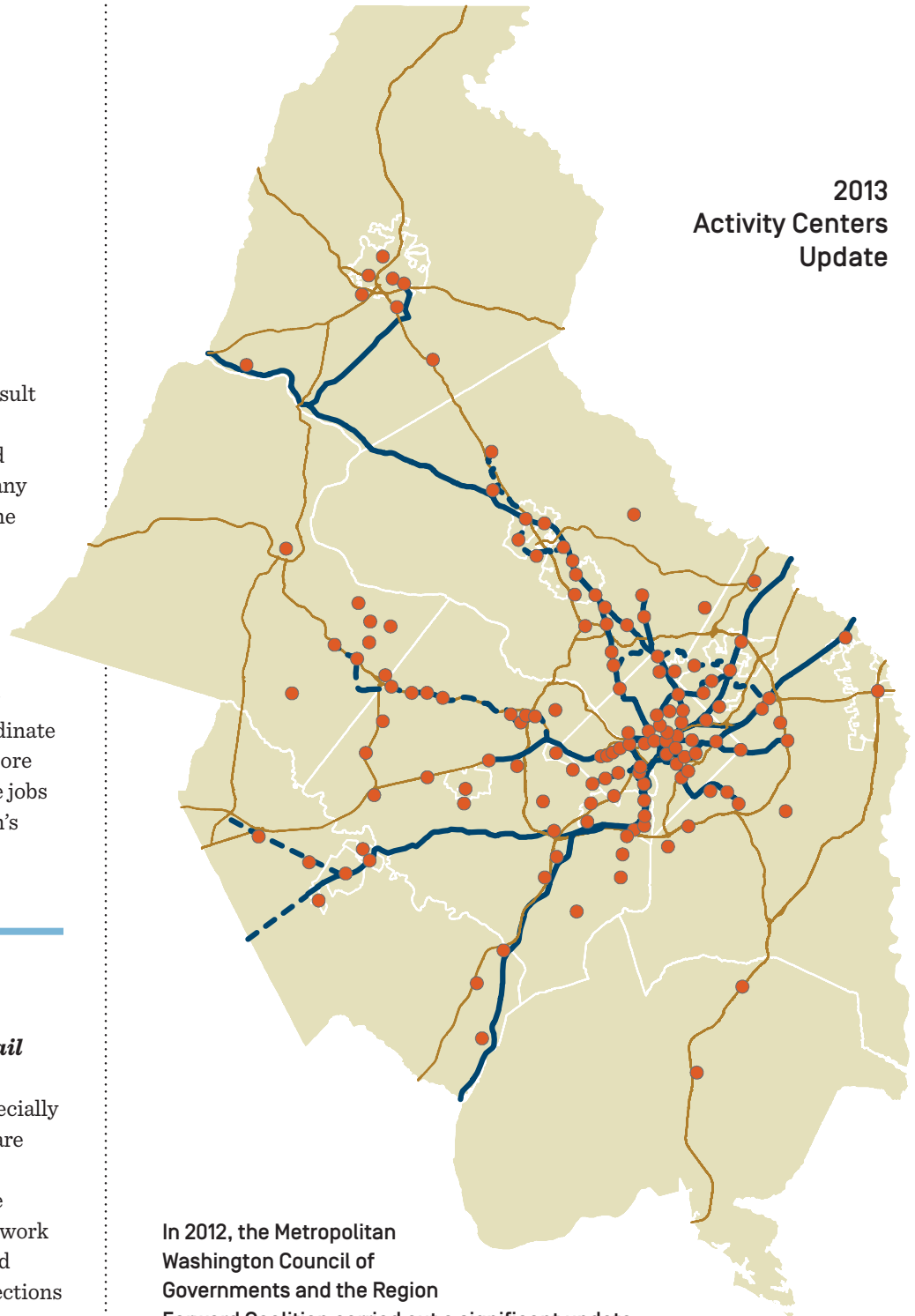
### Most Significant CHALLENGES

#### ***Development around Metrorail (G2C1)***

Too many Metrorail stations, especially on the eastern side of the region, are surrounded by undeveloped or underdeveloped land, limiting the number of people who can live or work close to transit and leaving unused capacity in reverse-commute directions on several lines.

#### ***Housing and Job Location (G2C2)***

Most housing, especially affordable housing, and many of the region's jobs are located in areas outside of activity centers where transit, bicycling, and walking are not safe and viable options.



In 2012, the Metropolitan Washington Council of Governments and the Region

Forward Coalition carried out a significant update of the regional Activity Centers map, which COG first developed in 2002. Activity Centers are areas that planners and other regional leaders have identified as places that will accommodate much of the region's future growth and development. The centers include existing urban centers, priority development areas, transit hubs, suburban town centers, and traditional towns. In the update, planners used more specific and targeted criteria, focused on identifying discrete places with a mix of uses. The new centers were approved by the COG Board of Directors in January 2013.



## GOAL 3

# Ensure Adequate System Maintenance, Preservation, and Safety

Keeping the region’s extensive transportation system in a state of good repair is crucial to ensuring reliability and safety. Maintaining existing infrastructure as repairs are needed can result in better system performance and significant savings in the long run.

### Where are we now and where are we headed?

The region is currently giving priority to operations and maintenance of the existing system over expansion. Of the nearly \$223 billion in transportation expenditures expected between 2011 and 2040, approximately 70 percent of the funds—or about \$163 billion—will go just to operating and maintaining the existing and planned system. Another 23 percent will go toward system preservation

efforts—new railcars and buses to replace old ones, road reconstruction, and replacement of aging bridges. Just 7 percent—or about \$16 billion—will be spent on expanding the system and adding capacity. These capacity expansions will not be able to keep pace with rising demand over the coming years. And traditional revenue streams—especially taxes on motor fuels, as the fuel-efficiency of vehicles continues to rise—will increasingly fall short of helping us meet our growing needs.

On Metro, unreliable escalators and unscheduled delays caused by rail or railcar malfunctions have become a major regional concern. Roadways, too, suffer from potholes and crumbling pavement, and a number of the region’s bridges have been deemed deficient. These problems are increasingly a

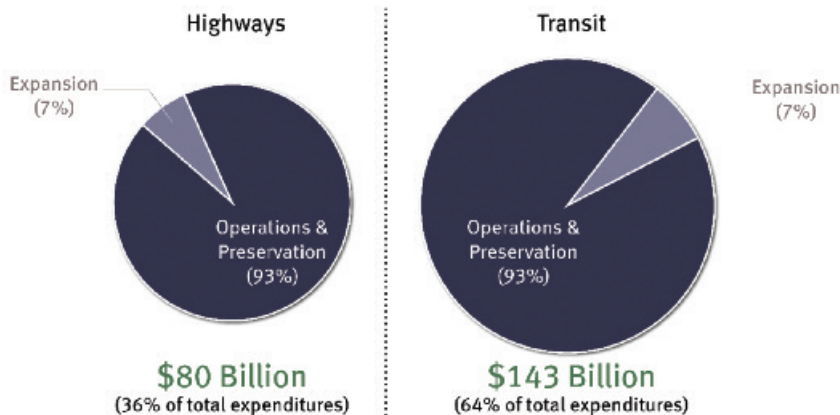


result of deferred maintenance, brought on by a lack of financial resources.

Stop-gap measures to address Metrorail maintenance are currently in place, but we have not found a long-term solution to Metro’s maintenance needs. In 2008, Congress passed the Passenger Rail Investment and Improvement Act (PRIIA), which, with 50 percent matching funds from the three states, provides \$3 billion in funding over ten years for Metro’s rehabilitation needs. The agreement is set to expire in 2020, and currently there is nothing in place to ensure this level of funding will continue into the future. As a result, the Metrorail system may be unable to handle projected ridership growth, limiting the number of people who can use Metrorail and possibly forcing more people onto already crowded roadways. Either situation could limit opportunities for people to get to jobs and other important destinations.

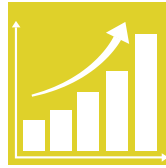
### CLRP Expenditures, 2011-2040

\$222.9 Billion





LARRY LEVINE, WMATA



## GOAL 4

# Maximize Operational Effectiveness and Safety of the Transportation System



VDOT

As funding levels become less dependable, so does our ability to provide timely repairs and maintenance of our aging transit and roadway infrastructure. Paying for necessary maintenance is a continuing struggle that will only worsen over time if current funding trends continue.

### Most Significant CHALLENGES

#### ***Metrorail Repair Needs (G3C1)***

Deferred Metrorail maintenance over the years has led to unreliability, delays, and safety concerns today, as well as higher maintenance costs.

#### ***Roadway Repair Needs (G3C2)***

Older bridges and roads are deteriorating and in need of major rehabilitation to ensure safe, reliable, and comfortable travel for cars, trucks, and buses.

**M**aximizing system effectiveness and safety means utilizing available technologies, techniques, and programs to get the most out of the existing system. Rapid growth and limited financial resources make it especially important to maximize system efficiency.

#### **Where are we now and where are we headed?**

Jurisdictions throughout the region have been working hard to increase safety for users of all modes of transportation and to coordinate public information and messaging.

Over the past few years, safety on our roadways has been steadily increasing in part due to advances in vehicle safety technology and enhanced enforcement. According to data collected by the TPB, automobile driver and passenger fatalities have been steadily declining since the early 2000s, from 342 in 2002

## GOAL 4, CONTINUED

to 194 in 2012. Over the same period of time, however, the number of pedestrian and bicyclist fatalities has remained relatively constant.

As anyone who drives or uses transit on a regular basis knows, accidents and weather can have impacts on the transportation system far from the scene of the problem. Though incidents cannot be avoided entirely, transportation officials are committed to improving incident management and information through the Metropolitan Area Transportation Operations Coordination (MATOC) program. Since its inception, MATOC has facilitated better transportation management by monitoring traffic and weather conditions and coordinating responses to highly disruptive incidents like severe weather and major accidents.

Transportation users today have access to new forms of technology that improve the overall user experience.

Public and private entities are continuing to develop more and better resources that help users make more effective transportation decisions.

Third-party smartphone applications, for example, allow users to access up-to-date arrival time information for their buses using data provided by regional transit agencies.

Public information programs have become an effective means to better manage how the region's residents interact with the transportation system. One successful example of this is the TPB's "Street Smart" campaign, a public information campaign that aims to reduce pedestrian and bicyclist injuries and deaths. Since it began in 2002, the campaign has used radio, newspaper, and transit advertising, and added law enforcement to remind motorists, pedestrians, and bicyclists about the region's traffic safety laws in an effort to reduce deadly collisions.

Though progress has been made,

there is room for significant improvement. Safety measures need to be improved in order to continually reduce the number of injuries and fatalities system wide, and information, public messaging, and technology resources will continually need to be improved to better serve our residents.

### Most Significant CHALLENGES

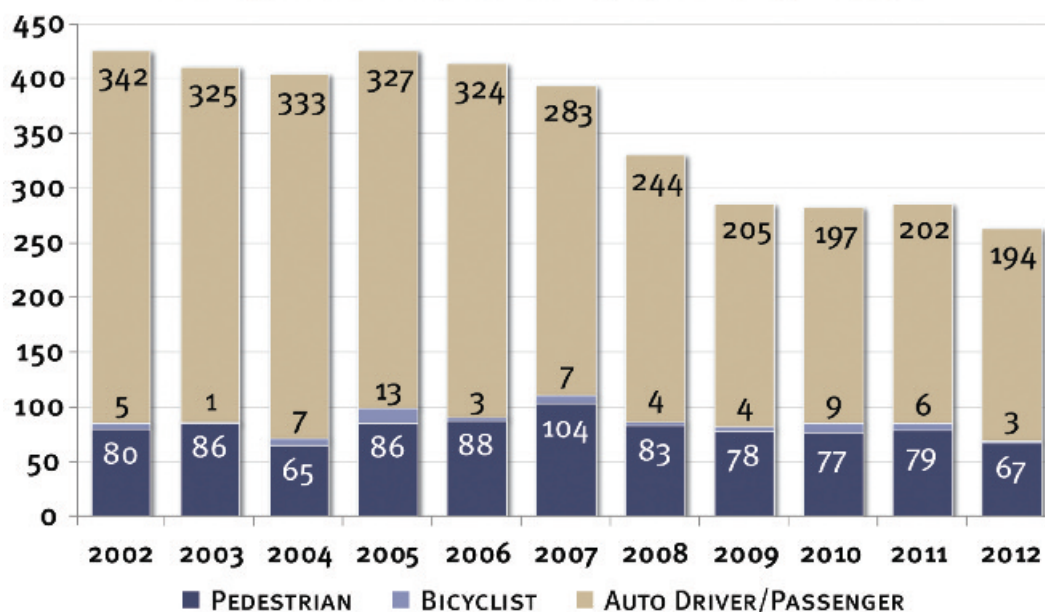
#### **Incidents (G4C1)**

Major accidents and weather disruptions on roadways and transit systems cause severe delays and inconvenience.

#### **Pedestrian and Bicyclist Safety (G4C2)**

The number of bicycle and pedestrian fatalities each year is holding steady even as the number of vehicle fatalities has declined steadily.

Traffic Fatalities in the Washington Region (2012 TPB analysis)





## GOAL 5

# Enhance Environmental Quality, and Protect Natural and Cultural Resources



MARIORDO, WIKI COMMONS

**A**n effective transportation system needs to balance the mobility needs of a growing region with the potentially harmful effects that travel by car and other modes may have on the environment and the health of our residents.

### Where are we now and where are we headed?

Jurisdictions throughout the region have implemented a variety of transportation-, land-use-, and energy-related policies to protect and preserve environmental resources. Though these efforts have been helpful, there is much more that can be done to enhance environmental quality.

The region is currently making good progress toward meeting Environmental Protection Agency (EPA) standards on regional air quality. Emissions of harmful air pollutants regulated by the federal government from motor vehicles are forecast to decline steadily over the next 30 years as more stringent federal standards come into effect and vehicles with much higher fuel efficiency come onto the market. Though greenhouse gas emissions from vehicles will also decline as the new federal fuel economy standards are implemented, the number of cars on the road resulting from population growth will counteract some of these reductions. Concentrated land-use patterns and policies that promote higher levels of transit, walking, and bicycling will be needed in order to reduce the number of vehicle miles travelled region-wide.

Hybrid and electric vehicle use is on the rise, which will also contribute to a reduction in emissions. Today there are more than 50,000 hybrid vehicles and approximately 500 electric vehicles on the road in the region. As these technologies become more cost effective they are likely to replace

## GOAL 5, CONTINUE

vehicles that rely on gasoline. The electric vehicle market has been slow to take off because of a simultaneous lack of supply and demand. A large number of electric vehicles will not be sold until consumers feel as though there is sufficient charging infrastructure to support their purchase, and the recharging industry will not be able to build significant infrastructure until there are enough vehicles on the road to justify the investment.

Transportation infrastructure also has effects on water quality and open space development. Many of the region's waterways continue to suffer from degradation, erosion, and pollution caused by stormwater runoff from roads and other infrastructure. In addition, new transportation facilities often spur development in previously un-developed parts of the region, which takes away open space. Local and state governments have put programs in place to enhance and protect green space, recognizing the importance of preserving open space for farming, wildlife habitat, and recreation. Nevertheless, much of the

region's farmland and open space remains open to development and is slowly decreasing as development creeps outward.

In order to meet our environmental goals, we need to continue to make efforts to meet and exceed clean air and clean water standards, increase the energy efficiency of our transportation modes, and support more stringent preservations programs to development of open spaces.

### Most Significant CHALLENGES

#### *Environmental Quality (G5C1)*

Increasing amounts of vehicle travel resulting from population and job growth could threaten the quality of our region's air and water.

#### *Open Space Development (G5C2)*

Wildlife habitat, farmland, and other open spaces are threatened by construction of new transportation facilities and residential and commercial development.



## GOAL 6

### Support Inter-Regional and International Travel and Commerce

The region strives to be among the most accessible in the nation for international and inter-regional passenger and goods movement. Providing strong passenger and freight connections by air, highway, rail, and sea brings economic benefits to our region.

#### Where are we now and where are we headed?

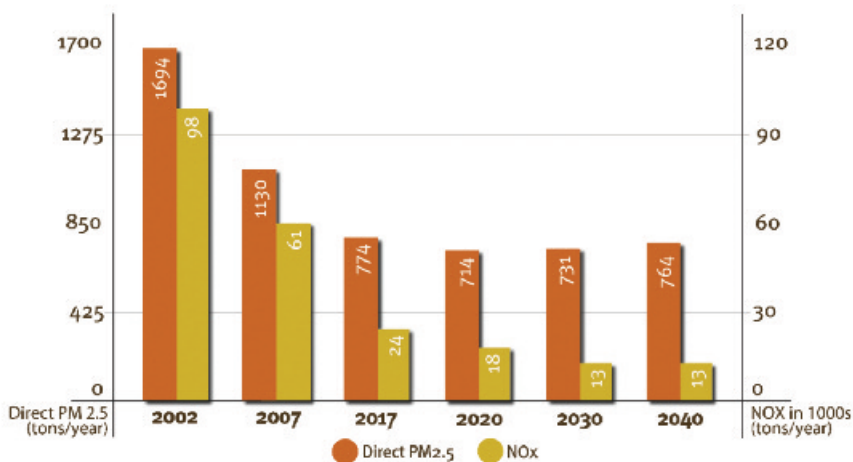
The Washington region is among the fastest growing areas in the country, and this trend is forecast to continue through 2040. As we grow, our transportation system has to adapt to a constant influx of people and goods, and will have to accommodate even more in the future.

