

The Region

VOLUME 50 2011

Annual Review of
Transportation Issues
in the Washington
Metropolitan Region

Updating the Region's Long-Range Transportation Plan



What is the TPB?

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

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

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

TPB Members 2010

Officers

Chair

David Snyder
City of Falls Church

First Vice Chair

Muriel Bowser
District of Columbia

Second Vice Chair

Todd M. Turner
City of Bowie

Board Members

Kerry Donley
City of Alexandria

Christopher Zimmerman
Arlington County

Gary V. Hodge
Charles County

Patrick Wojahn
City of College Park

Yvette Alexander
District of Columbia

Phil Mendelson
District of Columbia

Harriet Tregoning
District of Columbia

David Meyer
City of Fairfax

Catherine Hudgins
Fairfax County

Linda Smyth
Fairfax County

Paul Smith
Frederick County

Carol Krimm
City of Frederick

Henry F. Marraffa
City of Gaithersburg

Rodney M. Roberts
City of Greenbelt

Lori Waters
Loudoun County

Jonathan L. Way
City of Manassas

Suhas Naddoni
City of Manassas Park

Arthur Holmes
Montgomery County

Marc Elrich
Montgomery County

Tony Knotts
Prince George's County

Haitham A. Hijazi
Prince George's County

Michael C. May
Prince William County

John D. Jenkins
Prince William County

Phyllis Marcuccio
City of Rockville

Colleen Clay
City of Takoma Park

William A. Bronrott
Maryland House of
Delegates

Jennie Forehand
Maryland Senate

Barbara J. Comstock
Virginia House of Delegates

Patricia S. Ticer
Virginia Senate

Gabe Klein
District of Columbia DOT

Donald A. Halligan
Maryland DOT

Garrett Moore
Virginia DOT

Nat Bottigheimer
Washington Metropolitan
Area Transit Authority

Ex-Officio Members

Christopher Lawson
Federal Highway
Administration

Letitia A. Thompson
Federal Transit
Administration

James Bennett
Metropolitan Washington
Airports Authority

John V. Cogbill, III
National Capital Planning
Commission

Peter May
National Park Service

Robert Werth
Private Providers Task
Force

Metropolitan Washington Council of Governments 2010

COG Board Chair
Kwame Brown

COG President
Judith Davis

Executive Director
David Robertson

*Department of
Transportation Planning
Director*
Ronald F. Kirby

The Region

VOLUME 50 2011

3 Making the Region a Better Place

David Snyder, 2010 TPB Chairman

4 Updating the Region's Long-Range Transportation Plan

Every few years the TPB provides a reality check to the region with the comprehensive update of the Constrained Long-Range Plan (CLRP), an official preview of the transportation future we can expect in the coming decades if current trends continue.

16 TPB Awarded \$58 Million in TIGER Grant Funding

Bus priority treatments will increase reliability and ridership for bus services running on existing infrastructure.

19 Looking at Regional Transportation Priorities

In 2010, the TPB took steps to begin developing a regional transportation priorities plan that will build upon the region's successes and learning from our shortcomings.

21 Centers, Transit and Tolls: A Synergistic Vision for 2030

Concentrated growth, superb bus transit, and lots of toll lanes... A major TPB study released last year offered a peak into a bold vision for the year 2030.

29 In Brief

- 29 Catalyzing Small Transportation Improvements
- 30 TPB Formally Addresses Freight Planning
- 32 Mitigating Transportation Challenges One Incident at a Time
- 33 Building on Bike/Ped Planning Successes
- 34 Survey Shows Increase in Transit-Use and Telecommuting
- 36 Breaking Down Barriers for Disadvantaged Communities

Managing Editor: John Swanson

Design: Carla Badaracco Design

Cover photo: Rail to Dulles construction by Tom Saunders, VDOT

The Region is published by the Metropolitan Washington Council of Governments, 777 N. Capitol St., N.E., Suite 300, Washington, D.C. 20002-4239; (202) 962-3200.

This publication was funded, in part, by grants from the District of Columbia Department of Transportation, the Maryland Department of Transportation, the Virginia Department of Transportation, the Federal Highway Administration and the Federal Transit Administration. © 2011.

ADA and Limited English Proficiency (LEP): Alternative formats of this publication are available upon request. Phone: 202.962.3300 or 202.962.3213 (TDD). Email: accommodations@mwco.org. Please allow seven working days for preparation of the material.



BILL MCNEAL, CREATIVE COMMONS



PHOTO BY GERALD MARTINEAU FOR THE WASHINGTON POST

Metropolitan Area Transportation Operations Coordination (MATOC) center operators observe traffic conditions on various monitors, listen to scanners, and make phone calls to area jurisdictions in the greater Washington area. Photographed in Greenbelt, MD on February 2, 2011.

Making the Region a Better Place

David Snyder



We are constantly reminded, in good times and bad, of the importance of transportation services to the safety, security, health, prosperity, and well-being of our region's people. As 2010 chairman of the National Capital Region Transportation Planning Board, I am pleased to be part of a team that is striving to make the region a better place.

The economic troubles that confront all of us make it imperative that we focus even more on improvements that will maximize the capacity of our existing systems to serve more people and move freight in a safe and reliable manner. The emphasis on low-cost, high-impact matters, such as improved management and operations, technology, communications, and cooperation is now more essential than ever.

But even as we pay attention to our current capacity, we need to continue to vision and plan for the future. As Robert Kennedy said so well, "Some men see things as they are and ask why, other men dream dreams of things that never were and ask why not." It is our job to ask both why and why not.

Finally, as the nation's capital, our region has the expertise and indeed the obligation to influence and help guide the national debate on transportation policy. Our nation can do better and must do better if we are to remain a global leader in government and in commerce.

When we work together we can really accomplish a great deal. Because I have seen first-hand the fruits of regional cooperation, I am optimistic about the years ahead. I look forward to a remarkable future for a place that world calls the U.S. capital but we call home.



Updating the Region's Long-Range Transportation Plan

Every few years the TPB provides a reality check to the region when it comprehensively updates the Constrained Long-Range Plan (CLRP), an official preview of the transportation future we can expect in the coming decades if current policies continue.

The CLRP update in 2010 predicted a future with few surprises: transportation funding is expected to remain tight while the region continues to add jobs and people.

A number of big-ticket projects have been added since the last major update of the CLRP in 2006. These projects include the Purple Line in Maryland, reconstruction of D.C.'s South Capitol Street and the 11th Street Bridges, and construction of HOT lanes on I-95 in Virginia (this project originally included HOT lanes on I-395, but VDOT in 2011 proposed the deletion from the plan of most of that segment.) Before these projects were included in the CLRP, the project sponsors were required to submit detailed financial plans demonstrating anticipated funding.

Despite these additions, however, the economic recession forced state and local governments to delay or withdraw many other significant road projects in order to show that revenues would equal expenditures. No transit projects were delayed or removed in this period.

Funding Realities

The CLRP includes all the major transportation projects that the region

anticipates can be funded and built between now and 2040. The Transportation Improvement Program (TIP) is a six-year, more detailed subset of the CLRP. All regionally significant projects must be included in the CLRP and TIP in order to receive federal funding.

Federal law requires the region's Transportation Planning Board to update the CLRP on a regular basis and to make sure it meets federal requirements related to adequate funding for projects, air quality improvement goals, and other factors.

The CLRP's financial constraint requirement creates a prioritization process. Unfunded projects are left out of the CLRP or are simply included as "studies" that are not slated for development and construction.

According to federal law, the TPB is required every four years to conduct a financial analysis for the CLRP. This analysis must show that anticipated revenues will equal expenditures. The 2010 forecast found that between 2011 and 2040, the region is expected to spend an average of \$5.4 billion per year in today's dollars or a total of \$156.5 billion over the 29 years of the plan. Adjusted for inflation (year of



CLRP Revenues and Expenditures for 2011-2040
\$222.9 Billion

Revenues

Private/Tolls	7%
Local	12%
Federal	18%
Transit Fares	24%
State/DC	39%

Expenditures

Highway Expansion	13%
Transit Expansion	17%
Highway Operations and Preservation	23%
Transit Operations and Preservation	47%

expenditure dollars), total expenditures will be \$222.9 billion.

The financial analysis updates projected transportation revenues and costs for operating, maintaining and expanding the regional transportation system through 2040. The forecasts were prepared by the transportation implementing agencies and jurisdictions, with technical integration and documentation provided by consultants. The TPB conducted the last regional financial forecast in 2006.

Of total forecast revenues, 39 percent will be state funding (including DC) and 24 percent will come from transit fares. Both these percentages increased from the 2006 forecasts in which state funds and transit fares

were predicted to provide 32 and 17 percent respectively of total revenues. Eighteen percent of total funding is forecast to be federal and 12 percent will be local. Both these percentages are lower than the 2006 forecast.

Seven percent of future revenue will be derived from tolls, bonds and private sources. This is the same percentage as the 2006 forecasts. Maryland's Intercounty Connector and the HOT lanes projects in Virginia account for much of this category.

As our system ages, a large portion of funding will be needed to maintain the system that is already in place. The financial forecast found that 70 percent will be used for operations and preservation for both highways and transit, leaving 30 percent for system expansion.

More of the region's funding will go to transit than previously expected. Of total forecast expenditures, 64 percent will be spent on public transit while 36 percent will go to highways and roads. In contrast, the TPB 2006 financial analysis forecast a ratio of 57:43 in transit-to-highway expenditures.

WMATA's Metro system will receive 51 percent of total funds, although it is worth noting that more than one fifth (21 percent) of the region's total transportation revenues will come from WMATA fares. Of WMATA's total revenues, 42 percent will come from fares (the agency's anticipated farebox recovery) and 40 percent will be state and local funding.

