National Capital Region Transportation Planning Board

Financially Constrained

## Long-Range Transportation Plan









# 2008 Update

A SUPPLEMENT TO THE CLRP WEBSITE: www.mwcog.org/clrp

#### What is the TPB?

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

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

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

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How Can You Get Involved?.....

## Frederick Berkeley District of Falls Church Prince George's Rappahannock Prince William TPB Planning Area Metropolitan Statistical Area Modeled Area (as defined in 1983)

## WHAT IS THE CLRP?

The Financially Constrained Long-Range Transportation Plan, or CLRP, identifies and describes all regionally significant transportation projects and programs that are planned in the Washington metropolitan area between 2008 and 2030. Over 750 projects are included, ranging from simple highway landscaping to billion-dollar highway and transit projects. Some of these projects will be completed in the near future, while others are only in the initial planning stage.

The CLRP is updated annually and this year's update was adopted on November 19, 2008.

## The TPB Planning Area

The TPB's planning area covers the District of Columbia and surrounding jurisdictions as shown on the map to the left. However, for many planning activities, such as air quality analysis and travel demand forecasting, a larger area is examined. Specifically, Census information for the Metropolitan Statistical Area is used to assess demographic changes over the life of the plan and travel modeling is done for the entire modeled area shown.



## The TPB Vision

Adopted in 1998, the TPB Vision is the policy framework guiding the development of the CLRP.

In addition to goals listed here, the Vision includes a vision statement, strategies and objectives. The goals, objectives and strategies in the TPB Vision incorporate the eight federal planning factors. Each planning factor is included in the Vision goals, objectives and strategies; security is implicitly covered by the TPB Vision. The full Vision document is available at www.mwcoq.org/transportation.

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

#### WHAT IS THE CLRP?

## **Federal Requirements**

The long-range plan must meet several federal requirements related to Safe, Accountable, Flexible, Efficient Transportation Equity Act: Legacy for Users (SAFETEA-LU), the federal transportation authorization bill passed in 2005. The US DOT issued new requirements on February 14, 2007 and reaffirmed existing rules for metropolitan planning organizations (MPOs) in developing long-range transportation plans. Below is a summary of how the TPB has met all of the SAFETEA-LU requirements.



#### **Financial Constraint**

Federal law requires the long-range plan to be based on revenue sources that are "reasonably expected to be available." The financial plan demonstrates that the estimated revenues reasonably expected to be available equal the estimated costs of expanding, while adequately maintaining and operating, the highway and transit system in the region from 2008 through 2030. Please see the financial plan information on page 18.



#### **Air Quality**

The TPB must make sure that the projects in the CLRP and TIP, taken collectively, contribute to air quality improvement goals for the region. This is a requirement of the federal Clean Air Act. The plan's air quality conformity was assessed by comparing forecasted mobile source emissions of various pollutants to emissions ceilings (called "mobile emissions budgets"). The conformity analysis of the plan found that mobile emissions are within currently required budgets. See page 23.



#### **Public Participation**

A Participation Plan has been approved that articulates the TPB's commitment to a transparent interface with the public and with relevant public agencies to support the regional transportation planning process, including the development of the CLRP. The TPB has two standing citizen committees: The Citizens Advisory Committee (CAC), the main standing body for providing citizen input into the deliberations of the TPB; and the Access for All (AFA) Advisory Committee, which is described below.



#### **Environmental Justice and Access for All**

To ensure on-going participation from low-income and minority communities and persons with disabilities, the TPB created the Access for All (AFA) Advisory Committee in 2001 to advise the Board on transportation issues, programs, policies, and services that are important to these communities and individuals. The AFA comments on the Draft CLRP each year. In addition, the long-range plan is analyzed for negative impacts on low-income, minority and disabled populations.





#### **Congestion Management**

The TPB established a Congestion Management Process (CMP) to provide information on transportation system performance, and to consider alternative strategies to alleviate congestion and enhance the mobility of persons and goods. The CMP has four main components: 1) Congestion monitoring of major highways; 2) Identification and analysis of strategies to alleviate congestion; 3) Implementation of reasonable strategies and an assessment of their effectiveness and 4) Integration of strategies into major roadway construction projects. With the CMP, the TPB aims to use existing and future transportation facilities efficiently and effectively, reducing the need for highway capacity increases for singleoccupant vehicles (SOVs).



#### **Transportation Safety**

Transportation safety is a major concern in the Washington metropolitan region. In 2007, 396 people were killed as the result of traffic accidents in the Washington region. SAFETEA-LU puts a greater emphasis on safety, and added safety as a separate planning factor to be considered in the creation of the Plan and TIP. Accordingly, the 2008 CLRP includes additional ways to integrate safety into its planning process. The TPB conducts a yearly "Street Smart" campaign to raise awareness and promote safer behavior among drivers, pedestrians and bicyclists.



#### Freight Planning

The TPB is committed to giving full consideration to freight and goods movement in the overall regional transportation plan, through enhanced consideration of freight movement information, a regional freight planning committee, and additional stakeholder outreach and input activities. In 2007, TPB commissioned a freight planning study for the metropolitan area. The study found that annually approximately \$200 billion of goods are transported to, from or within the Washington region, with an additional estimated \$1.2 trillion of goods traveling through the region (through-trips). This freight movement, critical to the region's economy, has impacts on and is impacted by the region's congestion.



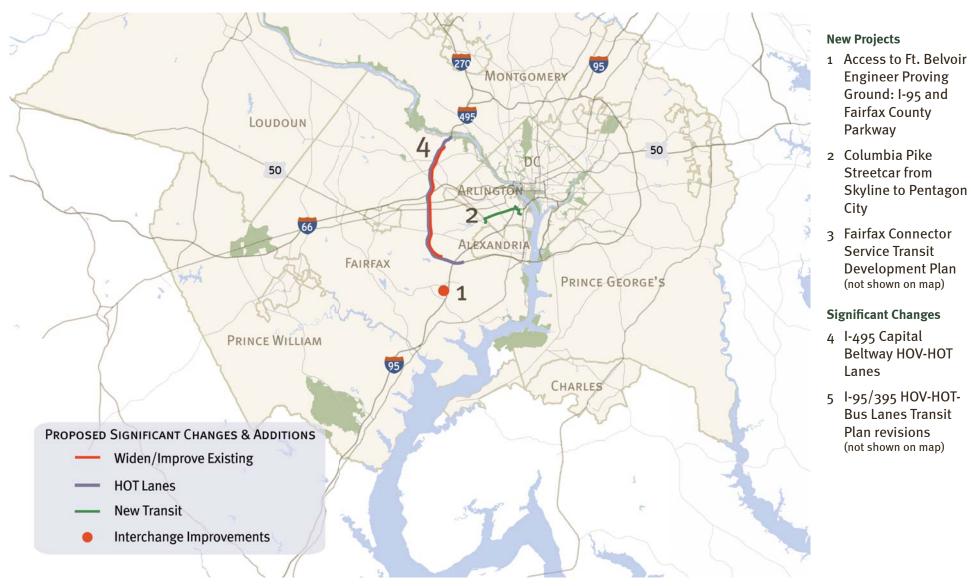
#### **Environmental Consultation and Mitigation**

The TPB consults with natural resource, conservation, environmental protection and historic preservation agencies regarding the development of the CLRP. These agencies provided comments on the plan, contacts for future engagement and environmental GIS data. This regional data is used to create maps of environmentally and/or culturally sensitive areas for comparison with the CLRP. In 2007, the CLRP featured its first environmental mitigation discussion which identified potential activities to moderate the environmental impacts of the long range transportation plan.

## WHAT IS IN THE PLAN?

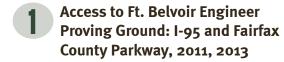
## **New Projects and Significant Changes**

These new projects and changes were approved for addition into the 2008 CLRP. The adopted plan from 2007 plus these changes and new projects form the 2008 CLRP. On November 19 2008, this plan was approved by the TPB.





