

Progress Report: Regional Value Pricing Study

TPB Task Force on Value Pricing for Transportation

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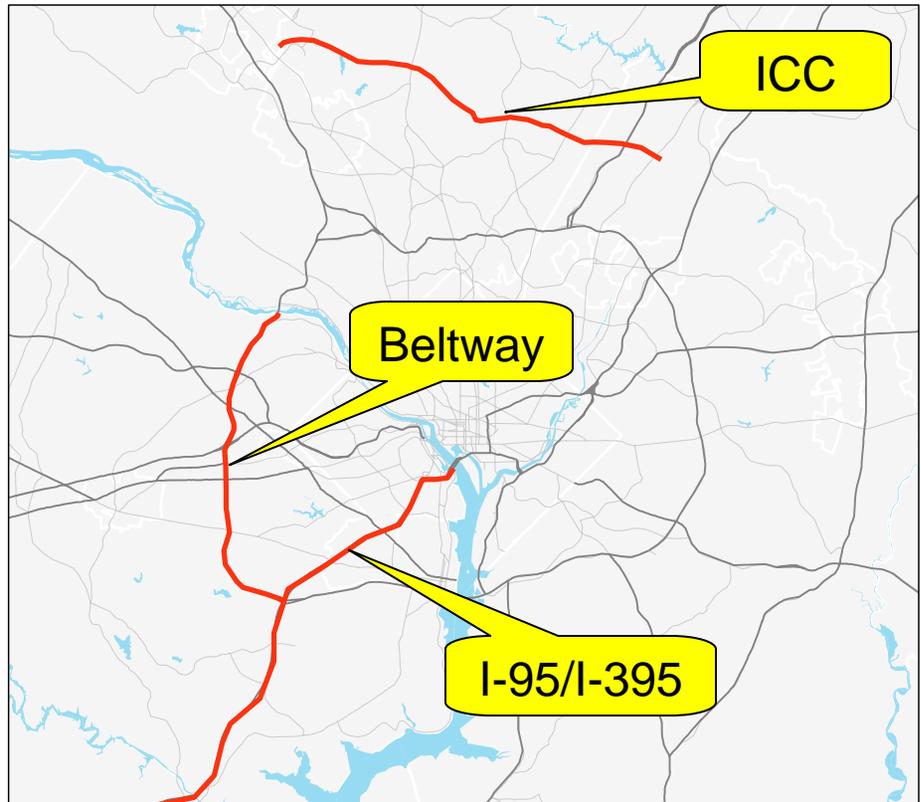
TPB Value Pricing Task Force

- Created Fall 2003 following June 2003 Regional Conference
- Examine the benefits of value pricing for the Washington region
- Goals approved by TPB, April 2005
- Study a regional system of variably priced lanes (VPLs)



Current Value Pricing Projects

- Intercounty Connector (ICC)
 - 2004 CLRP Update*
- Beltway HOT
 - 2005 CLRP Update*
- I-95/I-395
 - Under development
- Regional Network
 - Regional Mobility and Accessibility Study



* Federal Record of Decision approved

TPB Value Pricing Analyses to Date

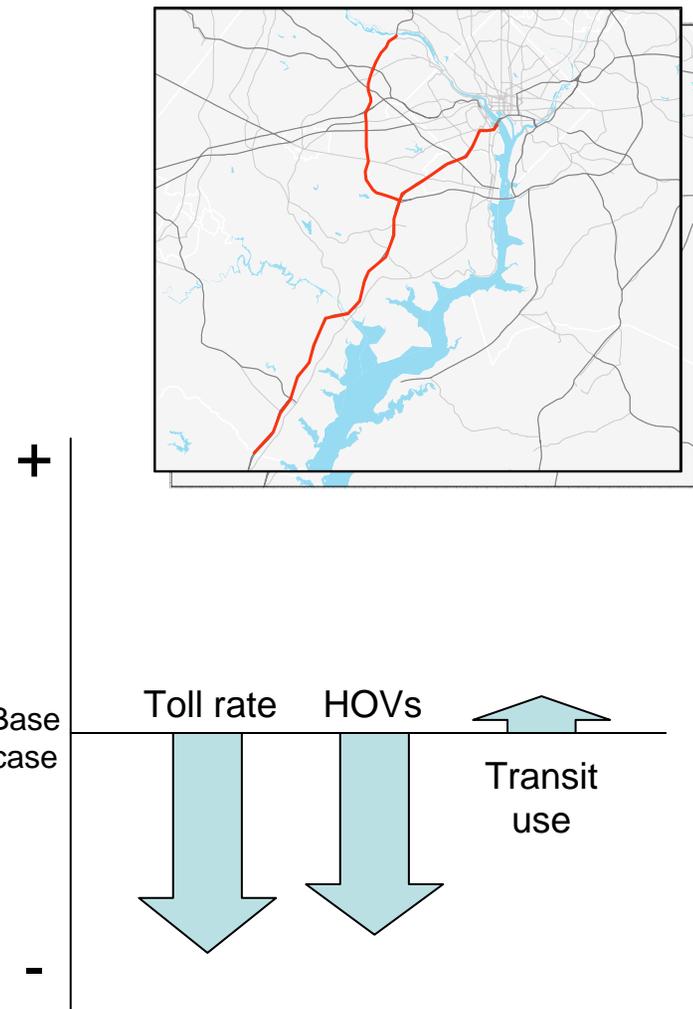
- Assisting Virginia DOT in analyzing key corridors
 - Beltway
 - I-95/I-395
- Sensitivity Analysis of Enhanced Transit on the Beltway and I-95/I-395 HOT Lanes for 2010
- Starting Point “Scenario A” developed and analyzed under Regional Mobility and Accessibility Study (RMAS).



