

# TPB SCENARIO STUDY

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## Progress on “CLRP Aspirations” & “What Would it Take?” Scenarios

Michael Eichler  
Department of Transportation Planning

Presentation to the TPB Regional Bus  
Subcommittee

September 23, 2008

# The Two New Scenarios

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## CLRP Aspirations

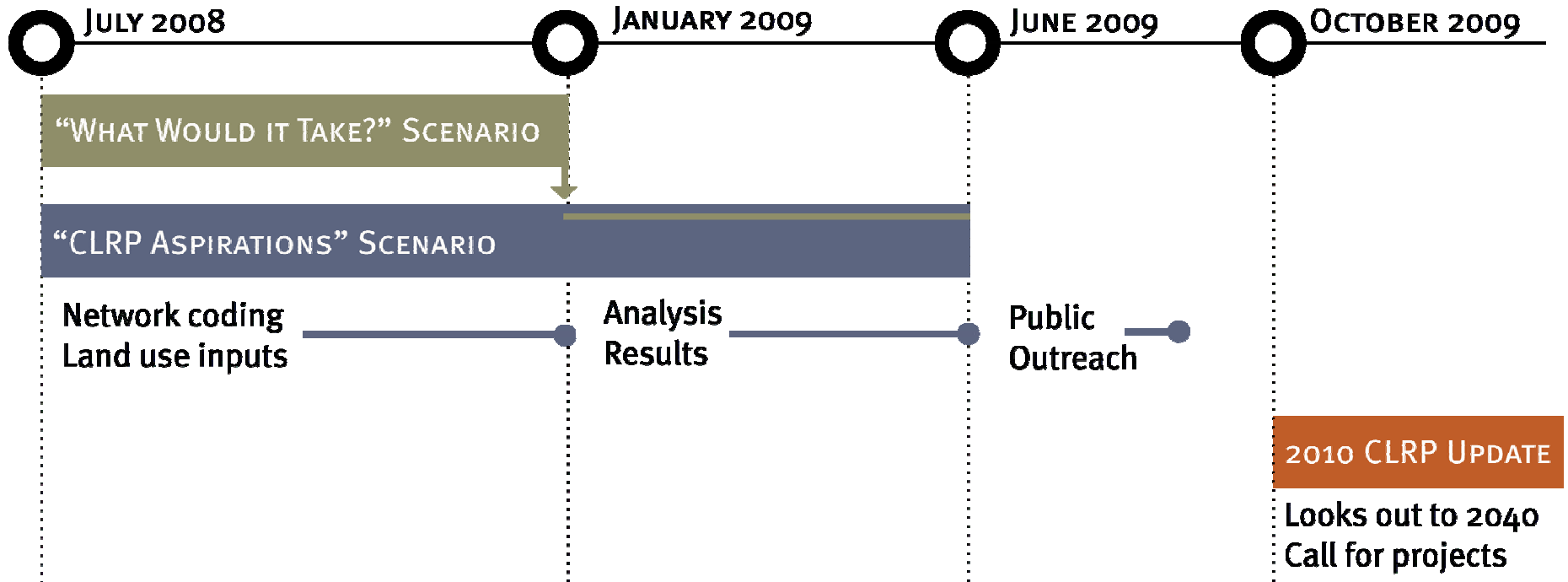
Draws on past scenarios (5 transportation/land use scenarios and 2 value pricing scenarios) to provide an ambitious yet attainable vision of land use and transportation for the 2010 CLRP update.

## What Would it Take?

Starts with CO2 goals (80% below 2005 levels in 2050 and 20% reduction by 2020) and assesses what scales and combinations of interventions will be necessary to achieve the goal.

# Study Timeline

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# Developing the Scenarios

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## **CLRP Aspirations**

1. Transportation Component
2. Land Use Component

## **WWIT**

3. Evaluation of WWIT Strategies

# Developing the CLRP Aspirations Scenario

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## 4 principles of RMAS

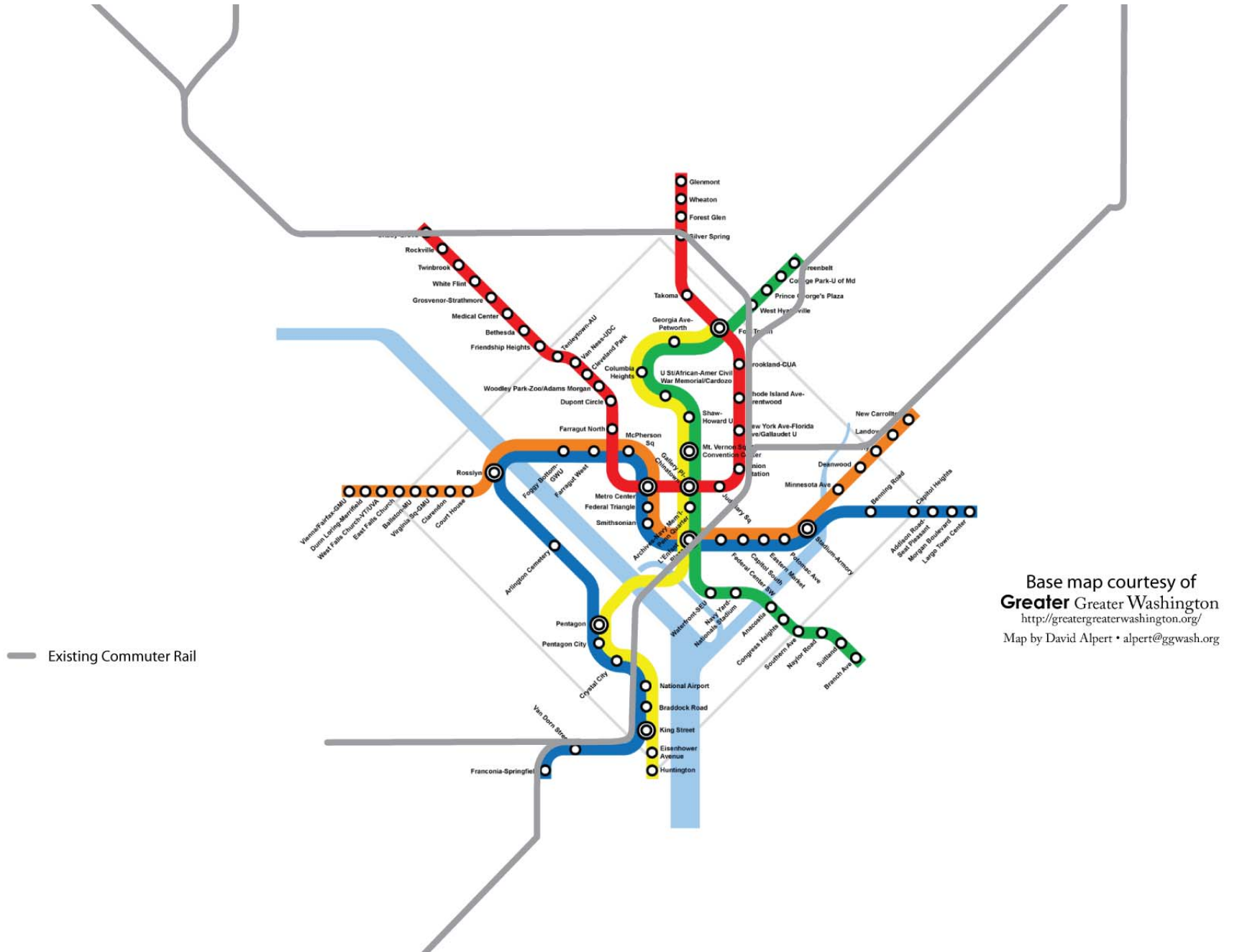
1. **Bring people closer to their jobs**, thereby reducing their commuting distance
2. **Create a balance between the number of workers and jobs** available in the region
3. **Land use shifts should push the boundaries** of current zoning and comprehensive plan restrictions, while insuring that changes remain feasible
4. Land use changes should be **supported by high quality transportation infrastructure.**

# *CLRP Aspirations*

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## **The Transportation Component**