## **New Projects**





Complete: 2011, 2013

Cost: \$28.8 million (I-95 access), \$6.8 million

(Fairfax Parkway access) Fundina: Federal

**Description:** Two projects have been proposed to meet expected demand at the Fort Belvoir Engineer Proving Ground (EPG) due to the Base Realignment and Closures (BRAC) act.

- a) I-95 Access to Fort Belvoir includes the following improvements:
- Widen the existing ramp from southbound I-95 to the Fairfax County Parkway and EPG southern loop road with an additional barrier-separated lane, providing dedicated access to the EPG for DOD personnel only.
- A new reversible, single-lane approach bridge from the northbound HOV/Bus/HOT lanes to the EPG's southern loop road. This connection will provide access from the northbound I-95 HOV lanes in the morning. In the evening, access will reverse to the northbound I-95 general purpose

lanes and the southbound HOV lanes.

- b) Fairfax County Parkway Access to Fort Belvoir:
- A one-lane ramp from the EPG Access Road to northbound Fairfax County Parkway and a two-lane ramp from the Access Road to southbound Fairfax County Parkway. The proposed ramps will connect to the proposed interchange at Rolling Road, which is already included in the CLRP.

#### Columbia Pike Streetcar from Skyline to Pentagon City, 2016



Complete: 2016 Cost: \$138.5 million Funding: State, local Length: 4.7 miles

Description: Design, construct and operate a streetcar system running approximately 4.7 miles between Pentagon City in Arlington County and Skyline in Fairfax County. For most of the route, streetcars will travel in mixed traffic.

CLRP

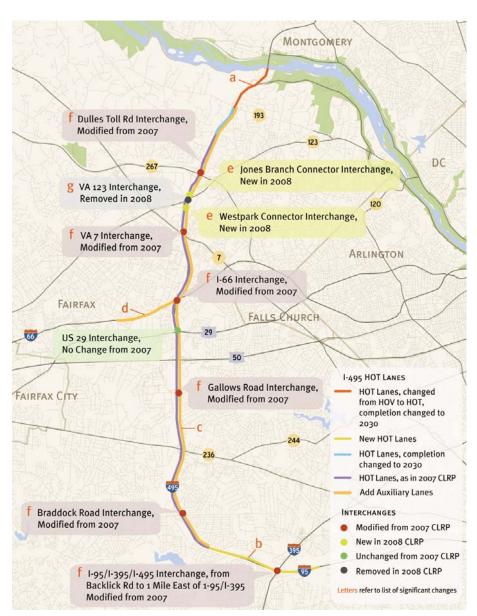
**Fairfax Connector Service Transit** Development Plan, 2010 (not shown on map)



Complete: 2011 Cost: \$91.9 million Funding: Local

**Description:** Increase bus service on priority routes and purchase 35 new Fairfax Connector buses. Expand the West Ox Bus Operations Facility to accommodate new buses and increased service. Also includes bus stop access and safety improvements identified as part of the Bus Stop Inventory and Safety Study.

## **Significant Changes**





#### I-495 Capital Beltway HOV-HOT Lanes, 2013, 2030

Complete: 2013, 2030 Cost: \$1.619 billion

Funding: Federal, state, private, bond

Length: 14 miles

Description: The 14 mile stretch of HOV-HOT Lanes on the Capital Beltway between Backlick Road and Old Dominion Drive is scheduled to be completed in 2013. The following changes have been proposed for the Capital Beltway HOT-HOV Lanes Project:

- a) The northern terminus of the HOT lanes will extend 2 lanes from Georgetown Pike to the American Legion Bridge. These were previously planned as HOV lanes to be completed in 2015 and are now proposed as HOT lanes to be completed in 2030. A 4 lane stretch of HOT lanes from Georgetown Pike (193) to Old Dominion Drive will be completed in 2030 instead of 2013.
- b) The southern terminus of the HOT lanes has been extended to include 2 HOT lanes from the Hemming Avenue underpass to one mile east of the I-95/395/495 Interchange. This segment is scheduled to be completed by 2013.
- c) One additional general purpose auxiliary lane from Georgetown Pike to the Hemming Avenue underpass will be added in each direction to connect the on-ramps and off-ramps between interchanges.
- d) Auxiliary lanes will be added on eastbound and westbound I-66 between the I-495 interchange and Cedar Lane.
- e) Two new interchanges are planned at the westbound Jones Branch Connector and the westbound WestPark Connector.
- f) Planned HOT lane interchanges at the Dulles toll Road, VA 7, I-66, Gallows Road, Braddock Road and I-95/395 will be modified.
- g) A planned HOT lane interchange at VA 123 is being removed from the project scope.



#### I-95/395 HOV-HOT-Bus Lanes Transit Plan revisions, 2010, 2011, 2013 (not shown on map)

**Description:** The Transit Plan for the I-95/395 HOT Lanes project has been revised to reflect the results of the Transit/Transportation Demand Management (TDM) Study conducted by the Virginia Department of Rail and Public Transportation (DRPT) and the Technical Advisory Committee. The following significant changes have been proposed for the Transit Plan:

The Transit/TDM plan's cost and revenue estimates have been revised to reflect the revised transit investment strategy for the corridor.

- Earlier capital investments of \$76 million revised to \$152 million to reflect increased investment into transit facilities
- Earlier operating expenses of \$314 million revised to \$245 million to reflect revised service plan, service duration and fare box recovery

Greater level of improvement/investment into transit facilities.

- 3 new transit stations along the corridor
- Improvements at 4 VRE stations platform extension and overnight storage
- 9 new or enhanced TDM initiatives
- 3,750 park and ride spaces in addition to the 3,000 proposed earlier
- 3 new/improved transit centers instead of 1 bus maintenance facility
- 76 new buses and 6 VRE rail cars instead of 184 new buses

#### WHAT ARE HOT LANES?



HOT (or High Occupancy/Toll) Lanes are HOV lanes that can be used by low-occupancy vehicles for a fee. Usually, the fee is variable and based on the number of people wanting to use the lane. Like HOV lanes, HOT lanes are free for carpools, transit buses and emergency vehicles and run alongside the regular lanes.

HOT lanes were first implemented in the US in 1993. HOT lanes now operate in 4 states: California (California State Route 91 is pictured here), Texas, Colorado and Minnesota.

HOT lanes aim to take cars off the regular lanes by providing new revenue-generating highway options for motorists, as well as expanded public transportation options operating within the HOT lanes.

## WHAT IS IN THE PLAN?

## **Major Highway Improvements**

#### Almost all planned highway construction involves widening or upgrading existing roads, rather than building new facilities.

New lanes will be added to some of the region's busiest commuting arteries, and a few new major highways will provide cross-suburban links in Virginia and Maryland. Funding shortfalls have caused some projects' completion dates to be pushed back since the last update of the plan.