Today the region's major airports support nearly 25 million outbound trips per year, and major growth in air traffic is forecast. More air passengers and cargo coming and going from the region will place greater demand on both the airports and the ground transportation system that supports travel to and from them.

Highway bottlenecks currently cause delays and unreliable travel times for people and goods. Based on congestion forecasts, these bottlenecks are expected to get worse, causing delays for those traveling to, from, within, or through the region.

Bottlenecks also have a negative effect on the trucking industry, which is

Emissions Projections (2012 CLRP)







PAUL LLOYD, FLICKR CREATIVE COMMONS

a critical part of the region’s economy. At present, trucks carry approximately 76 percent of goods to, from, and within the region. As our economy grows, so too will the number of trucks on the road delivering goods. The shipping industry will face longer traffic delays and increased costs as bottlenecks and congestion worsen.

Freight rail is also a necessary element of our regional economy. Metropolitan Washington serves primarily as a

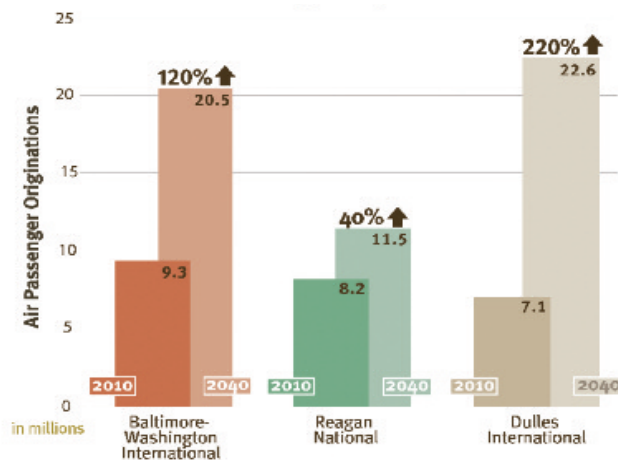
through corridor for freight rail travelling along the East Coast, but major railroads are in need of infrastructure improvements. For example, CSX is working to rebuild the rail tunnel under Virginia Avenue SE in the District of Columbia because freight trains carrying double-stacked cargo containers are unable to use the 100-year-old tunnel, while single-stack trains that can use the tunnel must often queue at either end while they wait to use the tunnel’s single

track. The back-ups interfere with Amtrak, MARC, and Virginia Railway Express (VRE) passenger traffic leaving from or approaching Union Station.

The region’s ability to accommodate anticipated growth in freight, passenger, and commuter rail traffic in coming decades will also depend on the future of the region’s only Potomac River freight crossing, a 2,500-foot span between the District of Columbia and Virginia known as the Long Bridge. Freight and passenger trains currently share the Long Bridge’s two tracks, which is nearing its practical capacity during rush hours. The bridge’s private owner, CSX, maintains the right to give priority to freight traffic over passenger traffic, limiting the scheduling ability and frequencies of passenger trains using the facility. This issue will only get worse as demand for freight and passenger traffic increase in coming decades.

To ensure that metropolitan Washington remains a global economic center, a world-class destination for tourists, and an attractive place for businesses to locate, we must make efforts to make travel to, from, within, and through the region as smooth as possible.

Growth in Air Passenger Originations, 2010 – 2040 (2011 TPB analysis)



## Most Significant CHALLENGES

### **Bottlenecks (G6C1)**

Bottlenecks on the highway and rail systems cause delays in inter-regional travel for both freight and passengers, hurting the region’s economic competitiveness.

### **Travel Time Reliability (G6C2)**

Travel times to and from the region’s airports are becoming less reliable for people and goods movement.

# Chapter 3



LARRY LEVINE, WMATA

# Strategies

There is no question that we face an uphill battle in achieving our region's long-term transportation goals. Limited resources combined with growing demand means our transportation system is strained and local, state, and regional transportation agencies are finding it more difficult to meet the region's needs. The strategies outlined in this plan are intended to identify those strategies that offer the greatest potential to respond to our most significant transportation challenges and to help us realize the transportation future we envision for ourselves, our children, and for future generations. The strategies are also meant to be “within reach” both financially and politically—recognizing the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue.

The strategies that this plan identifies are divided into three categories, according to the timeframe by which they should be achieved:

- **Near-Term:** to be completed within the next 1 to 5 years
- **Ongoing:** will require continuing attention and investment over time
- **Long-Term:** to be completed within the next 10 to 30 years

Included in the following chapters are summaries of each of the strategies, outlining the key strategic elements we should pursue and why we should pursue them. The summaries also provide an estimate of the magnitude of the cost of implementing a given strategy

In most cases, many local, state, and regional transportation agencies are already pursuing these strategies in one form or another. But we need to do more if our transportation system is to support growth and a strong economy, and to provide a high quality of life for future generations by strengthening communities and ensuring economic opportunity.

## Near-Term Strategies

A number of strategies to pursue in the next 1 to 5 years are an important first step in overcoming some of our region's significant transportation challenges and achieving our long-term transportation goals. Many of our local, state, and regional transportation agencies are already pursuing these strategies, but we need to ensure that those efforts can continue into the future.

The six near-term strategies described in greater detail below include, in no particular order:

- 1 Improve Access to Transit Stops and Stations [NT1]
- 2 Alleviate Roadway Bottlenecks [NT2]
- 3 Support and Promote Electric Vehicles [NT3]
- 4 Promote Commute Alternatives [NT4]
- 5 Expand Pedestrian Infrastructure [NT5]
- 6 Expand Bicycle Infrastructure [NT6]

### COST OF STRATEGIES KEY

\$\$\$\$\$

*Millions of Dollars*

\$\$\$\$

*Tens of Millions of Dollars*

\$\$\$

*Hundreds of Millions of Dollars*

\$\$\$\$

*Billions of dollars*

\$\$\$\$\$

*Tens of Billions of Dollars*

## NEAR-TERM STRATEGY 1

# Improve Access to Transit Stops and Stations [NT1]



ARLINGTON COUNTY, FLICKR CREATIVE COMMONS

### What we should do

*Make it easier and safer to get to bus stops and rail stations, especially by modes other than car, and make bus stops and areas around rail stations more comfortable, inviting, and accessible to all users.*

- Build sidewalks and pedestrian crosswalks and/or overpasses that connect transit stops to nearby neighborhoods, commercial areas, and existing pedestrian infrastructure
- Connect bicycle paths to transit stops and provide ample bicycle parking
- Install protective shelters, curb ramps, and better lighting at or near stations

- Improve signage and wayfinding in and around transit stops to aid in locating the stop as well as nearby destinations reachable on foot or by bicycle
- Provide bike-share and car-share services at or near transit stops to make more destinations reachable by transit

### How much it will cost

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*Tens of millions of dollars*

### Why we should do it

***Increases transit ridership and reduces roadway congestion***

One of the barriers to choosing transit as a travel mode is the inability of potential users to access rail stations and bus stops easily and safely. Physical access improvements, like sidewalk connections and bike lanes, help make transit a more attractive and practical travel option for those who live or work nearby. Protective bus shelters, curb ramps, and better lighting make riders feel safer and more comfortable. And improved signage and wayfinding can help users feel more confident in finding their way to transit stops and through the system. All of these things, together, can encourage more people to ride transit.

Physical access improvements also help connect transit stops to final destinations, which is equally important in making transit a viable transportation option. All transit trips are, by nature, multi-modal journeys. Upon arriving at a stop, one must walk, ride, or drive to a final destination, whether home, work, restaurants, shops, medical appointments, or

recreational opportunities. Sidewalks and bicycle lanes that connect to nearby residential and commercial areas, signage to help people find their way to such areas, and additional services like bike-share and car-share can help people reach their final destination more easily and safely, effectively expanding the number of destinations accessible by transit.

### ***Can catalyze development near transit stations***

In addition to making transit more accessible for people who already live or work near it, physical access improvements can also catalyze new residential and commercial development near transit stations—especially underutilized ones—increasing the number of people for whom transit is a convenient option. Sparking new development near underutilized stations, especially on the eastern side of the region, can make better use of the existing system by filling empty seats in reverse-commute directions on trains that are currently operating with plenty of available capacity.

Spurring more development near stations closer to the regional core can also help take greater advantage of the existing system by creating a better balance of housing and jobs in station areas, which can provide opportunities to “sell the same seat twice”—first to workers commuting to a mixed-use housing and jobs center, and second to people living in the center and boarding the train to commute further along the line.

## Access Improvements are Often Highly Cost-Effective

Financial analyses consistently show net positive benefits of physical access improvements to transit stations and stops compared to their costs. For example, a 2012 TPB analysis of several proposed access improvements included in an application for federal TIGER funding found that investing in these types of improvements leads to substantial travel time and travel cost savings, in addition to congestion, environmental, and health and safety benefits that outweigh the costs of building and operating them.



ELVERT BARNES, FLICKR CREATIVE COMMONS

## NEAR-TERM STRATEGY 2

# Alleviate Roadway Bottlenecks (NT2)

### What we should do

***Make targeted roadway improvements that provide congestion relief for drivers in key locations throughout the region.***

- Install extra turn lanes, extend highway on- and off-ramps, and build new lanes where doing so is modest in cost and provides congestion relief that supports other regional goals

### How much it will cost

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***Tens of millions of dollars***

### Why we should do it

***Reduces unnecessary congestion and travel delay***

Bottlenecks on existing roads can create unnecessary traffic back-ups and delays for drivers and the movement of goods, resulting in wasted time and fuel and diminished economic productivity. Improvements like new turn lanes, longer

on- and off-ramps, and additional lanes in key locations can significantly reduce congestion and improve travel time reliability for drivers. And the benefits of relieving bottlenecks can multiply quickly when they affect large numbers of travelers or goods shipments.

### ***A wise use of limited resources***

Building significant new roadway capacity is expensive. In an era of limited funding, it's especially important to identify and make improvements that promise the greatest benefits and outcomes relative to their cost. That means we need to be smart in the way we evaluate and prioritize bottlenecks that deserve attention, focusing on improvements that will provide the greatest reductions in congestion and increases in travel time reliability, and that support other regional goals like economic development and more efficient land-use.



Already the region's state and local governments go to great lengths to monitor current travel conditions and forecast future demand to identify bottlenecks worthy of improvements. The TPB conducts an aerial traffic survey of area freeways every three years to identify the chokepoints where travelers experience the greatest delays.

## TPB's Aerial Traffic Survey Helps Identify Top Bottlenecks

Every three years the TPB carries out an aerial traffic survey of the region's freeways. The survey aims to identify roadway segments that experience the greatest congestion during peak hours. The last survey, completed in 2011, identified portions of I-395 on either side of the 14th Street Bridge, and a segment of the Inner Loop of the Capital Beltway on the American Legion Bridge as the most congested bottlenecks in the region, with travel speeds frequently dropping to just 5 to 10 mph during peak hours.



## NEAR-TERM STRATEGY 3

# Support And Promote Electric Vehicles (NT3)

The TPB's Freight Subcommittee has also worked to identify bottlenecks that are essential for improving goods movement in the region. In Maryland, the key short-term improvement identified by the subcommittee is to increase capacity along a four-mile stretch of Interstate 70 in Frederick County. In Virginia, construction of a new exit ramp from eastbound Interstate 66 to northbound Interstate 495, which is currently underway, will relieve a major bottleneck for trucks at the interchange.

While we need to seek out smaller-scale, high-payoff projects, we also need to recognize that not all bottlenecks will be quick or low-cost fixes. The Woodrow Wilson Bridge replacement, which cost more than \$2 billion, provided massive regional benefits, but took years to coordinate and complete.

### ***Demonstrates public sector responsiveness***

Alleviating bottlenecks is seen by the public as a basic, commonsense solution to the region's transportation problems, and projects that alleviate bottlenecks are often highly visible. Because of this, efforts by transportation agencies to alleviate bottlenecks can be a good way to increase the public's trust in the ability of government agencies to solve problems and provide real improvements in our daily lives. Such renewed confidence is good for public agencies, our quality of life, our collective faith in the future of the region, and for our prospects for economic prosperity.



### **What we should do**

***Make electric vehicles more convenient to use and encourage more consumers and businesses to purchase such vehicles.***

- Invest in a system of public-access electric vehicle recharging stations for vehicles that run on electricity
- Offer tax credits to private businesses that install recharging stations and make them available to employees, customers, or the general public
- Offer benefits, such as access to HOV lanes or priority parking, to owners of electric vehicles
- Pursue all-electric car fleets for car-sharing programs like Zipcar and Car2Go, and for public agencies and other organizations with vehicle fleets

### **How much it will cost**

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***Millions of dollars***

**Why we should do it**

***Better for the environment***

Burning petroleum-based fuels results in emissions of harmful pollutants and diminishes the region’s air quality. In 2007 in the Washington region, motor vehicles were responsible for 55 percent of nitrogen oxide emissions and 16 percent of fine particle emissions—two pollutants that cause a range of respiratory ailments. Since electric vehicles do not burn petroleum-based fuels, they do not produce tailpipe emissions of such pollutants and would contribute significantly to improved air quality.

Widespread adoption of electric vehicles could also go a long way in reducing emissions of greenhouse gases. Motor vehicles were also responsible for 30 percent of all greenhouse gas emissions. The U.S. Department of Energy sees the electrification of vehicles as one of the highest impact strategies for reducing greenhouse gas emissions and combating climate change. Though most of the electricity in the Washington region is still generated using carbon-based fuels like coal, the local electrical grid has a relatively low greenhouse gas emissions profile, producing emissions equivalent to automobiles that have a fuel efficiency of 50 miles per gallon or more. And since electric vehicles run on electricity produced at a central location, they become cleaner and more efficient as we phase in alternative forms of electricity production, such as solar and wind power.

***A cheaper and more dependable energy source***

Electric vehicles have fuel efficiencies generally equivalent to 75 to 100 miles

**COG Report Assesses the Region’s Readiness for Electric Vehicles**

In 2012, the Metropolitan Washington Council of Governments released a report on the region’s readiness for more widespread use of electric vehicles. The report found that the region’s charging infrastructure and electric vehicle policy frameworks are not yet positioned to accommodate greater market penetration of electric vehicles. The report made a number of recommendations to deal with the challenges, including incentives for consumers to purchase electric vehicles and changes to local zoning codes and other regulations to encourage faster deployment of electric vehicle infrastructure.

per gallon and cost about \$0.04 per mile to operate, compared to conventional fuel-burning vehicles, which cost about \$0.13 per mile. An estimate from the Union of Concern Scientists says that drivers in the Washington region on average could save around \$950 a year in fuel and operating costs by driving an electric vehicle.

Electricity is more dependable than petroleum-based fuels like gasoline and diesel because it can be produced from a variety of energy sources, including renewable sources like wind, solar, and biomass. Petroleum is not a renewable resource, meaning that unlike plants and other ever-present energy sources like the sun and wind, it will no longer be a viable source of energy once our current reserves are used up. And as oil supplies dwindle, fuel prices will increasingly suffer from greater volatility as the future availability of fuel becomes less and less certain. Encouraging the use of electric vehicles protects vehicle owners from such volatility.

***An increasingly practical alternative for households***

Though electric vehicles are still few in number in the Washington region, data on household travel patterns collected by the Transportation Planning Board suggest that electric vehicles, despite their limited range

compared to gasoline-powered vehicles, could be practical for many of the vehicle trips currently made throughout the region. At 7.7 miles, the average length of a one-way trip by car is well within the range of a typical electric vehicle on a single battery charge. And in most jurisdictions in the region, the average total daily amount of driving per household is less than the one-charge range of most electric vehicles currently on the market.

Although there are a few electric vehicle models for sale to consumers, the market has been slow to take off because of a simultaneous lack of supply and demand. A large number of electric vehicles will not be sold until consumers feel as though there is a sufficient charging infrastructure to support their purchase, and the recharging industry will not be able to build significant infrastructure until there are enough vehicles on the road to support the investment. Much as the Internet needed substantial public investment in its early stages before it was widely adopted, so too do electric vehicle technology and infrastructure. Offering a variety of incentives to consumers and to industry to encourage adoption and overcome what is a classic “chicken and egg” dilemma is a low-cost way to support an industry that could bring a number of benefits to the region.



## NEAR-TERM STRATEGY 4

# Promote Commute Alternatives (NT4)



### What we should do

***Encourage commuters to use travel modes that make efficient use of limited roadway space at peak hours.***

- Reach out to commuters with more information on alternative ways to get to work, including by transit, carpool, vanpool, bicycle or walking, or by teleworking or living closer to work
- Provide more incentives for first-time users of alternative commute modes to encourage the shift into more efficient travel modes
- Help employers establish commute alternative programs that encourage and support employees who choose alternative modes

### How much it will cost

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***Millions of dollars***

### Why we should do it

***Increased efficiency, reduced emissions, and better quality of life***

Even small decreases in the number of cars trying to use a crowded roadway can go a long way toward alleviating congestion and travel delay. Any vehicle with two or more people in it makes more efficient use of limited roadway space than vehicles with just a solo driver. Buses and other high-capacity vehicles make the most efficient use of limited roadway space, although teleworking and bicycling and walking to work can eliminate trips on crowded roadways altogether, and living closer to work can significantly reduce the overall number of miles one commutes.

Reducing the number of cars on the road also leads to reductions in the emissions of vehicle-related pollutants, resulting in improved air quality and greenhouse gas emissions entering the atmosphere. And when travelers take advantage of alternative, more efficient modes, they stand to gain personally, through time savings, reduced fuel and vehicle maintenance costs, and reduced stress associated with sitting in traffic—all of which leads to increased quality of life.