Sensitivity Analysis: Impacts of Enhanced Transit

Transit service levels increased on Beltway and I-95/395 HOT Lane transit routes for 2010:

- Decrease in toll rates and HOV use
- Increase in transit use
- Slight increase in VMT
- Total revenue essentially unchanged
- Slight increase in speeds on mixed use lanes



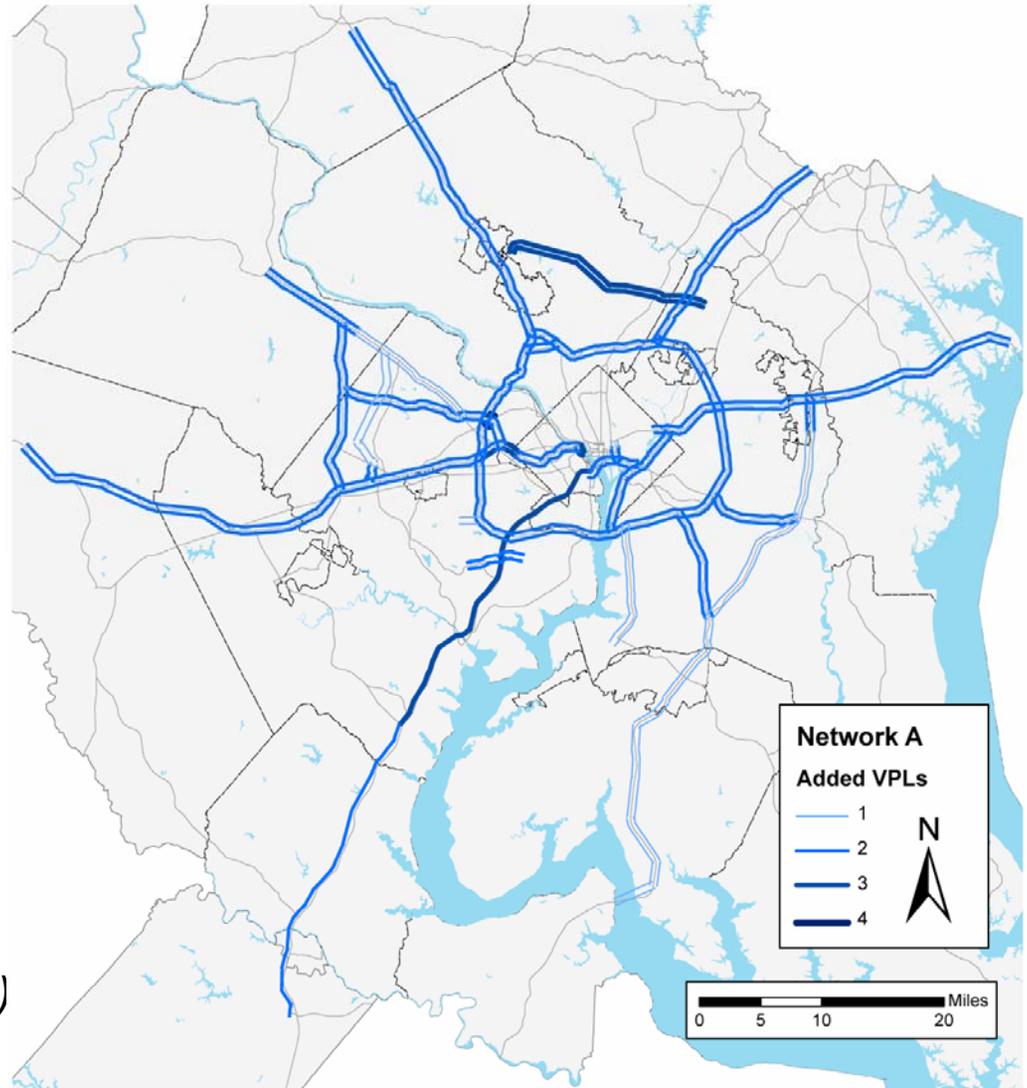
Scenario A

In addition to the ICC, Beltway and I-95/395 as described previously:

- All Freeways:
 - Add 2 VPLs
- Arterials outside of beltway:
 - Add 1 VPL
- Existing HOV lanes:
 - Convert to VPLs
- Direct access ramps at key interchanges
- Incorporate existing transit service