Increased funding levels for WMATA will not support enough capacity to meet the projected ridership levels on MetroRail and MetroBus in the coming decades. In 2008, Congress passed the Passenger Rail Investment and Improvement Act providing an additional \$3 billion in revenues (\$1.5 billion in federal and \$1.5 billion from dedicated sources in the District and states) for WMATA's future capital needs. This legislation is set to expire in 2020 and currently there is no law in place to extend it. Because of this

uncertainty, the TPB's travel forecasts assume that an increase in the number of riders in the system's core areas cannot be accommodated after the year 2020. Unless this situation is addressed, a number of future transit trips after 2020 will not be accommodated, resulting in increased daily automobile trips and vehicle emissions.

How Will the System Perform in 2040?

What will transportation conditions be like in 2040? Analysis of the CLRP shows some improvements, but many continuing challenges.

According to Council of Governments forecasts, our region's population will grow by 30 percent by 2040, with the addition of 1.6 million new people to the 2010 population of 5.3 million. Employment will grow even faster—at a rate of 39 percent—as 1.3 million new jobs are added in the next two decades to the 2010 baseline of 3.3 million jobs. Because jobs are growing faster than population, the demand for workers is intense, and people outside the region increasingly are commuting in on a daily basis. This robust economic growth will support a continuing high standard of living, but it will also present fundamental challenges to our quality of life, including new demands on our roads, trains and buses.

The fastest growth rate in population will be seen in the region's outer suburbs—Frederick, Charles, Prince

William and Loudoun counties—where the population will grow 50 percent between now and 2040. Although jobs will increase everywhere, the majority of employment opportunities will still be in the inner jurisdictions. This locational mismatch, as well as other factors, means the average distance between jobs and households will continue to get longer.

This overall rate of growth and the fact that people will be living farther from their jobs will cause more road congestion. TPB forecasts anticipate a 38 percent increase in lane miles of morning congestion by 2040.

WHAT IS THE CONSTRAINED LONG-RANGE PLAN (CLRP)?

The CLRP identifies and describes all regionally significant transportation projects and programs that are planned in the Washington metropolitan area between 2011 and 2040. The projects and programs that go into the CLRP are developed cooperatively by governmental bodies and agencies represented on the TPB.

Federal law requires the long-range plan to be updated every four years and to undergo adequate opportunity for public involvement. The law also requires the plan to be based on revenue sources that are “reasonably expected to be available.” In other words, the CLRP is not a “wish list”; it reflects the reality of what the region can afford to build and maintain over the coming decades.

To ensure that the projects in the CLRP can be built, the TPB conducts an extensive financial analysis as part of the update process. The TPB is also required to demonstrate, through a technical analysis, that the predicted emissions associated with the CLRP will be “in conformity” with the region's air quality improvement goals.

The good news is that the average person is expected to drive less in 2040 than today. Vehicle miles of travel (VMT), which is a measure of how much we drive, is expected to go up overall because of the increase in population, but it will decrease per capita. This decrease reverses a long-standing trend of increasing personal auto use and is partly linked to an anticipated rise in transit work trips, which will increase 43 percent by 2040. But the decline in driving per capita is also partly linked to the pervasiveness of congestion. Faced with the mounting inconvenience of driving, many people

will be convinced that there are better ways to get around.

The TPB has long held that a key to reducing auto dependency is to encourage concentrated growth in regional activity centers—which are intended to be focal points for development and nodes for transportation linkages. TPB analysis shows that employment and households in regional activity centers will increase along with overall growth over the coming decades. However, the current percentage of jobs and households in regional activity centers—77 and 49 percent respectively—will remain roughly the same in 2040.

Activity centers are important hubs of transit use. Currently around 90 percent of transit work trips in the region are to jobs in activity centers. This percentage is expected to remain the same in 2040, although the impact will be much greater in the coming decades because the total number of transit trips will increase significantly.

Regional leaders increasingly worry that we will not be able to accommodate the burgeoning demand for public transit. Like our road system, transit is forecast to become increasingly congested and in some cases is projected to reach capacity. Due to a lack of funding for trains, buses and other capital improvements, the Metrorail system will gradually approach capacity on trips to and through the regional core. According to WMATA, without additional railcars beyond what is currently funded, the

How much will things change between 2011 and 2040?

Growth Forecasts for Transportation and Land Use

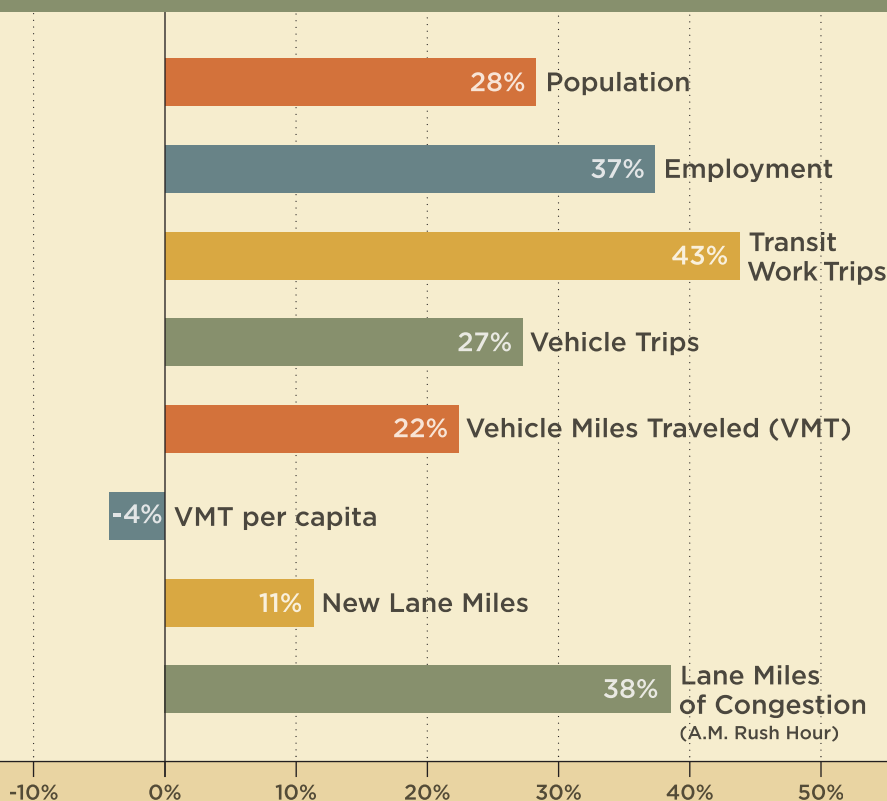




PHOTO COURTESY OF VDOT

Beltway HOT lanes



VDOT ANDREWBOSSI

South Capitol Street Bridge



PHOTO BY THOMAS GIZALUSKAS

Dulles Metrorail



Orange Line and future Dulles Rail Line between Courthouse and Rosslyn stations are expected to exceed capacity by 2020, and the entire Metrorail system will approach capacity by 2030.

Looking Forward

As required by federal law, the CLRP is a reflection of what we expect to fund in the coming decades, not what we want to fund. Therefore, the CLRP’s revenues are equal to its expenditures, but that outcome was achieved in part because the region’s jurisdictions have eliminated or delayed projects in recent years.

With the world mired in recession, governments in metropolitan Washington are finding themselves hard-pressed to raise revenue for

transportation projects. But the region’s transportation funding shortfall is an old story, in good times and in bad.

“We have had a transportation funding problem—a big, systemic, long-term problem—for more than a decade,” said TPB Chairman David Snyder in May 2010. “At the TPB, we have been talking about it for a long time now—way back in the boom years. We have limped along and we’ve pulled together some band-aid solutions, but we still haven’t really solved it in a comprehensive manner.”

As the region grapples with growth and seeks to prioritize infrastructure investments, we can expect this continuing financial squeeze to cast a shadow over regional transportation planning.



2010
FINANCIALLY
CONSTRAINED
LONG-RANGE
PLAN (CLRP)



The Purple Line

H Street Streetcar Corridor



MAJOR TRANSIT AND HOV IMPROVEMENTS



District of Columbia

1. Anacostia Streetcar Project Phases I and II, 2012
2. **H St/Benning Rd Streetcar Project, 2012, 2015**
3. K Street Transitway, 2018
4. **TIGER Grant Bus Priority Improvements (not mapped: DC, MD, VA)**

Maryland

5. Corridor Cities Transitway, from Shady Grove to COMSAT, 2020
6. I-270/US 15 Corridor, Shady Grove to I-70, HOV lanes, 2030
7. Purple Line, Bethesda to New Carrollton, 2020

Virginia

8. Cherryhill VRE Station and 3rd Track, 2012
9. Crystal City/Potomac Yard Busway, Arlington and Alexandria, 2010, 2013
10. Dulles Corridor Metrorail, 2013, 2016
11. *Fairfax County Parkway HOV, widen and upgrade, 6 to 8 lanes, 2035*
12. *Franconia/Springfield Parkway HOV, 2020, 2025*
13. I-495 High Occupancy/Toll (HOT) lanes and new bus service, 2013, 2030
14. I-66 HOV, widen to 8 lanes from VA 234 to US 29, 2010, and widen to 6 lanes from US 29 to US 15 with an interchange reconstruction at US 15, 2020
15. I-66, construct HOV ramps to access Vienna Metro Station, 2014
16. I-95/395 HOT Lanes, widen, construct 2, 3 lanes and new bus service, 2012
17. Potomac Yard Metro Station, 2030
18. *US-1 bus right turn lanes, 2035*
19. VA 244 Columbia Pike Streetcar from Skyline to Pentagon City, 2016