***We have a good system of alternatives already in place***

Fortunately, the Washington region's transportation system already provides a wide range of travel options for commuters—numerous park-and-ride lots where carpools and vanpools can meet; extensive Metrorail, commuter rail, and local and express bus services, especially at peak hours; increasingly robust bicycle and pedestrian infrastructure, like sidewalks,

crosswalks, and bike lanes; more and more compact, walkable, mixed-use development centers that allow people to live closer to work or to transit; and a rising number of employers open to teleworking and flexible work schedules. With such options in place, efforts to promote alternative modes of travel can be especially effective.

### ***People support commuter alternatives***

People believe that getting more commuters to use alternatives to driving alone is a good idea. They repeatedly suggest that providing additional services and information—like more incentives and more and bigger mass media campaigns—to support and promote the use of alternatives is an obvious next step in addressing congestion and other transportation challenges.

Already, the TPB's Commuter Connections program actively reaches out to Washington area commuters to provide information about alternatives like carpooling and vanpooling, transit, biking and walking, teleworking, and living closer to work. Commuter Connections even provides incentives for first-time users of alternative modes to encourage the shift away from solo driving. Numerous transportation agencies around the region have similar programs in place. But the region should do more to spread the word about these alternatives and encourage commuters to take advantage of them.

## NEAR-TERM STRATEGY 5

# Expand Pedestrian Infrastructure (NT5)



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### **What we should do**

***Make walking a viable transportation choice for more people in more places by making it safer, easier, and more convenient.***

- Add new sidewalks and improve existing ones
- Install crossing signals at more crosswalks, pedestrian refuge islands, and raised medians
- Employ traffic calming to reduce speeds in areas where there is a high density of pedestrians
- Provide direct pedestrian connections between nearby streets and land uses to reduce walking distance and make more destinations easily accessible on foot
- Ensure accessibility for all users by accommodating those with assistive mobility devices and by providing essential information in formats that can be easily heard or felt by those with hearing or visual disabilities

## How much it will cost

\$\$\$\$

*Tens of millions of dollars*

## Why we should do it

*Improves safety and encourages more walking*

Nearly 10 percent of all trips in the Washington region are made by foot. Everyone is a pedestrian at some point in their day—whether for whole trips to destinations or part of one, like walking to a transit station or even to one’s parked car. According to data compiled by the TPB, while the number of motorists and vehicle passengers killed in traffic accidents has been declining steadily since the early 2000s, the number of pedestrian and bicyclist fatalities has remained relatively constant. Sidewalks, crosswalks, crossing signals, and other such infrastructure make trips on foot safer and help reduce the number of pedestrians injured or killed in traffic collisions.

Installing more pedestrian infrastructure can also encourage more people to make more trips on foot, which has numerous benefits. When trips are made by foot instead of by car or transit, it contributes to less overall congestion on both systems. Greater pedestrian travel also has a positive effect on public health: a 2012 study by the Alliance for Biking and Walking found that areas with high rates of non-motorized transportation often have lower rates of obesity, high blood pressure, and diabetes. And the increased use of non-motorized transportation also has environmental benefits, reducing the negative effects of automobile use, such as air, water, and noise pollution.

## *Supports activity centers and builds community*

As the region moves toward a model of high-density development around transit stations, pedestrian infrastructure is a key element in providing mobility and circulation within these places. This infrastructure is especially important in areas where there is a high number of destinations that are within close proximity to one another.

Pedestrian mobility also helps to build a sense of community since pedestrians are more likely to interact with, get to know, and identify with an area and the people within it. Increasing the prevalence of pedestrian infrastructure is also especially important to the safety and security of residents who must walk to fulfill their daily needs but live in areas with little or no pedestrian infrastructure.

## More Jurisdictions Adopting “Complete Streets” Policies

All three states and most of the region’s local jurisdictions have adopted “Complete Streets” policies calling for a transportation that accommodates users of all travel modes, including pedestrians. The TPB adopted a regional Complete Streets policy in 2012 and called upon its member jurisdictions to develop their own policies if they had not already. Montgomery and Prince George’s counties and the Maryland State Highway Administration adopted policies that were influenced in part by this regional effort.



COMPLETE STREETS, NODOT

## NEAR-TERM STRATEGY 6

# Expand Bicycle Infrastructure (NT6)

### What we should do

*Make bicycling a viable transportation choice for more people in more places by making it safer, easier, and more convenient.*

- Invest in more bike lanes and bike paths
- Expand bike-sharing systems like Capital Bikeshare
- Provide more bicycle parking
- Increase workplace amenities for bicyclists, such as showers and changing rooms

### How much it will cost

\$\$\$

*Tens of millions of dollars*

### Why we should do it

*Responds to rising demand*

Bicycling is booming in the Washington region—not just as way to get healthy and have fun, but as a practical mode of transportation. Because of this rising demand, we need to expand bicycling infrastructure to make it safer and easier for more people.

Between 2000 and 2011, the District of Columbia saw the share of its residents who bicycle to work double, from 1.4 percent of residents to 3.5 percent. Regionally, the share is still below 1 percent, but growing. Some higher-density, mixed-use communities outside the regional core have higher shares of people commuting to work by bike, like the area near the East and West Falls Church Metrorail stations, which saw 3.6 percent of commuters traveling by bike.

Interest in and support for bicycling is also growing across the region. Suburban jurisdictions are increasingly



seeing that bicycling can provide a viable transportation option in locations where it was previously considered unrealistic. Fairfax and Montgomery counties, for example, are both pursuing the expansion of Capital Bikeshare into communities there. Bike to Work Day 2013 had a record 14,500 total participants, with individuals from every jurisdiction in the region pledging to commute to work by bike as part of the event.

*Encourages greater use at a small price*

The more bicycle infrastructure that is available, the more people are likely to ride. For example, since the year 2000, the District Department of Transportation (DDOT) has designated 56 miles of marked bike lanes, installed 2,300 bicycle parking racks, and launched Capital Bikeshare. Most of the increases in bicycle use observed over the last decade have occurred in the neighborhoods near downtown Washington, which has the highest concentration of new bike lanes, cycle tracks, and Capital Bikeshare stations. Capital Bikeshare has been particularly effective in increasing bicycling trips: in 2013, Capital Bikeshare provided an average of [X] trips per month.

Bicycling infrastructure is also relatively inexpensive to install. Bike lanes cost about \$15,000 per mile and costs can be much lower if the striping is done as part of planned resurfacings

or larger streetscape projects. Protected cycle tracks are more expensive to install, at approximately \$200,000 per mile, but they also facilitate more bicycling than can normal lanes.

*Supports activity centers and builds community*

Bicycling infrastructure is a key element in community design. The TPB's Complete Streets Policy, adopted in 2012, called upon the region's local and state governments to adopt policies to promote street design policies and standards to make alternative modes of transportation—including bicycling and walking—safer and more comfortable. Today, nearly all the region's jurisdictions have adopted Complete Streets approaches and are finding ways to make a range of transportation options available to more residents. Jurisdictions in all corners of the region are seeking their own ways to promote mixed-use activity centers and bicycle infrastructure to expand the number of destinations that can be reached without a car.

As we seek to improve air quality, reduce greenhouse gas emissions, and improve public health, bicycling provides the freedom to get where you need to go quickly and efficiently. Even for people who do not often bike, it represents an expansion of our options for travel. And transportation choice is a key element in our region's vision for the future.

## Ongoing Strategies

A number of ongoing strategies are also important to achieving our region's long-term goals. These are strategies that will require continuing attention and investment over time. As with the near-term strategies identified earlier, many of our state, local, and regional transportation agencies are already pursuing these strategies, but we need to ensure that those efforts can continue into the future as we keep working to achieve our goals.

The six ongoing strategies described in greater detail below include, in no particular order:

- 1 Ensure Maintenance of the Transit System (OG1)
- 2 Ensure Maintenance of Roads and Bridges (OG2)
- 3 Apply Priority Bus Treatments (OG3)
- 4 Increase Roadway Efficiency (OG4)
- 5 Ensure Accessibility for Persons with Disabilities (OG5)
- 6 Update and Enforce Traffic Laws (OG6)

## ONGOING STRATEGY 1 Ensure Maintenance of the Transit System (OG1)



ALBINO FLEA, FLICKR CREATIVE COMMONS

### What we should do

***Keep the Metrorail, Metrobus, local bus, and commuter rail systems in the region safe and in good working order.***

- Finish addressing the backlog of deferred maintenance
- Set up systems to address maintenance challenges as they arise
- Secure dedicated, reliable sources of funding to ensure maintenance is carried out as needed

### How much it will cost

\$\$\$

***Hundreds of millions of dollars***

### Why we should do it

***Our daily lives and our future depend on it***

The region's transit system—Metrorail, Metrobus, local bus, commuter rail, and other services—is an essential part of our daily lives, providing more

than one million trips a day to area travelers. In the region's core jurisdictions, our most congested areas, more than 43 percent of workers rely on transit to get to work. Regionally, 17 percent of commuters use transit to get to work—more than three times the national average. Lower-income residents are particularly dependent upon transit services to get to jobs, schools, and shops.

Transit is also a cornerstone for our future. *Region Forward*, a vision for the region's future developed by the Metropolitan Washington Council of Governments, calls for more development in mixed-use, walkable Activity Centers, many of which are focused around transit stations and services. The TPB's Constrained Long-Range Transportation Plan (CLRP) calls for more than \$7 billion in regional transit investments, including the Silver Line, the Purple Line, and portions of the District of Columbia's planned streetcar system.



LARRY LEVINE, WMAPA

These and other investments will create new demands on the existing system and put new pressure on available maintenance resources. This is especially true of our Metrorail system, which has seen years of much-needed upkeep delayed due to lack of funding and other challenges. If we don't take care of the transit system today—especially Metro—future transit expansions will not be as effective as they need to be. And as a result, continued population and job growth near transit will not be sustainable. Essentially, if Metro and the rest of our transit system are not maintained, our lives and our economy will be immediately threatened.

***Metro is iconic and part of our region's self-identity***

Over the last 50 years, we have invested much more than money in the Metro system. In many ways our regional self-identity and our vision of the future is riding on Metro. At its best, the system symbolizes our region's vibrancy and the connectivity among our local communities and economies. But at its worst, Metro's maintenance problems can cause us to question our region's very ability to take care of our most basic needs. If we can't maintain our regional transit system, how can we expect to thrive in a competitive global economy?

***We're already making progress, but need to do more***

We are making progress with the backlog of maintenance needs that have accumulated over the years. Thanks to an infusion of federal and state funding, Metro in 2011 launched an aggressive

***MetroForward Aims to Keep Metro System in a State of Good Repair***

In 2011, the Washington Metropolitan Area Transit Authority (WMATA) launched *MetroForward*, a \$5 billion program to deal with deferred maintenance of the Metrorail and Metrobus system. This six-year effort has already delivered improvements in safety and reliability, including aggressive escalator rehabilitation, station repairs, and hundreds of replaced or rehabilitated buses.

Although *MetroForward* will make great strides in rebuilding the system, the funding agreement for the program will end in 2020. At the same time, new maintenance challenges are emerging. The opening of the Silver Line will increase the size of the rail system by 25 percent, requiring an increase in capital maintenance. Over the coming decade, WMATA estimates that the system will need more than \$1 billion annually just to maintain and replace assets on a regular life-cycle basis to continue the current level of service

In addition to this annual maintenance pricetag of \$1 billion, WMATA has identified essential capital investments in its strategic plan *Momentum* (see page 50) between now and 2025.



\$5 billion program to pull itself out of the hole of deferred maintenance. This intensive effort has already delivered a host of improvements that are improving safety, reliability, and customer service.

But we can't stop now. The current funding agreements do not extend beyond 2020. WMATA estimates that it will need more than \$1 billion annually just to maintain and replace assets on a

regular life-cycle basis to ensure a state of good repair and continue current levels of service. These projects include safety improvements recommended by the National Transportation Safety Board (NTSB), railcar and bus replacement and repair, and escalator replacements. We need to secure a dedicated, reliable source of funding to make sure these things can happen on a continuing basis in future years.

## ONGOING STRATEGY 2

# Ensure Maintenance of Roadways and Bridges (OG2)

### What we should do

***Ensure that roadways and bridges provide safe, reliable, and comfortable travel for people and goods.***

- Ensure that needed road and bridge maintenance projects are completed as a first priority for use of highway funding

### How much it will cost

\$\$\$\$\$

***Hundreds of millions of dollars***

### Why we should do it

***Preserves the backbone of our transportation system***

High-quality, well-functioning roads enable the many essential economic transactions that make our region's economy so strong and resilient, ensuring tremendous economic opportunity and a high quality of life for as many people as possible. More than 1.3 million people use the region's road network to get to jobs each day, whether by car, vanpool, bus, or bike. And the goods that move using our road network are an essential part of day-to-day life and overall economic well-being.

Our road and bridge network truly is the backbone of our transportation system. Maintaining it is essential to the region's economic health. And it helps us meet so many of our other transportation and land-use goals, including improved bus service, more bicycle use, and strengthening and connecting mixed-use activity centers.

***Saves motorists money and time... and their lives***

By one estimate, motorists in the Washington region pay more than \$500



a year in additional vehicle operating costs—accelerated vehicle depreciation, additional repair costs, increased fuel consumption and tire wear—due to poor pavement conditions. And time spent stuck in slow-moving traffic due to poor pavement conditions also adds up. But, ultimately, road and bridge maintenance is a matter of personal safety. Deteriorating roads can lead to an increased number of accidents in which drivers and passengers are at greater risk of injury or death. Deteriorating bridges can and do collapse, as seen recently on I-5 in Washington State and in 2007 on I-35W in Minnesota.

***Saves tax dollars in the long-run***

Waiting for roads to crumble or bridges to fall down before performing routine maintenance is poor public policy. Keeping our roads and bridges in a state of good repair—that is, repairing and maintaining them before they deteriorate to the point of needing to be fully rebuilt—saves transportation agencies significant amounts of money in the long run. One estimate from the American Association of State Highway and Transportation Officials says that every \$1 spent to keep a roadway in good condition saves \$7 in spending to reconstruct it once it has fallen into disrepair. (AASHTO, RRA, p. viii)

## ONGOING STRATEGY 3

# Apply Priority Bus Treatments [OG3]

### What we should do

**Apply priority bus treatments on key routes to make bus transit faster, more reliable, and more convenient.**

- Establish signal priority systems to give buses more green lights
- Make roadway improvements, like bus-only lanes and queue jump lanes at intersections, to allow buses to bypass traffic congestion
- Construct and provide curb extensions, station platforms, pre-boarding payment systems and low-floor buses to ease and speed boarding and alighting
- Provide real-time bus information to help travelers plan their trips
- Allow local and commuter buses to use the shoulders on highways to bypass traffic in specific corridors where determined to be feasible and cost-effective

### How much it will cost

\$\$\$

*Tens of millions of dollars*

### Why we should do it

**It's a smart use of existing infrastructure**

Bus priority treatments can be a smart use of existing infrastructure. Rather than implementing new transit services that could put unrealistic capital and operating burdens on cash-strapped public transit providers, these approaches will create new transit capacity without requiring new operating expenditures.

**Reduces travel times and greater reliability**

The region has already prioritized these kinds of improvements and we are



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looking to do more, because the benefits of bus priority treatments are significant. Analysis of WMATA's Priority Corridor Network found that bus-only lanes and off-board fare collection can each provide travel time savings of three minutes per mile. Transit signal priority systems reduce travel times by approximately 30 seconds per mile.

**Encourages increased transit ridership**

These benefits will add up to more predictability and convenience in the daily commutes of bus riders throughout the region. As bus travel becomes more attractive, more people will use them, which will reduce roadway congestion, improve air quality, reduce greenhouse gas emissions from vehicles, and provide more accessibility to economic opportunity for people in all corners of the region.

### Federal TIGER Funds Supporting Bus Priority

In 2010, the TPB was awarded \$58.8 million in federal TIGER funding to implement bus priority projects throughout the region. Today, the 16 projects funded under the grant are demonstrating efficiency benefits that are models for replication. One such project is the region's first Bus Rapid Transit route, which will operate between the Pentagon City and Braddock Road Metro stations in northern Virginia starting in early 2014. Looking forward, the Washington Metropolitan Area Transit Authority has recommended specific bus priority improvements along 24 bus corridors in the region in its Priority Corridor Network Plan.



## ONGOING STRATEGY 4

# Increase Roadway Efficiency (OG4)

### What we should do

#### *Smooth traffic flow and minimize delays on the existing road network.*

- Coordinate traffic signals and construction schedules
- Provide travelers with more real-time traffic information
- Respond to and clear traffic accidents more quickly
- Prepare for severe weather and other highly disruptive incidents

### How much it will cost

\$\$\$

*Tens of millions of dollars*

### Why we should do it

#### *Potential for extra capacity and fewer delays exists*

We've found lots of ways over the years to use our road network more efficiently—for example, by using electronic tolling to eliminate queues at tollbooths and broadcasting traffic reports on television and radio so motorists can choose alternate, less congested routes.

But the region can do more. And thanks to advances in technology, squeezing additional capacity out of the existing road network in such ways is becoming easier.

Already the state departments of transportation and other agencies in our region have come together to create and support MATOC, the Metropolitan Area Transportation Operations Coordination program. MATOC exists to monitor traffic and weather conditions and coordinate responses to highly disruptive incidents like severe weather and major accidents.

