

Planning for Sustainable Transportation: the Metropolitan Washington Region

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What is the TPB?



- The National Capital Region Transportation Planning Board (TPB)
- Responsible for long-range transportation planning for the TPB planning area
 - Approximately 3500 mi²
 - Over 5 million people and 3 million jobs
- Major industries include professional and business services, education and health services, and federal government

What are the Key Roles of the TPB?

- The TPB is a Federally Designated Metropolitan Planning Organization (MPO)
- The key roles of an MPO include:
 - Federally required planning process
 - Forum for regional coordination among state and local jurisdictions
 - Technical resources for regional decision-making
- The TPB is responsible for coordinating planning and funding for the region's transportation system.
- The TPB is currently developing a plan to identify the top ten to fifteen regional transportation priorities

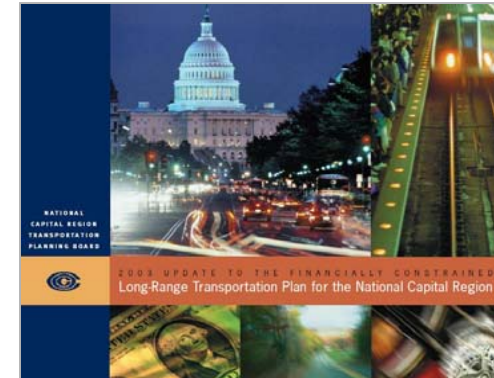
Regional Planning in the Metropolitan Washington Area

- Decision-making is quite decentralized
 - Land-use: Mostly local government
 - Transportation: State/local government, regional transit agency, private entities
- The TPB and its host agency MWCOG provide forums for regional collaboration
- Encourage decision-makers to “think regionally, act locally”
 - Successful examples include regional activity centers and development around Metrorail stations

What is the Constrained Long Range Plan (CLRP)?

Subject to federal regulatory requirements:

- 20-30 year planning horizon
- NOT a wish list
 - Only includes projects for which funding is “reasonably expected to be available”
 - Reflects the region’s priorities
- Projects must be in the CLRP in order to qualify for federal funds
- CLRP must “conform” to regional air quality goals



The TPB Vision: A Policy Framework



VISION STATEMENT

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

Adopted by the National Capital Region Transportation Planning Board on October 21, 1998

Policy Goals, Objectives, and Strategies

Policy Goal 1

The Washington metropolitan region's transportation system will provide reasonable access at reasonable cost to everyone in the region.

Objectives

- 1 | A comprehensive range of choices for users of the region's transportation system.
- 2 | Accurate, up-to-date and understandable transportation system information which is available to everyone in real time, and is user-friendly for first-time visitors and residents, regardless of mode of travel or language of the traveler.
- 3 | Fair and reasonable opportunities for access and mobility for persons with special accessibility needs.
- 4 | Convenient bicycle and pedestrian access.

Strategies

- 1 | Plan, implement, and maintain a truly integrated, multi-modal regional transportation system.
- 2 | Plan and implement a tourist-friendly system that encourages the use of transit and provides international signage and information.
- 3 | Make the region's transportation facilities safer, more accessible, and less intimidating for pedestrians, bicyclists, and persons with special needs.
- 4 | Plan and implement a uniform fare system for transit and commuter rail.
- 5 | Adopt a regional transit planning process and plan, with priority to uniformity, connectivity, equity, cost effectiveness and reasonable fares.

Policy Goal 2

The Washington metropolitan region will develop, implement, and maintain an interconnected transportation system that enhances quality of life and promotes a strong and growing economy throughout the entire region, including a healthy regional core and dynamic regional activity centers with a mix of jobs, housing and services in a walkable environment.

Objectives

- 1 | Economically strong regional core.
- 2 | Economically strong regional activity centers with a mix of jobs, housing, services, and recreation in a walkable environment.
- 3 | A web of multi-modal transportation connections which provide convenient access (including improved mobility with reduced reliance on the automobile) between the regional core and regional activity centers, reinforcing existing transportation connections and creating new connections where appropriate.
- 4 | Improved internal mobility with reduced reliance on the automobile within the regional core and within regional activity centers.
- 5 | Efficient and safe movement of people, goods, and information, with minimal adverse impacts on residents and the environment.