Notes

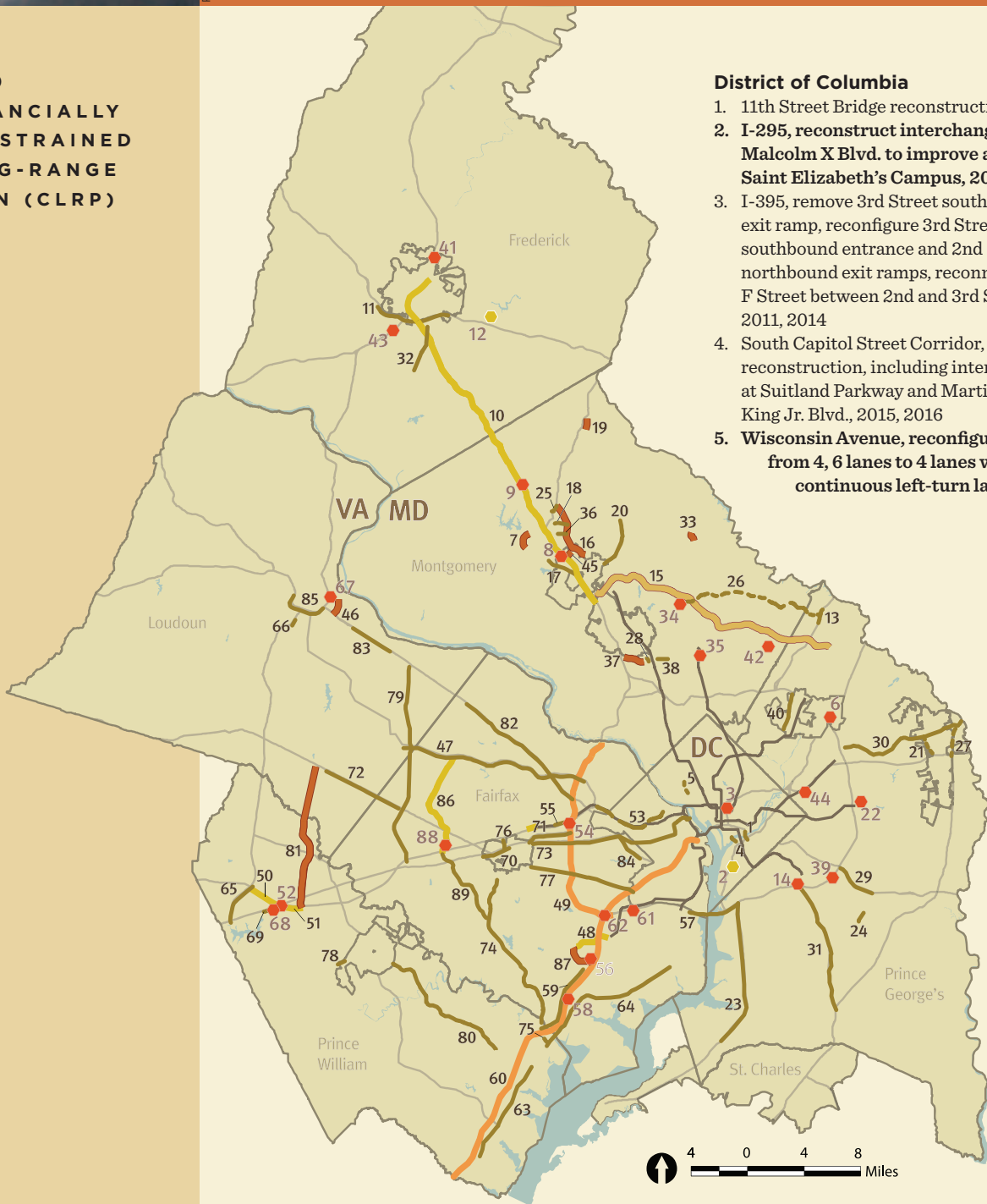
- Projects in **bold** are new to the 2010 CLRP.
- Projects in *italics* represent significant changes or delays of five years or more as compared to the 2009 CLRP.
- HOV = High-Occupancy Vehicle
- HOT = High-Occupancy/Toll



PHOTO BY ANDREW BOSSI, CREATIVE COMMONS

MAJOR HIGHWAY IMPROVEMENTS

**2010
FINANCIALLY
CONSTRAINED
LONG-RANGE
PLAN (CLRP)**



District of Columbia

1. 11th Street Bridge reconstruction, 2013
2. I-295, reconstruct interchange at Malcolm X Blvd. to improve access to Saint Elizabeth's Campus, 2014
3. I-395, remove 3rd Street southbound exit ramp, reconfigure 3rd Street southbound entrance and 2nd Street northbound exit ramps, reconnect F Street between 2nd and 3rd Street, 2011, 2014
4. South Capitol Street Corridor, bridge reconstruction, including interchange at Suitland Parkway and Martin Luther King Jr. Blvd., 2015, 2016
5. Wisconsin Avenue, reconfigure from 4, 6 lanes to 4 lanes with a continuous left-turn lane, 2011

- | | | | |
|--|-----------------|-----------------|---|
| ● Intersection Improvement
(number appears in grey) | — New Road | — Add HOT Lanes | — Widen/Improve Existing Road |
| ● Intersection Improvement,
added 2010 | — New Toll Road | — Add HOV Lanes | — Widen/Improve Existing Road
added 2010 |

Maryland

6. Baltimore Washington Parkway, intersection improvement at MD 193, 2025
7. Father Hurley Blvd., construct 4 lanes, 2010
8. I-270, interchange at Watkins Mill Road Extended, 2016
9. *I-270, reconstruct interchange at MD 121, 2016*
10. *I-270/US 15 Corridor, Shady Grove to Biggs Ford Road, widen and HOV or HOT, 2030*
11. I-70, widen to 6 lanes, 2016
12. **I-70, reconstruct interchange at Meadow Road, 2016**
13. I-95, interchange and CD lanes at Contee Road, 2020
14. I-95/495, Branch Avenue Metrorail access improvements, 2020
15. Intercounty Connector, construct 6 lanes, 2012
16. MD 83, construct 4, 6 lanes, 2020
17. *MD 117, widen to 4 lanes, 2025*
18. MD 118/Germantown Road, widen to 4 lanes, 2020
19. MD 124 extended, construct 2 lanes, 2011
20. MD 124, widen to 6 lanes, 2010, 2020
21. **MD 197, widen to 4/5 lanes, 2025**
22. MD 202, Largo Town Center Metrorail access improvements, 2015
23. MD 210, upgrade 6 lanes and interchanges, 2020, 2030
24. MD 223, widen to 4 lanes, 2020
25. *MD 27 Father Hurley Blvd./Ridge Road, widen to 6 lanes, 2020*
26. **MD 28/MD198, construct, widen to 4/6 lanes, 2025**
27. **MD 3, widen to 6 lanes, 2030**
28. MD 355, construct interchange improvements at Montrose/Randolph Road and grade-separated CSX crossing, 2015, 2020
29. *MD 4, widen to 6 lanes with interchanges at Westphalia Road and Suitland Parkway, 2016, 2020*
30. MD 450, widen to 4 lanes, 2016
31. MD 5, upgrade, widen to 6 lanes, including interchanges, 2015, 2020
32. MD 85, widen to 4, 6 lanes, 2020
33. MD 97, construct 2 lanes, 2020
34. MD 97, upgrade intersection at MD 28, 2020

35. MD 97, upgrade intersection at Randolph Road, 2015
36. *Middlebrook Road Extended, widen, construct 4 lanes, 2020*
37. Montrose Parkway East, construct 4 lanes, 2015
38. *Randolph Road, widen to 5 lanes, 2020*
39. Suitland Parkway, interchange at Rena/Forestville Road, 2025
40. US 1, widen to 6 lanes, 2010, reconstruct 4 lanes, 2020
41. *US 15, construct interchange at Monocacy Blvd., 2016*
42. *US 29, interchange at Musgrove/Fairland Road, 2025*
43. *US 340/US 15, construct interchange at Jefferson Tech Park, 2016*
44. US 50, westbound ramp to Columbia Park Road, 2025
45. Watkins Mill Road Extended, construct 6 lanes, 2011