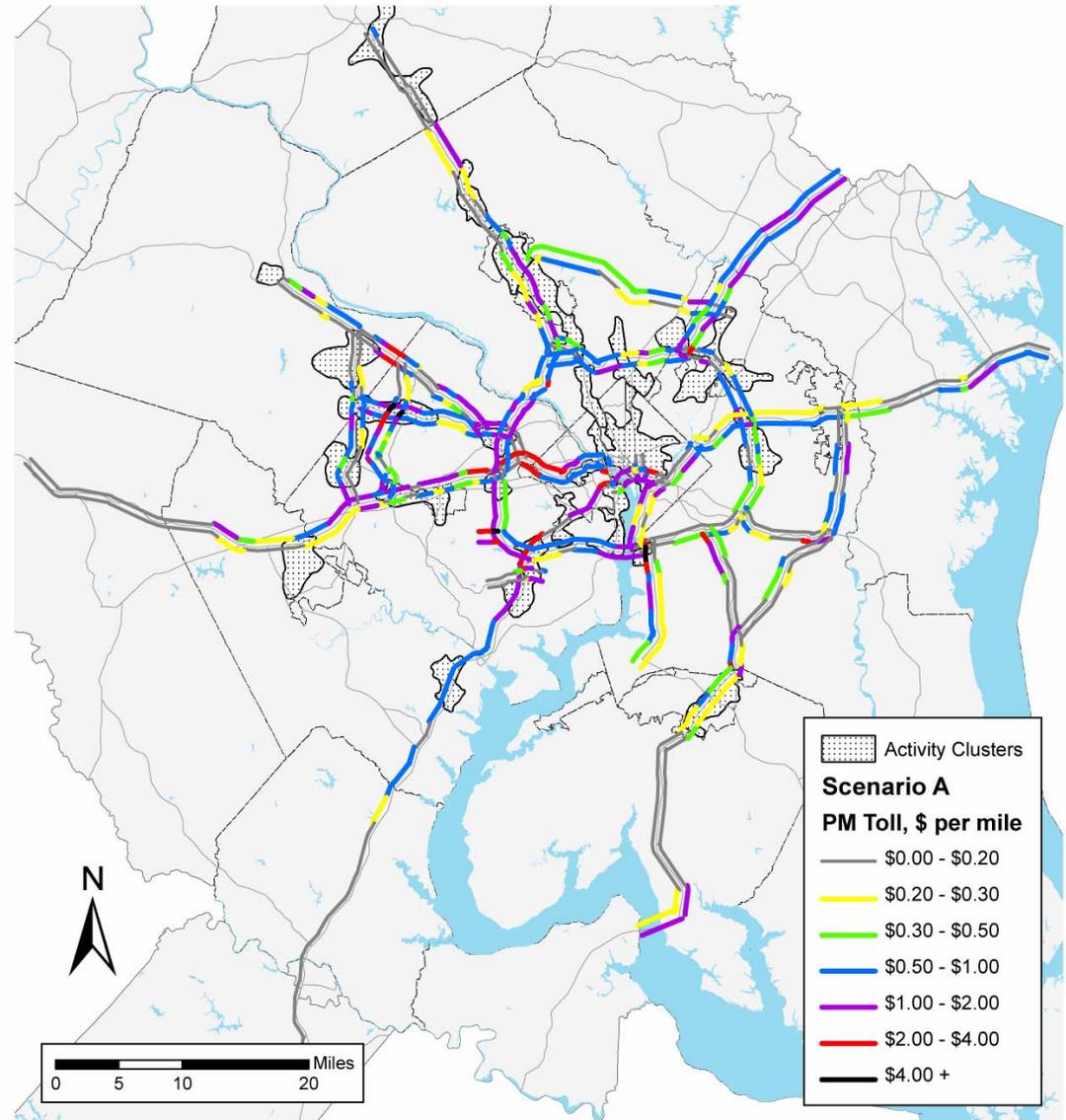
Variably Priced Lanes (VPLs):

- VA: HOT lanes, HOV 3+ free
- DC, MD: Express Toll Lanes (ETL) all pay



Scenario A: Resulting Tolls

- To ensure free flow, toll rates vary significantly by segment, direction and time of day
- Tolls in 2010 dollars



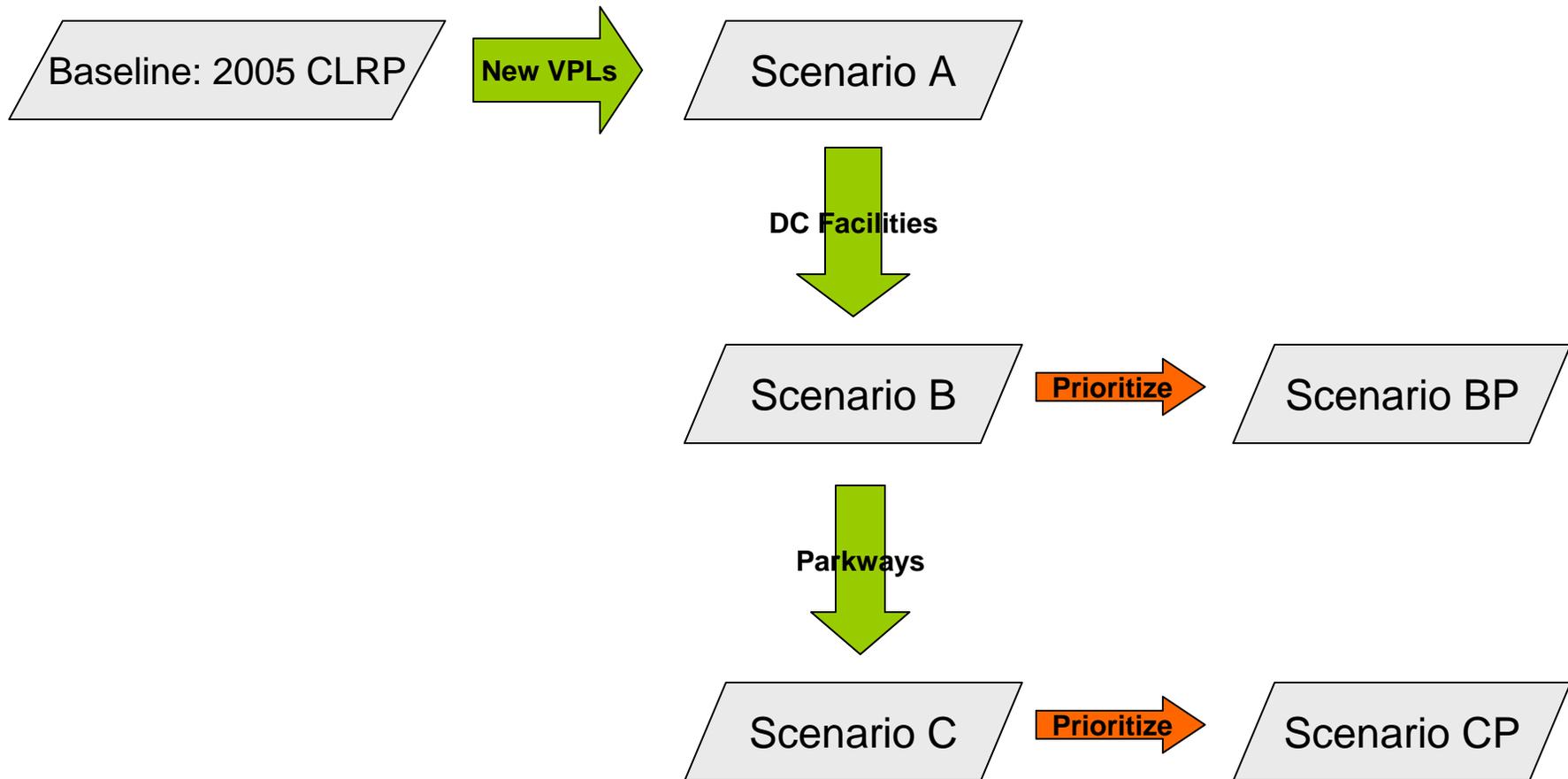
New Grant Under FHWA Value Pricing Pilot Program