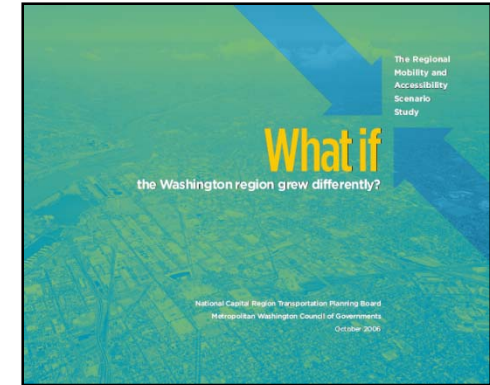
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- Approved in 1998
- Policy framework that guides region's transportation investments
- Goals include:
 - Provide a range of transportation options
 - Reduce auto-dependency
 - Increase transit use
 - Coordinate land use and transportation
 - Maintain the existing system

Transportation and Land Use Planning

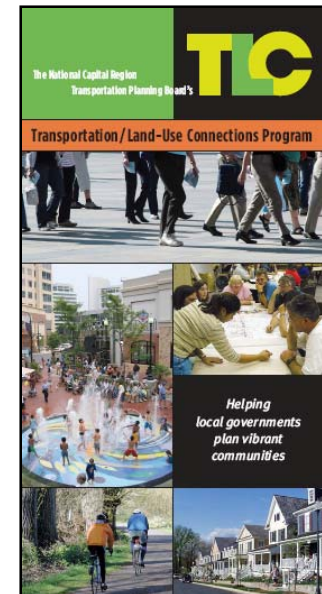
Macro Level: Scenario Planning

Looking at regional transportation, land-use, and climate change scenarios for 2030 and 2040.