Virginia

46. Battlefield Parkway, construct 4 lanes, 2010
47. Dulles Access Road, widen to 6 lanes, 2017
48. *Franconia/Springfield Parkway, HOV with interchange at Nueman St, 2020, 2025*
49. I-495 High Occupancy/Toll (HOT) lanes, auxiliary lanes, and new bus service, 2013, 2030
50. I-66 HOV, widen to 6 lanes, reconstruct US 15 interchange, 2020
51. I-66 HOV, widen to 8 lanes, 2010
52. I-66, reconstruct interchange at US 29, 2014
53. *I-66, spot improvements inside the Beltway, 2013, 2020*
54. I-66/I-495, reconstruct interchange, 2013
55. I-66, construct auxiliary lanes at Gallows Road and Cedar Lane, 2030
56. I-95, Fort Belvoir EPG access improvements, 2012, 2016
57. I-95, construct approaches to Woodrow Wilson Bridge, 2011
58. I-95, reconstruct interchange at VA 642, 2010
59. I-95, widen to 8 lanes, 2011
60. I-95/395 HOT Lanes, construct 1, 2 additional lanes and new bus service, 2012
61. I-95/495, reconstruct interchange at VA 613, 2015
62. I-95/I-395/I-495, interchange access ramps to I-495 HOV, 2013
63. *US 1, widen to 6 lanes, 2011, 2025*
64. US 1, widen to 6 lanes, 2015, 2017
65. *US 15, widen to 4 lanes, 2040*
66. US 15, widen to 4 lanes, 2015
67. *US 15 Bypass, interchange at Edwards Ferry Road, 2025*
68. US 29, interchange at VA 55, 2014
69. US 29, widen to 5, 6 lanes, 2014
70. *US 29, widen to 6 lanes, 2013, 2040*
71. US 29, widen to 6 lanes, 2015, 2025
72. US 50, widen to 6 lanes, 2012, 2015
73. US 50, widen/reconstruct 6 lanes including interchanges, 2012, 2015, 2025
74. VA 123, widen to 6 lanes, 2015, 2025
75. VA 123, widen to 6 lanes, 2017
76. VA 123, widen to 6 lanes, 2013
77. *VA 236, widen to 6 lanes, 2025*
78. VA 28, widen to 6 lanes, 2017
79. *VA 28, widen to 8 lanes, with interchanges, 2010, 2011, 2015, 2025*
80. *VA 3000, widen to 6 lanes, 2012, 2025*
81. *VA 411 Tri-County Parkway, construct 4 lanes, 2035*
82. *VA 7, Leesburg Pike, widen to 6, 8 lanes, 2014, 2025, 2030*
83. VA 7, construct interchanges, 2010, 2025
84. VA 7, widen to 6 lanes, 2025
85. *VA 7 Bypass, widen to 6 lanes, 2035*
86. *VA 7100/Fairfax Co Pkwy HOV, widen, upgrade to 6/8 lanes, 2035*
87. VA 7100/Fairfax Co Pkwy, construct 4, 6 lanes with interchanges at Rolling Road and Boudinot Drive, 2010, 2011, 2012, 2025
88. VA 7100, interchanges at Fair Lakes Parkway and Monument Drive, 2011
89. *VA 7100, widen to 6 lanes, 2020*

Notes

- Projects in **bold** are new to the 2010 CLRP.
- Projects in *italics* represent significant changes or delays of five years or more as compared to the 2009 CLRP.
- HOV = High-Occupancy Vehicle
- HOT = High-Occupancy/Toll



PHOTO BY 98SPHOTOGRAPHY, CREATIVE COMMONS

BIKE/PEDESTRIAN IMPROVEMENTS

**2010
FINANCIALLY
CONSTRAINED
LONG-RANGE
PLAN (CLRP)**



District of Columbia

1. 11th Street SE Bridges and Intersection
2. Anacostia Freeway Pedestrian Bridge
3. Anacostia Riverwalk Trail
4. Garfield Park Canal Park
5. Great Streets H Street NE Streetscape
6. Great Streets Minnesota Avenue NE
7. Klinge Road Reconstruction
8. Metropolitan Branch Trail
9. Theodore Roosevelt Bridge Rehabilitation
10. Union Station Pedestrian Tunnel

- Planned Spot Improvement
(number appears in grey)
- Planned New Facility
- Existing Facility

Maryland

11. Adelphi Road Sidewalks and Bike Lanes
12. American Legion Bridge
13. Anacostia River Trail
14. Ballenger Creek Trail
15. Bethesda Bikeway and Pedestrian Facilities
16. Bowie Mill Road Bike Lanes
17. Briggs Chaney Road East and West Bikeway
18. Bush Creek Trail
19. Cabin Branch Trail
20. Carroll Creek Trail
21. Charles Branch Trail
22. Chesapeake Beach Rail-Trail
23. Chestnut Avenue-Highbridge Road Sidepath
24. Clopper Road/Diamond Avenue Bikeway
25. Collington Branch Trail
26. Democracy Boulevard Bike Path
27. East Street Rail Trail
28. Emmitsburg Railroad Trail
29. Goshen Road/Brink Road Bike Path
30. Gundpowder Road Sidepath and Bike Lanes
31. H & F Trolley Trail Phase III
32. Henson Creek Trail Extension
33. I-270 Transitway Trail
34. ICC Bike Path
35. Little Paint Branch Trail Extension
36. MacArthur Boulevard Bikeway
37. MD 115 (Muncaster Mill Road)/Norbeck Road Bike Path
38. MD 118 (Germantown Road) Bike Path
39. MD 121 (Clarksburg Road)/Stringtown Road Bike Path
40. MD 189 (Falls Road) Bike Path
41. MD 190 (River Road) Bike Path
42. MD 193 Bikeway
43. MD 197 Sidepath
44. MD 223 Sidepath
45. MD 28 (Darnestown Road) North Bikeway
46. MD 355 (Frederick Road) – Upcounty Bike Path
47. MD 4 Sidepath
48. MD 450 Sidepath and-or Wide Sidewalks
49. MD 565 Sidepath and Bike Lanes
50. MD 704 Sidepath and Bike Lanes
51. MD 97 (Georgia Avenue) North Bike Path



52. Mid-County Highway Bike Path
53. Middletown-Myersville Trolley Trail
54. Monocacy River Greenway Future Phases
55. Monocacy River Greenway Phase I
56. Muddy Branch Trail
57. New Hampshire Avenue Bikeway
58. Oxon Run Trail
59. Piscataway Creek Trail
60. Princess Garden Parkway Sidewalks and Bike Lanes
61. Queens Chapel Road Sidewalks and Bike Lanes
62. Race Track Road Sidepath and Bike Lanes
63. Rhode Island Avenue Trolley Trail Extension
64. Ritchie Branch Trail
65. Ritchie Marlboro Road Bike Path
66. Rock Creek Trail - Frederick City
67. Seven Locks Road Bikeway
68. Silver Hill Road Sidewalks and Bike Lanes
69. St. Barnabas Road Sidewalks and Bike Lanes
70. Suitland Parkway Trail
71. Tinkers Creek Trail
72. Tuscarora Creek Trail
73. University Boulevard Bike Path
74. US 1 Bikeway
75. Walkersville to Woodsboro Corridor Phase III Bike Path
76. Western Branch Trail
77. Whitfield Chapel Road Sidewalks and Bike Lanes

Virginia

78. Army-Navy Drive-Joyce Street Bike Facilities
79. Balls Ford Road Widening Bike Path
80. Bus 234 Add Signalized Crosswalks
81. Carlin Springs Road Bridge Replacement
82. Columbia Pike Complete Streets
83. Duke Street Pedestrian Bridge
84. Eisenhower Trail
85. Fairfax County Parkway Trail
86. Four Mile Run Pedestrian and Bicycle Bridge
87. Gallows Road On-Road Bicycle Facility
88. Georgetown Pike Multi-Use Trail
89. Holmes Run Greenway Tunnel
90. King Street/Beauregard/Walter Reed Interchange
91. Linton Hall Road Widening Bike Path
92. Long Bridge Park Esplanade Bridge
93. Lovettsville Ped and Bike Path Network
94. Mount Vernon Trail Extension
95. Old Dominion Drive Complete Streets
96. Pedestrian Study and Improvements
97. Pohick VRE Trail
98. Rosslyn Circle Crossing
99. Route 110 Trail
100. Route 28 Trail Extension
101. Route 606 (Old Ox Road) Widening
102. Stringfellow Road Bikeway
103. US 1 (Richmond Highway) Ped and Bike Improvements
104. US 50 Pedestrian Improvements
105. VA 120 (Glebe Road) Pedestrian Intersection Improvements
106. VA 234 Bike Trail
107. W&OD Trail Extension
108. Washington Boulevard Trail Phase II
109. Woodrow Wilson Bridge



TPB Awarded \$58 Million in TIGER Grant Funding

Bus priority treatments will increase reliability and ridership for bus services running on existing infrastructure.

U.S. Transportation Secretary Ray LaHood came to COG on December 14, 2010 to sign \$58.8 million in federal TIGER grants for the National Capital Region. The award for a TPB grant application will be used to improve bus transportation along priority corridors in the District of Columbia, Maryland

and Virginia, and create better connections between buses and other forms of transportation in the region.

The TIGER (Transportation Investments Generating Economic Recovery)

grant program, created under the American Recovery and Reinvestment Act, funds innovative transportation projects that have significant benefits for the economy, the environment, or the safety and efficiency of existing infrastructure. Of more than 1,400 projects submitted in the first round of TIGER

grants, fewer than three percent were chosen for funding. The region's grant was the only one awarded to a metropolitan area for a large-scale, multi-modal regional project.

TPB Chairman and Falls Church Vice Mayor David Snyder emphasized the cooperation that was necessary for the TPB's TIGER application to be successful. "This required a team effort and it really paid off. Every citizen in the region is going to benefit from this funding," Snyder said. "This really is a victory for regionalism."

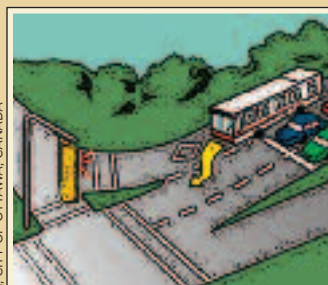
The TPB application to the TIGER Program was designed to build upon the successful track record of the Washington region's public transit network, consisting of the world-class Metrorail system complemented by commuter rail and by regional and local bus systems. Priority bus treatments offer ways to relieve pressure on the Metrorail system by making existing bus service running on existing

infrastructure work better, move faster, and deliver more in terms of performance. Priority bus treatments include traffic signal prioritization, dedicated bus lanes, and real-time schedule information.

More than \$26 million of the funding will go to improving bus transportation along priority corridors in the District of Columbia, Maryland, and Virginia. Improvements to these



Dedicated bus lanes



Queue bus lanes

K. MILUCSI, CITY OF OTTAWA, CANADA



corridors include dedicated bus lanes, traffic signal priority, skip stop service, enhanced pedestrian access, real-time passenger information, and enhanced bus stops, among others. Focusing on corridors with the highest regional ridership, the purpose of these improvements is to increase ridership and reliability.