- Cooperative Agreement Approved Sept 2006
- \$300,000 Total Budget Over One Year
- Anticipated Completion Date: Sept 30, 2007
- Allows scenario developed under RMAS to be evaluated in greater detail, and includes additional corridors, such as parkways

Regional Value Pricing Study (FHWA Value Pricing Pilot Program Grant)

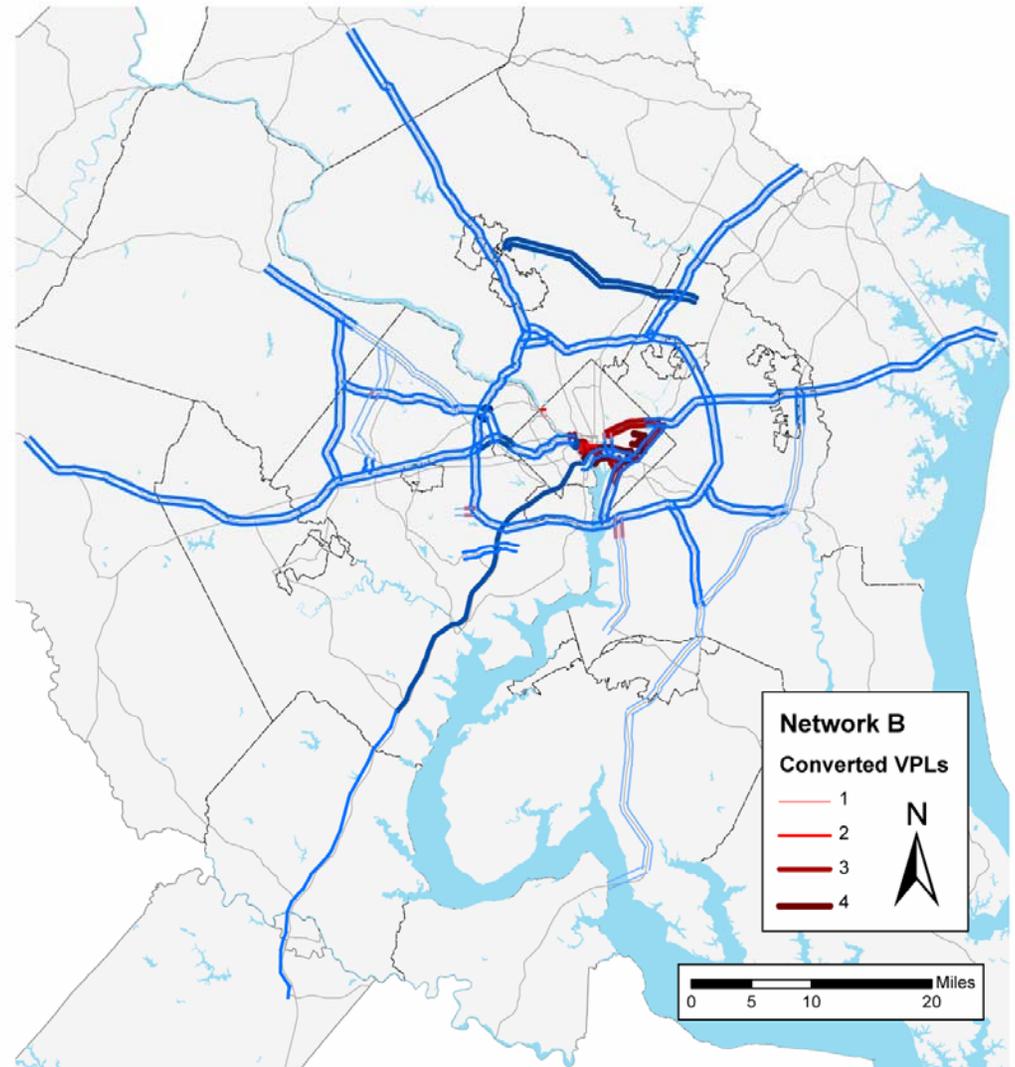
Task	2006			2007								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Task 1: Examine high potential corridors for variably priced lanes. <i>Estimated Cost: \$100,000</i>	■											
Task 2: Identify potential toll revenues, costs, transit viability and land use activity changes for specific high potential corridors. <i>Estimated Cost: \$100,000</i>			■									
Task 3: Analyze high potential corridors as a Phase 1 regional network. <i>Estimated Cost: \$50,000</i>						■						
Task 4: Identify how potential impacts on low-income and minority populations could be identified. <i>Estimated Cost: \$40,000</i>							■					
Task 5: Develop a study report with major findings. <i>Estimated Cost: \$10,000</i>									■			
Update and Gather Input from the Value Pricing Task Force	■											
Brief the Joint Technical Working Group	■											
<i>Estimated Total Cost: \$300,000</i> <i>Federal: \$240,000 State/Local: \$60,000</i>												