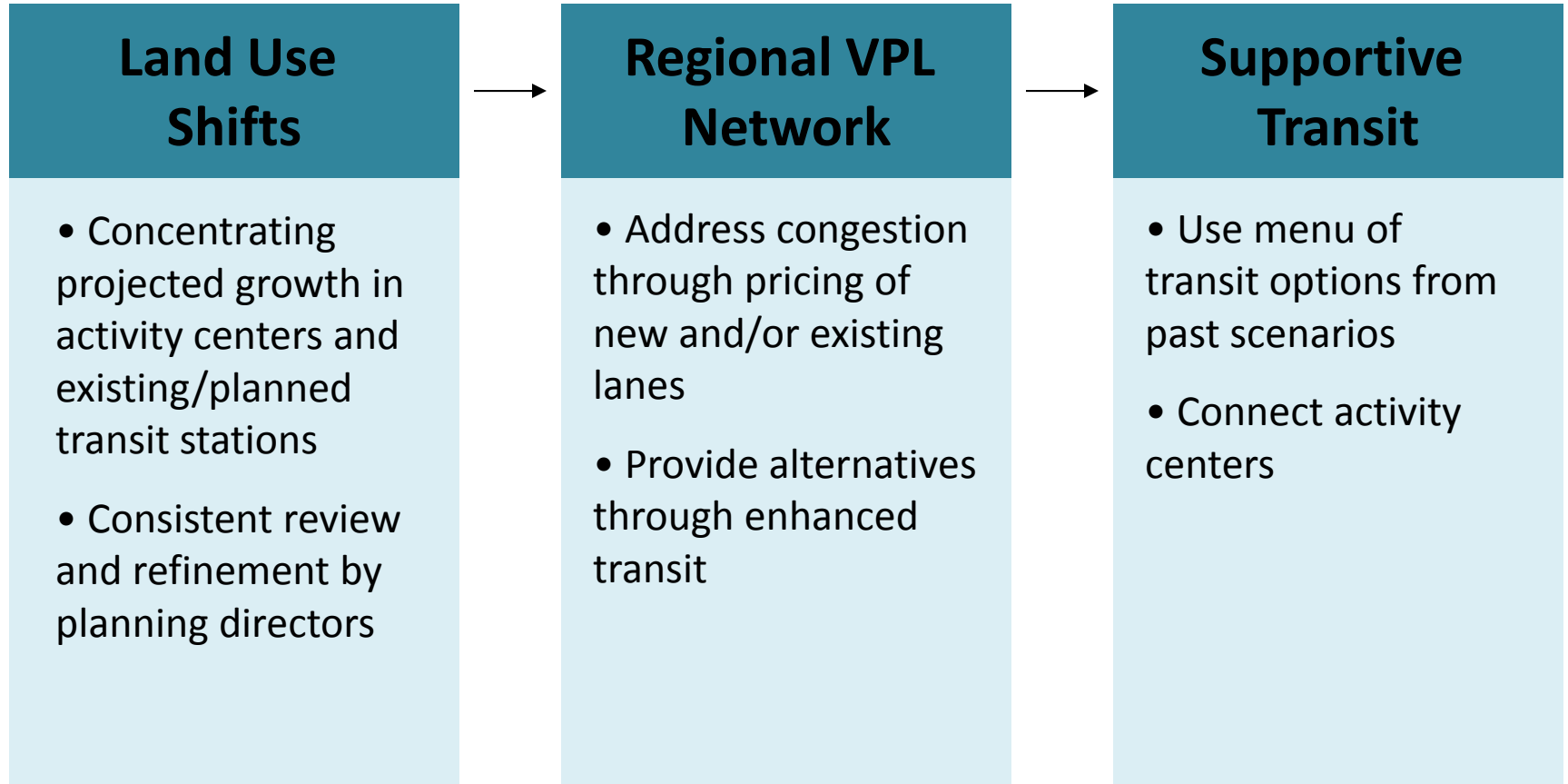


Micro Level: Transportation/Land-Use Connections (TLC) Program

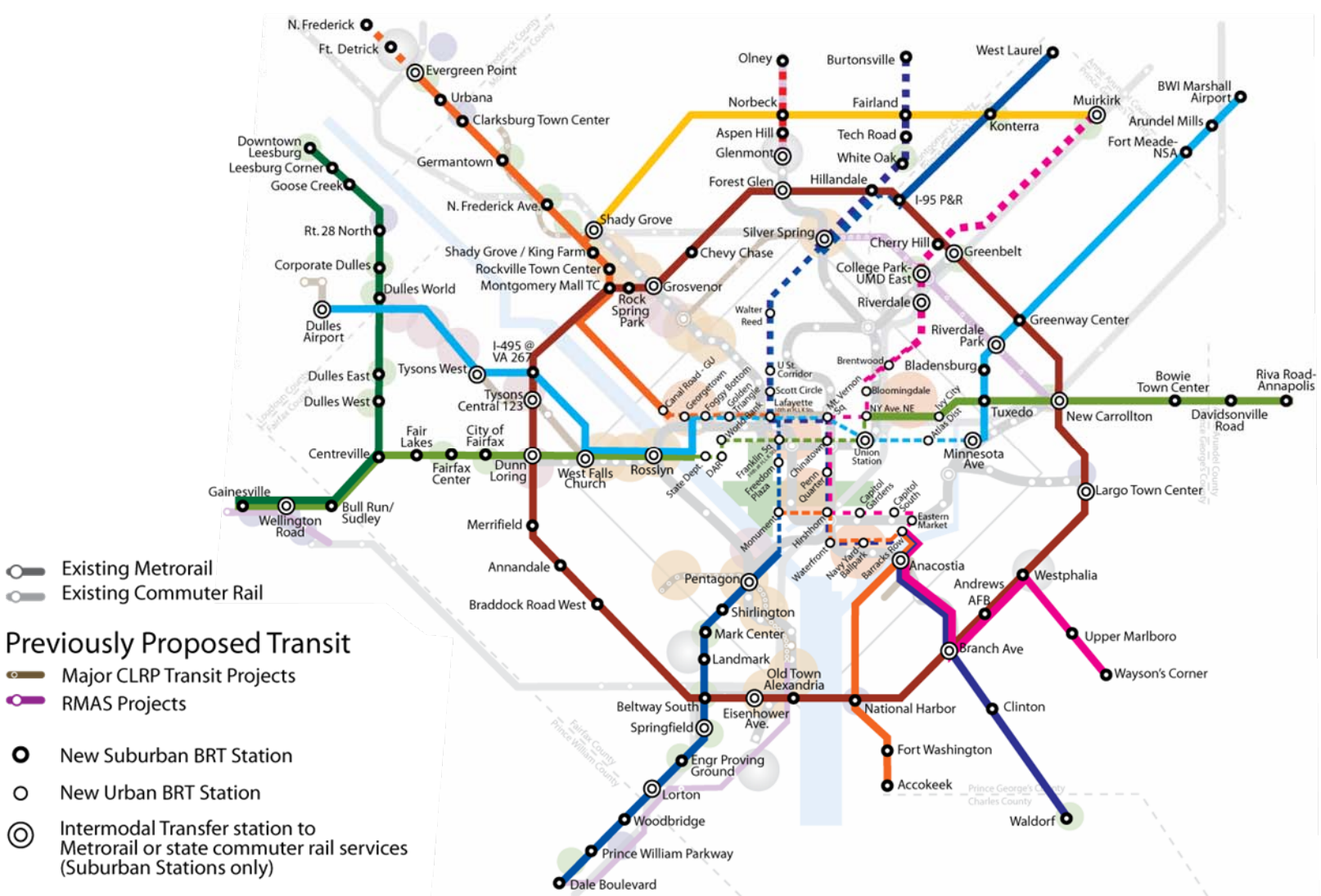
Assist jurisdictions to implement changes at the local level.



Scenario Planning: CLRP Aspirations Scenario



CLRP Aspirations Scenario: Regional BRT Network



Scenario Planning: “What Would it Take?” (WWIT) Scenario

What would it take to meet non-sector specific greenhouse gas (GHG) reduction goals looking at the three major factors that impact GHG emissions from the transportation sector?