Measures like more traffic cameras and in-road sensors could help spot and respond to traffic accidents more quickly and to relay information about traffic conditions to drivers on overhead signs, smartphone apps, and in-vehicle navigation systems. Efforts to collect and store data about traffic conditions on an ongoing basis could be used to make predictions about future travel patterns, which could help identify improvements needed to further smooth traffic flow and minimize delays.

Eventually, technology could allow roadways to communicate with vehicles, and vehicles to communicate with other vehicles, allowing cars to follow one another more closely at constant speeds—minimizing congestion and moving more cars through a given roadway. Such steps could also improve on-road safety by reducing the chances of accidents.

#### *The benefits of small improvements multiply quickly*

The benefits of roadway efficiency measures multiply quickly, since they can affect so many travelers at once. Even something that saves an individual traveler only two minutes of travel time can get multiplied across tens of thousands of drivers on busy roads at peak travel times. The personal time-savings, increased travel time reliability, savings on wasted fuel and increased productivity all add up to benefits for the region. And trucks that are responsible for moving goods and making on-time deliveries are also better able to do their jobs, providing further economic benefit.

#### *Makes the most of what we already have*

Finding ways to squeeze more capacity out of our existing road network helps us make the most of the transportation infrastructure we already have. That can allow us in some cases to avoid building expensive new infrastructure. Construction costs and limited availability of land, especially in urbanized areas, can make it difficult to expand roads, so finding ways to make the most of what we already have is a necessity.



VDOT

## ONGOING STRATEGY 5

# Ensure Accessibility for Persons with Disabilities, Low Incomes, and Limited English Proficiency (OG5)



ARLINGTON COUNTY, FLICKR CREATIVE COMMONS

### What we should do

***Improve access to the existing transit system and other transportation services for traditionally disadvantaged groups in order to create more and better travel options for all people.***

- Improve MetroAccess and other paratransit services, provide more wheelchair-accessible taxis regionwide, and increase information services such as travel training for those with disabilities
- Expand transit service offerings, such as more off-peak and weekend service and neighborhood circulator services, to help those who are dependent on transit meet more of their mobility needs
- Work to limit the negative effects that transit fare increases have on persons with limited incomes
- Provide important transit system information in multiple languages and formats to make sure that all riders can use the transportation system with confidence

- Focus efforts to improve accessibility for traditionally disadvantaged groups in communities with the greatest need

### How much it will cost

\$\$\$\$

***Tens of millions of dollars***

### Why we should do it

***Mobility is essential to equal opportunity***

Transportation and mobility are basic necessities for all members of society. However, a substantial portion of people living in our region are not able to access the transportation system to fulfill their daily needs. Two decades after passage of the Americans with Disabilities Act, or ADA, transportation options for many people with disabilities in the Washington region remain limited. Individuals with lower incomes, who are often reliant on public transit, face increasing transit fares and service reductions, including less frequent service and more restricted hours. And people with limited English proficiency often do not have access to information needed to

navigate and take full advantage of the region's complex transportation system.

Unfortunately, the lack of options means that getting to work, to school, to medical appointments, and to other destinations can be a challenge for many individuals. Without access to reliable, affordable transportation options, many individuals are unable to contribute to and benefit from society as individuals, workers, taxpayers and consumers.

### ***Mobility enhancements for all means advantages for all***

Transportation improvements that increase accessibility for disadvantaged groups help the population at large. Everyone benefits from efforts to improve transportation options for those with disabilities, such as Complete Streets policies that promote high-quality pedestrian amenities, more accessible bus stops, and easy-to-read signage. Providing better transit services that help low-income individuals, such as more weekend and off-peak transit service, provides additional options for all users. And services that help more people to access the transportation system, such as paratransit and bilingual information, can increase productivity and allow more people to participate in the region's economy.

### ***We can easily build on programs that already exist***

Efforts to improve transportation options for traditionally disadvantaged groups are already underway in our region. For people with disabilities, MetroAccess, WMATA's paratransit service, provides door-to-door service within a three-quarter-mile radius of Metrorail stations and Metrobus stops in Maryland and the District of

Columbia. Wheelchair-accessible taxis can also offer door-to-door travel options for people with limited mobility due to disability. Many jurisdictions in the region have passed legislation requiring private taxicab companies to offer wheelchair-accessible taxicab service. In order to limit the effects of rising transit fares, Metro offers reduced fares to individuals with disabilities and the elderly, and many organizations and public agencies throughout the region have used federal grants to provide transit vouchers, expand transit in underserved neighborhoods, and support vanpools to suburban employment sites. Many of the region's transportation providers also offer specialized language assistance upon request as well as information on how to use transit services and timetables in multiple languages and formats.

In addition, efforts to increase public awareness of existing transportation options and programs are gaining traction. With its Reach-A-Ride service, the TPB is trying to make it easier for people with specialized transportation needs to find the services they require and to find providers that serve their area. With the help of federal grant funds, organizations in the region have begun to provide “travel training” to educate individuals and groups on how to use the transportation system safely and effectively. By participating in these programs, individuals can enjoy significantly greater independence, self-reliance, and mobility as they start using public transit.

Much can be done to improve and expand these services so they become better options throughout the region.

## ONGOING STRATEGY 6

# Update and Enforce Traffic Laws (OG6)

### What we should do

**Apply non-engineering solutions to make the transportation system safer and reduce the number of traffic-related injuries and fatalities.**

- Update existing traffic laws to make roadways safer for all users, especially bicyclists and pedestrians
- Improve enforcement of traffic laws, through stepped up in-person enforcement and automated enforcement techniques like red-light and speed cameras in high-exposure areas
- Increase public information and outreach regarding traffic laws to ensure that everyone is aware of the “rules of the road”

### How much it will cost

\$\$\$\$\$

**Millions of dollars**

### Why we should do it

**Improves safety for all users**

As more and more trips in the region are made by bicycle and on foot, we have to find ways for all road users to coexist safely and peacefully. “Engineering” solutions—like striped crosswalks, pedestrian signals, and bike lanes—go a long way to making bicyclists, pedestrians, and drivers safer, by reducing the risk of collisions and other conflicts. But updated laws that account for the particular needs and vulnerabilities of non-motorized road users—and enforcement of those laws—are also important in reducing the risk of accidents that cause injuries, or even death.

One of the most effective ways to protect bicyclists and pedestrians is by lowering vehicle speeds in areas where



they are most likely to be or would want to be. A 2011 study by the American Automobile Association (AAA) found that the average risk of severe injury for a pedestrian struck by a vehicle rises from 10 percent if struck by a vehicle traveling at 16 mph up to 50 percent if struck by a vehicle traveling at 31 mph. The risk increases to 75 percent at 39 mph and to 90 percent at 46 mph. Many places throughout the region, where local planners, officials, and residents are seeking to encourage non-motorized travel, have taken steps to reduce speed limits in key areas.

Changes to other laws, especially those that require bicyclists to operate as if they are driving motor vehicles, can also help reduce potential conflicts—for example, allowing bicyclists to enter intersections ahead of motorized vehicles. Other states and local jurisdictions also have in place laws requiring motorists to give three feet when passing bicyclists and imposing higher penalties for motorists who injure or kill a pedestrian or bicyclists through careless or inattentive driving.

To ensure that these measures are as effective as possible, stepped up in-

## ONGOING STRATEGY 6, CONTINUED

person enforcement and automated enforcement techniques like red light and speed cameras, especially in high-exposure areas, are also important. Twice a year, the TPB sponsors the regional Street Smart program, which aims to remind motorists, bicyclists, and pedestrians about traffic safety laws and to encourage local law enforcement to step up patrols in high-exposure areas.

### ***Minimizes conflicts and improves traffic flow***

All roadway users stand to gain from updating laws that minimize conflicts between different types of users because of reduced chances of collisions and the stress associated with that risk. Doing so can also smooth traffic flow by helping different users operate within the roadway in a predictable, coordinated way rather than in what can sometimes feel like chaotic, haphazard interaction.

### ***Supports Activity Centers and builds community***

Updating and enforcing traffic laws, especially those that protect bicyclists and pedestrians, makes modes of travel other than driving more viable travel options for more people. Such efforts make Activity Centers function better by complementing bicycle and pedestrian infrastructure improvements. Moving people around safely and easily is crucial to the functioning of such high-density, mixed-use areas. Better traffic laws will make bicycling and walking safer and easier, and will invite more people to use non-motorized modes. That adds to the sense of community that bicycling and walking encourages by making people more likely to interact with, get to know, and identify with an area and the people within it.

## Long-Term Strategies

A half-century ago, we built the Capital Beltway and launched construction of the Metro system. These bold projects responded to our region's needs in a manner well suited to the post-World War II era, when resources were more abundant and support for major public spending was much higher.

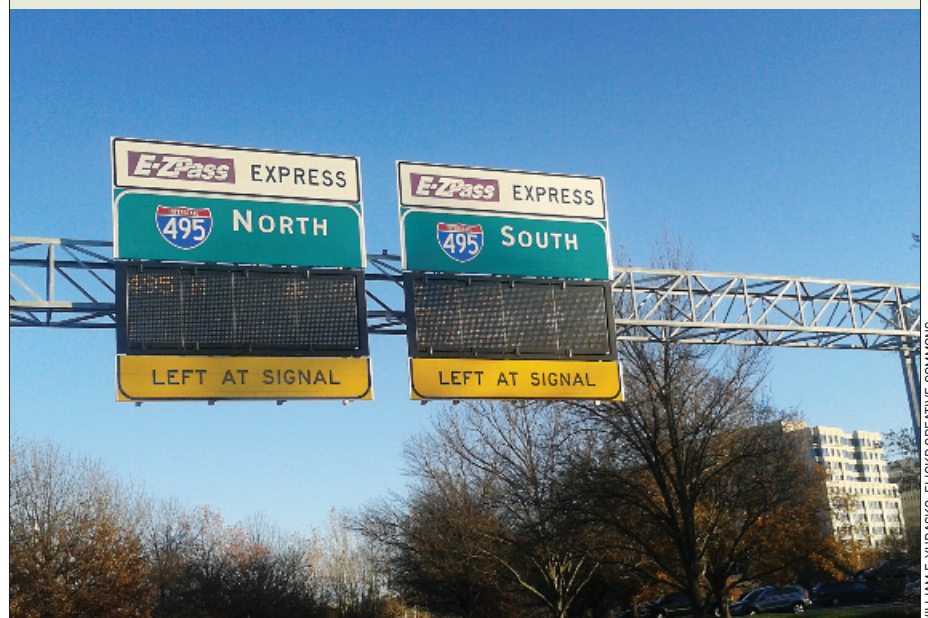
Today things are different. Funding is tight, our road and rail systems desperately need maintenance, and expansion opportunities are limited due to resource constraints and a lack of public will to raise new revenue. But the demands on our transportation system are even greater than they were 50 years ago. The region is growing and our economy is diversifying. We cannot afford to just sit back. The right transportation decisions today can help us seize the opportunities of tomorrow.

Massive public works projects like the Beltway and Metro were the result of bold, visionary thinking and determination. But what will be the "New Bold" solutions that serve the next generation? What will be the iconic transportation initiatives that respond to—and take advantage of—this current moment in history?

Our long-term strategies must be cost-effective. We need to be smart about our transportation decision-making, beginning with the fact that we need to make better use of infrastructure that is already in place. That means we need to promote growth in regional Activity Centers so that we can maximize existing transportation connections among and within these centers.

But we also need to capture the imagination of the public through visionary thinking and creative problem-solving. Innovative systems, like high-quality bus systems and express toll lanes, will serve people's daily needs and help them take advantage of new opportunities. At the most basic level, we need to continue to meet the everyday needs of a growing population, while planning for the growth expected over the coming decades.

The five strategies described on the following pages each respond to our region's continuing challenges individually. Their benefits will be even greater, however, if we implement them in combination.



WILLIAM F. YURASKO, FLICKR CREATIVE COMMONS

## LONG-TERM STRATEGY 1

# More Capacity on the Existing Transit System (LT1)



LARRY LEVINE, WATA

### What we should do

***Fund basic capital improvements in the Metro system, commuter rail and other transit systems, as well as capacity enhancements in key locations, especially the regional core.***

- Fund state of good repair needs and capacity improvements that are identified in Metro 2025 and Metro's Strategic Plan *Momentum*. Such improvements include all eight-car trains during rush hours and core station improvements.
- Expand the frequency, coverage, and capacity of the region's bus systems to better serve more communities, especially individuals who are transit-dependent.
- Make rail infrastructure improvements to ensure commuter rail services can be expanded to serve new riders.

### How much it will cost

\$\$\$\$\$

***Billions of dollars***

### Why we should do it

***Meet new demands, especially in the core***

Transit ridership is growing, and that's the way we want it. But our region's transit systems, particularly Metrorail, are already operating at close to capacity in some locations during peak hours. They will continue to get more crowded as the region grows. The pressure is particularly intense in our region's central jurisdictions. The Metro system's core—an area that incorporates 26 stations across all lines in the District of Columbia and Arlington—is the destination or transfer point for 80 percent of all rail riders system-wide.

According to current regional plans, there is insufficient funding to maintain a state of good repair and for core capacity improvements on Metrorail beyond 2020. As a result of this shortfall, the Constrained Long-Range Transportation Plan (CLRP) includes a “transit capacity constraint” that reflects more system unreliability and reduced capacity on Metro through the regional core after 2030. That means that unless something changes, riders in the future will encounter increased service disruptions and more crowding on Metro, and that a significant number of them will switch to other travel modes, mainly driving. In a region like ours, which has bet its economic prosperity and well-being on increased transit ridership, a system not kept in a state of good repair with a constraint in capacity should be unacceptable.

To respond to these challenges, the region needs to fund priority improvements for the next 10 years, including all eight-car trains during rush hour and core station enhancements. In particular, the region needs to agree to fund the vital projects in the Metro 2025 package in the *Momentum* Strategic Plan.

**Supports new riders on commuter rail**

Commuter rail services are also under pressure to accommodate more riders on the existing system. Both Virginia Railway Express (VRE) and Maryland’s commuter rail service, MARC, rely upon aging infrastructure, largely shared with freight rail lines. Both systems have plans to make improvements to support a state of good repair and serve new ridership.

The Long Bridge, the region’s only freight and passenger rail crossing of the Potomac River, is a particularly

**Metro 2025: Ensuring State of Good Repair and Maximizing Existing Capacity**

*Momentum* is Metro’s strategic plan for decision making over the next ten years. Identifying safety and the highest priorities, the plan emphasizes the importance of ensuring state of good repair and maximizing the current

transit network by utilizing every bit of capacity available. Pivotal investments identified in the Metro 2025 component of *Momentum* include all eight-car trains during rush hour, station improvements in the region’s core and the restoration of Blue Line service levels between Rosslyn and the Pentagon. The plan also calls for the implementation of the Metrobus Priority Corridor Network, communications improvements, bus fleet expansion, and other improvements to maximize capacity.



LARRY LEVINE, WMATA

important link. Growing demand for freight and passenger traffic in coming decades will lead to strain, especially since CSX, the bridge’s private owner, will retain the right to prioritize its own freight traffic over passenger traffic. It is nearing its practical capacity, and in the near future, it will require major renovation or replacement. Growth of freight, passenger, and commuter rail services in the region—and the economic activity that it supports—will depend largely on the future of Long Bridge and its ability to handle new demands.

Another location that needs major improvements is Union Station, which is operating beyond capacity, especially during peak periods. Upgrades to this rail and transit hub will satisfy transit demand at a critical junction in the regional system, supporting all modes

of transit and promoting economic development.

**Provides an essential foundation for so many other objectives**

So much depends on whether Metro and other transit systems in the region can handle the challenges they will face over the next decade. The new transportation systems that we have planned, including investments of \$7 billion currently in the CLRP, will not perform as expected if the existing transit system does not rise to the challenge of anticipated growth. And Activity Centers—a cornerstone of our regional economic development policy and a key to achieving greater land-use and transportation efficiencies—simply will not work if transit and commuter rail systems are not able to connect them and move people efficiently between them.

## LONG-TERM STRATEGY 2

## Concentrated Growth in Activity Centers [LT2]



ARLINGTON COUNTY, FLICKR CREATIVE COMMONS

**What we should do**

***Concentrate more development in the region's Activity Centers to achieve land-use and transportation efficiencies.***

- Encourage a balance of jobs and housing in each Activity Center.
- Promote an array of housing opportunities in Activity Centers that are affordable and attractive to diverse populations.
- Support development of Activity Centers on the eastern side of the region, particularly those located near Metrorail stations.

- Tailor development densities and design characteristics to suit each Activity Center's unique identity, not following a one-size-fits-all approach.

**How much it will cost**

The public cost incurred as the result of land-use changes can vary depending on local conditions. In many cases these improvements are funded by private sources.

**Why we should do it**

***Increases the availability of transportation options and decreases travel demand***

People who live or work in Activity Centers have access to more transportation options and are less dependent on driving. The Metropolitan Washington Council of Governments has, in cooperation with local jurisdictions, identified 141 locations to be designated as Activity Centers. About seven in ten of these centers are served by high-frequency, high-capacity transit service, or are planned to have such service in the future, according to regional plans. Concentrating development near transit means more people can use trains and buses, and will have more opportunities to walk or bicycle to nearby destinations.

With more destinations in closer proximity, people will not need to travel so frequently or such long distances. Trips to school or to the store will be made on foot or by bicycle rather than by car. Auto trips will not be as long, which can reduce vehicle miles of travel and congestion, improve accessibility, and have positive environmental effects.