Task 1: Create Network of High Potential Corridors



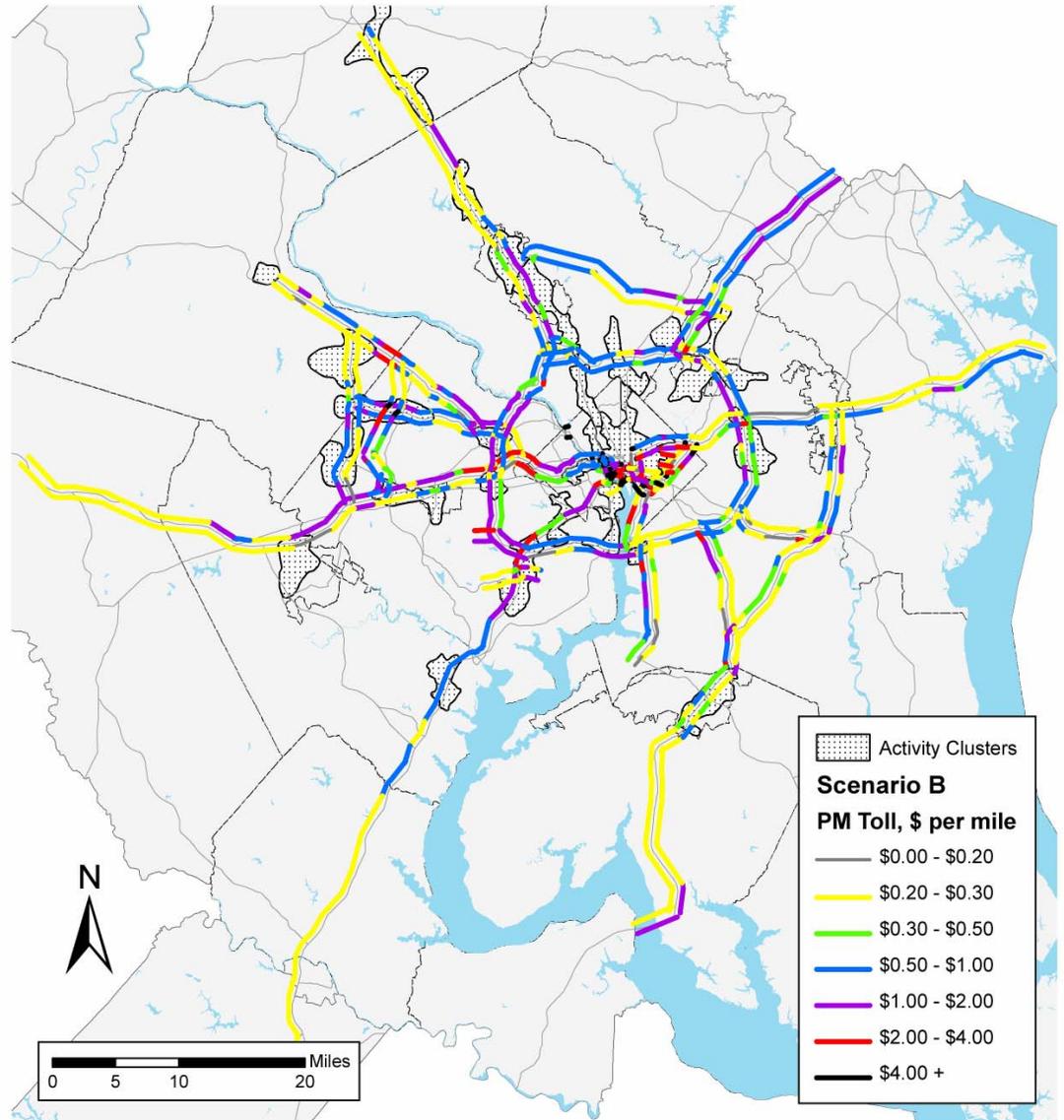
Scenario B: Add Variable Pricing to Existing DC Bridges and Other Facilities

- **DC Bridges (Existing Capacity)**
 - Chain Bridge
 - Key Bridge
 - Memorial Bridge
 - South Capitol Street (Frederick Douglas) Bridge
 - Pennsylvania Avenue (John Phillip Sousa) Bridge
 - East Capitol Street (Whitney Young Memorial) Bridge
 - Benning Road Bridge
- **Other DC Facilities (Existing Capacity)**
 - New York Avenue from the District line to I-395 at 4th St NW
 - Independence Ave SW and Maine Ave SW between the Memorial Bridge and the Southeast/Southwest Freeway
 - Remove added capacity on Southeast/Southwest Freeway and I-295 and toll all existing lanes.
- **Additional VPLs to Address Scenario A Chokepoints**
 - Fairfax County Parkway northbound and southbound at the Dulles Toll Road (VA-267)
 - Braddock Road westbound at the Capital Beltway (I-495)
 - Indian Head Highway (MD-210) southbound at the Capital Beltway (I-495)