1



The composition of the fleet
fuel efficiency, heavy/light duty split

2



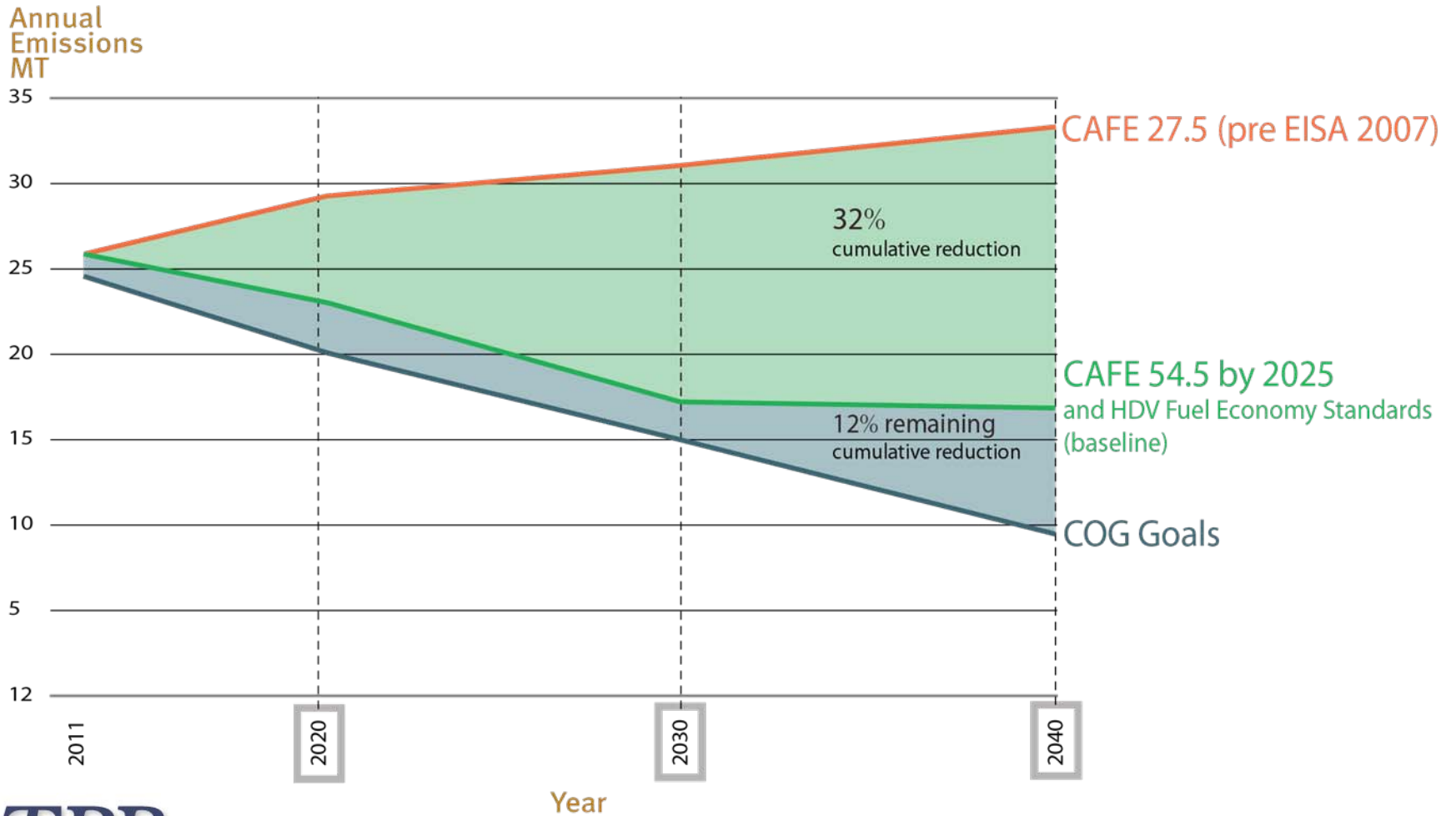
The fuel we put in our fleet
gasoline, diesel, alternative fuels (electricity, ethanol, biofuels)

3



How we use our fleet
trip lengths, purpose, and mode, vehicle occupancy, congestion

WWIT Scenario: Impact of Fuel Economy Standards



WWIT Scenario: Impact of Short-term Regional/State/Local Strategies

Category	Example Strategies	Reduction (% off BAU)
1. Increase transit and bike/ped use	Implement kiosks, feeder buses and circulators, real-time bus information, bus priority, free transfers, bike stations, improved bike/ped access to transit, bike sharing	-0.3%
2. Pricing	Implement parking impact fees, pay-as-you drive insurance, parking cash-out subsidies	-1.5%
3. Improve operational efficiency	Promote eco-driving (public education campaign), incident management, traffic signal optimization, idling reduction	-1.8%
4. Reduce travel	Expand telecommuting, carpooling and vanpooling, car-sharing	-0.3%
	TOTAL	-3.9%

WWIT Scenario: Impact of Long-term Regional/State/Local Strategies

Category	Example Strategies	Reduction (% off BAU)
1. Increase transit use	Major transit expansion, such as the Dulles Rail line, and park and ride lots at rail stations	-0.15%
2. Increase bike/ped use	Accelerated completion of the TPB Bicycle and Pedestrian Plan	-0.3%
3. Pricing	Variable pricing of new and existing freeway and select arterial lanes	-0.25%
4. Reduce travel	Land use strategy encouraging concentrated growth in activity centers and around transit	-0.15%
	TOTAL	-0.85%