Activity Centers are typically more resource-efficient, too, capitalizing on existing infrastructure like water, sewer, and power utilities and other public services, as well as transportation, instead of requiring expensive expansion.

***Spurs balanced economic development and provides greater access to more opportunities***

Developing Activity Centers will do more than just achieve transportation efficiencies. It also supports and encourages more balanced job and household growth that benefits the region by promoting robust economic development in all jurisdictions, inner and outer, east and west.

Metrorail station areas on the eastern side of the region offer tremendous opportunities to develop into robust Activity Centers. Prince George’s County, for example, has 15 Metrorail stations, each of which could attract higher-density development that would strengthen the local and regional economy. Job growth in these areas, which would take advantage of existing transit accessibility, would also directly benefit low-income communities. And as job opportunities expand on the eastern side of the region, east-west traffic flows that are currently imbalanced could even out, leading to reduced congestion on major east-west routes.

***Provides environmental benefits***

The direct and indirect impacts of concentrated growth all add up to a more sustainable future. By making transit and non-motorized transportation more viable, Activity Centers will make us less dependent on our cars. Less driving will help reduce vehicle emissions that have adverse health effects and green-house gas emissions. In addition to cutting vehicle emissions, focusing development in Activity Centers will be good for a range of other environmental indicators, including reducing storm water runoff and preserving open space.

***Reflects a regional consensus about land use and growth***

Concentrated growth has become a hallmark of our regional land-use policy. The *TPB Vision* in 1998 first called for identifying mixed-use Activity Centers throughout the region that would serve as focal points for job and housing development, and as nodes for



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transportation linkages. Since that time, concentrated development in Activity Centers has been an overarching tenet of the region’s land-use planning activities.

The important role of Activity Centers was reaffirmed in *Region Forward*, metropolitan Washington’s vision for growth through 2050. *Region Forward* was adopted by COG in 2010 and later that year it was endorsed individually in the form of a regional compact by each of COG’s member jurisdictions. Activity Centers are at the heart of that compact, which includes the goal: “We seek transit-oriented and mixed-use communities emerging in regional activity centers that will capture new employment and household growth.”

This regional consensus reflects an understanding that concentrated development in Activity Centers is a concept that makes sense for all the region’s jurisdictions, especially because it is not a one-size-fits-all approach. The region’s 141 Activity Centers are located throughout every jurisdiction and have the opportunity to capitalize on their own unique identities and assets. An Activity Center in Loudoun County will not look like one in the District of Columbia, but both places can be less auto-dependent, and more walkable and economically vibrant.



## LONG-TERM STRATEGY 3

# Enhanced Circulation within Activity Centers [LT3]

### What we should do

***Provide and support an array of transportation options for short trips within Activity Centers.***

- Expand pedestrian and bicycle infrastructure in Activity Centers to make non-motorized transportation safer and more efficient.
- Provide bus services that offer short-range connections within Activity Centers.
- Promote street connectivity in Activity Centers to provide quicker access to more destinations and to diffuse localized congestion.

### How much it will cost

\$\$\$

***Tens of millions of dollars***

### Why we should do it

***Keeps Activity Centers moving***

Travel *within* an Activity Center can be just as challenging as travel *between* Activity Centers. Our region's communities must be designed to accommodate short trips on foot, by bike, or on circulator buses and vans. Long-term strategies must include comprehensive efforts to ensure non-motorized options are fully viable. That can mean something as simple as building a sidewalk or as complicated as establishing a bike-share program in a suburban location.

As part of a longer-term strategy, street patterns are important. Traditional street grids and smaller street blocks can enhance walkability and increase the number of destinations that a person can quickly reach on foot, or by other modes. Throughout our region, communities have re-established street



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connections that were once closed. New developments have increasingly used grid patterns to improve circulation and diffuse congestion.

### ***Make Activity Centers more vibrant***

If we think of an Activity Center as an organism, then we can think of its internal transportation pattern as the circulation system that provides its life blood. With good circulation, diverse economic activities will thrive. Seniors, people with disabilities, and transit-dependent populations will have more opportunities to get around without a car. And the entire community will benefit from a “sense of place” derived from increased street life and renewed vibrancy.

### ***Reduce localized congestion***

Finally, circulation enhancements will reduce localized congestion that is likely to result from concentrating development. Such improvements make it possible to feel comfortable leaving your car at home, knowing that you can get where you need to go because you have a variety of transportation options. They will allow us to more fully capitalize on existing transit infrastructure by ensuring the “last mile” or the “first mile” in a trip, which is often on foot, bike, or short-range transit, is comfortable and safe.

## LONG-TERM STRATEGY 4

# Bus Rapid Transit (BRT) and Other Cost-Effective Transit Alternatives [LT4]



ORAN VIRIYINCI, FLICKR CREATIVE COMMONS

### What we should do

***Develop new transit systems that cost-effectively connect Activity Centers and/or major rail stations.***

- Implement bus rapid transit (BRT) systems that provide extensive, high-quality transit services, particularly in places that are unlikely to be serviced by rail. BRT lines can be implemented on arterial roads or on limited-access highways.
- Implement street-level transit systems, including light-rail, in jurisdictions that have determined such projects to be cost-effective and important for mobility, accessibility, and community development.

### How much will it cost?

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***Hundreds of millions of dollars***

### Why we should do it

***Provides cost-effective expansion of the region's transit options***

Fifty years ago, we focused on building Metrorail and we got that job done. Today, we need to be just as diligent in our efforts to develop a wide variety of public transit options—diverse systems that will serve diverse needs throughout our region. That means we need a variety of interconnected bus and rail services—some local, some express. And it means that we need to find cost-effective ways of providing high-quality transit services so that they can reach more people in more places.

In many cases, high-quality bus services can be cheaper, more extensive, and just as convenient as rail transit. Bus rapid transit, otherwise known as BRT, provides high-quality transit service approaching the speed, frequency, and reliability of heavy rail (like Metro) but at a fraction of the cost to build. Pre-payment systems and level

boarding—either low-floor buses or elevated station platforms—assure speedier and more efficient service. Bus-only lanes or lanes with guaranteed free-flow traffic conditions ensure that BRT vehicles do not get stuck in traffic. And because BRT uses much of the same kind of infrastructure that cars do, it can be implemented on limited-access highways or arterial roads, as is being done on Route 1 in Alexandria.

In other cases, jurisdictions have decided that their needs are best served with street-level rail systems. Such rail projects in our region include the Purple Line in Maryland, the Columbia Pike streetcar in Arlington and the District of Columbia's streetcar projects. Proponents typically promote light rail because they say the permanence of rail will promote economic development and they believe it will provide the necessary capacity for fast and efficient service, particularly in higher-density locations where significant ridership is forecast.

### ***Connects more Activity Centers***

Activity Centers are the economic engines of our region. COG forecasts currently show that in 2040, 69 percent of jobs will be located in centers. Because they are home to majority of the region's employment, and in the future they will increasingly concentrate jobs and housing, we need to focus our transportation resources on connecting these locations, not just with roads, but with transit.

A target in COG's *Region Forward* called for all 141 designated Activity Centers to have transit access by 2050. Using a variety of new transit options, we can meet this target and provide high-quality transit in a vast network extending across the region.

## LONG-TERM STRATEGY 5

# Express Toll Lanes [LT5]



VDOT

### What we should do

*Use tolling and pricing mechanisms to manage road congestion and raise revenue.*

- Consider implementing tolling mechanisms, especially when building new lanes or roads—that is, when expanding capacity. Tolling existing lanes should be considered in places where state and local decision makers deem it to be appropriate and where federal permission is obtained.
- Seek to connect tolled facilities in a way that allows for the seamless use of such facilities.
- Provide high-quality transit alternatives on priced lanes to provide a viable alternative to driving.

### How much will it cost?

\$\$\$\$\$

*Billions of dollars*

### Why we should do it

*Meets rising roadway demand in an era of limited funding*

Express toll lanes represent a new way of thinking about how to meet rising demand for driving in an era of limited public funding. Such lanes are a form of “congestion pricing” in which toll rates increase during the most congested times of day. Higher tolls reduce demand on the lanes, which keeps traffic free-flowing and makes travel more predictable and reliable.

Express toll lanes can add capacity to our existing road system in a manner that ensures that congestion-free options will always be available for drivers willing to pay for them—that the lanes won’t simply “fill up again” as



DAN REED, FLICKR CREATIVE COMMONS

more people crowd on to the region’s roads. Rather than building enough capacity to ensure free-flowing traffic for all vehicles at all times— which most engineers agree is impossible in most urban areas and would be very expensive—express toll lanes always make congestion-free travel an option for individuals when they need it most.

Managed toll lanes already exist on the Intercounty Connector (ICC) in Maryland and on the 495 Express Lanes on the Capital Beltway in Virginia. Such lanes are also under construction on I-95 in Virginia. These facilities make more efficient use of our road system by putting a price on the use of new road capacity to help manage congestion and

to help raise revenue for construction.

Toll lanes are the most likely way that we will be able to help fund the road improvements that we are going to need in our growing region, even as we seek to reduce our dependence on driving. Moreover, toll lanes provide a source of revenue that can be used for a variety of transportation alternatives, particularly in the tolled corridor.

Road pricing is particularly appropriate for projects that add new lanes or build new roads because it provides new revenues and manages new travel demand. For road pricing projects on existing roads, tolling or other forms of congestion pricing may be more difficult to implement. The most

recent federal surface transportation reauthorization legislation, Moving Ahead for Progress in the 21st Century, or MAP-21, placed restrictions on tolling existing road capacity, although there are some exemptions to these limitations. In addition, placing tolls on existing capacity could pose political challenges, as drivers can be reluctant to support tolls on lanes or roads that were previously free.

Nonetheless, the benefits of congestion pricing on existing roads can be significant. Decision makers may wish to pursue such projects where they deem pricing to be locally appropriate and permissible under federal law and regulations.

***Provides new opportunities for transit***

Pairing priced lanes with BRT services provides the potential for great synergy: variably priced toll lanes provide free-flowing running way for buses while toll revenues offset some of the cost of bus facilities and services. BRT services would reduce the demand for the priced lanes, allowing them to operate more smoothly and carry more people with fewer vehicles. Both the BRT and priced lanes would provide incentives for travelers to choose more efficient travel modes, like carpools, vanpools, or transit, providing congestion relief to the existing general-purpose lanes.

Analysis by the TPB has found that such a network would substantially reduce the anticipated increase in congestion, while providing the new road capacity necessary to keep our region’s economy functioning. It would also provide improve transit access and shorten average commute times.

## CONCLUSION: The Benefits of Integration

So how do we get maximum benefit out of these strategies? Combine them.

Integrated long-term approaches will give people in the region greater benefits than the disaggregated strategies. Express toll roads work better if they also provide high-quality bus services. Activity Centers will be most successful if they are served by multi-modal transportation systems.

Analysis by the TPB shows that an integration of all five strategies is particularly effective. Such a combined approach would create access to the widest variety of travel options—including more transit, congestion-free priced lanes, and pedestrian and bicycle facilities. Activity Centers would blossom into vibrant nodes of mixed-use and walkable development. People who live and work in these centers would enjoy a variety of travel options for trips across town and across the region. They could choose from a range of transportation options for longer trips that connect Activity Centers, such as an integrated system of bus rapid transit and toll lanes, as well as a revitalized transit network. And for short trips, they could safely and easily walk, bike, or take a local bus.

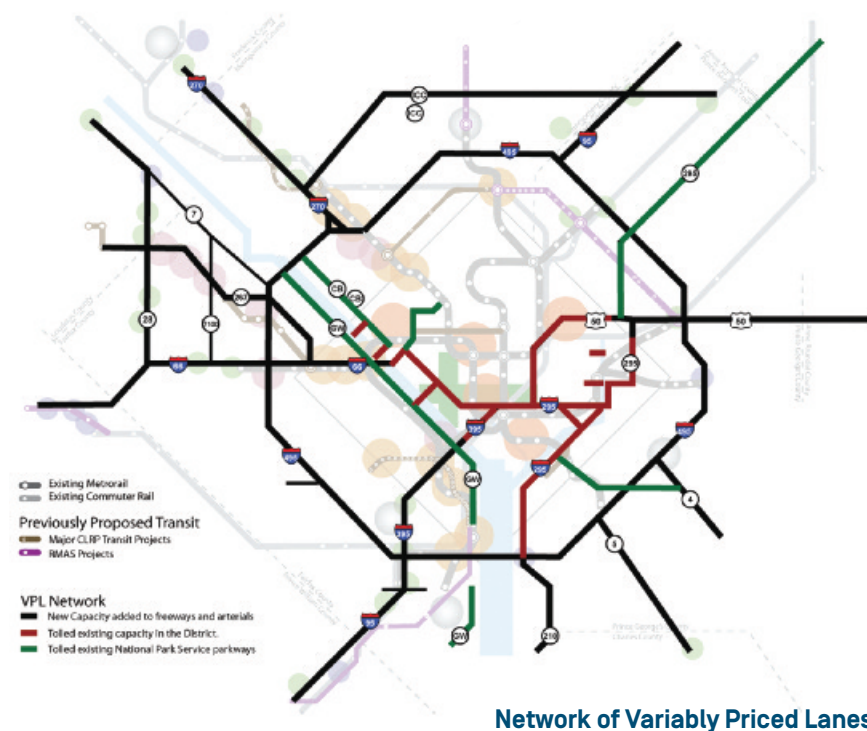
A combination of long-term strategies is the key to a successful “New Bold” approach to our transportation future. It broadly meets our regional goals calling for a transportation system that supports economic growth, environmental stewardship and a high quality of life for all the region’s residents. And most of all, such a combined approach declares that we can be smart in the ways we respond to future challenges.

### The CLRP Aspiration Scenario

In the 2010 “CLRP Aspirations Scenario,” the TPB studied the effects of building a 1,650 mile long regional express toll-lane network, operating a 500-mile system of high-quality bus service on much of the toll-lane network, and implementing changes in land-use policies to promote denser, transit-oriented development throughout Metropolitan Washington. The original scenario envisioned that much of the toll network would require new construction, while the rest would be converted from existing high-occupancy vehicle (HOV) or general-purpose travel lanes. More recent versions have been developed since the original. One version reduced the number of new interchanges to be built and decreased the amount of new construction, and another eliminated tolls on existing lanes.

Each variant capitalized on the efficiencies created by implementing all of these elements together, and produced significant impacts on daily travel patterns in the region. When compared to projected future travel patterns, the three mutually supportive initiatives, when combined, resulted in a substantial reduction in vehicle hours of delay, and an increase in commute trips made on foot or by bicycle, by bus transit, and by carpools with three or more people.

The results of the scenario study suggested that the synergies that arise when these elements are combined could help the region and its residents enjoy new travel options, slowed growth in congestion-related travel delays, and new revenue streams for much-needed road and transit improvements.





# Public Opinion Survey

In the spring of 2013, TPB staff conducted an online survey to solicit citizen input on regional transportation issues. The input received from the survey informed the identification of priority strategies for addressing the region’s most pressing transportation challenges—in particular, it helped identify those strategies with the greatest potential for garnering broad-based public support.

In the survey, the long-term strategies in the Plan were packaged as integrated scenarios of two or more strategies. After collaborating with stakeholders to refine the Plan in the fall of 2013, these strategies were split apart and described individually in Chapter 3 and referenced in Chapter 5.

# Designing the Public Opinion Survey

The purpose of the public opinion survey was to gather informed input from average citizens. To that end, one of the primary aims in designing the survey was to provide respondents with the context necessary for understanding the region's transportation challenges and potential strategies in simple, straightforward terms, avoiding complicated technical details. The other goal was to design a survey that could be self-administered—that is, that respondents could view and respond to without aid from TPB staff or an outside survey administrator.

TPB staff opted to use MetroQuest public engagement software, developed by the firm Envision Sustainability, to carry out the survey. Metroquest offers many advantages over traditional survey approaches, like phone-based or written surveys. Among the advantages of MetroQuest is the ability to convey large amounts of complex information in an attractive, engaging visual interface, as well as to solicit feedback using a variety of input devices, including rating and ranking systems, traditional

survey questions, and open-ended responses. The open-ended response device allowed respondents to provide suggestions and additional comments.

For this survey, the Metroquest tool was configured to include the following five panels:

- **Introduction:** to provide a basic overview of the Washington region, the Regional Transportation Priorities Plan, and the role of public input
- **Goals and Challenges:** to describe each of the six main goal areas on which the RTPP was built and to solicit input on key challenges identified, through analysis, as standing in the way of achieving those goals
- **Strategies:** to solicit feedback on potential near-term, ongoing, and long-term strategies for addressing regional challenges, including one's level of support for individual strategies and one's willingness to raise additional funds to pay for strategies
- **Additional Questions:** to solicit input on other issues important in identifying regional priorities

- **“Tell Us About Yourself”:** to obtain basic demographic information to ensure representation from a diverse group of the region's residents

## Soliciting Input on Regional Challenges and Potential Strategies

The primary purpose of the survey tool was to gather input on the region's transportation challenges and potential strategies for addressing them. The “Goals and Challenges” section of the survey provided respondents with brief descriptions of each of the six goal areas on which the Priorities Plan was built, as well as descriptions of the key challenges standing in the way of achieving each goal. Survey respondents were asked to rate the significance of each of the challenges in reaching the larger goal. Participants were also invited to comment on each challenge and to suggest additional challenges not identified in the survey.

.....

**In order to reach the goal, how significant is each challenge?**



Rate from 1 star (not significant) to 5 stars (very significant)

.....