#### **District of Columbia**

- 11th Street Bridge reconstruction, 2013
- South Capitol Str/Bridge Reconstruction, including intersection with Martin Luther King Ir. Blvd, 2015

#### Maryland

- Baltimore Washington Parkway at MD 193, Intersection Improvement, 2025
- Cross-County Connector, widen to 4 lanes, 2009
- Father Hurley Blvd., construct, widen, 4, 6 lanes, 2011
- I-270, interchange at Watkins Mill Rd. Ext., 2020
- I-270, reconstruct interchange at MD 121, 2010
- I-270/US 15 Corridor, Shady Grove to I-70, widen and HOV, 2020
- I-70, widen to 6 lanes, 2020
- I-95, interchange and CD lanes at Contee Road, 2020
- I-95, Woodrow Wilson Bridge, build 12 lane bridge, 2008 (MD), 2009, 2011
- I-95/495, interchange at Arena Drive,
- I-95/495, interchange at Greenbelt
- I-95/495: Branch Avenue Metro Access, construct 8 lanes, 2009
- Intercounty Connector, construct 6 lanes, 2012
- M-83, construct 4, 6 lanes, 2020
- MD 117, widen to 4 lanes, 2020 17
- MD 118 (Germantown Rd.), widen to 6 lanes, 2020
- MD 124 extended, construct 2 lanes, 2011

- MD 124, widen to 6 lanes, 2010, 2015
- MD 201/Kenilworth Ave widen to 6 lanes, 2020
- MD 202, reconstruct 6 lanes, 2020
- MD 210, upgrade 6 lanes and interchange improvement, 2030
- MD 212, construct 4 lanes, 2008
- 25 MD 223, widen to 4 lanes, 2008
- MD 27, widen to 6 lanes, 2010 26
- MD 27, widen, MD-355 to A 305, 2010
- MD 28/MD 198, widen, construct 4, 6 lanes, 2020
- MD 3, widen to 6 lanes, 2020
- MD 355, construct 6 lanes. interchange at Montrose/Randolph Road, 2010
- MD 355/MD 80, Urbana Bypass, construct 4 lanes, 2010
- MD 4, widen to 6 lanes, upgrade with interchanges at Westphalia Road and Suitland Parkway, 2010, 2011, 2020
- MD 450, reconstruct, grade separate at Peace Cross, CSX, 2008
- MD 450, widen to 4 lanes, 2020
- MD 5, upgrade, widen to 6 lanes, including interchanges, 2010, 2030
- MD 85, widen to 4, 6 lanes, 2020
- MD 97, construct 2 lanes, 2020
- MD 97, upgrade intersection at MD 28, 2020
- MD 97, upgrade intersection at Randolph Road, 2015
- Middlebrook Road Extended, widen, construct 6 lanes, 2015
- Montrose Parkway East and West, construct 4 lanes, 2009, 2014
- Randolph Road, widen to 5 lanes, 2010

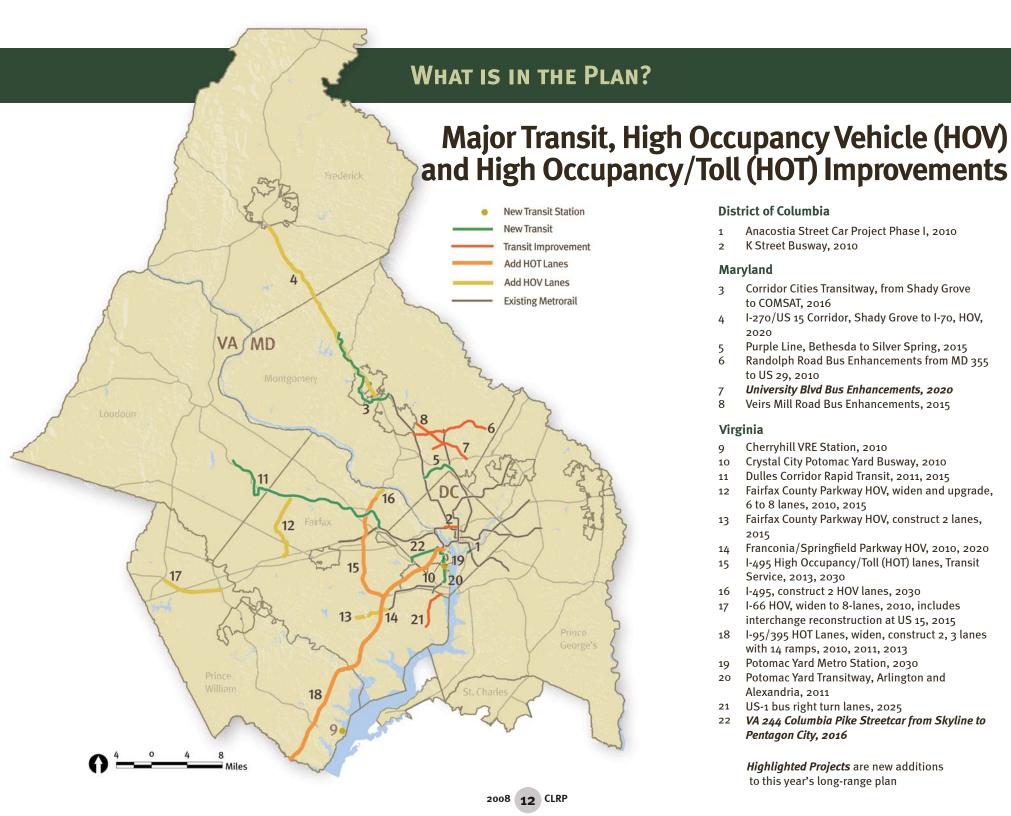
- 43 Suitland Parkway, interchange at Rena/Forestville Road, 2025
- 44 US 1, reconstruct 4 lanes, 2020. widen to 6 lanes, 2010
- US 15, construct interchange at Monocacy Blvd, 2010
- 46 US 29, upgrade, including intersections/interchanges, 2010,
- US 301, widen to 6 + 2 lanes, 2020
- 48 US 340/US 15, construct interchange at Jefferson Tech Park, 2010
- US 50, westbound ramp to Columbia Park Road, 2025

#### Virginia

- Battlefield Parkway, construct, widen, upgrade 4 lanes, 2008, 2010
- Dulles Access Road, widen to 6 lanes including interchange reconstruct at I-495, 2010
- Dulles Toll Road, reconstruct interchange at VA 674, 2012
- Fairfax County Parkway HOV, construct 2 lanes, 2015
- Fairfax County Parkway HOV, widen and upgrade, 6 to 8 lanes, 2010, 2015
- Fort Belvoir EPG access improvements, 2011, 2013
- 56 Franconia/Springfield Parkway, HOV with interchange at Nueman Street, 2010, 2020
- I-495 High Occupancy/Toll (HOT) lanes, Transit Service, 2013, 2030
- I-495, construct 2 HOV lanes, 2015
- I-66 HOV, includes interchange reconstruction at US 15, 2015

- I-66 HOV, widen to 8-lanes, 2010
- I-66, spot improvements inside the Beltway, 2013
- 62 I-66, reconstruct interchange at US 29, 2014
- I-66/I-495, reconstruct interchange,
- I-66, interchange at Gallows Road and Cedar Lane, 2030
- I-95, interchange at VA 7900, 2015
- I-95, reconstruct interchange at VA 642, 2010
- I-95, widen to 8 lanes from Newington to VA 123, 2011
- I-95/395 HOT Lanes, widen, construct 2, 3 lanes with 14 ramps, 2010
- I-95/495, reconstruct interchange at VA 613, 2015
- I-95/I-395/I-495, interchange access ramps to I-495 HOV, 2010
- US 1, reconstruct interchange at Russell Road, 2010
- US 1, widen to 6, 8 lanes including interchange at VA 123, 2009,2011, 2015, 2016, 2017
- US 15, widen to 4 lanes, 2009, 2020 73
- US 15, widen to 4 lanes, 2011
- US 15 Bypass, interchange at 75 Edwards Ferry Road, 2015
- US 29, interchange at VA 55, 2014
- US 29, widen to 5, 6 lanes, 2014, 77
- US 29, widen to 6 lanes, 2010 78
- US 29, widen to 6 lanes, 2009, 2010, 2011
- US 29, widen to 6 lanes, 2015, 2020
- US 29, widen to 6 lanes, 2010





#### **District of Columbia**

- Anacostia Street Car Project Phase I, 2010
- K Street Busway, 2010

#### Maryland

- Corridor Cities Transitway, from Shady Grove to COMSAT, 2016
- I-270/US 15 Corridor, Shady Grove to I-70, HOV, 2020
- Purple Line, Bethesda to Silver Spring, 2015
- Randolph Road Bus Enhancements from MD 355 to US 29, 2010
- University Blvd Bus Enhancements, 2020
- Veirs Mill Road Bus Enhancements, 2015

#### Virginia

- Cherryhill VRE Station, 2010
- Crystal City Potomac Yard Busway, 2010
- Dulles Corridor Rapid Transit, 2011, 2015
- Fairfax County Parkway HOV, widen and upgrade, 6 to 8 lanes, 2010, 2015
- Fairfax County Parkway HOV, construct 2 lanes,
- Franconia/Springfield Parkway HOV, 2010, 2020
- I-495 High Occupancy/Toll (HOT) lanes, Transit Service, 2013, 2030
- 16 I-495, construct 2 HOV lanes, 2030
- I-66 HOV, widen to 8-lanes, 2010, includes interchange reconstruction at US 15, 2015
- 18 I-95/395 HOT Lanes, widen, construct 2, 3 lanes with 14 ramps, 2010, 2011, 2013
- Potomac Yard Metro Station, 2030
- Potomac Yard Transitway, Arlington and Alexandria, 2011
- US-1 bus right turn lanes, 2025
- VA 244 Columbia Pike Streetcar from Skyline to Pentagon City, 2016

Highlighted Projects are new additions to this year's long-range plan

## **Major Studies**

In addition to the facilities funded for construction, the CLRP includes many projects that are listed in the CLRP as "studies." A study can become a CLRP project slated for construction, however they currently do not have financial plans, detailed project scopes, alignments or costs associated with them and they are not included in the CLRP's air quality conformity analysis.