Air Quality Conformity and Transportation

Changes from 2011 CLRP to 2012 CLRP for Forecast Year 2020

Land Activity and Travel			Emissions based on 2011 Vehicle Fleet			Emissions based on 2008 Vehicle Fleet		
Households	-0.5%	↓	VOC	+12.8%	↑	VOC	-.56%	↓
Employment	-0.4%	↓	NO _x	+15.7%	↑	NO _x	-1.05%	↓
Transit Trips	+3.0%	↑	PM _{2.5}	+1.5%	↑	PM _{2.5}	-1.04%	↓
Vehicle Trips	-0.8%	↓	Pre NO _x	+15.6%	↑	Pre NO _x	-1.12%	↓
VMT	-2.3%	↓						

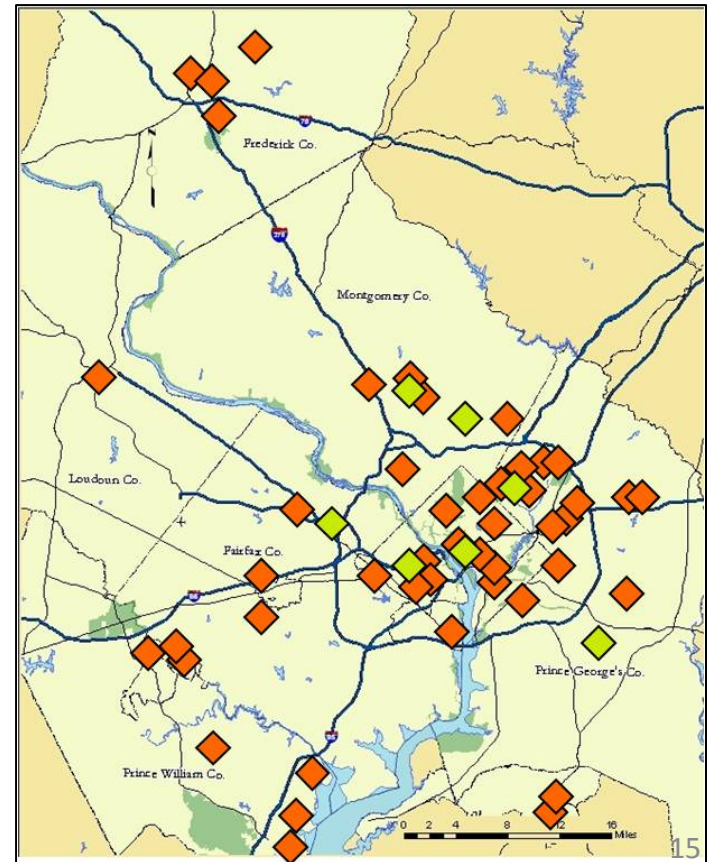
The Transportation/Land-use Connections (TLC) Program

Regional Clearinghouse (www.mwcog.org/tlc)

- Web-based source of information about local and national transportation and land-use coordination

Technical Assistance Program

- Focused consultant assistance available to local jurisdictions working on innovative, plans and projects integrating transportation and land-use
- The TLC Program has funded 56 projects at \$1.7 million



TLC Project Recommendations

- Converting an auto-oriented corridor into a multimodal, pedestrian friendly environment in Falls Church, Virginia.
- Complete streets improvements around the Prince George's Plaza Metrorail Station in Maryland.
- Pedestrian safety and access improvements around Farragut Square in the District of Columbia.

TPB Support for Sustainable Transportation

- Commuter Connections program
- TPB Regional Bicycle and Pedestrian Plan
- Complete Streets Policy (adopted May 2012)
- Seek federal discretionary grants for bus priority projects, bike-sharing, and rails station access projects
- Greenhouse gas reduction strategies

Trans-Atlantic Learning Opportunities

Comparison of approaches to:

- Institutional collaboration between different levels of government
- Involvement of stakeholders from both the public and private sectors
- Adoption of national vehicle emissions and fuel economy standards