Scenario B: Resulting Tolls

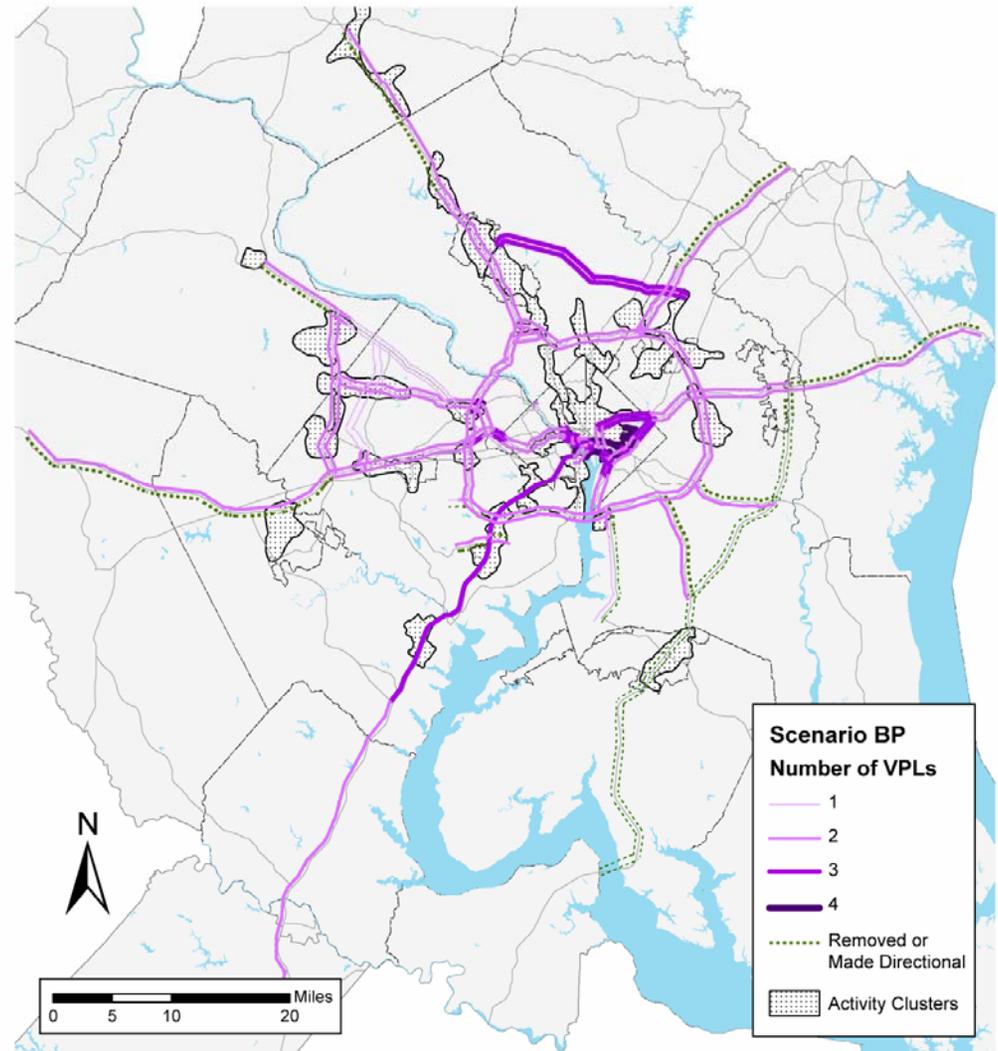
- Compared to Scenario A:
 - High toll rates on DC Bridges (mostly between \$4 and \$7 per mile; between \$0.50 and \$2.50 per one-way crossing)
 - System-wide toll revenue increases by 50%
 - Small reduction in system-wide VMT (<1%)
 - HOV use increases by 6%
 - Transit trips increase by 2%