#### **District of Columbia**

- 16th Street Rapid Bus, Military Road to Rhode Island Ave
- Anacostia Street Car Project (Phases II - IV)
- DC Circulator Bus (not mapped)
- Southern Avenue
- Whitehurst Freeway, Roosevelt Bridge

#### Maryland

- I-95/I-495, Capital Beltway, from American Legion Bridge to Woodrow Wilson Bridge
- MD 201 Extended 7
- Purple Line, Silver Spring to New Carrollton
- University of Maryland Connector, I-95/495 to UMD
- US 301 improvements
- US 301 Waldorf Bypass Study

#### Virginia

- Alexandria Bus Lanes (not mapped)
- I-495/I-95 Capital Beltway, HOV and transit service improvements from Woodrow Wilson Bridge to American Legion Bridge
- I-66, HOV and transit service improvements, includes park and ride lots, ramps at US 29 in Arlington
- Light rail from Manassas to Dulles

- Metrorail, Dunn Loring to American Legion Bridge Metrorail, I-95 from Springfield to Potomac Mills People Mover from Fort Belvoir **Engineer Proving Ground to** Franconia/Springfield US 1 transit improvements, including priority bus US 29 improvements I US 29 improvements II US 50, transit service improvements US-29 (Lee Hwy) Bypass around the Manassas
- VA 7, transit service improvements VA 7100, priority bus VA 9 improvements **VRE Extension from Manassas** to Haymarket

National Battlefield Park

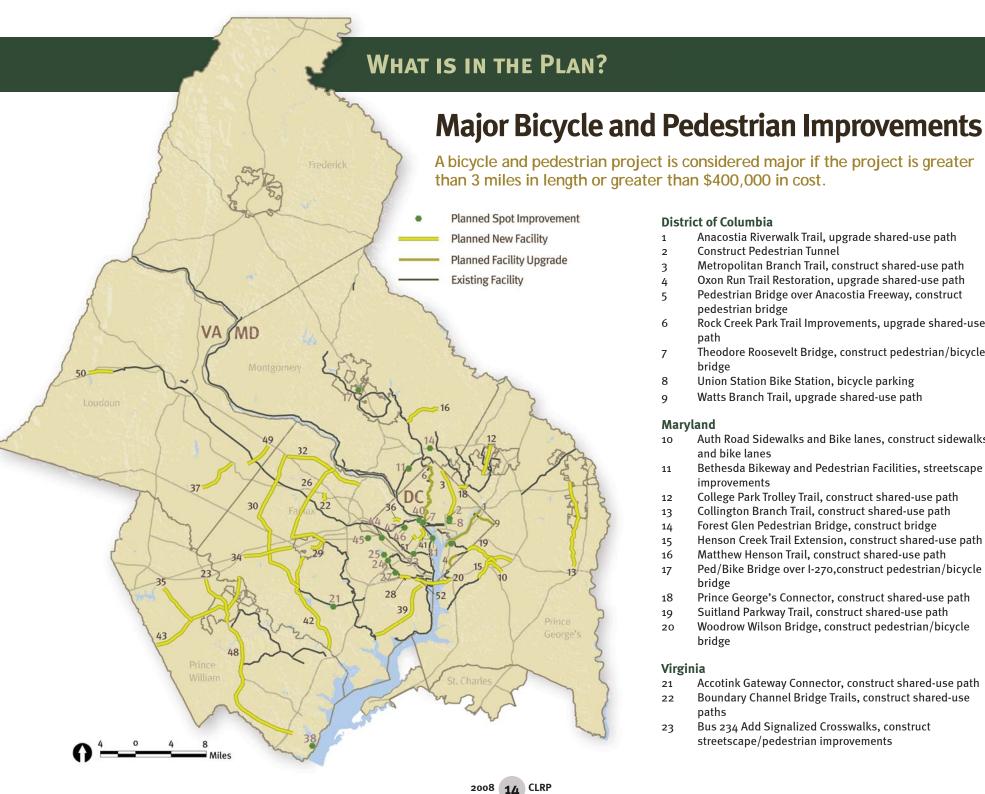
VA 620 (Braddock Road) HOV,

VA 236 priority bus

VA 645 to Beltway

MD

Major Study Other Study



#### **District of Columbia**

- Anacostia Riverwalk Trail, upgrade shared-use path
- Construct Pedestrian Tunnel
- Metropolitan Branch Trail, construct shared-use path 3
- Oxon Run Trail Restoration, upgrade shared-use path
- Pedestrian Bridge over Anacostia Freeway, construct 5 pedestrian bridge
- 6 Rock Creek Park Trail Improvements, upgrade shared-use
- Theodore Roosevelt Bridge, construct pedestrian/bicycle
- 8 Union Station Bike Station, bicycle parking
- 9 Watts Branch Trail, upgrade shared-use path

#### Maryland

- Auth Road Sidewalks and Bike lanes, construct sidewalks and bike lanes
- Bethesda Bikeway and Pedestrian Facilities, streetscape 11
- College Park Trolley Trail, construct shared-use path 12
- Collington Branch Trail, construct shared-use path 13
- Forest Glen Pedestrian Bridge, construct bridge 14
- Henson Creek Trail Extension, construct shared-use path 15
- Matthew Henson Trail, construct shared-use path 16
- 17 Ped/Bike Bridge over I-270, construct pedestrian/bicycle bridge
- 18 Prince George's Connector, construct shared-use path
- 19 Suitland Parkway Trail, construct shared-use path
- Woodrow Wilson Bridge, construct pedestrian/bicycle 20 bridge

#### Virginia

- Accotink Gateway Connector, construct shared-use path
- 22 Boundary Channel Bridge Trails, construct shared-use paths
- Bus 234 Add Signalized Crosswalks, construct 23 streetscape/pedestrian improvements