The “Strategies” section of the survey provided respondents with descriptions of 15 potential near-term, ongoing, and long-term strategies for addressing the region's ongoing transportation challenges. Each strategy description included details about what was included in the strategy, what benefits the strategy might offer, and an estimate of the magnitude of the cost of implementing the strategy.



Participants were asked to rate their level of support for each strategy, and to indicate whether they would support raising additional, dedicated funding for the strategy, or leave it to compete for existing funds.

**1. Do you support this strategy?**

(Move the slider to indicate support or opposition)



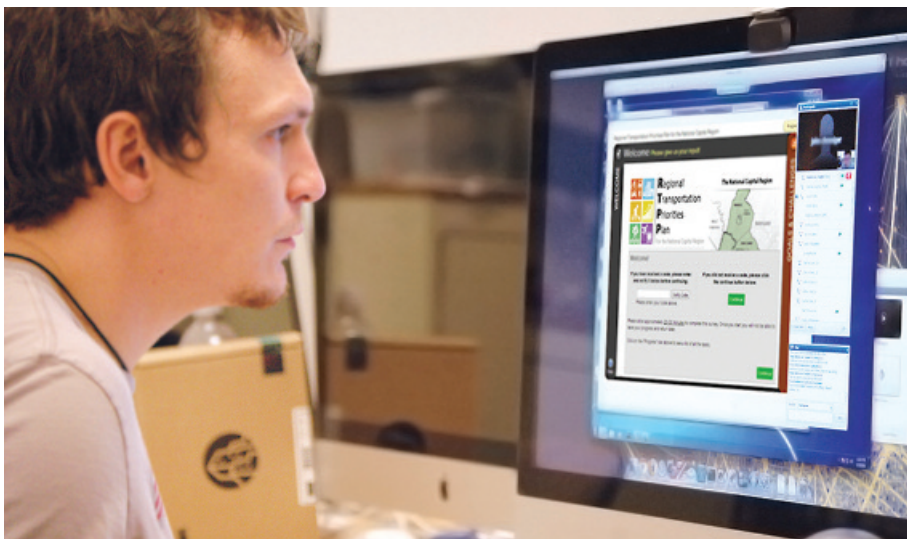
**2. How would you pay for it? (select one)**

- Additional dedicated funding
- Compete for existing fund
- Don't support/fund

**Additional Survey Questions**

The survey asked three additional questions about issues not included as specific strategies in the plan but that were seen as important in identifying regional priorities. The issues were raised in previous public outreach activities carried out during earlier stages in the development of the plan.

1. How confident are you that the transportation agencies serving the region will make good use of the resources available to them?  
*(Not confident at all → Very confident)*
2. How important do you think public information campaigns are?  
*(Not important at all → Very important)*
3. Do you think opposition from current residents and business owners would be an obstacle to increasing development in these areas?  
*(Definitely not → Definitely)*



**Soliciting Input from a Random, Representative Sample**

**Seeking Participants**

The public opinion survey for the Regional Transportation Priorities Plan was designed to solicit input from a random, representative sample of the Washington region’s population. The goal was to survey at least 600 adults residing in randomly-selected households within the region, and to apply rigorous statistical methods and controls to weight responses in a way that would ensure a sample representative of the region’s population.

To seek participants for the online survey, the TPB sent letters by postal mail to selected households in 600 randomly selected postal carrier routes throughout the region. Postal carrier routes typically include deliveries to about 550 residential units, so they are generally homogenous in the type of neighborhood they serve. The postal carrier approach provides a chance to actively seek participation from traditionally underrepresented populations.

The letters that were mailed to prospective participants explained the

purpose of the survey and invited individuals to access the survey online, promising a \$25 reward in the form of a gift card upon successful completion. Letters asked the member of the household 18 years of age or older with the next upcoming birthday to complete the survey. This is a standard and widely-used method for obtaining a more randomized sample. The solicitation letters were written in both English and Spanish.

After an initial wave of letters was sent to the selected postal carrier routes, the survey team carried out follow-up waves of mailings to postal carrier routes with low response rates. In all, four waves of mailings were carried out, and on some postal carrier routes up to 21 letters were sent before receiving a response from at least one household.

**Who Participated**

A total of 660 individuals completed the online MetroQuest survey. The respondents represented 481 of the 600 postal carrier routes that were selected for surveying. Overall, about 8 percent of the households that received invitations to participate in the survey did.

Staff carried out an extensive and rigorous weighting technique to

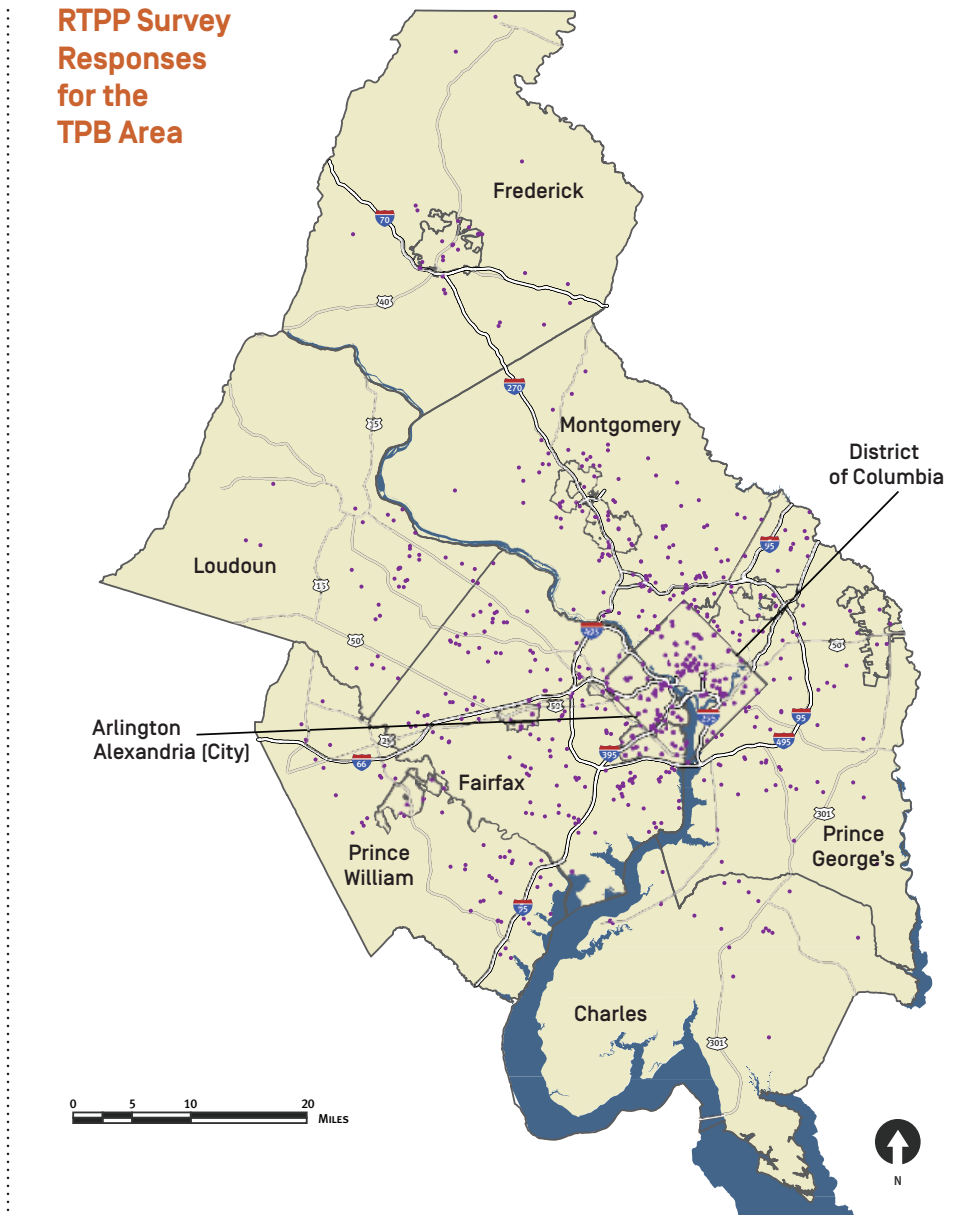


eliminate bias in the survey sample resulting from a lack of response from some carrier routes and a surplus of response from others. Staff used information about the housing and income characteristics of the carrier routes to weight the survey responses so that they more accurately represented the opinions of the region's population.

Following the weighting, a review of the demographic and other characteristics of the respondents showed that the 660 individuals were, as a group, generally representative of the region's population, based on Census data collected either as part of the decennial Census in 2010, or for the American Community Survey in 2011. With a few exceptions, the sample reflected quite well the age, gender, income, race and ethnicity, and travel characteristics of the region's population. The most notable exceptions:

- A higher percentage of the respondents to the survey tended to live in postal carrier routes in middle income ranges as opposed to the highest income range.
- A slightly higher percentage of respondents tended to be in the 55 to 64 age group and slightly lower percentages of the RTPP respondents were in the 18 to 24 and 65+ age groups.
- A somewhat higher percentage of respondents were Non-Hispanic and White by ethnicity and race.
- A significantly higher percentage of survey respondents reported that they usually use transit to commute to work and lower percentages of respondents reported that they drove alone or carpooled to work.

### RTPP Survey Responses for the TPB Area



### Completed Surveys

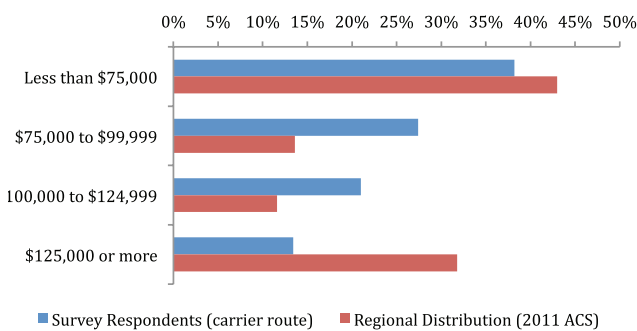
JURISDICTION	NUMBER OF COMPLETED SURVEYS	JURISDICTION	NUMBER OF COMPLETED SURVEYS
District of Columbia	77	City of Falls Church	3
Arlington County	56	Loudoun County	39
City of Alexandria	21	Prince William County	48
Montgomery County	127	City of Manassas	3
Prince George's County	81	City of Manassas Park	1
Fairfax County	148	Frederick County	32
City of Fairfax	5	Charles County	19
<b>Total</b>		<b>660</b>	

## Post-Weighting Distribution of Survey Respondents

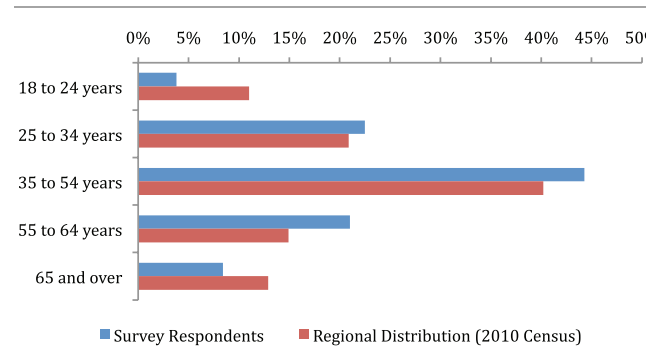
### By Jurisdiction

JURISDICTION	SURVEY RESPONDENTS	REGIONAL DISTRIBUTION (2010 CENSUS)
District of Columbia	14.2%	14.1%
Arlington County	5.5%	5.2%
City of Alexandria	3.5%	3.6%
Montgomery County	18.7%	18.9%
Prince George's County	16.3%	16.1%
Fairfax County	21.0%	21.5%
Loudoun County	5.5%	5.5%
Prince William County	8.0%	7.8%
Frederick County	4.7%	4.5%
Charles County	2.7%	2.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>

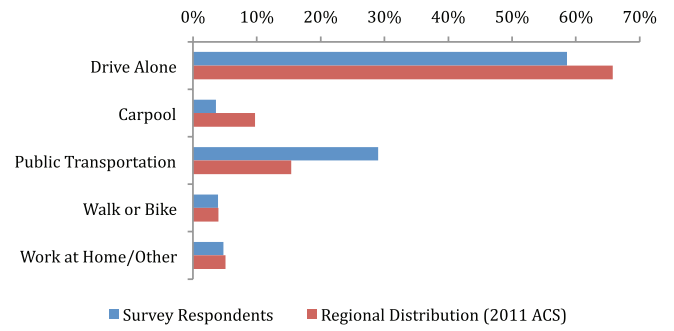
### By Income



### By Age



### By Usual Commuting Mode



### By Ethnicity and Race

JURISDICTION	SURVEY RESPONDENTS	REGIONAL DISTRIBUTION (2010 CENSUS)
White/ Caucasian	64.8%	56.6%
Black/African American	21.0%	29.4%
Asian American	7.6%	10.5%
All Other Race	6.6%	3.4%
Hispanic/Latino	6.1%	13.5%
<b>Total</b>	<b>100%</b>	<b>100%</b>

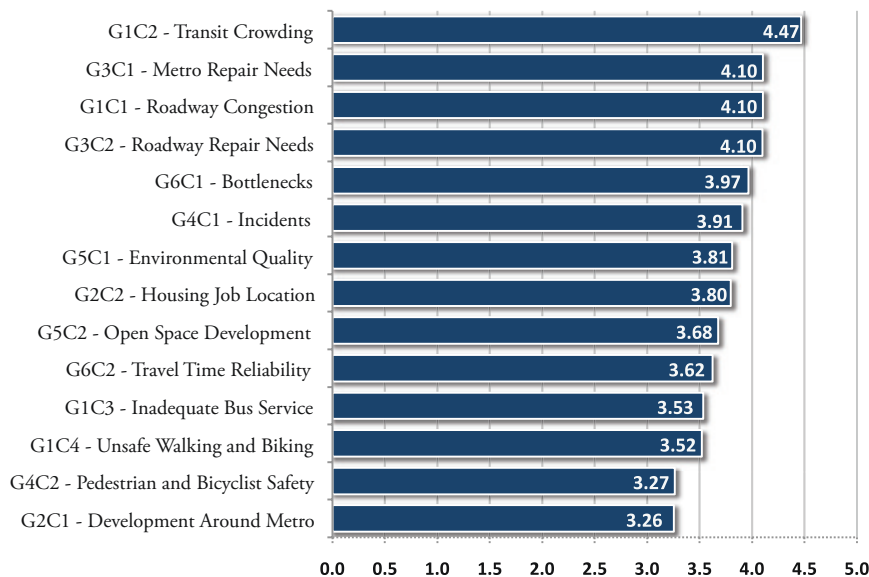
# Survey Results

## Regional Challenges

Survey respondents were asked to rate, on a scale of 1 to 5, how significant each of the transportation challenges were in keeping us from achieving the regional goal with which it was associated. A rating of “1” meant that the challenge was “not significant” and “5” meant the challenge was “very significant.”

### How significant is this challenge in achieving our regional goals?

(Average rating for each challenge)



### Key Findings:

- All of the regional challenges identified in the survey tool were rated as being significant issues standing in the way of achieving our regional goals (average rating of at least “3”). The average ratings for each challenge ranged from 3.26 (out of 5) to 4.47 (out of 5).
- The top four challenges that were identified as the most significant regionwide were, in order: **Transit Crowding**, **Metro Repair Needs**, **Roadway Congestion**, and **Roadway Repair Needs**

- These four challenges were identified as the most significant by respondents in both the core and inner suburban jurisdictions
- Respondents from the outer jurisdictions identified **Transit Crowding**, **Roadway Repair Needs**, **Bottlenecks**, and **Incidents** as their top four significant challenges
- The top four challenges for users of different modes varied:
  - **Transit Crowding** was rated as a top challenge by all mode users.

- **Metro Repair Needs** was identified as a top challenge by all mode users except those who drive alone.
- Carpoolers identified **Environmental Quality** and **Open Space Development** in their top four challenges
- Transit users also identified **Environmental Quality** as a top challenge
- Walkers and bikers said that **Unsafe Walking and Biking Facilities** was also a top challenge

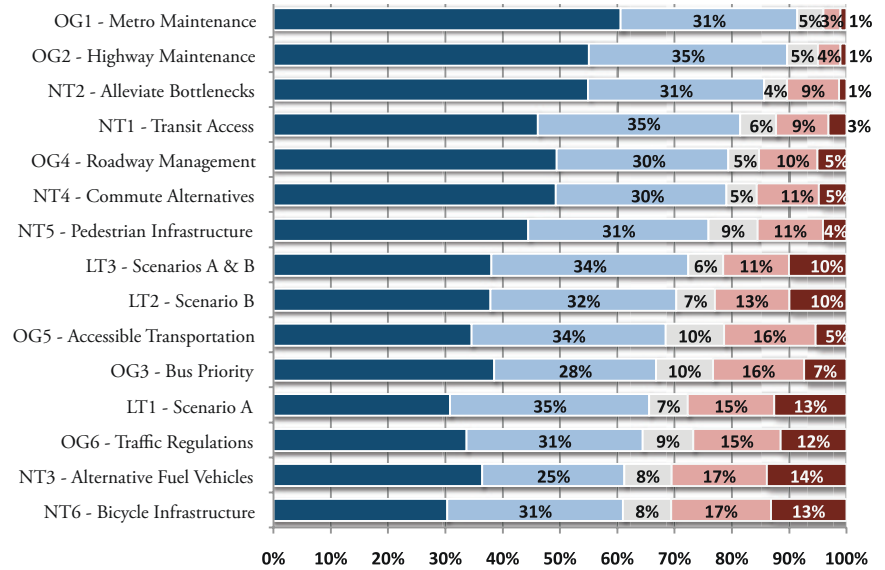
- Overall **Transit Crowding** was identified as the most significant regional challenge
  - This was consistent among respondents across the region: Transit crowding was the top challenge among respondents in all three sub-regional areas (regional core, inner suburbs, and outer suburbs).
  - Transit crowding was also identified as the top challenge across users of all modes of transportation, except transit-users who identified roadway congestion as slightly more significant.
- Overall, **Pedestrian and Bicyclist Safety** and **Development Around Metrorail** were rated as the least significant challenges.