In addition, over \$19.9 million was awarded for multimodal improvements to enable priority bus transit connecting Prince William and Fairfax Counties and the City of Alexandria with the District of Columbia. The aim is to provide high quality transit



Real-time bus information

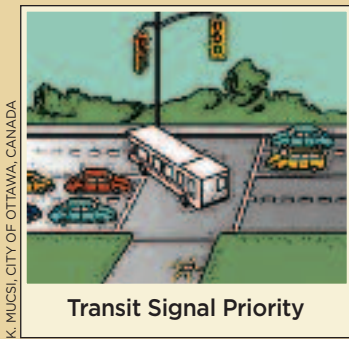
options for commuters and relieve pressure on the Metrorail system.

Finally, over \$12.3 million of the funding will be used for the construction of a multimodal Takoma/Langley transit center in

Prince George's County, which will improve safety and intermodal access to priority bus corridors.

The TPB's TIGER project focuses heavily on making the existing system work better, rather than implementing new transit services that could put unrealistic capital and operating burdens on cash-strapped public transit providers.

December 14, 2010
TIGER Signing Ceremony.
 From left to right:
 District of Columbia Councilmember (and 2011 TPB Chair) Muriel Bowser, City of Alexandria Mayor William Euille, COG Executive Director David Robertson, City of Falls Church Vice Mayor (and 2010 TPB Chair) David Snyder, U.S. DOT Secretary Ray LaHood, District of Columbia Council Chair (and 2010 COG Chair) Kwame Brown, Maryland Transportation Secretary Beverley Swaim-Staley, District Department of Transportation Director Gabe Klein, PRTC Executive Director Alfred Harf, WMATA General Manager Richard Sarles, and COG Director of Transportation Planning Ronald Kirby.









The project will make efficient use of federal money to obtain greater value out of the existing transit system by

creating capacity without requiring new operating expenditures.

At the beginning of 2011, the TPB had begun working to implement the TIGER grant in a process that is bringing together transit operators,

planners and traffic engineers to stimulate regional coordination and intermodal connectivity. Among other things, the TIGER grant has fostered discussions about the procurement of common technologies to ensure the future interoperability of bus systems. In the next couple of years, the project is expected to encourage further interagency coordination across the region's jurisdictions.

PROJECTS FUNDED UNDER THE REGION'S TIGER GRANT AWARD

-  **Priority Arterial Corridors**
- DC**
- 1 16th St. Downtown to Wheaton
- 2 Georgia Ave From Archives to Silver Spring
- 3 H St/Benning Rd, Minn. Ave to Franklin Sq.
- 4 Wisconsin Ave, Naylor Rd to Friendship Heights
- MD**
- 5 Addison Rd, Southern Ave to Addison Rd Station
- 6 University Blvd, Bethesda to College Park
- 7 US 1, Laurel to Rhode Island Ave station
- 8 Viers Mill Rd, Shady Grove to Silver Spring
- VA**
- 9 US 1 Transitway, Potomac Yard
- 10 VA 7, Alexandria to Tysons Corner
- 11 Van Dorn-Pentagon, via Shirlington
-  **Express Bus on Bridges and Arterials**
- 12 Theodore Roosevelt Bridge, I-66 to K St
- 13 14th St Bridge, I-395 to K St
-  **Express Bus on Freeways**
- 14 I-95/395, Pentagon to Dale City
-  **Transit Center**
- 15 Takoma/Langley Transit Center
-  Existing Metrorail
-  Bus/Rail Transfers





Looking at Regional Transportation Priorities

The “Conversation on Setting Regional Transportation Priorities” brought together stakeholders to discuss potential enhancements in the regional planning process.

In 2010, the TPB took steps to begin the development of a regional transportation priorities plan. Building upon the region’s successes and learning from our shortcomings, this new planning process will build consensus around key projects and programs that people from all corners of the region can get behind. When finalized, the plan will articulate the transportation priorities that the region will seek to implement over the coming decades to meet our goals for economic opportunity, environmental stewardship and quality of life.

The Conversation Brings Together Stakeholders

Throughout 2010, regional leaders discussed how a priorities plan might look and how it would be developed. On May 26, the TPB hosted an event called the Conversation on Setting Regional Transportation Priorities, which facilitated interactive discussions about regional transportation challenges, opportunities, and possibilities for enhancing the process of setting and implementing regional priorities. The impetus for the Conversation was a request by the TPB’s Citizens Advisory Committee (CAC) that regional leaders should develop a priorities plan to serve

as a financially-unconstrained regional vision for transportation investment.

Envisioned as a “mini-retreat,” the Conversation provided a rare opportunity for elected officials, professional transportation and planning staff, and involved citizens to sit down at the same table to discuss the region’s transportation planning process. The event brought together more than 80 of the TPB’s internal stakeholders, including members of the board, Technical Committee, the CAC, and Access for All (AFA) Advisory Committee. Former TPB Chair Peter Shapiro facilitated discussion throughout the day.

The highlight of the Conversation was a series of eight concurrent discussions in which participants discussed how they understand the current process, the reasons to change (or not change), and the options for enhancing the process. Participants generally agreed that a regional transportation priorities plan would build upon policies established in the *TPB Vision*, which is the TPB’s policy framework, and COG’s *Region Forward* policy plan, which was adopted in 2010. A priorities plan would identify regionally significant projects (both funded and unfunded) and focus on

analysis of the regional system as a whole. Attendees agreed that such a planning process would not shift authority from the state and local bodies that are responsible for funding and land use decision-making. Rather its primary purpose would be to provide guidance to decision makers throughout the region.

Much of the discussion at the Conversation focused on potential methodologies for developing a priorities plan, with participants agreeing that the priorities plan should be goal-oriented and should quantify the benefits and costs of different potential solutions. Participants urged the TPB to consider a variety of issues in the plan's development, including the importance of efficient land-use planning, opportunities to promote a variety of sustainable transportation modes, the concerns of vulnerable and disadvantaged groups, and the differing needs of inner and outer jurisdictions.

Conversation participants concurred that the new planning activity should build upon the TPB's extensive body of work. Clearly, the new plan will build upon the TPB's extensive scenario analysis over the past decade that has looked at a variety of transportation and land-use futures. The priorities plan should also build upon the planning activities of the TPB's members. Northern Virginia's TransAction 2030 Plan provides a good example of cross-jurisdictional priority setting.

As a model for priorities planning, many participants pointed to the TPB's success in winning a federal TIGER grant for \$58.8 million to improve bus services through priority bus treatments (see article on pages 16-18).

The TPB's application for the TIGER grant originated in regional scenario planning activities designed to identify priorities. At least in part, priorities planning could seek to achieve regional consensus on a pool of projects for which the region might seek funding in the future.

Scoping the New Priorities Plan

Based upon input from the Conversation, the TPB decided to initiate the development of a Regional Transportation Priorities Plan in earnest. In the July 2010, the board voted to establish a task force to develop a scope and process for such a plan. That task force is scheduled to issue its final recommendations in the spring of 2011. Development of the new plan will get underway in July 2011.

Although the Priorities Plan will be consistent with the interests and values of the TPB's member jurisdictions, it will not be simply a sum of local parts. Rather it will reflect truly regional priorities, consistent with regional goals and agreed upon by all jurisdictions from the outer suburbs to the inner core.

Reflecting on the TPB's evolving role in priorities planning, board member Karina Ricks from the District of Columbia Department of Transportation (DDOT) said "I think the Conversation demonstrates precisely what the TPB should be—a forum for regional discussion. And though people maybe are afraid a little bit of the term 'priorities plan,' I think that this kind of regional process is the only way that we're able to really frame and understand what our requirements are for moving forward."





PHOTO BY BEYONDDC

Centers, Transit and Tolls: A Synergistic Vision for 2030



PHOTO BY BEYONDDC

Concentrated growth, superb bus transit, and lots of toll lanes... a new study has integrated these elements into one synergistic system.

A major TPB study released in 2010 offered a peak into a bold vision for the year 2030. In this alternative future, dozens of activity centers throughout the region will blossom into vibrant nodes of concentrated, mixed-use and walkable development. People who live and work in these

centers will enjoy a variety of travel options for trips across town and across the region. An extensive regional network of high-quality transit will include rapid bus services—as fast and frequent as rail—which will run on toll roads where prices will automatically adjust to ensure free flowing traffic.



This vision was laid out in the *CLRP Aspirations Scenario*, which integrated far-reaching land-use and transportation alternatives into one synergistic system. This study looked at the effects of implementing a 1,650-mile regional network of toll lanes (including new lanes and conversions of existing lanes), a region-wide 500-mile system of high-quality bus service, and changes in land-use policies to promote denser, transit-oriented development. The scenario has the acronym “CLRP” in its title because it was designed to provide potential inputs for the TPB’s 2040 plan, known as the Constrained Long-Range Plan.

The study combined promising transportation and land-use strategies from previous TPB analysis, and represents the first time that the TPB has developed an integrated scenario whose purpose is not just to explore a single regional challenge or experiment

with a single strategy. Instead, the *CLRP Aspirations Scenario* takes a holistic, comprehensive approach to achieving a long-range regional outcome that is as preferable as possible to the business-as-usual baseline.