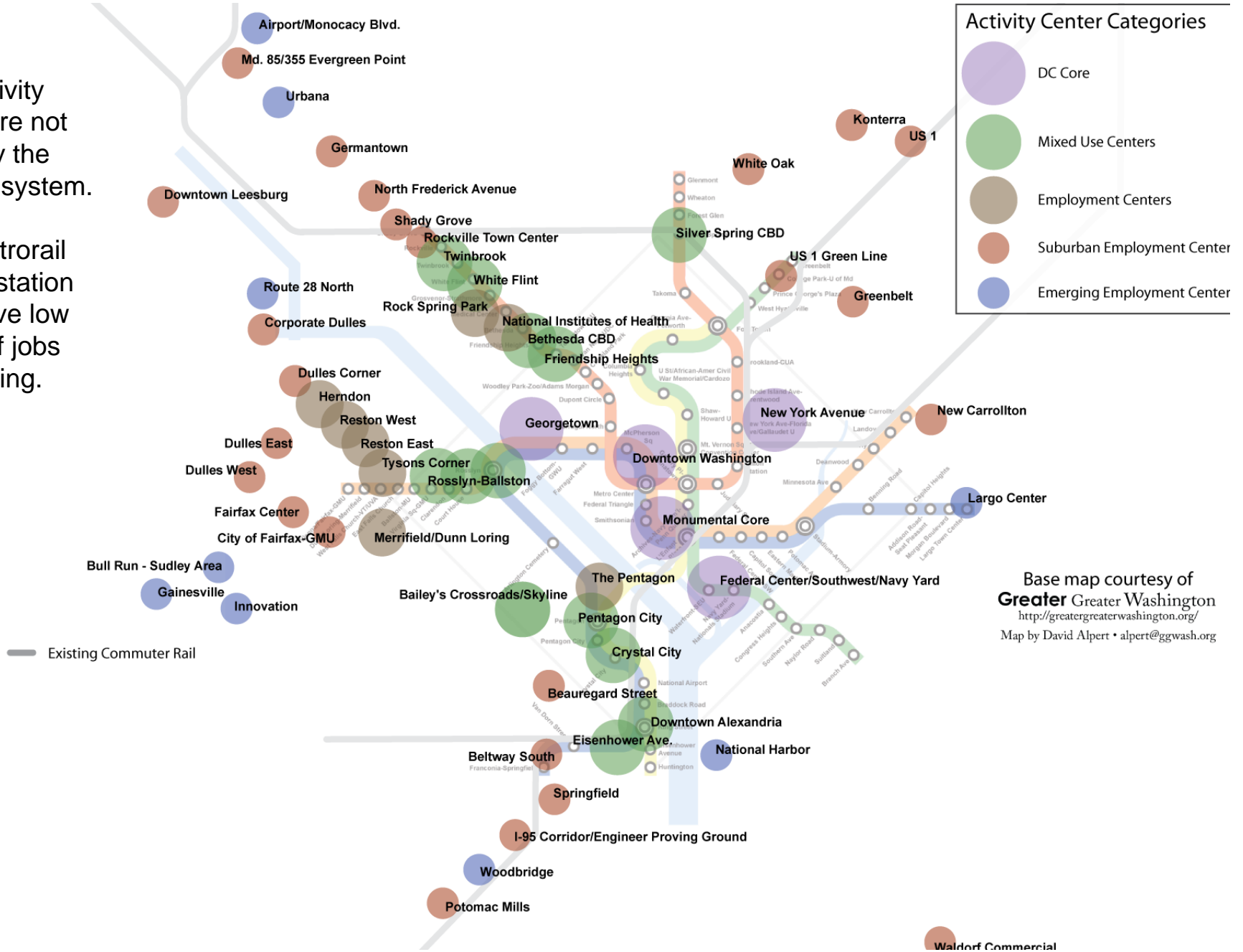
# Existing Metrorail and Commuter Rail



# Regional Activity Centers

Many activity centers are not served by the Metrorail system.

Many Metrorail stations' station areas have low density of jobs and housing.

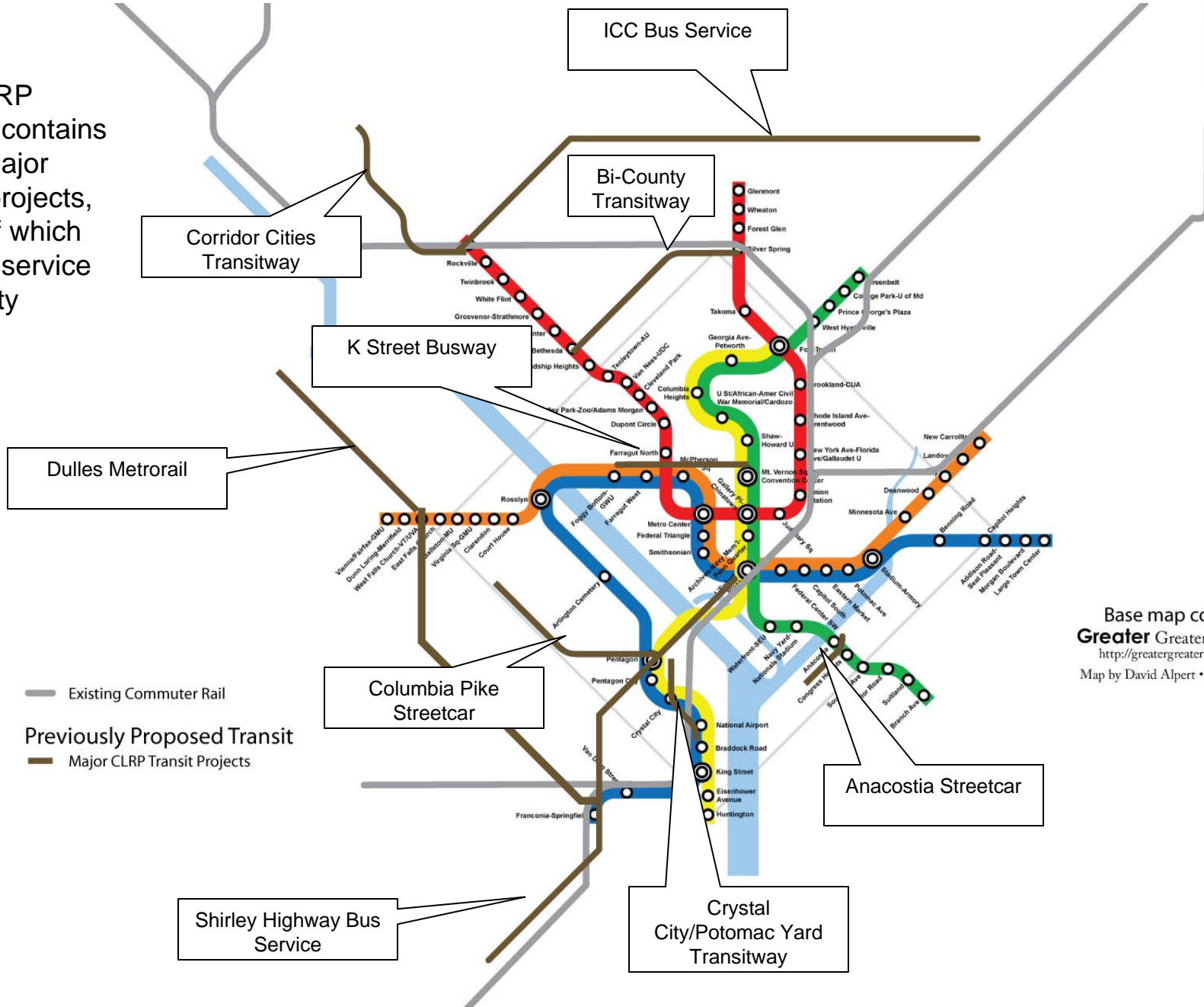


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**Greater** Greater Washington  
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# CLRP Major Transit Projects