## Strategies

For each near-term, ongoing, and long-term strategy, respondents were asked whether or not they supported the strategy, and if they supported it, how they would pay for it. For the question on support, respondents could choose from “strongly oppose,” “oppose,” “neutral,” “support,” and “strongly support.” For the question on funding, respondents were given the options of “additional dedicated funding,” “compete for existing funds,” or “don’t fund/support.”

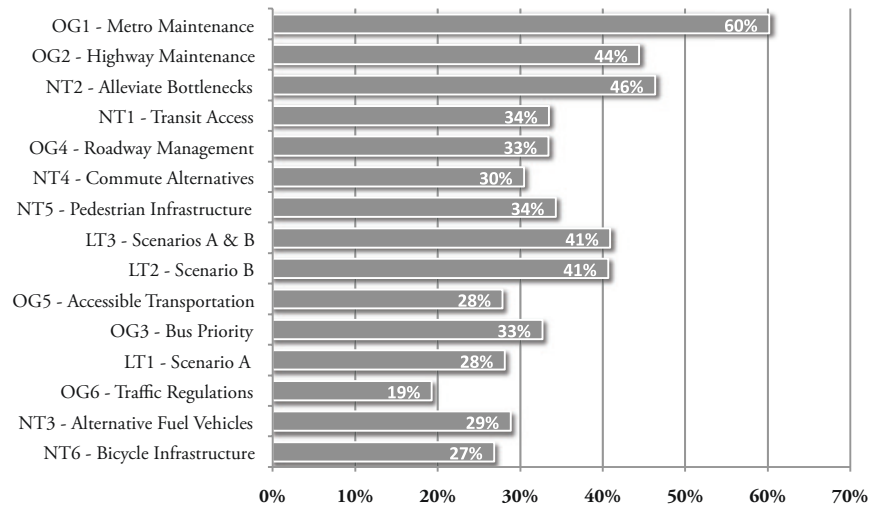
*NOTE: The survey presented long-term strategies as integrated scenarios of two or more strategies. Scenario A paired Express Toll Lanes on All Major Highways with Bus Rapid Transit on Toll Lanes. Scenario B grouped three strategies together: Concentrated Growth in Activity Centers, Increased Capacity on Rail and Bus Lines, and Expanded Circulation in Activity Centers. Survey participants were also presented with one larger package combining Scenario A and Scenario B (Scenario A+B). After collaborating with stakeholders to refine the Plan in the fall of 2013, these five strategies were split apart and described individually in Chapter 3 and referenced in Chapter 5.*

## Do you support this strategy?



## How would you pay for this strategy?

% of respondents who supported “Additional dedicated funding”



**Key Findings:**

- Each of the near-term, ongoing, and long-term strategies were supported by a majority of the survey respondents. Total support (the sum of those who support and strongly support a strategy) ranged from 61 percent to 91 percent.
- The top four supported strategies regionwide were, in order, **Transit Maintenance**, **Highway Maintenance**, **Alleviate Bottlenecks**, and **Improve Transit Access**.
  - Though the top four supported strategies varied by geography, residents of the regional core, inner suburbs, and outer suburbs all identified **Transit Maintenance** and **Highway Maintenance** in their top for supported strategies.
  - In addition, users of all modes also identified **Transit Maintenance** and **Highway Maintenance** in their top four supported strategies.
- The strategies with the lowest overall support were **Bus Priority**, **Scenario A**, **Update Traffic Regulations**, **Alternative Fuel Vehicles**, and **Bicycle Infrastructure**.
  - Even though these were the lowest on the list, they still were supported by 61 percent or more of survey respondents.
- Support for additional dedicated funding varied by strategy
  - Support for additional dedicated funding was highly correlated with overall support—usually, the greater overall support for a strategy, the greater support there was for identifying additional funding



- 60 percent of all respondents said that they would support identifying an additional dedicated funding source for **Transit Maintenance**
- This is substantially higher than those who would support additional funding for highway maintenance— 44 percent—even though the overall support for both strategies is quite similar.
- The smallest portion of respondents supported additional funding for updating traffic regulations.
- All of the long-term strategies overall had support from 65 percent or more of the respondents.
  - Of the three long term scenarios, **Scenario A + B** had the most support, followed by **Scenario B** and finally **Scenario A**
  - Support for the long-term strategies varied by geography
    - In the core jurisdictions **Scenario B** was the most supported
    - In the inner suburbs **Scenario A + B**
    - In the outer suburbs **Scenario A**
    - Overall, the long-term strategies were least supported in the outer suburbs
- There was substantially less willingness to identify additional dedicated funding for **Scenario A** than for the other two long-term strategies
  - Only 28 percent of survey respondents supported additional dedicated funding, compared to 41 percent for **Scenario B** and **Scenario A + B**

*NOTE: The observed number of respondents for carpool, walk/bike, and other transportation mode users is very low. Information that is reported for each of these modes is meant to be illustrative.*

*NOTE: The cross-tabulation tables from which some of the key findings above were distilled can be found in Appendix A.*

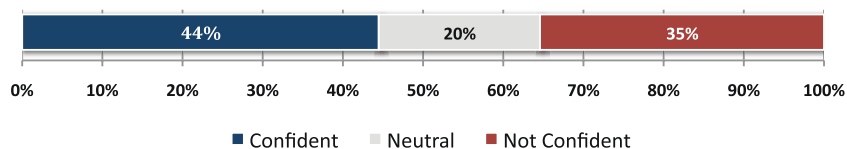
## Additional Polling Questions

Survey respondents were asked to answer three additional polling questions about issues not included as specific strategies in the plan but that were seen as important in identifying regional priorities.

### 1. Confidence in Transportation Agencies

In order to pay for future construction and maintenance of the region's highway and transit systems, state and local governments are developing ways to increase government revenue, including increasing gas taxes or sales taxes, and building toll lanes. *How confident are you that the transportation agencies serving the region will make good use of the resources available to them?*

**How confident are you that the transportation agencies serving the region will make good use of the resources available to them?**

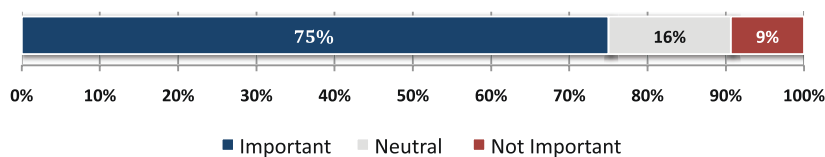


- 45 percent of respondents were confident that transportation agencies would make good use of resources, 35 percent were either “not confident” or “not confident at all,” and 20 percent were “neutral” on the issue.
- By comparison, annual Gallup surveys about general confidence in government show that from 2005 through 2012:
  - Confidence in state governments to handle state problems ranged from 51 percent to 67 percent
  - Confidence in local governments to handle local problems ranged from 68 percent to 74 percent
  - Confidence that government in Washington would do what is right just about always or most of the time ranged from 19 percent to 32 percent

### 2. Public Information Campaigns

Public information campaigns can help raise the public's awareness about key transportation issues, such as safety and transportation funding. *How important do you think public information campaigns are?*

**How important do you think public information campaigns are?**



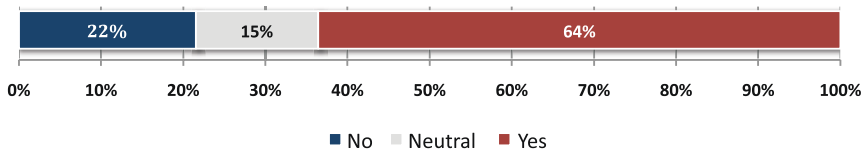
And, *What topics would you like to see more campaigns on?* (options: bicycle safety, pedestrian safety, funding for transportation, alternative commutes, and suggest your own)

- 75 percent of survey respondents answered that they believe public information campaigns were either “somewhat important” or “very important,” and only 9 percent said that they are either “not important” or “not important at all.”
- Of the topic areas that were suggested, information campaigns on alternative commuting (61 percent) and transportation funding (59 percent) were the most popular. Bicycle and pedestrian safety information campaigns were much less supported.

### 3. Opposition to Higher Density Development

Two of the long-term strategies we’ve presented propose more development near transit stations throughout the region. *Do you think opposition from current residents and business owners would be an obstacle to increasing development in these areas?*

**Do you think opposition from current residents and business owners would be an obstacle to increasing development in these areas?**



- 64 percent of respondents said that opposition from current residents and business owners would either “probably” or “definitely” be an obstacle toward increasing development.
- 22 percent said that opposition would “probably not” or “definitely not” be an obstacle, and 15 percent were “undecided” on the issue.

## Summary of Findings

The public opinion survey highlighted what average citizens find to be the greatest continuing transportation challenges, and which strategies were broadly supported to address those issues. In general, there was agreement that all of the major transportation challenges presented were standing in the way of achieving our regional goals, but that Transit Crowding, Metro Repair Needs, Roadway Congestion, and Roadway Repair Needs were the most pressing.

Each of the strategies that were presented garnered support from a majority of respondents, though some strategies were favored over others. The most supported strategies were those that addressed transit maintenance and highway maintenance, which indicated that the public is largely unified in backing efforts to maintain our existing infrastructure. When asked about funding, the respondents favored identifying new dedicated revenue for transit maintenance more than any other strategy.

The responses to the polling questions gave insight into issues that were not explicitly addressed by the 15 strategies presented in the survey. In general, respondents lacked confidence in public agencies to make good use of the resources available to them, supported greater use of public information campaigns on such issues as transportation funding and commute alternatives, and indicated that public engagement is essential when proposing significant land-use changes throughout the region.

In addition to discrete survey responses, more than 2,000 open-ended responses were collected through the online survey tool. These comments, along with the other survey results, helped in the process of reviewing and refining many of the goals, challenges, and strategies that were ultimately included in the Plan, and helped to shape the three priorities identified in Chapter 5.



ELVERT BARNES, FLICKR CREATIVE COMMONS



# Priorities and Recommendations

The Regional Transportation Priorities Plan aims to identify strategies with the greatest potential to respond to our most significant transportation challenges. It also aims to identify those strategies that are “within reach” both financially and politically—recognizing the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue.

The three priorities in this chapter and the individual strategies they comprise aim to achieve greater efficiencies, in particular by maximizing the benefit of the infrastructure already in place and by combining or packaging complementary strategies that offer mutually supportive benefits. They are rooted in principles of regional transportation and land-use planning, developed through a combination of professional judgment, technical analysis, and experience in the region, and informed by the results of a survey of public opinion. The three priorities create a framework to help guide the development of transportation projects and programs at the local, state, and regional levels, taking into account not only the technical merits of individual strategies but also the relative degree of public support for them.

**This Plan aims to identify strategies that are “within reach” both politically and financially, recognizing the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue for major expansion projects.**

### Background and Context

Development of the Regional Transportation Priorities Plan over the past two years has involved identifying the key continuing transportation challenges the Washington region faces in achieving six of the major policy goals articulated in the *TPB Vision*, and identifying regional strategies that offer the greatest potential contributions toward addressing those challenges. The process has also included a unique public opinion survey element to identify those strategies with the greatest likelihood of garnering broad public support. The strategies and priorities in the Plan are designed to be “within reach” both politically and financially, giving the Plan the ability to start guiding decision-making now.

The six policy goals on which the Priorities Plan is built, as well as the key challenges the region faces in achieving those goals, were discussed in Chapter 2. The process of identifying the challenges relied on the latest Constrained Long-Range Transportation Plan (CLRP) as a baseline assumption of land-use and transportation growth patterns through 2040, as well as anticipated transportation investment over that timeframe. Chapter 3 outlines a set of near-term, ongoing, and long-term regional strategies for addressing the region’s continuing transportation challenges, drawing on decades of analysis and planning by the TPB, as

well as public input conducted for this Plan. Chapter 4 summarizes the results of a public opinion survey about the challenges and strategies in the Plan carried out in the spring of 2013. The results of the survey help highlight which challenges matter most to the region’s residents and which of the strategies have the greatest promise of garnering broad-based public support.

This final chapter uses the inputs described earlier to identify three categories of priorities. It concludes by providing information on how such priorities might be implemented, and particularly how they might find their way into the TPB’s Constrained Long-Range Transportation Plan (CLRP).

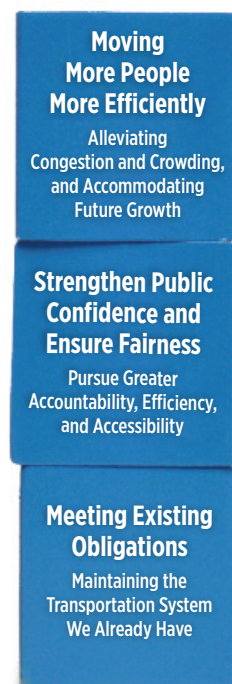
It is important to note that the challenges, strategies, and priorities in this Plan were developed assuming that the projects and programs already in the CLRP will be built or implemented. Several major projects that have not yet been built—like Phase Two of the Silver Line to Loudoun County, the Bi-County Parkway, the Potomac Yard Metrorail station, and the Columbia Pike streetcar in Virginia, the Anacostia and H Street streetcar lines in the District of Columbia, and the Corridor Cities Transit way and Purple Line in Maryland—are already in the CLRP, and were therefore considered part of the “baseline” assumption in identifying further challenges, strategies, and priorities.

### Our Three Regional Priorities

The three priorities identified in the Plan are like building blocks, all essential in achieving our shared goals for the future. This Plan aims to identify strategies that are “within reach” both politically and financially, recognizing the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue for major expansion projects. These priorities and the individual strategies they comprise aim to achieve greater efficiencies, in particular by maximizing the benefit of the infrastructure already in place and by combining or packaging complementary strategies that offer mutually supportive benefits.

Meeting our existing obligations to maintain the transportation system we already have comes first among these

#### PRIORITIES



**The success of all other strategies to improve transportation in our region relies on an existing system that functions properly and is safe.**

building blocks. Proper maintenance of our highways and transit systems, especially Metro, is of primary importance; the success of all other strategies to improve transportation in our region relies on an existing system that functions properly and is safe.

In addition, we must strengthen the public’s trust in government and commit to ensuring fairness and equity as we continue to improve our transportation system. The public must have confidence in public agencies to make good use of the resources available to them before new projects and programs can be supported and funded. We must also commit to ensuring fairness and equity throughout the region, especially for traditionally disadvantaged groups—persons with disabilities, low-income individuals, and persons with limited English proficiency—so that everyone in our region can contribute to and benefit from the region’s economy and enjoy a high quality of life.

As we strive to accomplish these things, we must also pursue strategies to alleviate crowding and congestion on the existing system, and prepare for accommodating future growth. We will need a combination of supply- and demand-side, multimodal strategies, with a strong focus on concentrating development in mixed-use Activity Centers. Such a package will support a future in which we move more people more efficiently and ensure that our region remains a good place to live and do business.

**PRIORITY 1**  
**Meet Our Existing Obligations**  
**Maintain the Transportation System**  
**We Already Have**

Our very first priority should be to keep our existing transportation system in a state of good repair. The infrastructure we’ve already built is the backbone of our economy and is the foundation for any improvements we make in the future. The existing system must be properly maintained and safe before we can move on to other investments.

We have an equal obligation to maintain both our vast highway and bridge network and our extensive transit system, especially Metro. In many cases, these systems were built decades ago and are in need of significant rehabilitation. Maintenance needs have built up in recent decades due in part to the deferral of much-needed ongoing maintenance. And maintenance needs will continue to rise as transportation facilities age, which means that efforts to keep our roads, bridges, and transit systems in a state of good repair will need to be sustained continuously for the life of the systems.

The public is highly supportive of the strategies in this priority, and agree that they should be our top priority. In the survey of public opinion carried out for the Priorities Plan, respondents identified highway repair needs and transit repair needs as two of the four most significant challenges standing in

the way of achieving our goals for the future. Approximately 90 percent of respondents supported the two strategies in the Plan that address these challenges: highway maintenance and transit maintenance. Support for these strategies was equally strong among respondents from all parts of the region—the inner and outer suburbs, as well as the regional core—and across users of all modes of travel—transit, bicycling and walking, and driving. This broad support was not evident for other strategies in the Plan.

**Highways and Bridges**

Maintenance of our aging highway system will require a significant and sustained infusion of funding. Already, the local and state departments of transportation in the region have set up robust systems for evaluating the condition of area roadways and bridges, including structural integrity, pavement condition, and time remaining before major reconstruction is needed. These evaluation systems help transportation agencies budget for and prioritize needed improvements. For many years now, most transportation agencies in the region that are responsible for the upkeep of roadway facilities have also had requirements and procedures in place to guarantee that adequate funds

**PRIORITY 1**  
**STRATEGIES**

- **Ensure Maintenance of the Transit System (OG1)**
- **Ensure Maintenance of Roads and Bridges (OG2)**

## Maintenance of our aging highway system will require a significant and sustained infusion of funding.

are dedicated to maintenance and preservation of the existing system before roadways are expanded or new facilities are built. Although some agencies still have not achieved all of their maintenance targets, they have sufficient systems in place for prioritizing maintenance and preservation of the existing system and are making good progress. These efforts should continue, and funding for maintenance should continue to be prioritized over expansion.