“We Can Make a Positive Impact”

The *CLRP Aspirations Scenario* seeks to better align land-use and transportation planning with objectives of the *TPB Vision*, the region’s transportation policy framework adopted in 1998. The *Vision* called for concentrating growth in regional activity centers and providing multi-modal transportation linkages among those centers. Previous scenario analysis showed that these strategies will have favorable effects. In 2006, TPB Chairman Michael Knapp said that TPB analysis had “confirmed that we can make a positive impact on future travel conditions by locating

SCENARIO INGREDIENT 1

Targeted Growth Areas

The scenario was designed to make the transportation system more efficient by concentrating growth in

mixed-use activity centers around existing and planned transit. The pictures at left show examples of activity centers functioning as economically vibrant, walkable, transit-supportive places.



housing and jobs closer together, approving development closer to transit stations, and expanding our network of public transit lines to support regional activity centers.”

But the TPB’s previous scenario studies were not comprehensive. The Regional Mobility and Accessibility Study (RMAS) looked at five transportation and land-use alternatives, each testing an individual strategy such as moving households into the inner jurisdictions or moving jobs into the outer jurisdictions. The RMAS study included public transit but not additional road capacity. A TPB study completed in 2008 looked at three packages of variably priced-lane networks but without any changes in land use. Neither the RMAS nor the variably priced-lane scenarios focused on how the region could effectively combine transportation and land-use improvements.

Several years ago, regional leaders

began calling for the development of a more integrated scenario. Among these voices was the TPB’s Citizens Advisory Committee, which in 2007 recommended the “development of refined, new, or composite scenarios that will identify packages of transportation projects and land-use strategies that produce positive, synergistic results,” and for the process to “draw upon information developed from existing scenarios and from public feedback.”

In 2008, the Scenario Study Task Force launched the development of two new studies: the “*What Would It Take?*” Scenario to identify steps to meet the region’s greenhouse gas emissions reduction goals for transportation, and the *CLRP Aspirations Scenario*, which was intended to provide a package of strategies that would be considered “within reach” and might realistically be considered for incorporation into the TPB’s Constrained Long-Range Plan.

SCENARIO INGREDIENT **2**

Priced Lanes

A 1,650-mile regional priced-lane network would be created under the scenario. Tolls would be collected

electronically and would automatically adjust to maintain free-flowing traffic. Pictured at left is the toll collection gantry for the InterCounty Connector, which charges vehicle owners according to their use of the road.



This concentration is expected to enable shorter trips made by transit, on foot, or by bicycle. However, this approach is expected to more than just achieve transportation efficiencies. The land-use component seeks to transform

Shifting Land-use and Transportation

The inputs for the *CLRP Aspirations Scenario* were in collaboration with the TPB's member jurisdictions. TPB staff held joint meetings with the land-use and transportation staffs in every jurisdiction to determine local land-use shifts that would be reflected in the study and to discuss the implications of transportation changes under consideration.

Land use

The scenario's land-use component was designed to make the transportation system more efficient by concentrating growth in mixed-use activity centers around existing and planned transit.

the region's 58 activity centers and additional transit station areas into economically vibrant, walkable, and transit-supportive places.

The development of the land-use component was based on a series of goal-oriented "rules" for shifting growth. All activity centers and areas with current/planned transit infrastructure received the necessary amount of residential and employment growth to be (1) transit-supportive, (2) walkable and (3) mixed use. These areas formed the scenario's "targeted growth areas." Out of all jobs and households forecast for 2030 (including the vast majority that are currently in place), a total of seven percent was shifted into "targeted growth areas."

Transportation

The scenario's transportation component focused on supporting the land-use component by providing increased accessibility to the targeted growth areas, specifically for transit riders, carpools and those willing to pay tolls to drive low-occupant vehicles on variably priced lanes and facilities.

The scenario creates a 1,650-mile regional priced-lane network. Of this total, 150 priced-lane miles are currently in the TPB's baseline Constrained Long-Range Plan (CLRP), 350 lanes miles would be converted from HOV lanes, 650 priced-lane miles would be new, and 500 priced-lane miles would be converted from general purpose lanes in the District of Columbia and on the region's national parkways. This priced-lane network provides new, priced capacity for auto users and creates relatively free-flowing right-of-way for bus transit.

The scenario creates a 500-mile regional Bus Rapid Transit (BRT) system with 138 BRT stations located in activity centers and existing parking facilities. BRT, which takes part of its name from rail rapid transit, refers to bus systems that provide

faster, more efficient service than ordinary bus lines. The systems are designed to approach the service quality of rail, while benefitting from the cost savings and flexibility of bus services.

To support the BRT system, 140 miles of circulator service would also be provided. The scenario also included three new rail projects and one transitway on Georgia Avenue, which were included in the TPB's previous scenario analysis. In total, the transit component creates a system that provides critical new service

BUS RAPID TRANSIT REGIONAL NETWORK



SCENARIO INGREDIENT **3**

Bus Rapid Transit

The scenario would create a 500-mile regional Bus Rapid Transit (BRT) system, providing reliable service on the free-flowing priced lane network. BRT systems are designed to approach the service quality of rail, while benefitting from the cost savings and flexibility of bus services. The picture at left shows a BRT system in Bogota, Columbia.



A Complex Set of Results

The TPB staff measured the scenario's impact on driving, congestion, mode share and air pollution. Staff also conducted a sensitivity analysis that examined the effects of making the land-use changes ("land-use sensitivity analysis") without introducing the priced lanes or expanded transit. The layering of three elements—land use, transit and road pricing—produced complex results, with some changes that are welcome solutions to regional problems, such as reduced congestion, and some changes that negatively impact the region, namely increased air pollution.

On the positive side, congestion would decrease significantly under the full scenario. Overall average speeds across the region increase by 6.1 percent and vehicle hours of delay decrease by 12.5 percent. In contrast, vehicle hours of delay increased slightly in the land-use sensitivity analysis compared to the baseline.

Transit use, walking, and bicycling would all increase significantly under the full scenario. Total transit trips would go up 13.8 percent compared to the baseline. The majority of this

(particularly circumferential connections between activity centers), redundancies to the Metrorail system to relieve current and forecast congestion, and connections to the existing transit system.

Pairing the priced lanes with BRT service provides the potential for great synergy: variably priced toll lanes provide free-flowing running-way for bus rapid transit vehicles while toll revenues offset the cost of BRT facilities and service. BRT services 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 mode-shift incentives, providing congestion relief to the existing general purpose lanes.

increase would result from land-use shifts, not increased transit capacity; under the land-use sensitivity analysis, transit trips would increase 10.5 percent. Ped/bike work trips would also increase 16.3 percent compared to the 2030 baseline. Under the land-use sensitivity, the increase would be slightly greater at 16.5 percent.

The analysis found that compared to the 2030 baseline, driving would increase under the full scenario. Region-wide, the full scenario would increase baseline projections of vehicle miles traveled (VMT) by 2.9 percent, and average auto trip length by 1.5 percent. Despite these increases, VMT per capita would decrease by 0.9 percent. In the land-use sensitivity analysis, VMT decreases slightly by 0.5 percent, auto trip lengths decrease by 2.5 percent, and VMT per capita decreases by 4.1 percent.

One negative result was an increase in air pollution under the full scenario, which is likely a result of increased driving on the region's roads. Compared to the 2030 baseline forecasts, the scenario would produce more emissions of VOCs and NOx (precursors of ground-level ozone), carbon dioxide (the major greenhouse gas) and particulate matter (PM2.5). VOC, NOx and PM 2.5 emissions also increase slightly under the land-use sensitivity analysis, while carbon dioxide shows a slight decrease.

Why did we see these impacts? The staff report on the scenario made the following observations:

- *Higher density + mixed use + transit-oriented development = more walkability and access to transit.* Because the land-use changes produced the majority of the increase in transit use, the study highlighted the important role of land use in making efficient use of the transit system.
- *Extensive BRT + pricing = more access to transit.* More transit trips can be expected to result from the implementation of a new bus rapid transit system operated on priced lanes.
- *More road capacity + pricing = faster speeds + longer trips.* New lanes and less congestion allows people to drive longer distances at faster speeds.
- *More population + jobs + increased density = less VMT per capita.* Despite an increase in population under the scenario (more people living in the region instead of commuting in from outside), the scenario was able to reduce VMT per capita and increase sustainable modes of transportation.

Learning from Positive and Negative Impacts

The *CLRP Aspirations Scenario* set out to better meet the goals of the *TPB Vision* than is currently projected. In many ways the scenario does provide an aspirational growth and development path for the region, providing solutions to long-standing problems that directly correspond with the *TPB Vision*, such



as congestion reduction and revenue generation.

Overall, the scenario shows that significant population growth can be accommodated without increasing road congestion or VMT per capita. The scenario also addresses economic imbalances between the eastern and western sides of the region because it concentrates future growth around existing transit stations, particularly around Metrorail stations in Prince George's County.

Other noteworthy benefits include the creation of walkable, transit-oriented, and mixed-use activity centers, resulting in more walking, biking and transit use on the existing system. In addition, the scenario envisioned a well-used BRT system, which would likely be necessary in some form to relieve existing and projected transit congestion.

Not all the results were positive, however. The increased population living in the region and higher road speeds under the full scenario resulted in increased VMT overall (although per capita VMT declined) and higher vehicle emissions. The scenario highlights the difficulty in combining strategies that, when implemented on their own,

produce positive results. There are clear synergies when land-use and transportation strategies are combined, but as may be expected, there are also conflicts and unexpected results.

The scenario demonstrated that land-use changes, in the form of more compact development, will be key to the development of a more efficient transportation system. By altering land-use priorities, the scenario suggested that we may have a significant amount of unused transportation capacity that we can tap into. Given the continuing squeeze on transportation budgets, this finding is particularly good news.

The scenario also showed how a bold new vision, including new transportation capacity, might be funded. A regional network of priced lanes would provide an infusion of revenue for services to maintain equitable mobility and accessibility. Under the scenario, it is assumed that toll revenues would be used to facilitate a network of bus rapid transit, which would produce an increase in transit use.