- 24 Chambliss Stream Crossing, construct pedestrian/bicycle bridge
- 25 Columbia Pike, construct shared-use path
- 26 Cross County Trail, construct shared-use path
- 27 Duke Street Pedestrian Bridge, construct pedestrian/bicycle bridge
- 28 Eisenhower Trail, construct shared-use path
- 29 Fairfax County Parkway Bridge, add crosswalks, crosswalk signals, sidewalk on bridge
- 30 Fairfax County Parkway Train, construct 8-mile shared-use path
- 31 George Washington Parkway Crossing, construct pedestrian/ bicycle bridge
- 32 Georgetown Pike Multi-Use Trail, construct shared-use path
- 33 I-395 Shirlington Underpass, Four Mile Run Trail, construct pedestrian/bicycle bridge
- 34 Lee Highway, construct shared-use path
- 35 Linton Hall Road Widening, construct shared-use path
- 36 Old Dominion Drive, streetscape/pedestrian facilities
- 37 Old Ox Road Widening (Rt. 606), construct shared-use path
- Potomac Avenue, streetscape/pedestrian improvements
- Richmond Highway (US 1) Ped and Bike Improvements, construct pedestrian intersection improvement
- 40 Rosslyn Circle Crossing, streetscape/pedestrian improvements
- Route 110 Trail, construct shared-use path
- Route 123 Widening, construct shared-use path
- 43 Route 28 Trail Extension, construct shared-use path
- 44 US 50 Pedestrian Bridge, construct pedestrian/bicycle bridge
- 45 US 50 Pedestrian Improvements, construct streetscape/ pedestrian improvements
- 46 VA 120 (Glebe Road) at 27th St., install crosswalks, pedestrian signals, refuge areas
- 47 VA 120 (Glebe Road) at N. Randolph St., streetscape/ pedestrian facilities
- 48 VA 234 Bike Trail, construct shared-use path
- 49 VA 846 (Sterling Boulevard) Landscaping, streetscape/ pedestrian improvements
- 50 W&OD Trail Extension, construct shared-use path
- 51 Washington Boulevard Trail Phase II, construct shared-use path
- 52 Woodrow Wilson Bridge, construct pedestrian/bicycle bridgestreetscape/pedestrian improvements

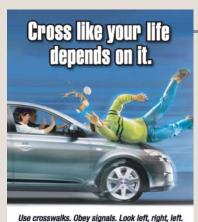


A Bicycle and Pedestrian Plan for the National Capital Region was adopted in 2006 by the National Capital Region Transportation Planning Board (TPB). The plan makes pedestrian safety a priority over vehicle movement, accommodates pedestrians and bicyclists in transportation projects (like the new Wilson Bridge), and connect trails throughout the District of Columbia, Maryland and Virginia.

#### STREET III SMART

The **Street Smart Campaign** is an ongoing public safety program for DC, suburban MD and northern VA aimed at drivers, pedestrians and cyclists. Since its inception in 2002, Street Smart's goal has been to save lives by educating the public about the severity of pedestrian and bicycle safety issues and increasing awareness about pedestrian and bicycle safety laws in the region. The program uses media advertising (radio, print, metro and outdoor transit advertising), with specific messages about crossing streets safely, among others.

The program has already resulted in measured changes in driver and pedestrian behavior. The number of drivers reporting that they had to suddenly swerve to avoid hitting a pedestrian in the previous week declined from 40% to 33% between 2004 and 2008.



2008 Street Smart Poster

**NOTE:** There have been no additions or changes to these projects from the 2007 CLRP to the 2008 CLRP.

#### WHAT IS IN THE PLAN?

## **Selected Project Highlights**

A number of key projects included in the plan have been the subject of special interest to the public over the past few years. Some of these projects are described below.



South Capitol Street/Bridge



- Covers a 7.5-mile corridor. It includes four interchanges and two new drawbridges
- Cost: \$822.5 million
- Completion: 2015



- a) Covers a 3.75-mile corridor from the Bethesda to Silver **Spring Metro Stations**
- Cost: \$371 million
- Completion: 2015
- b) A continuation of 12.25 miles from Silver Spring to New Carrollton is in the plan as a study



- Cover a 14-mile corridor from Rockville to Clarksburg, and will be an LRT or BRT line
- Cost: \$871 million
- Completion: 2016

#### **I-95/395 Hot Lanes**



- Reconfigure the HOV lanes between Eads Street and **Dumfries to include HOT** lanes for 36 miles
- Cost: \$889 million
- Completion: 2010



11th Street Bridges



- Upgrade of the existing 11th Street bridges and ramps, connecting the Anacostia and Southeast Freeways
- Cost: \$475 million
- Completion: 2011



#### **Dulles Corridor Rapid Transit**



- Covers a 23.1 mile extension of the Metrorail system from Fairfax County to Washington **Dulles International Airport**
- Cost: \$5 billion
- Completion: 2011, 2015\*



#### Intercounty Connector (ICC)



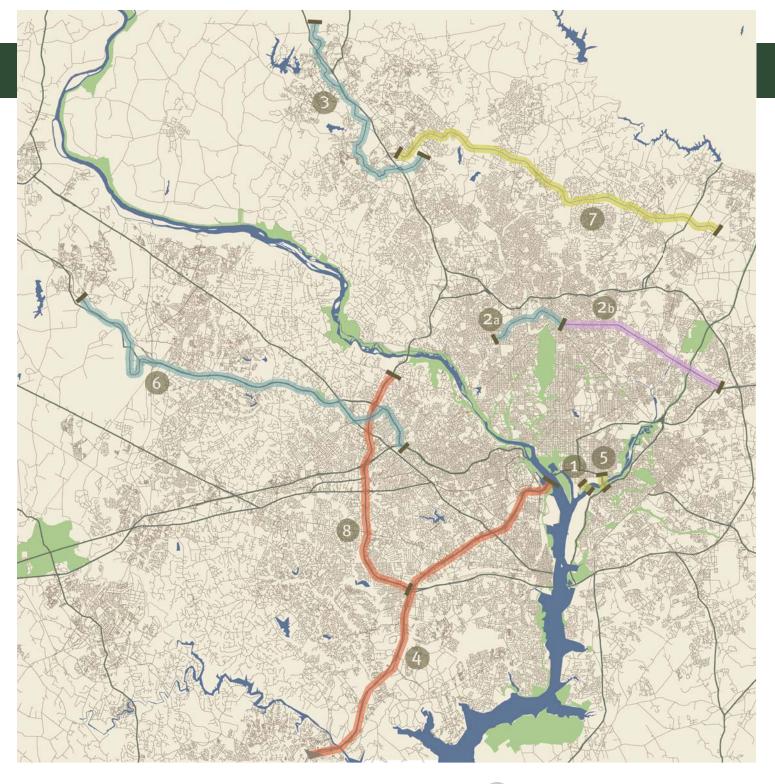
- Construct a new 18-mile eastwest highway in Montgomery and Prince George's counties between I-270 and I-95/US 1
- Cost: \$2.5 billion
- Completion: 2012



#### **Beltway Hot Lanes**



- Widen I-495 to 12 lanes with 4 HOT lanes for 14 miles from VA 193 connecting to 1 95/395 at the Springfield Interchange
- Cost: \$1.6 billion
- Completion: 2013, 2030\*





- South Capitol Street/ Bridge
- 2 Purple Line
- 3 Corridor Cities Transitway
- 4 I-95/395 HOT Lanes
- 5 11th Steet Bridges
- 6 Dulles Corridor Rapid Transit
- 7 Intercounty Connector (ICC)
- 8 Beltway HOT Lanes

## WHAT IS IN THE PLAN?

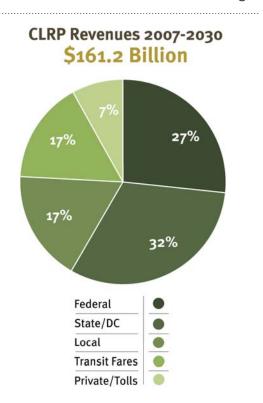


## The Financial Plan

The financial plan for the CLRP demonstrates that the forecast revenues reasonably expected to be available are equal to the estimated costs of expanding and adequately maintaining and operating the highway and transit system in the region through 2030. The comprehensive financial plan for the 2006 CLRP was updated in 2007 to show the forecasts of revenues and expenditures in "year of" expenditure dollars in addition to constant 2006 dollars. The forecasts were prepared by the transportation implementing agencies and jurisdictions, with technical integration and documentation provided by consultants. Documentation on the financial plan is available on the CLRP website at: www.mwcog.org/clrp.

#### **Transit Ridership is Constrained**

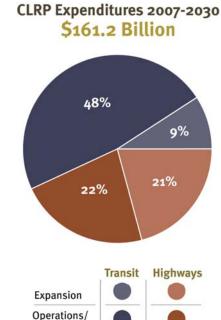
Funding has not yet been identified to accommodate all of the projected WMATA ridership growth through 2030. To address this situation, a method that has been applied since the 2000 CLRP was used to limit the projected ridership to be consistent with the available funding for the capacity improvements.