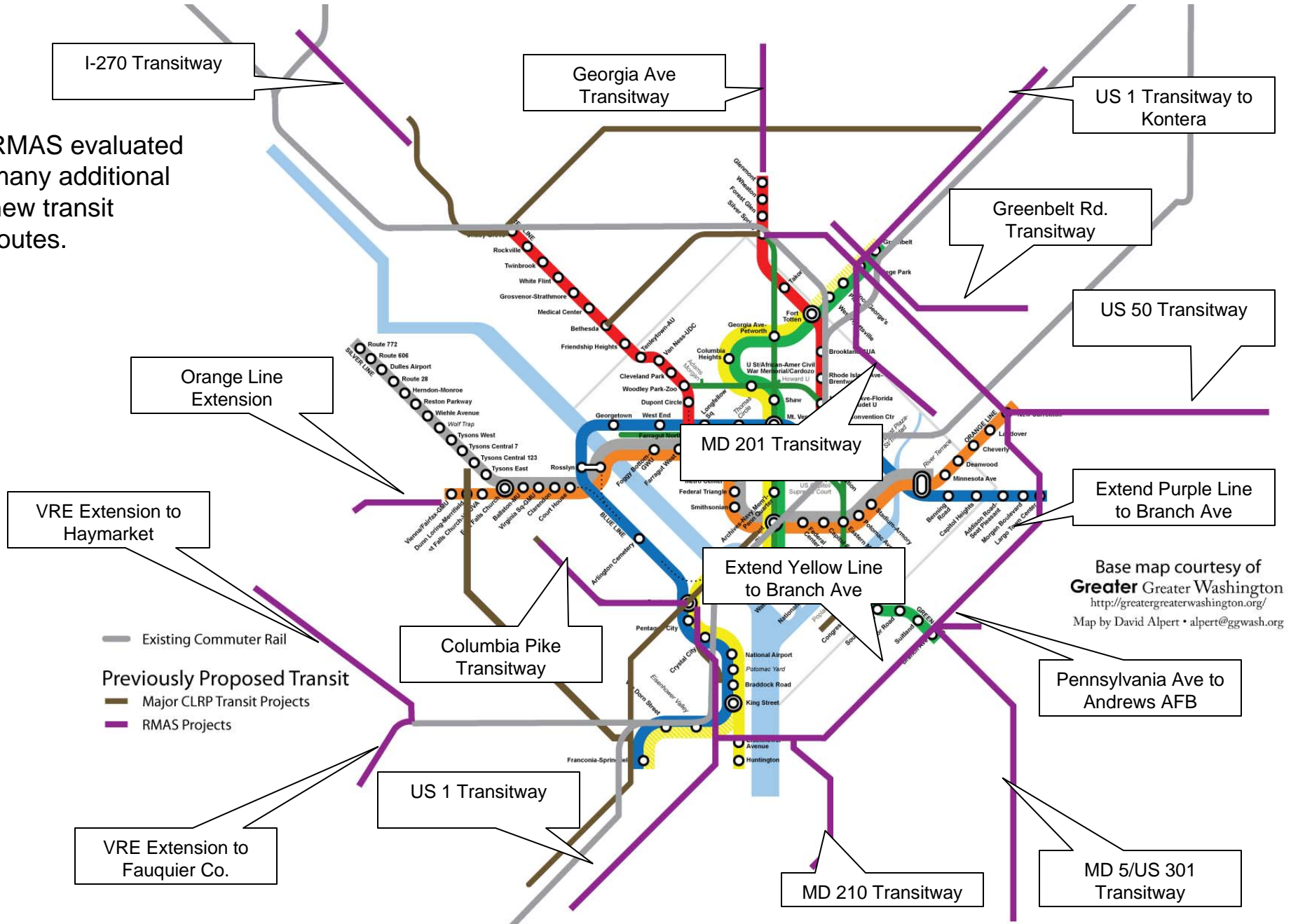
The CLRP already contains many major transit projects, many of which provide service to activity centers.



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# RMAS Transit Projects

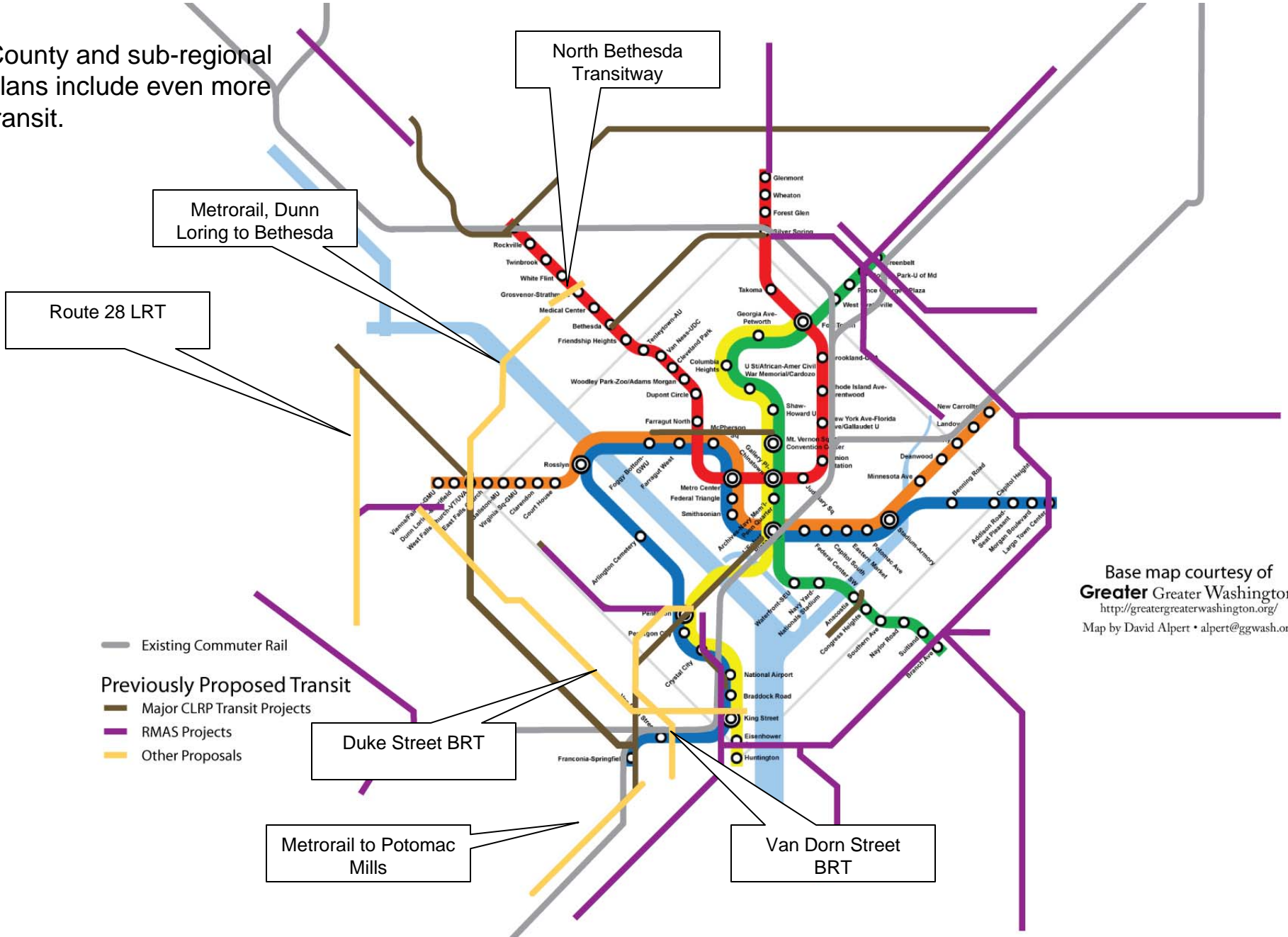
RMAS evaluated many additional new transit routes.



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# Other studied major transit projects

County and sub-regional plans include even more transit.