As the TPB gets ready to begin development of a Regional Transportation Priorities Plan (see article on pages 19-20), the *CLRP Aspirations Scenario* offers a useful starting point. "This scenario helps us ask some fundamental questions about how to dramatically improve the performance of the region's transportation system," said TPB Chairman David Snyder. "No one should get too wrapped up in the individual numbers, but rather use the scenarios to understand the potential role of each of the components—land use, tolls, and more transit."



Catalyzing Small Transportation Improvements

Since 2007, the TPB's Transportation/Land-Use Connections (TLC) Program has funded nearly 50 planning projects among the TPB's member jurisdictions. A recent review of past projects found that many TLC studies have catalyzed capital improvements—such as side-walks, bike facilities or transit enhancements—that help communities function better as walkable, mixed-use places.

The **City of Falls Church**, for example, has initiated the process to construct approximately \$2 million worth

of capital improvements in the South Washington Street Corridor which were recommended in a 2007 TLC report. These improvements, which are expected to be complete in 2012, include relocations of bus stops, building bus shelters, and tightening corners (curb radii) to slow traffic. The projects will be funded through a federal earmark secured by Congressman Jim Moran for an intermodal plaza, which was originally intended to be located one block away in a less advantageous spot, until a street

closure recommended by the TLC project created a better location.

The Moran earmark and the TLC project were not originally linked, but when the chance to use the earmark funds arose, the city was ready to take advantage of the opportunity. "The TLC project prepared us for this opportunity because the package of improvement projects had already been vetted," said Wendy Block-Sanford, transportation planner with Falls Church.

In **DC's NoMa District**, a TLC grant was the catalyst for the creation of significant pedestrian safety and beautification enhancements at one of DC's most challenging crossroads. In 2009, the NoMa Business Improvement District received a \$200,000 grant in federal Transportation Enhancement funds to implement the recommendations in the TLC study. Most of the work was complete by the spring of 2011.

"DDOT said they wouldn't do this project without the design... that's what the TLC project provided," said Liz Price, Executive Director of NoMa BID. "These projects will soften the environment and send a signal to the public that 'this is a place we care about.'"

CONTINUED ON PAGE 30

TPB Formally Addresses Freight Planning

Freight, like all surface transportation, is part of the transportation network. The story of freight in our region mirrors the reality of the region's growing economy. As the economy grows, so too does demand for more goods, as well as an increased reliance on freight transportation modes to move these goods from one place to another.



THE COURTYARD

IMPROVEMENTS, FROM PAGE 29

The Prince George's Plaza

TLC project focused on pedestrian and bike access and safety around the Metro station area, which has been the site of recent transit-oriented development (TOD) activities. A number of TLC study recommendations were incorporated into the “conditions of approval” for the Belcrest Plaza Mixed-Use Center, a new development. These recommendations included streetscaping, signage, and changes in road engineering to make the location more pedestrian-friendly.

In addition, “complete street” principles developed for the TLC study became the basis of the Complete Streets Policies of the

new Prince George's County Master Plan of Transportation. A complete-streets approach in planning recognizes that streets should be designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and bus riders of all ages and abilities. The Prince George's Plaza TLC project recognized that complete streets are an essential part of transit-oriented development.

“Prince George's has received several TLC projects and none of them is just sitting on a shelf,” said Fred Shaffer, trail and bike planner for the Maryland-National Capital Park and Planning Commission. “These are products that have lots of specifics and move us toward implementation.”



The metropolitan Washington region is a consumer region, and trucks carry over 75 percent of goods to, from, and within the region. Most of this freight movement by tonnage—nearly 60 percent—is through the region. Only 14 percent of freight movement by tonnage is inbound, whereas 8 percent is outbound. 19 percent of the freight movement by tonnage is intraregional. Not only does this truck freight movement contribute to rising congestion on roads, but

increasing congestion also creates challenges for freight — diminished productivity and increased cost of operations, as drivers must be paid for the time spent making deliveries in traffic.

In order to define the role of freight in the metropolitan Washington region, in July 2010 the TPB adopted its first ever National Capital Region Freight Plan. Development of the Plan was overseen by the TPB's Freight Subcommittee, which was formed in April of 2008. The Freight Plan provides information on current and forecasted freight conditions, identifies regional freight challenges and concerns, and presents a National Capital Region Freight Project Database. This database provides a compilation of projects beneficial to freight movement in the region. Projects identified in the database are drawn either from existing planning documents such as the CLRP, the Maryland Statewide Freight Plan, the Virginia Statewide Multimodal Freight Program Study, CSX National Gateway, and Norfolk Southern Crescent Corridor, or from Freight Subcommittee member recommendations. The database is intended to serve as a source to assist the Freight Subcommittee

in its efforts to prioritize top project recommendations.

The Freight Plan was adopted with unanimous TPB support, but only after some discussion that resulted in emphasizing the importance of a number of challenges that accompany the enhancement of the TPB freight program, namely: public safety and security, environment, congestion, commuter-rail, and service gap issues.

At the beginning of 2011, the Freight Subcommittee identified a short list of priority investments that would facilitate goods movement throughout the metropolitan Washington region. In developing this document, titled Ten Freight Transportation Highlighted Projects, the Subcommittee aimed to identify and promote a short list of regional corridors and projects important to freight movement in the region; to ensure that freight is considered in the regional priorities scoping process; and to have a source of highlighted corridors/projects as new funding opportunities arise. In addition to identifying these ten highlighted freight projects, the TPB also hosted its first ever Freight Forum in April of 2011, which focused on perspectives on demand, the freight transportation system, and priorities in freight investment.



PHOTO BY ANDREW BOSSI, CREATIVE COMMONS



PHOTO BY KENUDIGIT, CREATIVE COMMONS

Mitigating Transportation Challenges One Incident at a Time

The massive snowstorm that blanketed the region on January 26... The September 1st hostage situation at the Discovery Building in Silver Spring... The October 30th Rally to Restore Sanity and/or Fear on the National Mall. All of these major incidents had implications for traffic patterns around the region.

Yet incidents need not make headlines to have an impact on the regional transportation network. Things like building fires, rail disruptions, and accidents can cause street closures and traffic diversions, among other inconveniences. The Washington Metropolitan Area Transportation

Operations Coordination (MATOC) Program, which was developed in response to the gridlock that resulted from the mass evacuation of the region's inner core on September 11, 2001, continues its commitment to providing regional situational awareness of transportation conditions and incidents with the goals of improving traveler safety and reducing transportation delays.

MATOC activities include monitoring and communicating reliable information during major incidents; enabling operating agencies and the traveling public to make effective, coordinated and timely decisions; maintaining a web-based transportation information system; and facilitating standard operating procedures among transportation agencies. Incidents large and small may include a role for MATOC, from sending out notifications to transportation agencies throughout the region with information regarding an accident on the Beltway, to providing support during the hostage situation at Discovery Communications in Silver Spring in September. During the winter snowstorm in late January, MATOC expanded its normal coverage hours, provided hourly situational awareness reports, and coordinated with

agencies through monitoring the COG snow conference call and the regional transit operator group conference calls.

Established in 2008, MATOC is a joint program of the District of Columbia, Maryland, and Virginia DOTs and the Washington Metropolitan Area Transit Authority (WMATA), and was originally funded through a \$1.6 million federal grant secured by Congressman

Moran. Since this initial funding expired on September 30, 2010, MATOC must provide all its services with local funding. A variety of sources contribute to the \$1.19 million MATOC budget for FY2011, including contributions from the Maryland State Highway Administration, the District Department of Transportation, the Virginia Department of Transportation and the Northern

Virginia Transportation Authority, TPB, and an earmark secured through the Federal Transit Administration's budget. MATOC is staffed by a full-time Facilitator and two operators, and operates Monday-Friday from 4:30am-8:00pm, with an on-call schedule after hours and expanded hours during major scheduled events. Its organizational home is at the University of Maryland.

In Brief

Building on Bike/Ped Planning Successes

The Transportation Planning Board in October 2010 approved an update of the National Capital Region Bicycle and Pedestrian Plan. The plan, which was first developed in 2006, serves as a resource for planners and interested members of the public.

The Plan lists 409 individual projects—73 completed since 2006 and 336 projects planned for the future, at a cost of \$1 billion. These planned projects would triple facility mileage (including bike lanes and shared-use paths) by 2040 in comparison with 2006. The result of fully implementing the Plan would be a regional network of 541 miles of bicycle lanes and 1,173 miles



Bike-sharing is a key element of the region's Bicycle and Pedestrian Plan. Established in 2010, Capital Bikesharing offers 1100 bikes at 114 stations. By April 2011, the program had 11,000 members taking 3,000 trips a day.

of shared-use paths in 2040.

The 2006 Bike/Ped Plan has a strong track record of implementation. Completed projects from the plan include the Woodrow Wilson Bridge Trail

connecting Alexandria with Oxon Hill, the Union Station Bike Station and the College Park Trolley Trail.

The region is currently adding about 13 miles of shared-use path

CONTINUED ON PAGE 34

BIKE/PED, FROM PAGE 29

and about nine miles of bike lane per year. At that rate the region will add 390 miles of shared-use path and 270 miles of bike lane by 2040, and is on track to build about 60 percent of the planned bicycle network in the same period.

The TPB's Bicycle and Pedestrian Plan is consistent with the policy goals laid out in the *TPB Vision*, the region's transportation policy framework, as well as the *COG Region Forward* report, which calls for more rapid implementation of the projects in the TPB Bike/Ped Plan.