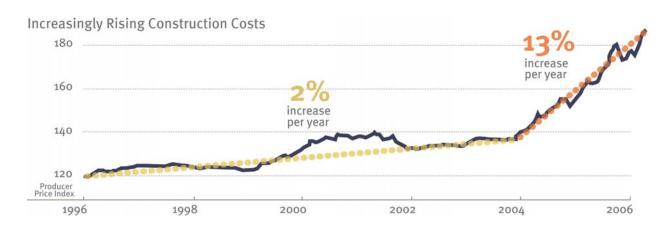


#### **New Funding is Offset by Increasing Costs**

On average, annual funding for transportation in the region has
grown by 18 percent since the 2003 forecast. However, rising
construction costs are eating up those funding increases. Between 2004 and 2006,
costs jumped about 26% (13% per year). In contrast, construction costs rose only 17

construction costs are eating up those funding increases. Between 2004 and 2006, construction costs jumped about 26% (13% per year). In contrast, construction costs rose only 17% over the previous eight years (2% per year).





#### How Does the Plan Perform?

## **Metropolitan Growth**

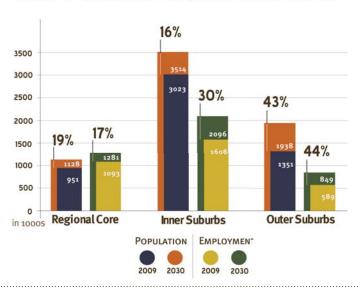
Information on how the region is expected to develop is essential for forecasting transportation conditions and the plan's performance. The Washington region's population and employment are expected to continue growing over the **coming decades.** The region is forecast to grow by more than 1.2 million people and nearly 1 million jobs between 2009 and 2030—a 24 percent increase in population and a 28 percent increase in employment. Forecasts indicate that by 2030, the region will include 6.6 million people and 4.2 million jobs.

#### By 2030, more jobs and households shift away from the Regional Core

While the region as a whole is fast growing, some areas are growing faster than others. The outer suburbs are expected to grow much faster than the regional core, with dramatic increases in population and employment. The result of this growth pattern is that the inner suburbs and regional core are expected to have the highest concentrations of jobs in 2030, while the inner and outer suburbs are expected to have most of the population.

What will these trends mean for the future? While our region grows to accommodate more jobs and more people and as jobs and households become increasingly further apart, greater demands will be placed on the transportation system. However, funding-even for rehabilitation and maintenance—will continue to remain in short supply. The result will be more cars squeezed onto our roads and more people squeezed into our buses and trains.

#### Change in Population and Employment Forecast, 2009-2030





#### Jurisdictions in the MSA (as defined in 1983)

Regional Core: District of Columbia; Arlington County and the City of Alexandria in Virginia

Inner Suburbs: Montgomerv and Prince George's Counties in Maryland; Fairfax County and the Cities of Fairfax and Falls Church in Virginia

Outer Suburbs: Loudoun, Prince William and Stafford Counties in Virginia, Frederick, Calvert and Charles Counties in Maryland

The performance analysis for the 2008 CLRP was conducted for jurisdictions within the Washington, DC Metropolitan Statistical Area (MSA) as defined in 1983 by the US Census Bureau. Population and employment estimates are based on the Revised Round 7.1 Cooperative Land Use Forecast. Travel forecasts were generated by the Travel Demand Model Version 2.2.

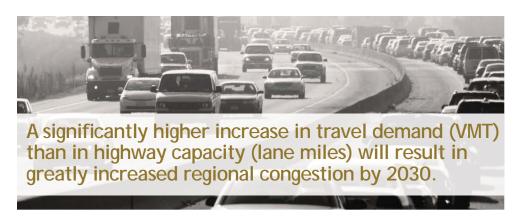
#### **How Does the Plan Perform?**

## **Travel Demand**

Over the next two decades, rising population and jobs will lead to additional vehicles, trips and congestion on the region's transportation system. Vehicle miles of travel (VMT), which is a measure of how much people drive, is increasing faster than new freeway and arterial lane miles slated for construction in the plan.

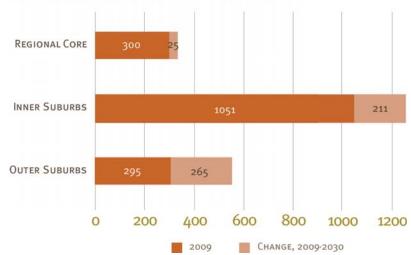
Transit work trips are forecast to increase by 32% as an increasing number of people are expected to use transit to commute to work. This will inevitably create even more crowding on the Metrorail system, since the ability of the transit system to expand its capacity is limited by funding constraints.

The road network will also experience a gap between forecasted demand and additional capacity. Given funding constraints, lane miles are only expected to increase 12%, while VMT is expected to rise 21%, resulting in a 30% rise in lane miles of congestion. Nearly all of this increased congestion will occur in the suburbs, with the Inner Suburbs experiencing the worst congestion in the region. However, it is the Outer Suburbs that will experience the most dramatic increase in congestion, with a 90% increase in lane miles of congestion by 2030.



#### 



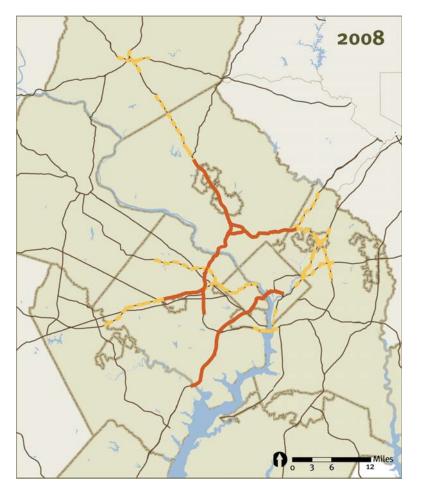




## Congestion

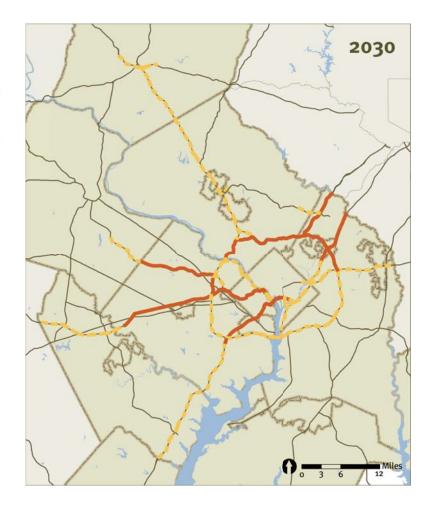
#### **Evening Highway Congestion**

In the coming decades, current forecasts call for more people to be driving and traveling longer distances. By 2030, congested traffic flow is expected to be prevalent throughout the entire region, not just in isolated areas. Significant highway needs remain unfunded, while road usage is expected to increase steadily. In 2030, there are some areas of forecasted improvement, such as the Virginia portion of I-95 south of the beltway, which will benefit from the 36-mile HOT lane project currently in the 2008 CLRP.



Congestion Flow
[average speed 30-50 mph]

Stop and Go Conditions [average speed <30 mph]



#### How Does the Plan Perform?

## **Congestion**

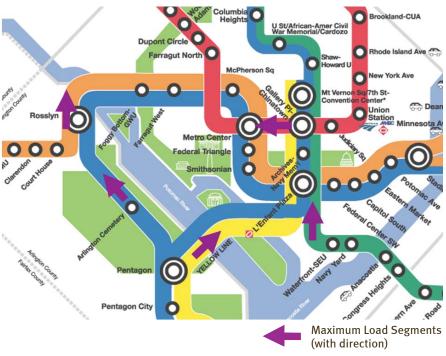
#### **Morning Transit Congestion**

Due to a lack of funding for capacity enhancement projects identified to accommodate all of the projected ridership growth, the Metrorail system will gradually approach capacity on trips "to and through" the regional core. According to a WMATA study, in 2010, 50% of the trains will be running with 8-cars, which will bring relief to peak crowding on all lines; however, without additional railcars beyond what is currently funded, the 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.