Metrorail, Dunn Loring to Bethesda

Route 28 LRT

North Bethesda Transitway

Duke Street BRT

Metrorail to Potomac Mills

Van Dorn Street BRT

- Existing Commuter Rail
- Previously Proposed Transit
- Major CLRP Transit Projects
- RMAS Projects
- Other Proposals

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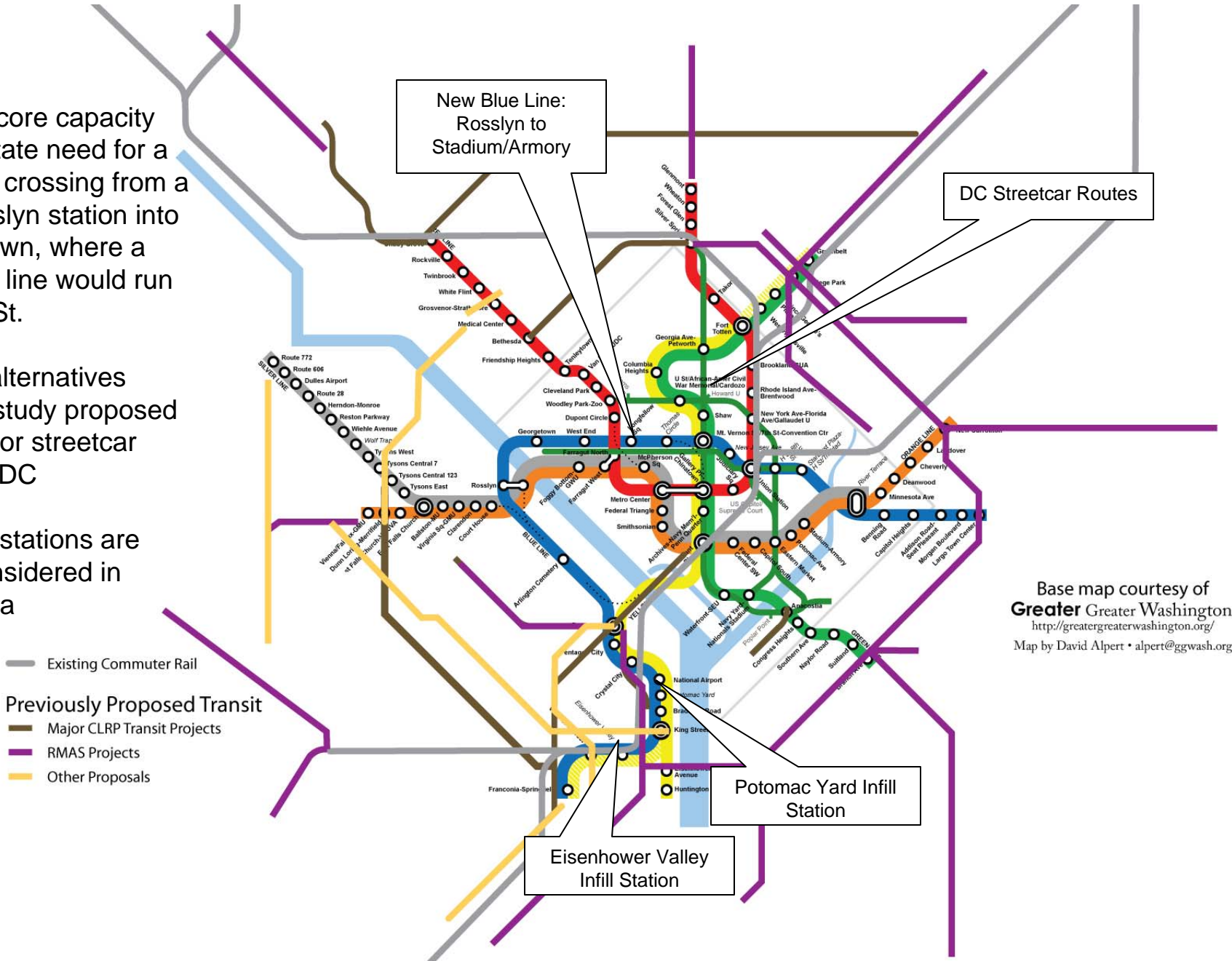


# DC rail projects: WMATA and DCAA

WMATA core capacity studies state need for a new river crossing from a new Rosslyn station into Georgetown, where a new Blue line would run along M St.

The DC alternatives analysis study proposed three major streetcar routes in DC

Two infill stations are being considered in Alexandria

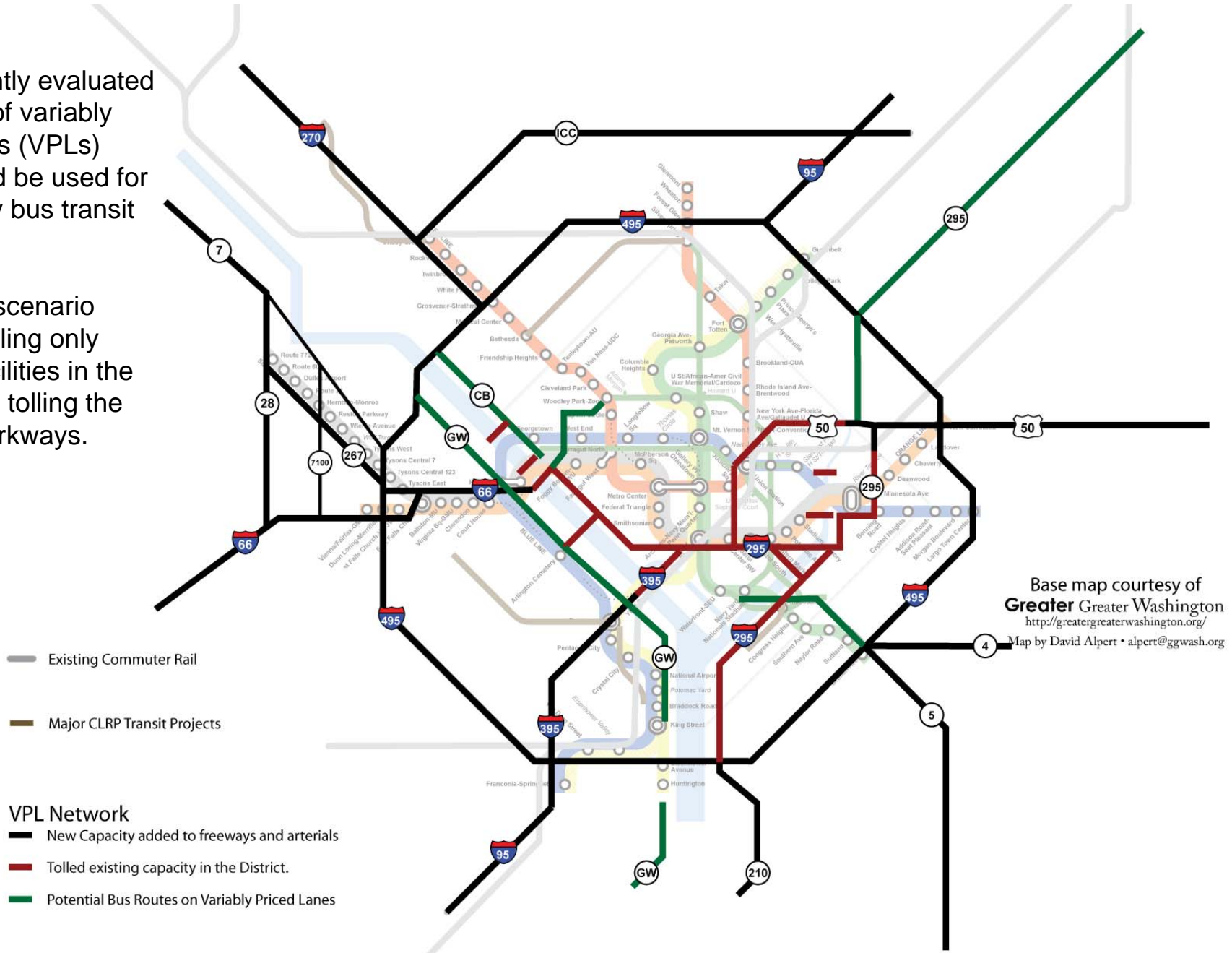


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# Studied Network of Variably Priced Lanes (VPLs)