### ***Transit Systems***

The area's transit agencies also dedicate a significant portion of their budgets to maintenance. But a number of high-profile disruptions and accidents on the region's transit system in recent years highlights the need for greater efforts to bring the system, especially Metrorail, into a state of good repair. In 2011, the Washington Metropolitan Area Transit Authority (WMATA) launched MetroForward, a \$5 billion program to deal with deferred maintenance of the Metrorail and Metrobus system. This six-year effort has already delivered improvements in safety and reliability, including aggressive escalator rehabilitation, station repairs, and hundreds of replaced or rehabilitated buses. Although MetroForward will make great strides in rebuilding the system, the funding agreements for this work will end before the end of the decade. In particular, funding through the federal Passenger Rail Investment and

Improvement Act (PRIIA) of 2008, which has provided \$3 billion in federal and state funding, will expire.

At the same time, new maintenance challenges are emerging. Increased and sustained maintenance funding is needed. Over the coming decade, WMATA estimates that the system will need more than \$1 billion annually just to maintain and replace assets on a regular life-cycle basis to continue the current level of service. A portion of WMATA's new Momentum strategic plan known as Metro 2025 spells out these needs and calls specifically for additional funding to pay for them.

### ***New Federal Requirements***

Finally, new federal rules outlined in the latest surface transportation reauthorization, Moving Ahead for Progress in the 21st Century, or MAP-21, compel the region to bring its highways and transit systems into a state of good repair. MAP-21 calls for greater use of performance-based planning and programming approaches by local, state, and regional transportation agencies, with a particular focus on maintaining existing transit and highway facilities. Under the law, the U.S. Department of Transportation will establish performance measures for system maintenance and preservation. The states, transit agencies, and metropolitan planning organizations (MPOs) will set performance targets and report regularly on their progress in achieving those targets.

## PRIORITY 2

### **Strengthen Public Confidence and Ensure Fairness**

#### **Pursue Greater Accountability, Efficiency, and Accessibility**

As a matter of institutional practice, agencies in the region should take steps to strengthen public confidence and ensure fairness. Agencies need the public's confidence in order to make important decisions about transportation, including raising revenues. Agencies also need to be as efficient and smart in planning and implementation as possible. This makes better use of existing resources, and it helps strengthen public confidence. Finally, agencies should commit to further meeting the mobility needs of traditionally disadvantaged groups—persons with disabilities, individuals with low incomes and persons with limited English proficiency. This reaffirmation is key so that we can continue improving accessibility and ensuring fairness and equity throughout our region.

The strategies in this priority are overarching principles that should be taken into account in all future transportation planning and decision-making, including the design of projects and processes for implementation. Some of the elements of this priority have been included specifically as strategies in the Plan, while others arose during various stages of public outreach.

### ***Strengthening Public Trust***

Public trust is essential. Achieving our shared transportation goals is going to require big decisions and big projects with big price tags. We need political

will to make that happen. Over and over again during the development of this Plan, the public expressed skepticism that public agencies can or should be trusted with making improvements to our transportation system. In the spring 2013 public opinion survey, only 44 percent of respondents were confident that the transportation agencies serving the region currently make good use of the resources available to them. Many thought agencies were not competent or trustworthy enough, and wanted assurances of accountability and transparency before they would be willing to support major improvements to the system, especially those that would require significant increases in revenue or funding.

Agencies in the region should take steps to demonstrate their competence and that they are being managed effectively. This includes taking care of obvious things first, making commonsense improvements, setting clear and measureable goals and objectives, strengthening performance

## PRIORITY 2 STRATEGIES

- **Ensure Accessibility for Persons with Disabilities (OG5)**
- **Engage and Communicate with the Public\***
- **Promote System Efficiency Through Management and Operations, and the Appropriate Use of Technology\***

\* These strategies originated in public outreach during the development of the Plan. They are not described in the strategies in Chapter 3.

## Strengthening public trust is an essential step that must be taken before big new decisions about transportation are made.

tracking and reporting, and communicating with the public about plans, overall strategic direction, and key decision-making processes.

Engaging citizens in the planning and decision-making process can also help. One issue that arose during early public outreach in developing the Priorities Plan was potential local opposition in areas where higher-density development was being proposed. In the public opinion survey, 64 percent of respondents said that opposition from current residents and business owners would “probably” or “definitely” be an obstacle in achieving higher-density development in those areas. The results suggest a strong need to engage local stakeholders when proposing changes in land use that support regional goals.

Another issue raised in early public outreach was the need for greater public information about a range of transportation-related issues. In the public opinion survey, 75 percent of respondents agreed that public information campaigns to raise the public’s awareness of such issues are important. Six in ten said they’d like to see more public information campaigns about transportation funding realities and alternative commuting options in the region.

Improved management and operations is another key to strengthening public confidence. Transportation programs, project development, and implementation must be carried out using the most

efficient means possible. Many of the technological and management techniques described in “Ongoing Strategy 4: Increase Roadway Efficiency” not only provide system improvements by smoothing traffic flow and minimizing delays, they also demonstrate the ability of public agencies to make commonsense improvements. Technological advances now allow for greater coordination of traffic signals and construction schedules, help agencies respond to and clear traffic accidents more quickly, and enable much more coordinated responses to severe weather and other highly-disruptive incidents. And technology offers new opportunities to communicate with the public about these and other issues.

### ***Ensuring Fairness***

Ensuring greater social and economic fairness in our region means improving access to transportation services so that everyone can use the system and contribute to and benefit from society as individuals, workers, taxpayers, and consumers. “Ongoing Strategy 5: Ensure Accessibility for Persons with Disabilities, Low Incomes, and Limited English Proficiency” outlines a number of steps we can take to improve accessibility, including improvements to paratransit services, expanding transit service offerings, working to limit the negative effects of increases in transit fares, and providing important transit system information in multiple

**A number of other strategies in the Plan that reduce auto-dependency and expand transportation choice greatly benefit traditionally disadvantaged groups.**

languages and formats so all users can navigate the transportation system with confidence.

A number of other strategies in the Plan that reduce auto-dependency and expand transportation choice greatly benefit traditionally disadvantaged groups. Ensuring maintenance of the transit system, applying bus priority treatments, improving access to transit stops and stations, and updating and enforcing traffic laws improves existing travel options on which many people with disabilities or limited incomes rely. Concentrating development in mixed-use Activity Centers near transit, providing better circulation in Activity Centers, adding more capacity on the existing transit system, providing new surface transit options, and expanding pedestrian infrastructure all expand the travel options available for traditionally disadvantaged groups.

Committing to providing more and better travel options and greater accessibility for everyone in our region is an essential step as we move forward both in maintaining our existing system and in developing new projects and programs to improve our transportation system.

## PRIORITY 3

### Move More People and Goods, More Efficiently

#### Alleviate Congestion and Crowding, and Accommodate Future Growth

The region’s economy and quality of life depend on the ability of our transportation system to move more people and goods, more efficiently. Priority Three focuses on the more technical aspects of transportation planning, decision-making, and investment—how to alleviate congestion and crowding on the existing system now, and how to accommodate growth in travel in the future.

This priority calls for:

- **A mix of supply- and demand-side strategies.** Supply-side strategies alone—that is, expanding capacity—aren’t enough to deal with congestion and crowding on our highway and transit systems. Expanding capacity, of course, goes a long way in alleviating congestion, but doing so can often be more expensive and less cost-effective than efforts to manage demand.

On the supply side, we should continue to maintain the region’s road system, to be sure that it continues to adequately and safely handle heavy volumes of car, bus, and truck traffic. And we should alleviate major bottlenecks where it makes sense to do so and supports other regional goals. We should also increase capacity on the transit system, especially on Metro in the regional core. We can also manage traffic on our roadways more effectively—through better incident management and communication—and apply bus priority treatments to speed buses and improve their on-time reliability.

## PRIORITY 3 STRATEGIES

- Improve Access to Transit Stops and Stations [NT1]
- Alleviate Roadway Bottlenecks [NT2]
- Support and Promote Electric Vehicles [NT3]
- Promote Commute Alternatives [NT4]
- Expand Pedestrian Infrastructure [NT5]
- Expand Bicycle Infrastructure [NT6]
- Apply Priority Bus Treatments [OG3]
- Increase Roadway Efficiency [OG4]
- Update and Enforce Traffic Laws [OG6]
- More Capacity on the Existing Transit System [LT1]
- Concentrated Growth in Activity Centers [LT2]
- Enhanced Circulation within Activity Centers [LT3]
- Bus Rapid Transit [BRT] & Other Cost-Effective Transit Alternatives [LT4]
- Express Toll Lanes [LT5]

On the demand side, one of the most effective strategies is to promote land-use policies, particularly in Activity Centers, that reduce the number of trips by auto and the distances of those trips. We can also reduce demand for driving by increasing the availability of transportation alternatives. For example, we can improve bicycle and

pedestrian infrastructure, expand bus routes and services, and do more to promote commute alternatives.

- **A multimodal approach.** Offering a wider variety of travel modes, and focusing attention on modes that can move more people at lower cost, is key to moving more people more efficiently. Bus and rail transit vehicles can carry far more people than private automobiles, while ridesharing, bicycling, and walking have dramatically lower construction, maintenance, and operations costs. Making such options available to more people also takes pressure off currently crowded systems, especially the roadway network and the core of the transit system, and alleviates demand for expensive new roadway and heavy rail transit infrastructure.

Providing travelers with more options also results in an increase in quality of life, as they are more likely to be able to choose a mode that best suits their individual needs. This is especially true for traditionally disadvantaged populations, especially those with disabilities or low incomes, whose mobility options can be significantly limited. Pedestrian improvements, in particular, provide great benefit to people with mobility limitations.

A multimodal approach does not necessarily mean giving equal attention to all projects within a given mode, however; some investments or projects support more regional goals and offer greater benefits relative to their costs than others. Alleviating key roadway bottlenecks, using existing roadway capacity more efficiently, and managing new

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roadway capacity using tools like pricing can all make better use of existing resources. Transit improvements mainly in the core and on the existing system make more financial sense than large-scale expansions. And investments in bicycle and walking infrastructure near transit and in or connecting Activity Centers can have significant benefits.

- **A focus on concentrating future growth in mixed-use Activity Centers.** Land-use is a critical component in more effectively managing demand on our region's transportation system. That means we need to promote growth in regional Activity Centers so that we can maximize existing transportation connections among and within these centers. Moving housing and jobs closer together helps to shorten commutes, and concentrating housing and jobs in areas where higher-capacity travel options like transit, bicycling, and walking are available reduces both the number of auto trips and the average length of those trips, reducing the burden on our road system. Paying particular attention to transit-oriented Activity Centers on the eastern side of the region can improve socioeconomic imbalance in the region by supporting job growth and commercial activity

in areas that currently lack it, and can help take advantage of unused demand in the transit system by filling seats on trains currently operating below capacity in reverse-commute directions.

These land-use principles were central tenets of COG's *Region Forward* agreement of 2010 and the *TPB Vision* in 1998. They help us use our existing resources more effectively, and help build community and improve quality of life for the region's residents. Efforts to concentrate development in mixed-use Activity Centers near transit also provides housing and job options for people who desire such a transit-oriented lifestyle, and such changes can have positive effects on many other factors affecting quality of life, like education, housing, health and human services, public safety, and the environment.

Together, the strategies outlined in Priority Three represent a shift in focus away from large-scale supply-side investments of the past to smarter, more strategic approaches to alleviating congestion and crowding, and to accommodating future growth.

Because the CLRP is a “check point” in the implementation process, updating it provides a clear opportunity to consider the priorities outlined in this Plan in making decisions about what projects and programs to advance, or what projects or programs already in the plan might need to be changed or removed in order to bring the region closer to achieving its goals.

### Next Steps: Implementing Regional Priorities

#### *Thinking Regionally, Acting Locally*

Implementation of specific projects and programs is the responsibility of local, state, and regional agencies in the Washington region. These agencies are also responsible for conceiving and developing such initiatives. The purpose of the Regional Transportation Priorities Plan is to inform that project development processes, by encouraging local, state, and regional leaders to consider regional needs in identifying projects to advance to implementation.

Some of those projects will have to move through the regional decision-making process, while others will not. Those that do will eventually have to be included in the region’s Constrained Long-Range Transportation Plan (CLRP), which the TPB is responsible for maintaining and updating each year. Because the CLRP is a “check point” in the implementation process, updating it provides a clear opportunity to consider the priorities outlined in this Plan in making decisions about what projects and programs to advance, or what projects or programs already in the plan might need to be changed or removed in order to bring the region closer to achieving its goals.

The project development process is often a long one. Ideas generally start in local or state plans and move through an extensive process of public input, technical review, and political decision-making. A new TPB website, the “Transportation Planning Information Hub for the National Capital Region,” outlines this process and highlights some of the major projects and studies that are being considered throughout the region. Some major projects or studies that are currently under development include a study to identify increased capacity for commuter rail services between Virginia and the District of Columbia on or near the Long Bridge, Metro’s *Regional Transit System Plan* to identify significant long-term capacity increases in the regional transit system, MARC and VRE strategic investment plans, a study of the feasibility of commuter ferry service on the Potomac River, an arterial-based bus rapid transit system in Montgomery County, multi-modal studies of the I-66, I-270, and I-95/495 corridors, and additional streetcar lines in the District of Columbia. Once projects like these have a sufficient level of specificity, have been agreed upon by local decision-makers and can reasonably be expected to be funded,

they can be considered for inclusion in the CLRP.

#### **Upcoming Opportunity: The 2014 Update to the CLRP**

If projects have been adequately developed and are reasonably expected to be funded, they can be considered for inclusion in the CLRP in the next major four-year update, scheduled to be complete by the end of 2014. The official Call for Projects—soliciting from the local, state, and regional transportation agencies in the region the projects and programs they would like to add to the CLRP in 2014—urges agencies to consider the priority strategies in this Plan as they develop their project submissions.

As agencies make their submissions in late 2013 and early 2014, the TPB will have an opportunity to review, assess, and discuss their relationship to the priorities in this Plan. The public will also have opportunities throughout the update process to comment on how well any proposed additions to the CLRP—or any proposed changes to projects or programs already in the CLRP—support these priorities. Both Metro and highway maintenance should be given the highest priority in program development and allocation of funding in the upcoming update to the CLRP, as they support the top priority identified in this Plan.

#### **Example of a Priority Being Implemented: Metro 2025**

A good example of a project that has been developed and could be ready to enter the CLRP as early as 2014 is a portion of Metro’s *Momentum* strategic plan known as Metro 2025, which outlines a multi-year effort to keep the



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Metro system in a state of good repair. Metro 2025 includes numerous improvements—like all eight-car trains during rush hour, core station improvements, and rail and bus fleet replacement—to improve the core capacity of the system, a growing challenge to moving people by transit through the region. Metro 2025 supports the objectives of Priority One in this Plan by ensuring maintenance of the existing system, and it supports Priority Three by adding capacity to the existing system, mainly in the regional core. The jurisdictions responsible for paying for the improvements included in Metro 2025, need to agree on a final price tag and make funding commitments. Once they do, the package of improvements is likely to be ready for inclusion in the CLRP.

***Future Updates to the CLRP***

Other projects, which have yet to be developed, could be added to the CLRP in future updates to the plan. Elected leaders and transportation officials who sit on the TPB should return to the jurisdictions, bodies, and agencies they

represent and share the priorities and principles laid out in the Priorities Plan as a resource to use in developing projects, even those which may not be “regionally significant” and therefore would not have to come before the TPB.

For projects that do come to the TPB for inclusion in the CLRP, the TPB will continue to have opportunities to review, assess, and discuss the relationship of those projects to the priorities in this Plan. In the future, the TPB will undertake efforts to evaluate how well the projects and programs in the CLRP, taken as a whole, support regional priorities. The TPB will also work collaboratively with the region’s jurisdictions to develop a process by which each jurisdiction will demonstrate—in a formal letter or other documentation—the ways in which the projects and programs they submit for inclusion in the CLRP address the priorities in this Plan.

In advance of each four-year update to the CLRP, the Priorities Plan will be revisited and updated to reflect changes planned for the region, including new projects in the CLRP, new land-use

developments and forecasts, and new challenges that will emerge as policy and political issues change over time.

**Conclusion**

Implementing the priorities identified in this Plan will be a long and complicated process; transportation decisions in our region are made every day at many different levels of government. Implementation will require a concerted effort by all jurisdictions and agencies at all levels to think regionally when acting locally to make improvements to the transportation system. And when projects and programs come before the TPB for inclusion in the Constrained Long-Range Transportation Plan (CLRP), the TPB will have an opportunity to review, assess, and discuss the relationship of those projects to the priorities in this Plan.

Ultimately, pursuing the priorities and strategies outlined in this Plan will lead to greater economic vitality and a higher quality of life in the Washington region. Maintaining the existing system first, strengthening public confidence and ensuring accessibility, and finding better, more efficient ways to move people throughout the region will move us toward achieving our shared goals for the future.

**Implementation will require a concerted effort by all jurisdictions and agencies at all levels to think regionally when acting locally to make improvements to the transportation system.**







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