Scenario BP: Prioritizing from B

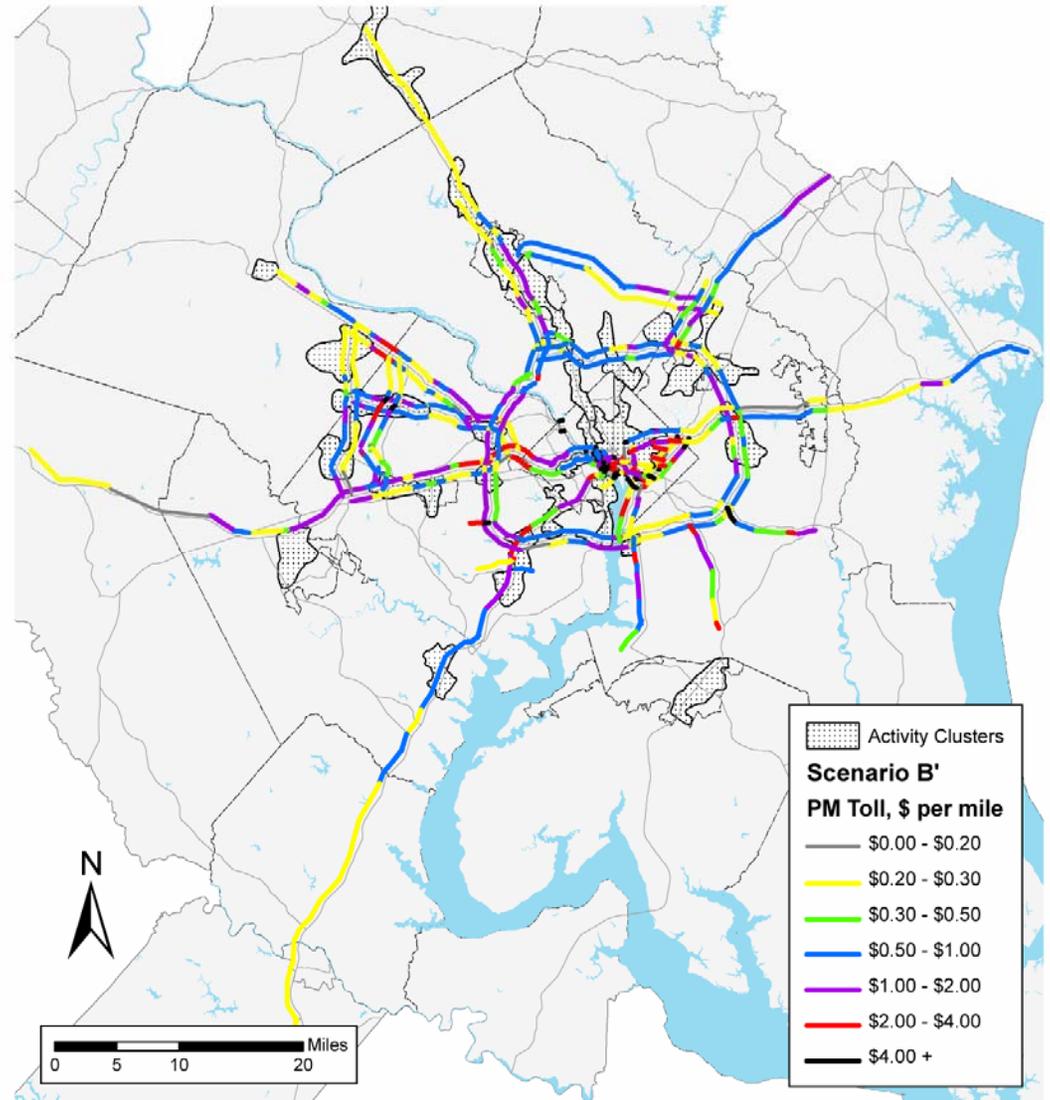
-Drop facilities/directions with low toll rates

- 2030 Scenario B network pared back where demand is low, as indicated by low toll rates:
 - Segments that have high toll rates in the peak direction only are changed to directional toll lanes
 - Segments with low toll rates in both directions are removed from the network



Scenario BP: Resulting Tolls

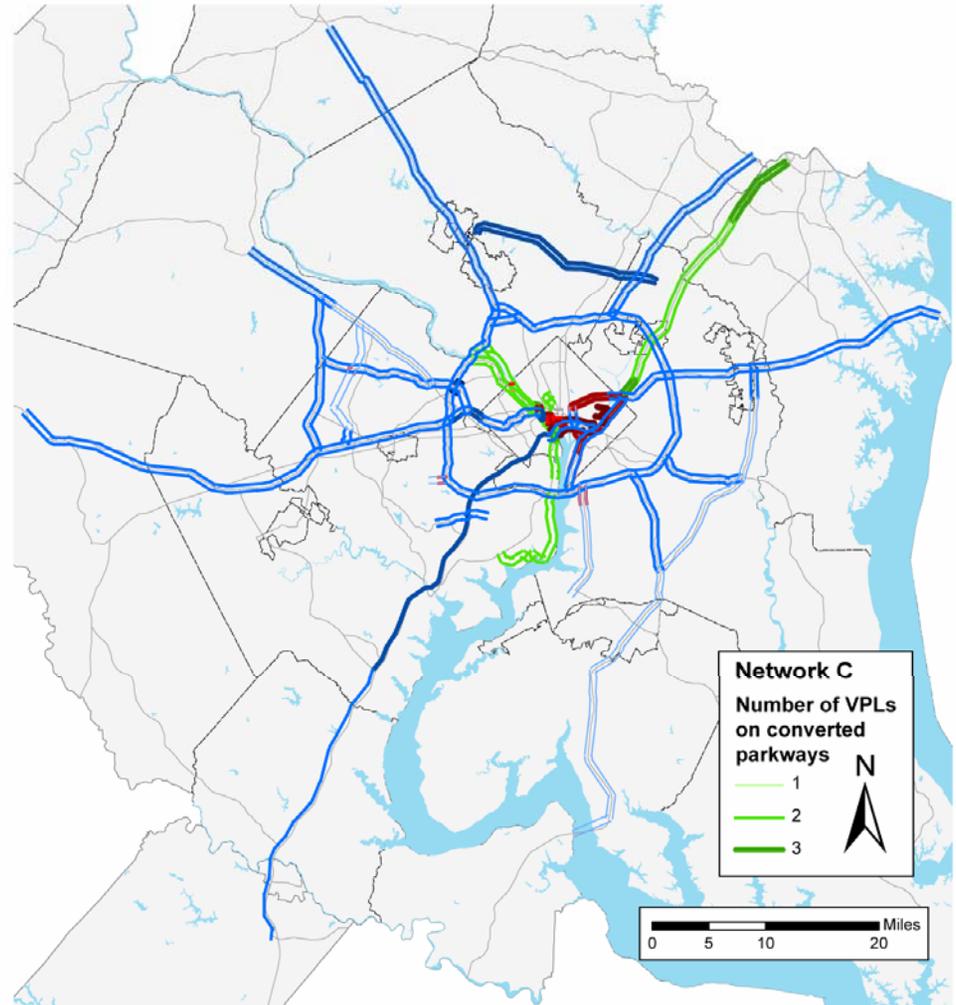
- Compared to Scenario B:
 - System-wide toll revenue decreases by 6%
 - Small reduction in system-wide VMT (<1%)
 - HOV use decreases by 2%
 - Transit trips unchanged