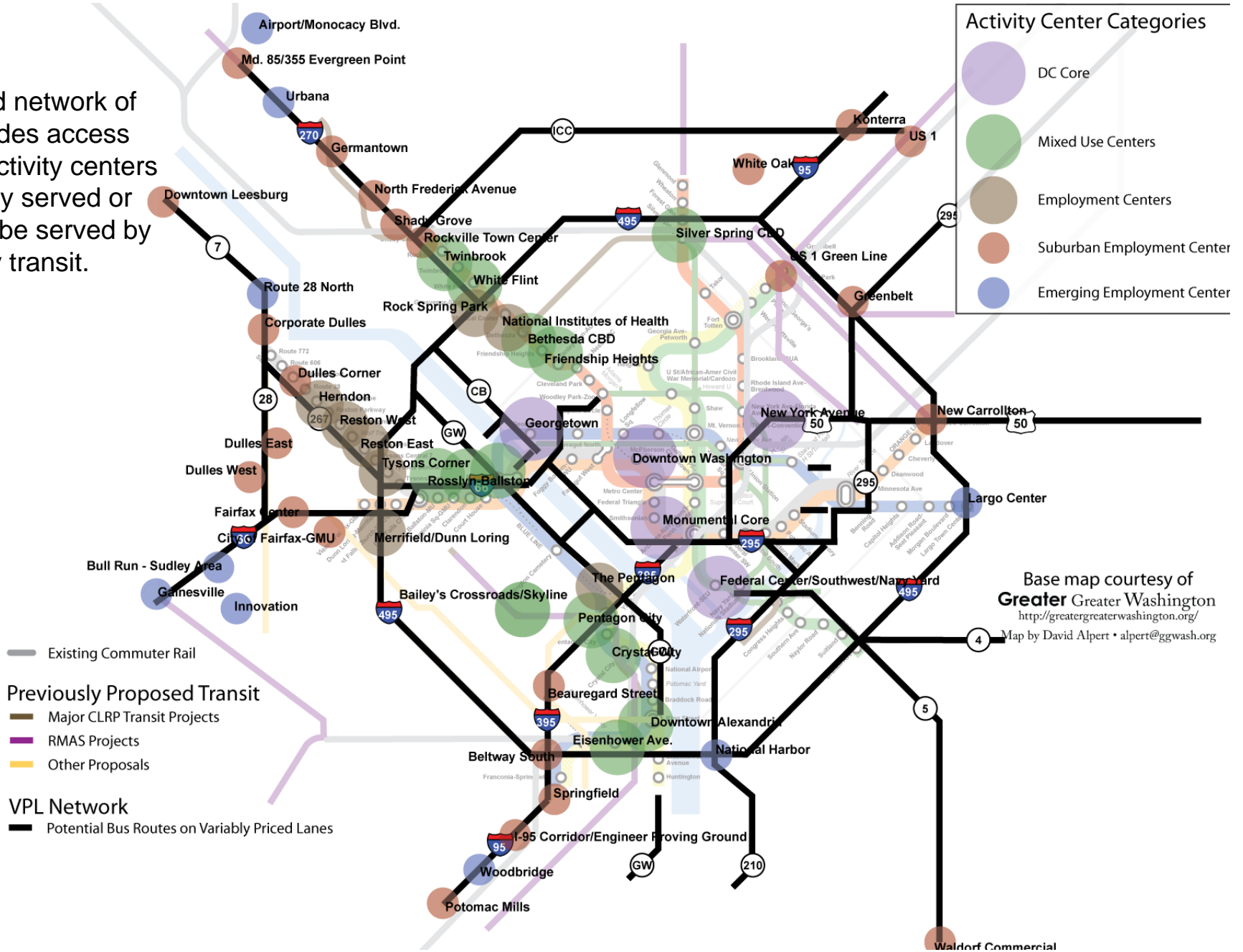
TPB Recently evaluated a network of variably priced lanes (VPLs) which could be used for high-quality bus transit service.

Advanced scenario includes tolling only existing facilities in the District and tolling the region's parkways.



# Studied Network of Variably Priced Lanes with Activity Centers

The studied network of VPLs provides access nearly all activity centers not currently served or planned to be served by high quality transit.

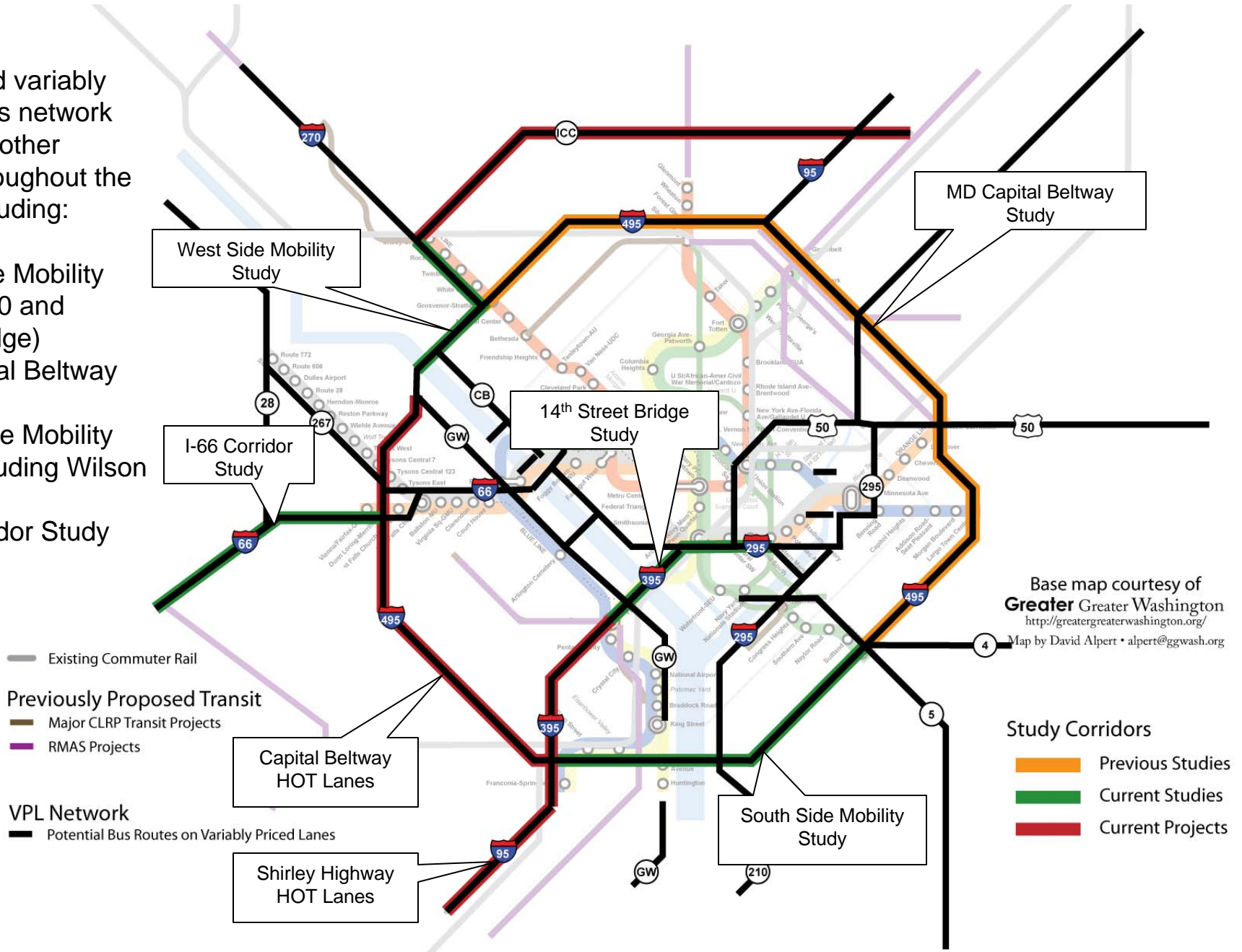




# Interaction With Regional Studies

The studied variably priced lanes network can inform other studies throughout the region, including:

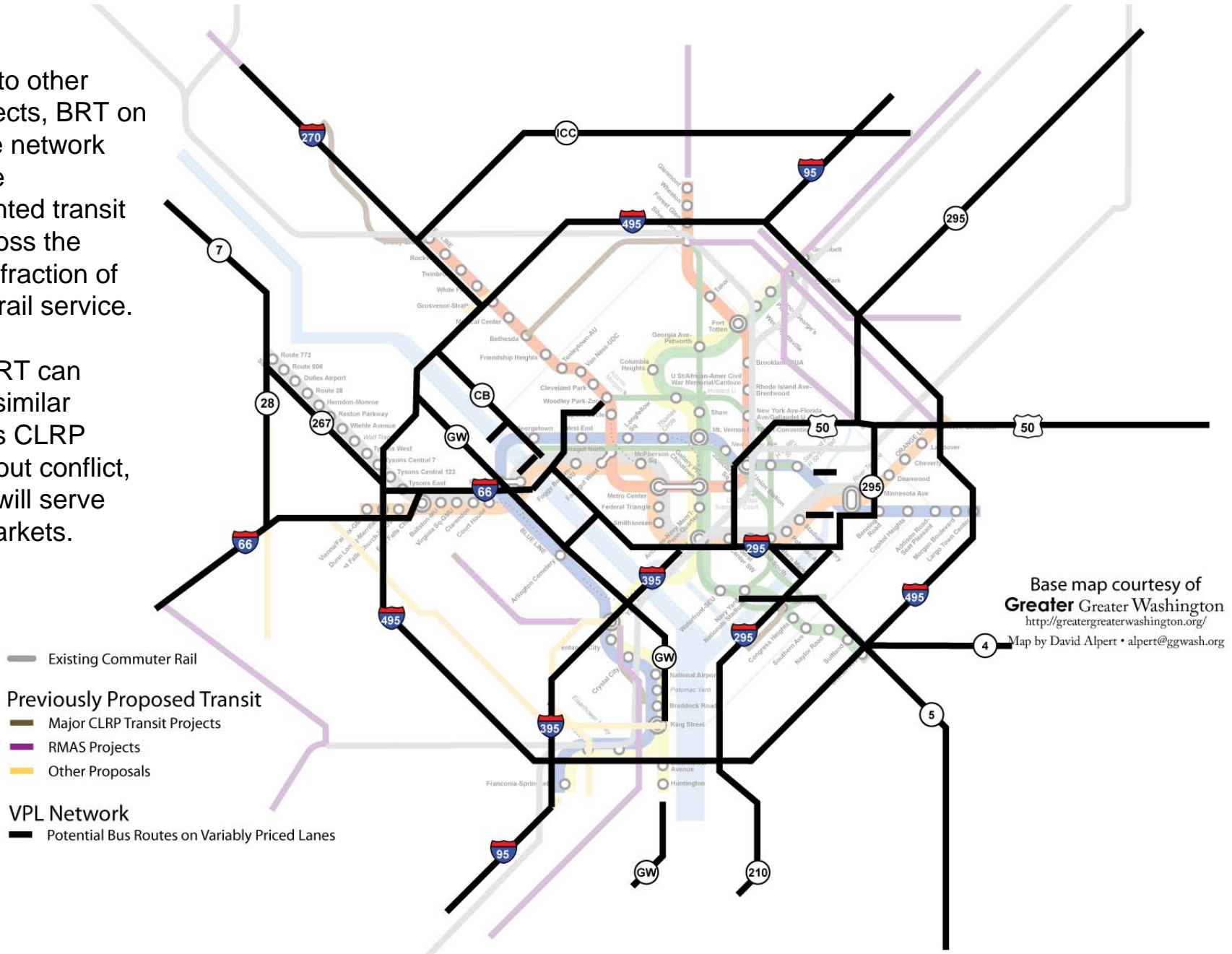
- West Side Mobility Study (I-270 and Legion Bridge)
- MD Capital Beltway Study
- South Side Mobility Study (Including Wilson Bridge)
- I-66 Corridor Study



# BRT on the Toll Lane Network?

In addition to other transit projects, BRT on the toll lane network can provide unprecedented transit access across the region at a fraction of the cost of rail service.

Toll-lane BRT can operate in similar corridors as CLRP transit without conflict, since they will serve different markets.

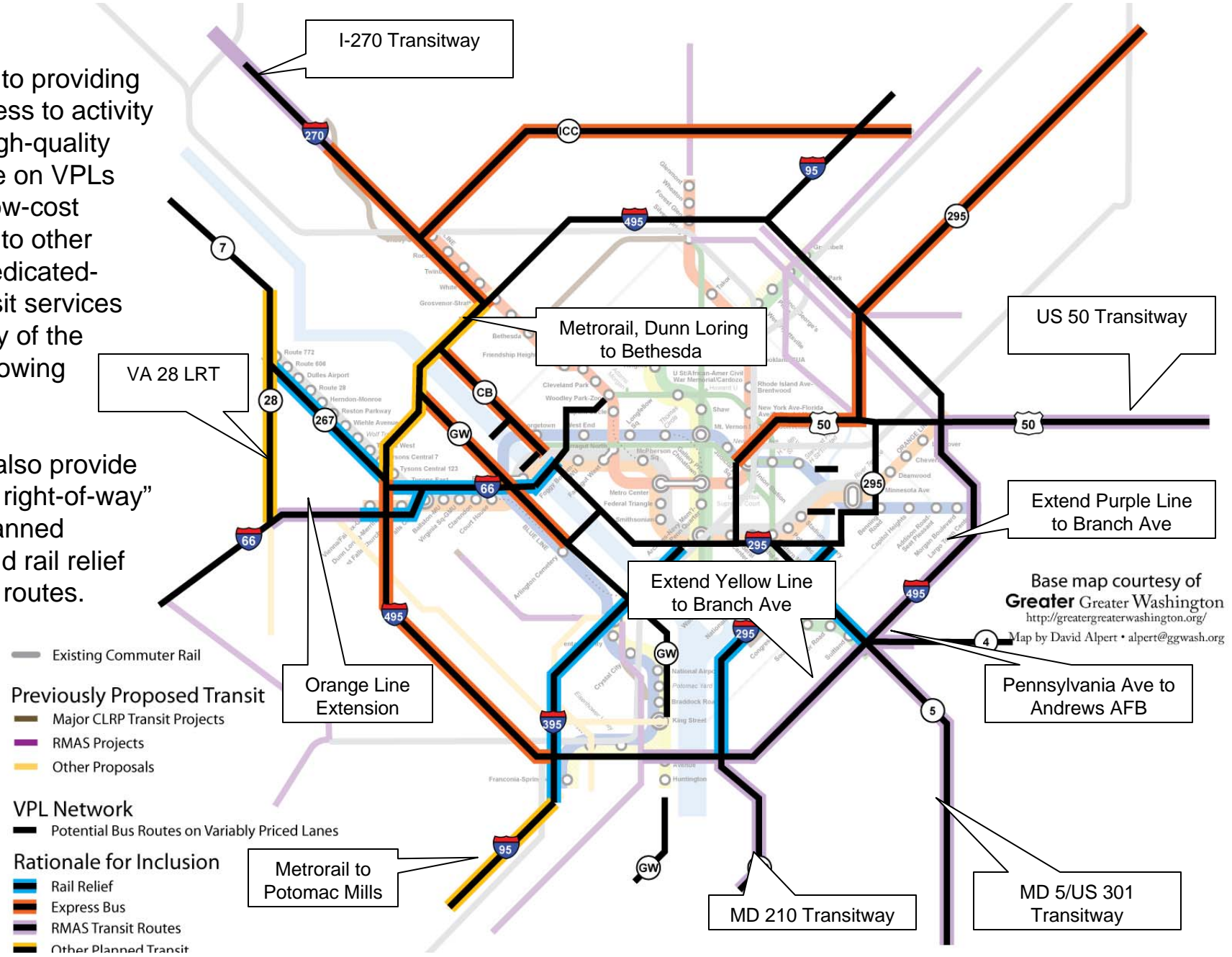




# Rationale for BRT on Variably Priced Lanes

In addition to providing transit access to activity centers, high-quality bus service on VPLs can be a low-cost alternative to other planned dedicated-ROW transit services along many of the region's growing corridors.