WMATA defines line capacity as an average of 120 passengers per car at the maximum load segment in the peak direction during the peak hour; however, passengers on individual trains during the peak of the peak hour may experience crowding beyond 120 passengers per car. To help put things in perspective, a Metrorail car generally provides about 70 seats, and the crush load for a car is around 180 passengers.



#### **Metrorail AM Maximum Load Segments**



Source: WMATA Metrorail Station Access & Capacity Study, April 2008

#### **Metrorail AM Line Capacity at Maximum Load Segments**

Line	2005	2010	2015	2020	2025	2030
Red						
Blue (Rosslyn)						
Orange/Dulles Rail						
Yellow/Blue (14th St Bridge)						
Green						

Congested (<100 people/car)

Highly Congested (100-120 people/car)

Exceeds Capacity (>120 people/car)

Source: WMATA Metrorail Station Access & Capacity Study, April 2008

## **Air Quality: Mobile Source Emissions**

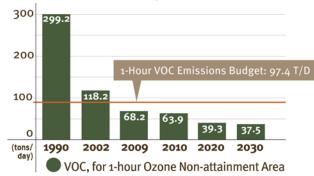
Under the Clean Air Act, the CLRP is required to conform to regional air quality improvement goals. Before the CLRP can be approved, the TPB must approve a "conformity determination" showing that anticipated vehicle emissions will conform to emissions ceilings (called "mobile emissions budgets") contained in the region's air quality improvement plan. The Metropolitan Washington Air Quality Committee (MWAQC) is the body responsible for developing the regional air quality plan, which is done in close coordination with development of the CLRP.

Sometimes called smog, ozone is formed on hot summer days when Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) combine in sunlight. Motor vehicles, as well as power plants and other sources, emit these pollutants. In addition to NOx and VOCs, the plan must track and estimate particulate matter of less than 2.5 micrometers in size (PM2.5). PM2.5 is of special concern because these ultra-fine particles can easily lodge into the lungs and cause health problems. Concern about PM2.5 has developed relatively recently, therefore PM2.5 was not tracked or estimated in 1990.

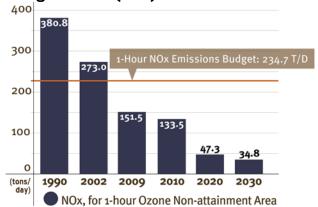
## The long-term trend shows continuing reductions in emissions from mobile sources.

Analysis of the plan shows dramatic reductions between 2002 and 2020 for mobile source emissions, with further reductions thereafter. The data shows that estimated emissions are within the mobile source emissions budget of each pollutant for 2010, 2020, and 2030. Historical emissions reductions from the Clean Air Act Amendments of 1990 have been well documented in the past. Largely, these results reflect the impact of better vehicle standards, fleet turnover, and cleaner fuels.

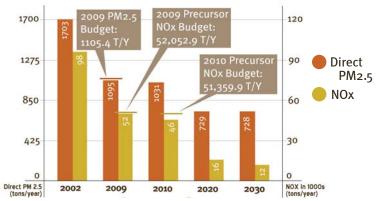
#### **Volatile Organic Compounds (VOC) Emissions**



#### Nitrogen Oxide (NOx) Emissions



#### **Particulate Matter and Precursor NOx Emissions**



#### **How Does the Plan Perform?**

**Job Accessibility** 

Another way to measure the performance of the plan is by accessibility to jobs by auto and transit. The maps show that the average accessibility to jobs by auto is expected to rise slightly between 2009 and 2030, and accessibility by transit is forecast to increase more significantly. However, overall accessibility by transit will still remain less than by auto.

## MAJOR HIGHWAY SYSTEM IMPROVEMENTS 2008 - 2030

Existing Highway Network

Intersection Improvements

Add HOV or HOT Lanes

New Road

New Toll Road

Widen/Improve Existing

#### Change in # of Jobs within 45 Minutes by Auto

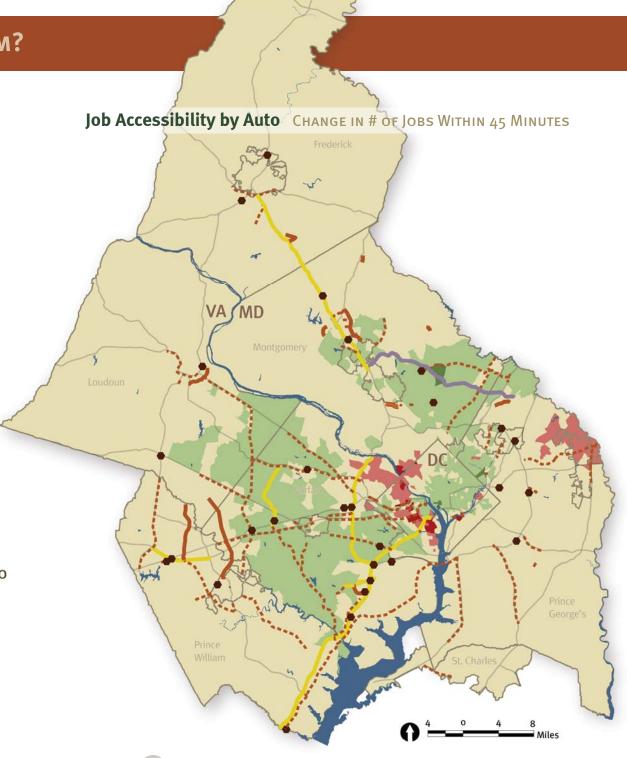
Significant Loss (<-300,000)

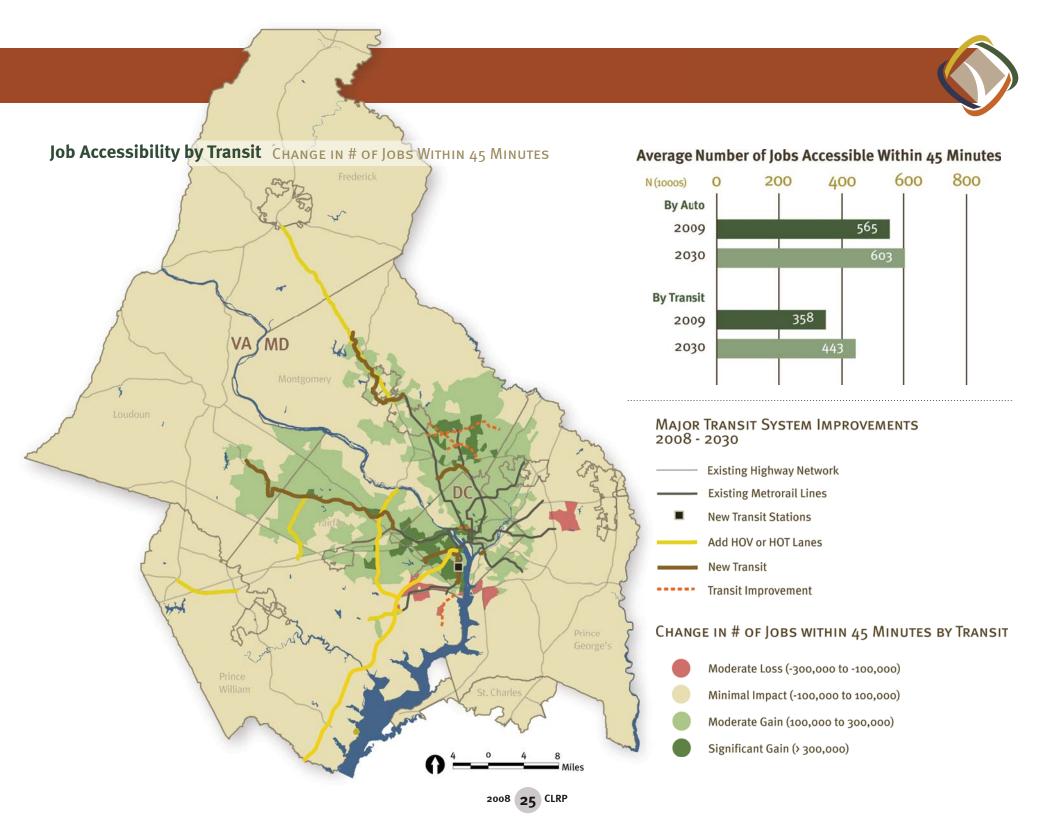
Moderate Loss (-300,000 to -100,000)