Scenario C: Add Parkways to Scenario B

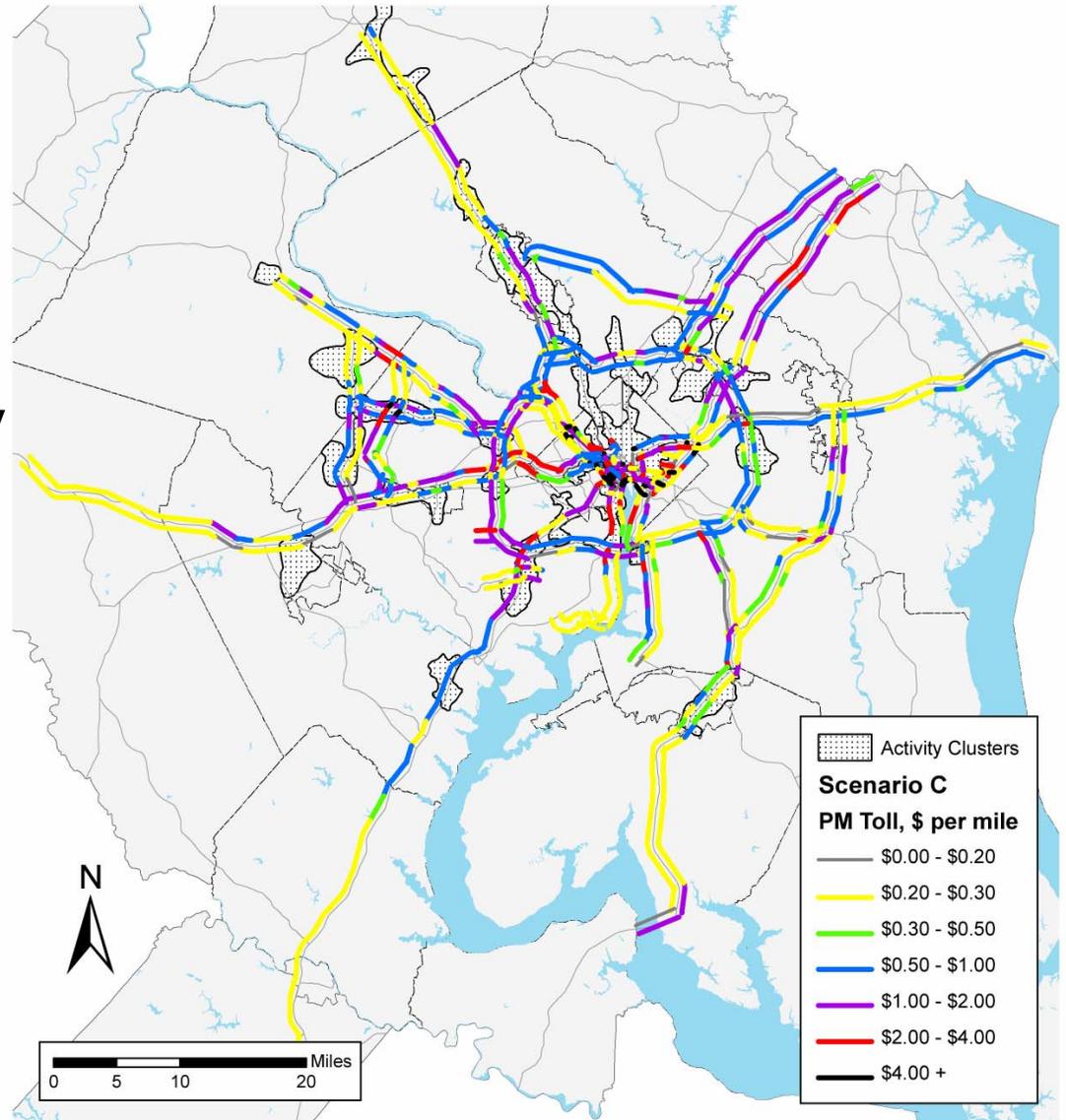
-Tolls applied to existing capacity

- Baltimore Washington Parkway (MD-295)
- George Washington Parkway
- Rock Creek and Potomac Parkway
- Clara Barton Parkway



Scenario C: Resulting Tolls

- Compared to Scenario B:
 - System-wide toll revenue increases by 30%
 - Small reduction in system-wide VMT (<1%)
 - HOV use decreases by 5%
 - Small increase in transit trips (1%)



Update: The 2006 CLRP

- Current analyses have been based upon the 2005 CLRP
- Capacity-increasing projects have been added to the CLRP in 2006 for two Anacostia Bridges
- Analysis will be rerun to include these projects
- Will provide opportunity to determine impact of capacity increases on toll rates



Next Steps

Task 2

- Transit Sensitivity Tests
 - How does adding enhanced transit to the toll lanes affect the network?
- Land Use Changes
 - Which areas might experience changes in land use due to increased accessibility?
- Phasing Plan
 - Which corridors could be included by 2020? 2010?

Task 3

- Network of High Potential Corridors: Financial Analysis and Feasibility

Task 4

- Equity Analysis
 - What will be the impacts on low-income and minority populations?