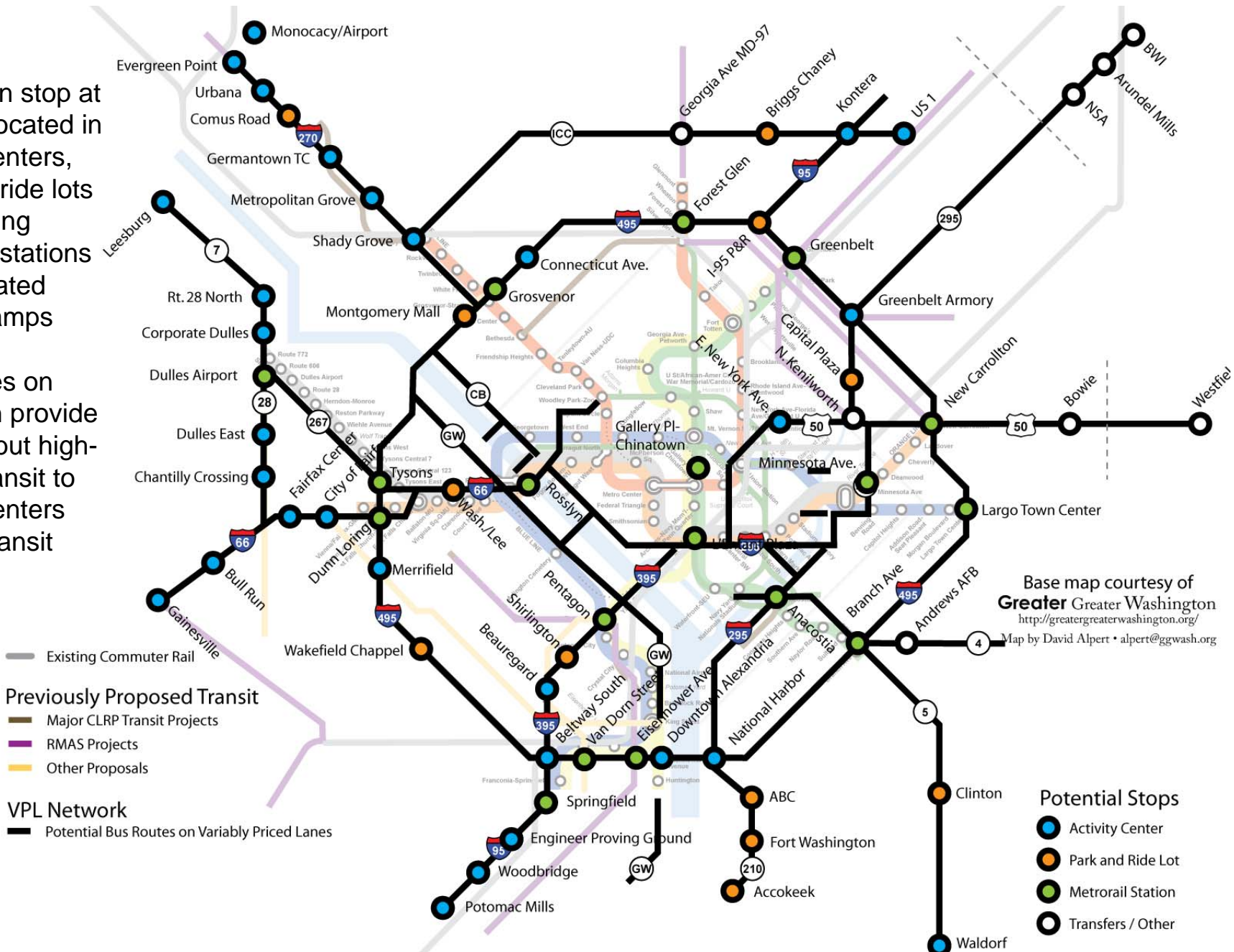
VPLs can also provide "dedicated right-of-way" to other planned express and rail relief routes bus routes.



# Potential Bus Station Locations

Buses can stop at stations located in activity centers, park and ride lots and existing Metrorail stations via dedicated access ramps

Bus routes on VPLs can provide low-cost but high-quality transit to activity centers without transit service.



# Bus Service on Variably Priced Lanes

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- Previous pricing study evaluated regular and express bus service operating on the variably priced lanes
- CLRP Aspirations Scenario to include BRT-like bus stations and technologies at high-demand locations



*The Shirlington Transit Station, Arlington, VA.*



Comments Received

Airport/Monocacy Blvd.

Include WMATA Priority Corridors

Service to the City of Frederick

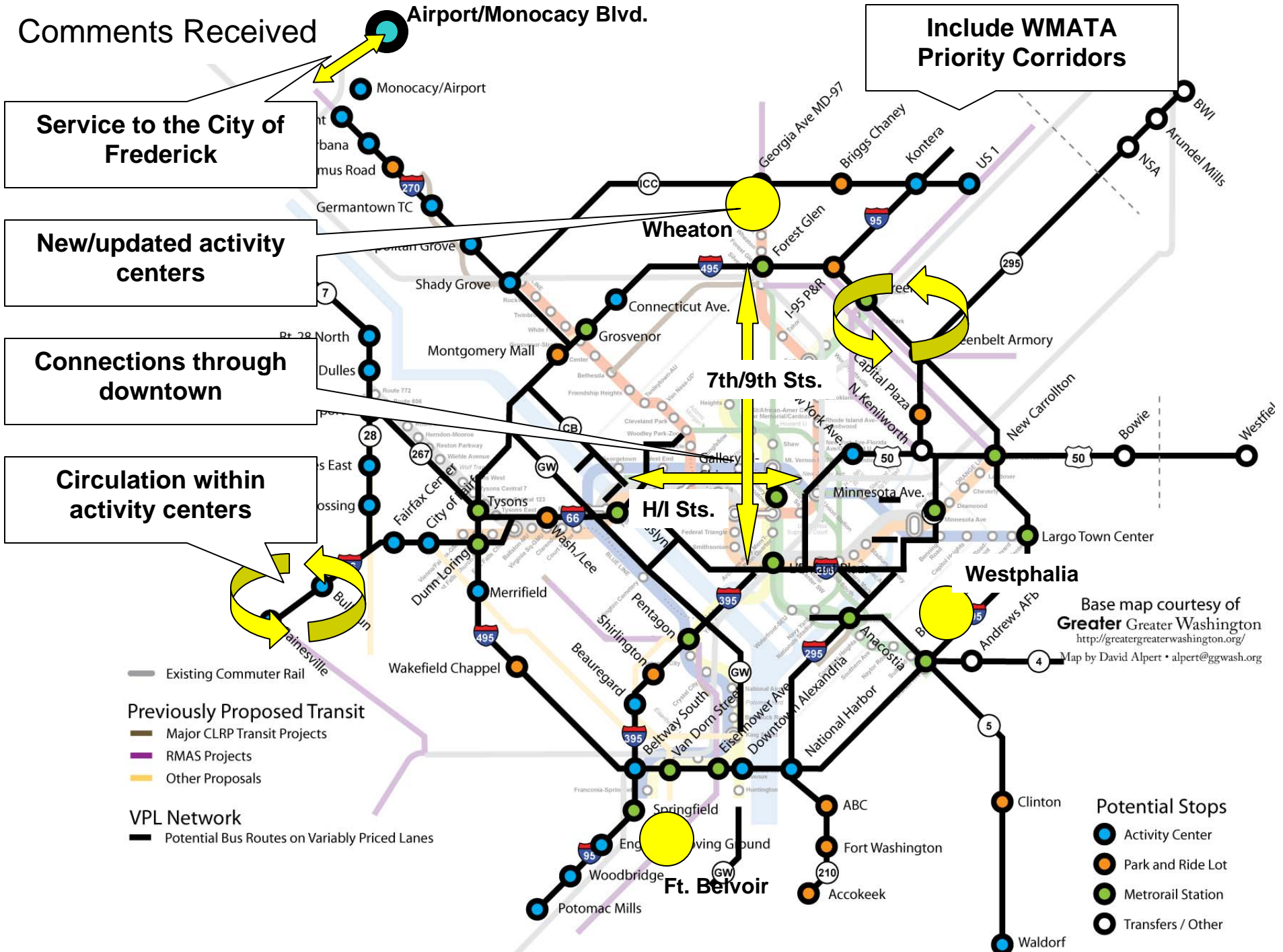
New/updated activity centers

Connections through downtown

Circulation within activity centers

- Existing Commuter Rail
- Previously Proposed Transit
  - Major CLRP Transit Projects
  - RMAS Projects
  - Other Proposals
- VPL Network
  - Potential Bus Routes on Variably Priced Lanes

- Potential Stops
- Activity Center
  - Park and Ride Lot
  - Metro rail Station
  - Transfers / Other