Over the past decade, bicycle and pedestrian facilities and their users have become more mainstream, as reflected in jurisdictional policies and plans as well as in the numbers of



PHOTO COURTESY OF DDOTDC

people choosing those modes. In recent years, TPB jurisdictions have conducted outreach activities in schools to promote safe bicycling and walking. Planners believe that a more

diverse group of users will be encouraged to walk and bicycle more often as the region adds sidewalks and bike lanes, as well as trails and facilities that are separated from motor vehicles.

In Brief



Survey Shows Increase in Transit Use and Telecommuting

More workers in the metropolitan Washington region are taking transit to work or teleworking than at any point in the past ten years, according to findings from the 2010 "State of the Commute" survey, which is conducted every three years by the TPB's Commuter Connections Program.

According to the survey, since 2001 the number of workers in the region driving alone to work has declined from 71 percent to 64 percent, while the share for transit and those who telecommute at least one day a week has risen to 20 percent (from 17 percent) and six percent (from two percent) respectively.

Approximately 600,000 workers, or 25 percent of the region's workforce, telecommute occasionally (at an average of 1.3 days per week). According to Nicholas Ramfos, Director of Commuter Connections, the rise in telecommuting is largely due to increased technology options and employer support for telecommute programs.

"Employers in the region have enthusiastically embraced telecommuting over the past ten years," Ramfos said. "They have seen the many economic, environmental, quality of life, and productivity gains that telecommuting provides their organizations, employees, and the region as a whole."

According to the survey, there is significant potential for further growth in telecommuting in the region. In addition to the 600,000 current telecommuters, 500,000 respondents said they "could and would" telecommute if given the opportunity by their employer.

In addition to the regional data, commuting behavior was broken down at the sub-regional level, which showed significant divergence in commuting choices between the region's inner and outer jurisdictions. The three sub-regional categories include: inner core (Alexandria, Arlington County, and Washington, D.C.), middle ring (Fairfax, Montgomery, and Prince George's Counties), and

outer ring (Calvert, Charles, Frederick, Loudoun, Prince William Counties).

The percentage of drive alone commuters was highest in outer ring jurisdictions (82 percent) and the lowest in the inner core (42 percent). In contrast, transit usage was much higher in the region's core (34 percent) than in outer jurisdictions (7 percent).

collection was conducted by CIC Research, Inc., while the preliminary data analysis was conducted by LDA Consulting.

A full report of the State of the Commute Survey will be released in 2011 and will be available on the COG website at www.mwcog.org.

Commuter Connections is a regional network of



PHOTO BY M. V. JANTZEN, CREATIVE COMMONS

Biking and walking as a mode of commuting was almost exclusively seen in the inner core (9 percent), whereas carpooling/vanpooling and telecommuting saw less variability at the sub-regional level.

The survey data was collected via a telephone survey of 6,629 randomly-selected employed residents of the metropolitan Washington region. Data

transportation organizations coordinated by the TPB. Commuter Connections provides workers and residents with information on commuting options, so citizens can make a smart choice about how they travel to work. Commuter Connections also helps employers establish commuting benefits and assistance programs for their employees.



The DC Wheelchair Accessible Taxi Pilot Program was officially launched in May 2011. Pictured is Muriel Bower, DC Councilmember and 2011 TPB Chair; Richard Devylder, Senior Advisor to the U.S. DOT on Accessible Transportation; and Robert Coward, TPB Access for All Committee member.

Breaking Down Barriers for Disadvantaged Communities

Since 2006, the TPB has been the designated recipient of funding from two federal programs designed to improve transportation services for low-income individuals and people with disabilities. The Job Access/Reverse Commute (JARC) and New Freedom programs, which are both supported through the Federal Transit Administration (FTA), have supported 34 projects in the metropolitan Washington area over the past four years. These projects, totaling about \$10 million, have lifted barriers to mobility that over a million people in the region experience every day.

The JARC projects help low-income individuals get to jobs and New Freedom projects fund

services that go above and beyond what is required by the Americans with Disabilities Act. In particular, the projects are designed to test pilot services that might be replicated on a broader basis throughout the region.

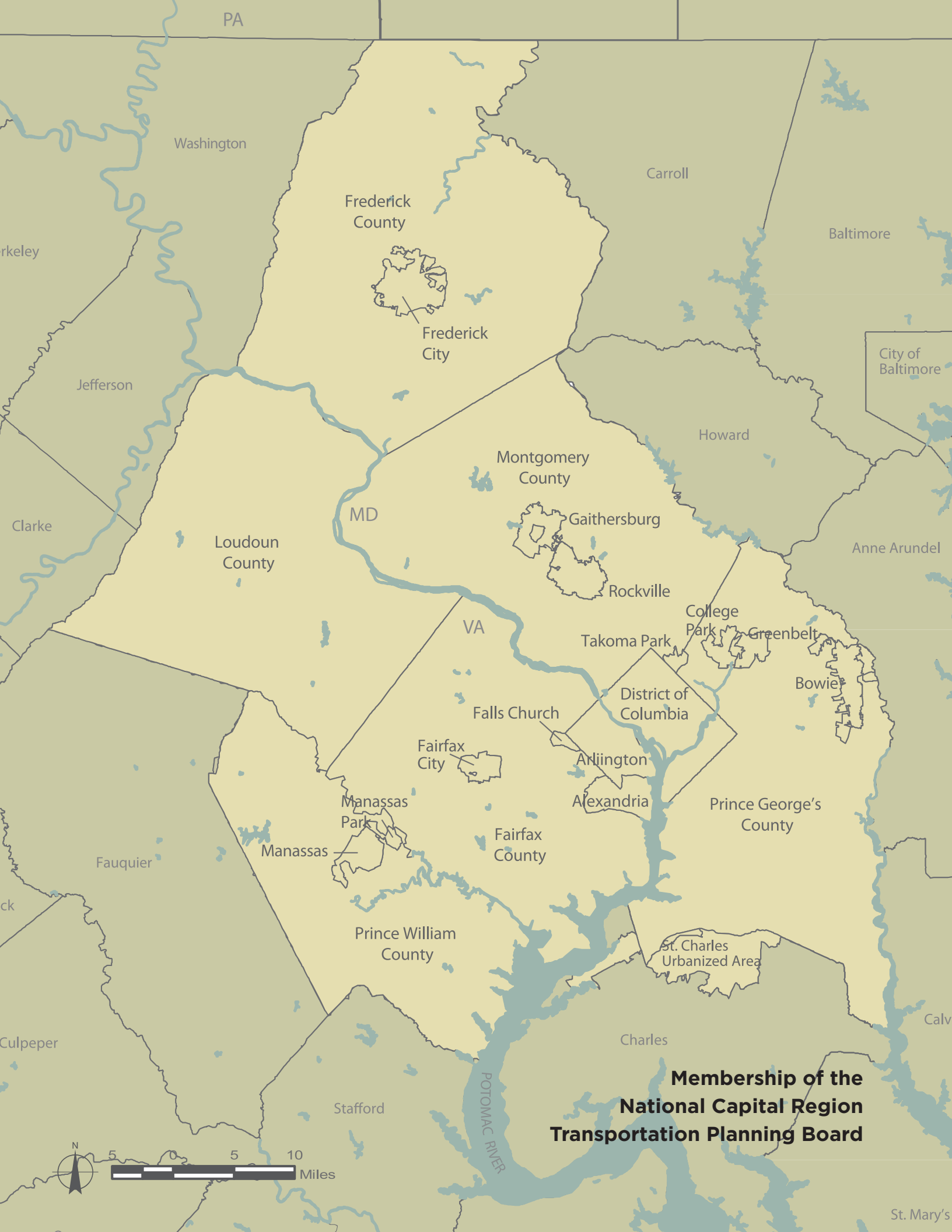
For example, a loan program has been funded to allow low-income families to purchase cars and access jobs in locations difficult to reach by public transportation. The collective repayment rate for the program is approximately 85 percent. More than a quarter of loan recipients have improved their credit ratings as a result of the car loans and more than 61 percent indicated in a recent survey that they had reduced their dependence on public benefits as a result of their new mobility.

Another grant established four pilot programs to train older adults with disabilities to travel independently and confidently on public transit. By pre-screening the participants to determine their familiarity with public transit, the trainers were able to structure classes and one-on-one sessions to accommodate the participants' needs. A recent survey found that attendees who completed a training program had taken as many as 13 more round trips in one month using public transit than they had previously taken.

"The class was great," said one travel training participant. "I thoroughly appreciated the trainers and the time they spent with me. I got to go to my dentist and I didn't have to cancel or pay for an expensive taxi."

TPB staff has been particularly involved in a New Freedom project that funded taxicabs for people who use wheelchairs. Until the pilot was implemented, D.C. was one of the few major American cities without wheelchair-accessible taxi service. TPB staff oversaw the establishment of operating parameters for the project such as draft taxi operating guidelines, dispatch options and vehicle procurement. Two companies, Yellow Cab and Royal Cab, are currently operating 20 taxis using the New Freedom funding.

The TPB makes grants from these programs available on an annual basis through a competitive application process.



PA

Washington

Carroll

Baltimore

Frederick County

Frederick City

Jefferson

City of Baltimore

Howard

Montgomery County

Clarke

Loudoun County

MD

Gaithersburg

Anne Arundel

Rockville

VA

College Park

Greenbelt

Takoma Park

Bowie

District of Columbia

Falls Church

Fairfax City

Arlington

Alexandria

Prince George's County

Fauquier

Manassas

Manassas Park

Fairfax County

Prince William County

St. Charles Urbanized Area

ck

Calv

Culpeper

Charles

Stafford

POTOMAC RIVER

Membership of the National Capital Region Transportation Planning Board



St. Mary's



National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street, NE Suite 300
Washington, DC 20002-4290
(202) 962-3200
www.mwcog.org