Minimal Impact (-100,000 to 100,000)

Moderate Gain (100,000 to 300,000)

Significant Gain (> 300,000)





## How Does the Plan Perform?

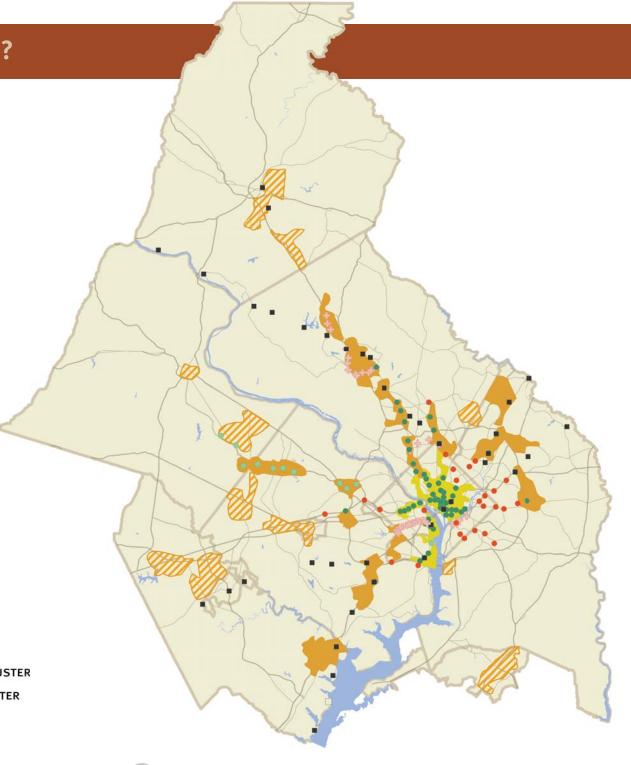
## **Activity Clusters**

The TPB Vision calls for the region to "Give high priority to regional planning and funding for transportation facilities that serve the regional core and regional activity centers, including expanded rail service and transit centers where passengers can switch easily from one transportation mode to another."

The TPB and the Metropolitan Washington Council of Governments Board of Directors worked cooperatively to develop activity center maps published in 2002. Related centers are grouped into clusters.

The activity cluster map shows the location of current and planned Metrorail and light rail stations relative to the activity clusters. An analysis of the plan showed that transit mode share was high in activity clusters, particularly core clusters in the District of Columbia, Alexandria, and Arlington.

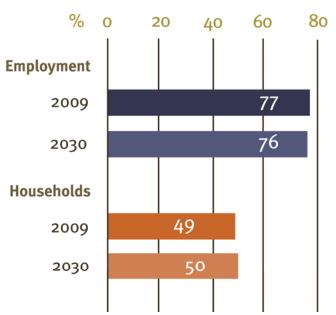
- CORE ACTIVITY CLUSTER
- SUBURBAN ACTIVITY CLUSTER
- ACTIVITY CLUSTER W/O PLANNED RAIL
- CURRENT COMMUTER RAIL STATIONS
- PLANNED COMMUTER RAIL STATIONS
- Current Metrorail Station Outside Activity Cluster
- CURRENT METRORAIL STATION INSIDE ACTIVITY CLUSTER
- PLANNED METRORAIL STATIONS
- PLANNED LIGHT RAIL STATIONS

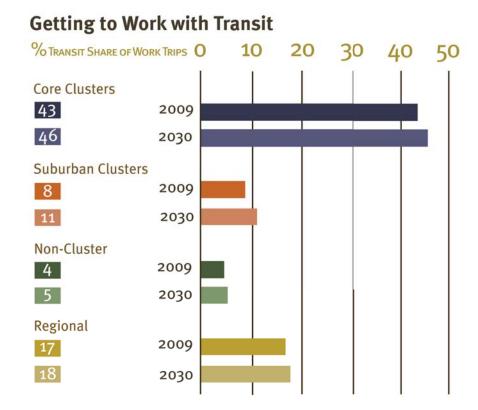




This analysis also showed that activity clusters will have a slightly higher percentage of the region's households in 2030, but will have a slightly lower concentration of jobs. As other trends also show, suburban clusters are projected to grow the fastest. In both 2009 and 2030 around 90% of transit work trips are to jobs in activity clusters and around 70% are to the three core activity clusters.

## Inside the Activity Cluster





Note: Trips based on destinations in core clusters, suburban clusters or non-clusters.

#### How Can You GET Involved?

#### Contact the National Capital Region Transportation Planning Board (TPB).

There are several ways members of the public can get involved in the development of the long-range plan.

Write: National Capital Region Transportation Planning Board

777 North Capitol Street NE

Suite 300

Washington, DC 20002-4239

Call: (202) 962-3262, TDD: (202) 962-3213

Email: TPBPublicComment@mwcog.org

Click: www.mwcog.org/transportation/publiccomment

Speak: Interested citizens may make a statement during the public comment period at the

beginning of each TPB meeting, at 12 noon on the third Wednesday of every month,

except August. To participate, call (202) 962-3315.



#### Contact your state or regional transportation agency.

#### **District of Columbia**

Department of Transportation (202) 673-6813 ddot@dc.gov ddot.dc.gov

#### Maryland

Department of Transportation (410) 865-1142 www.mdot.state.md.us

Maryland Transit Administration MTAInfo@mdot.state.md.us State Highway Administration shaadmin@sha.state.md.us

#### Virginia

Department of Transportation, Northern Virginia District Office (703) 383-VDOT NOVAinfo@virginiadot.org www.virginiadot.org

#### **WMATA**

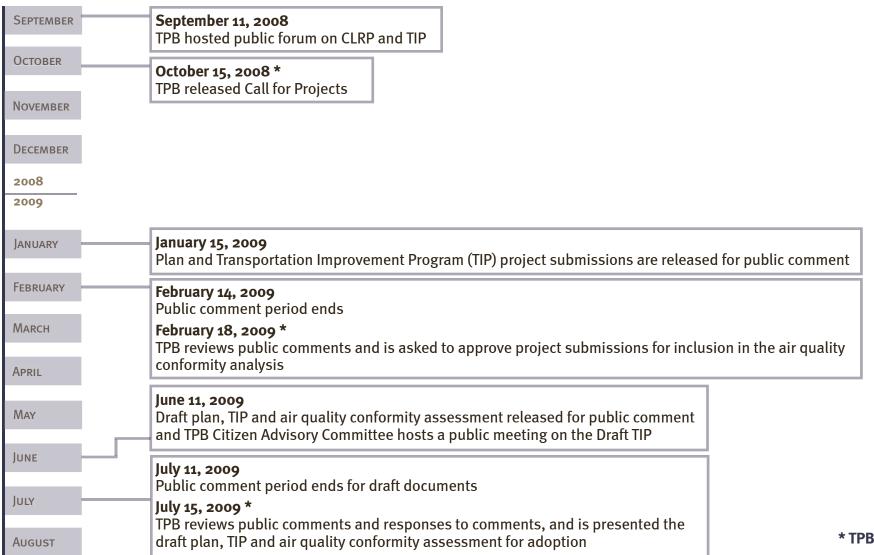
Washington Metropolitan Area Transit Authority (202) 962-1234 csvc@wmata.com www.wmata.com





## Schedule for the 2009 Plan Update

This schedule may be revised. For the latest dates, see www.mwcog.org/transportation.



\* TPB Meeting



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