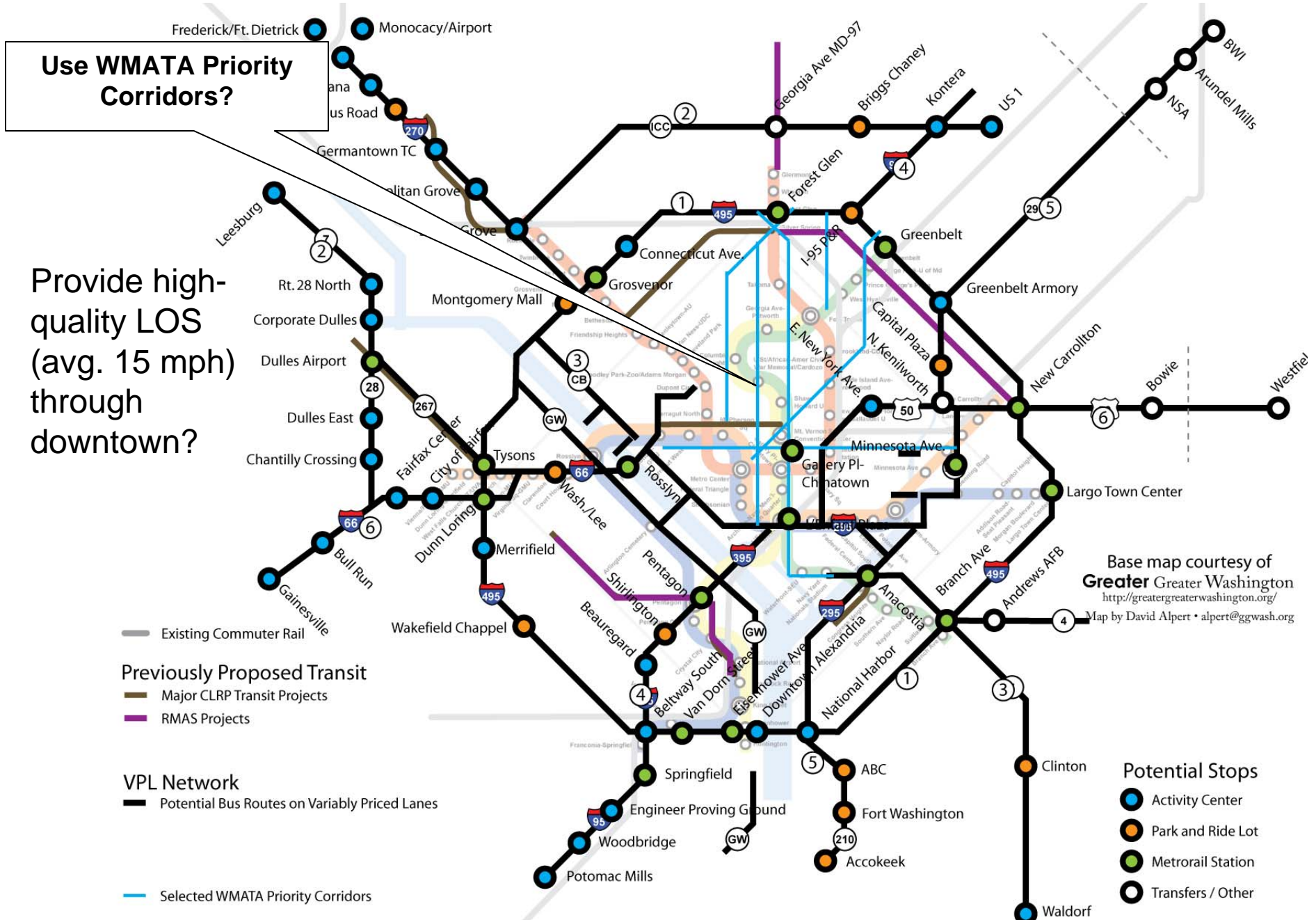
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# Connections Through Downtown DC?





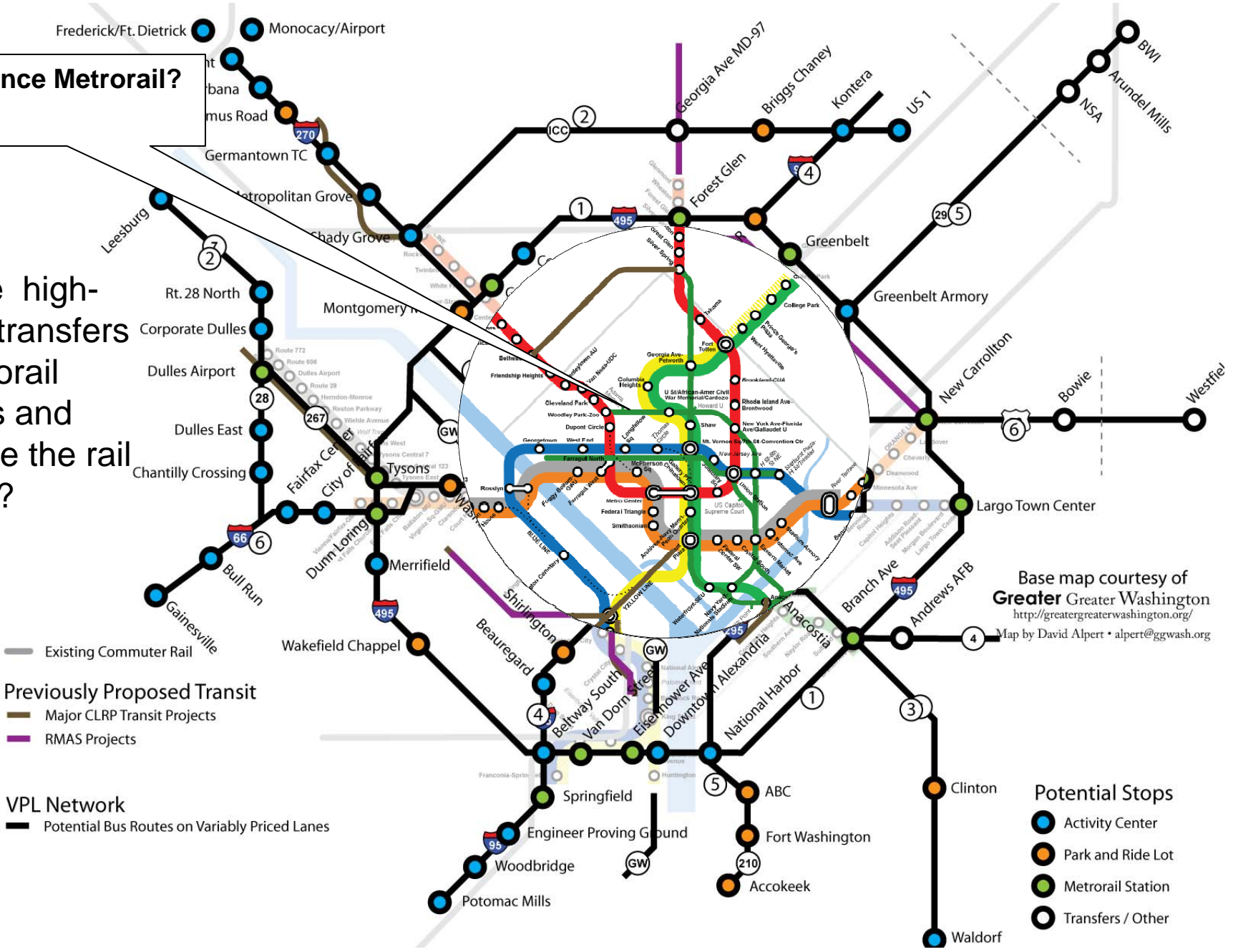
# Connections Through Downtown DC?



# Connections Through Downtown DC?

**Or Enhance Metrorail?**

Provide high-quality transfers at Metrorail stations and enhance the rail system?



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# Questions for Consideration

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- Activity Centers:
  - Can we shift development to new areas, including Westphalia, Fort Detrick, Fort Belvoir and Wheaton?
  - Are there other areas that are not activity centers that deserve more development?

*The land use component of the scenario is being addressed by TPB staff in conjunction with the COG Planning Directors Technical Advisory Group*



# Questions for Consideration

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Should other transit projects be included?

- DC Streetcar, Three routes: Georgetown to L'Enfant Plaza, Georgetown to Minnesota Ave, Bolling AFB to Silver Spring
- DC BRT, Two routes: Woodley Park to L'Enfant Plaza, Georgetown to Skyland
- Alexandria BRT, Two routes: Duke Street and Van Dorn St.

*Other studied projects incorporated into toll-lane BRT system.*

# Questions for Consideration

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- BRT Level of Service:
  - Peak and off peak headways
    - 10 minutes peak, 30 minutes off-peak?
  - Operating assumptions for freeways and arterials
  - Payment system assumptions (on- vs. off-board)
  - Boarding platforms, station areas, number of doors
- Park and Ride Lots
  - Many new, high-capacity park-and-ride lots need to be added
    - Especially needed with tolling of existing lanes
  - Where should they be located? Capacity for how many vehicles?

*What other criteria must be specified before the network can be coded?*

# Next Steps

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Final review of transportation network by TPB  
Scenario Study Task Force in October

Code network and begin analysis