

BRT Initiatives at the Northern Virginia Transportation Authority

*TPB Technical Committee
February 1, 2019*

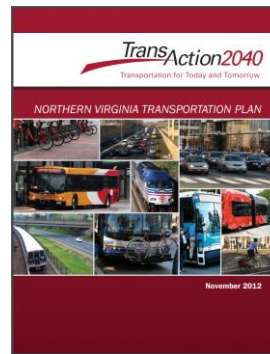
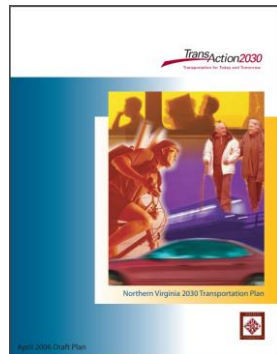


Sree Nampoothiri, Transportation Planner, NVTA



Two Primary Responsibilities

1. Develop and update the long range, multi-modal Transportation Plan for Northern Virginia → **TransAction Plan** (adopted October 2017)

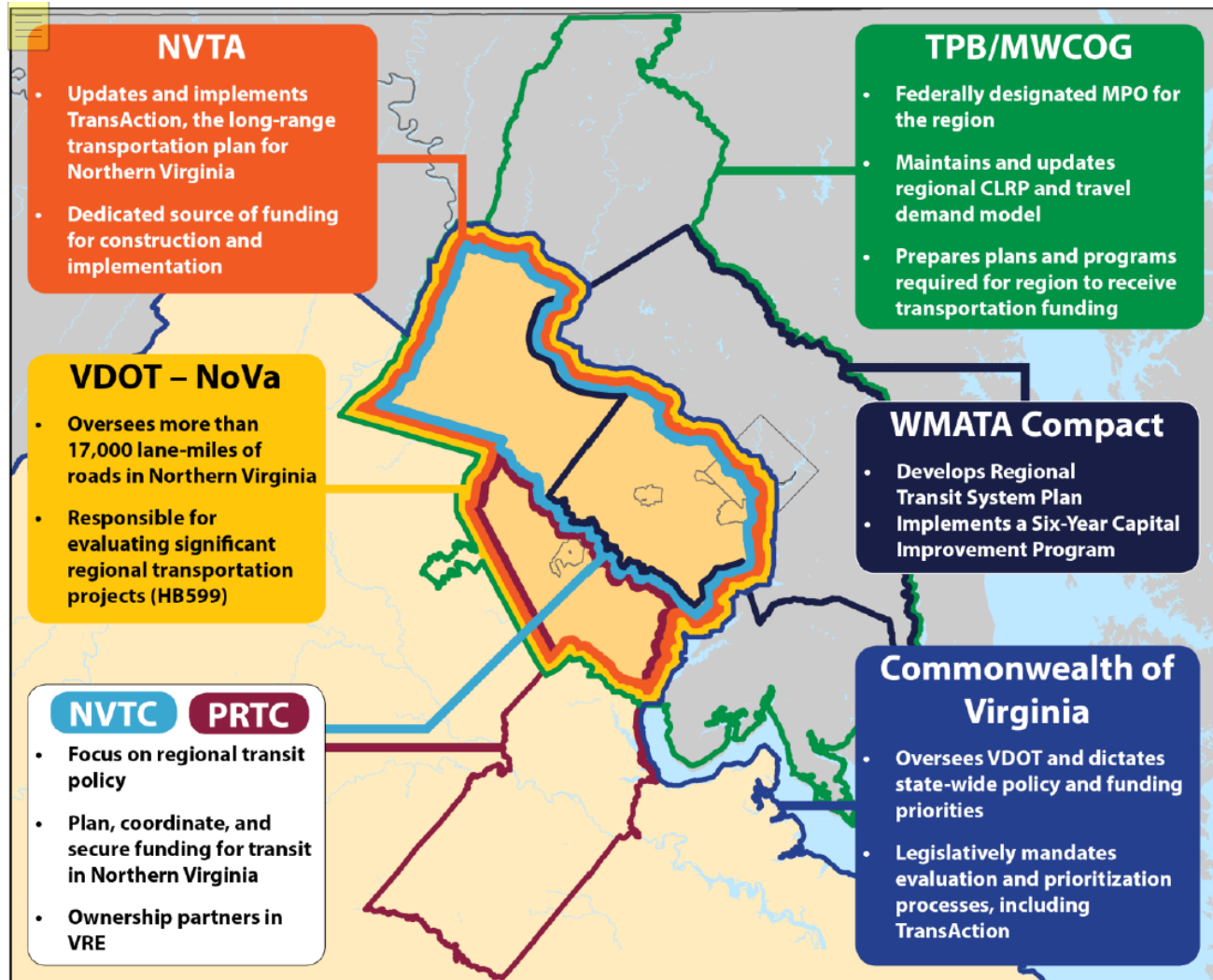


2. Prioritize and fund regional transportation projects → **Six Year Program** (adopted June 2018)



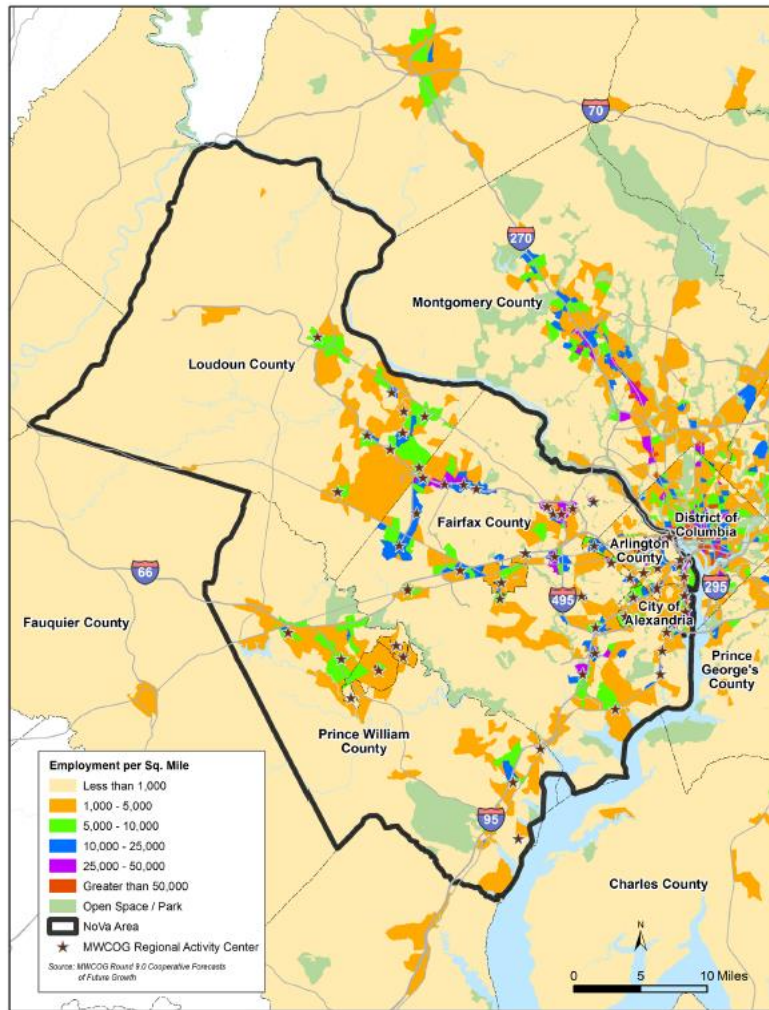
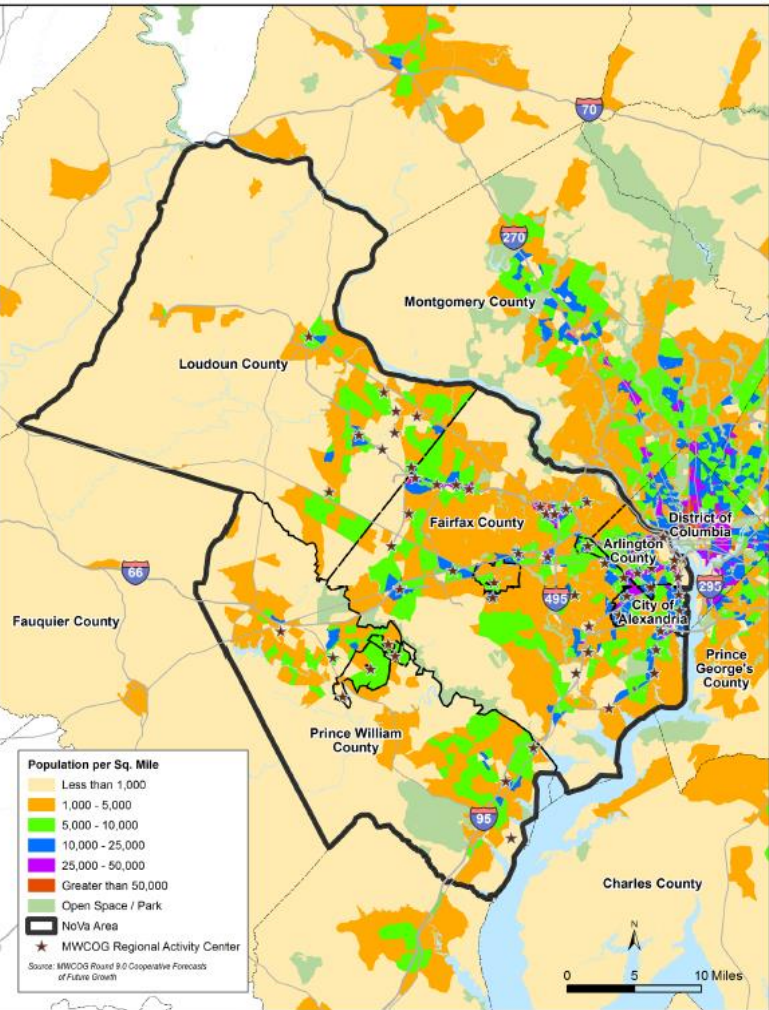


Regional Collaboration



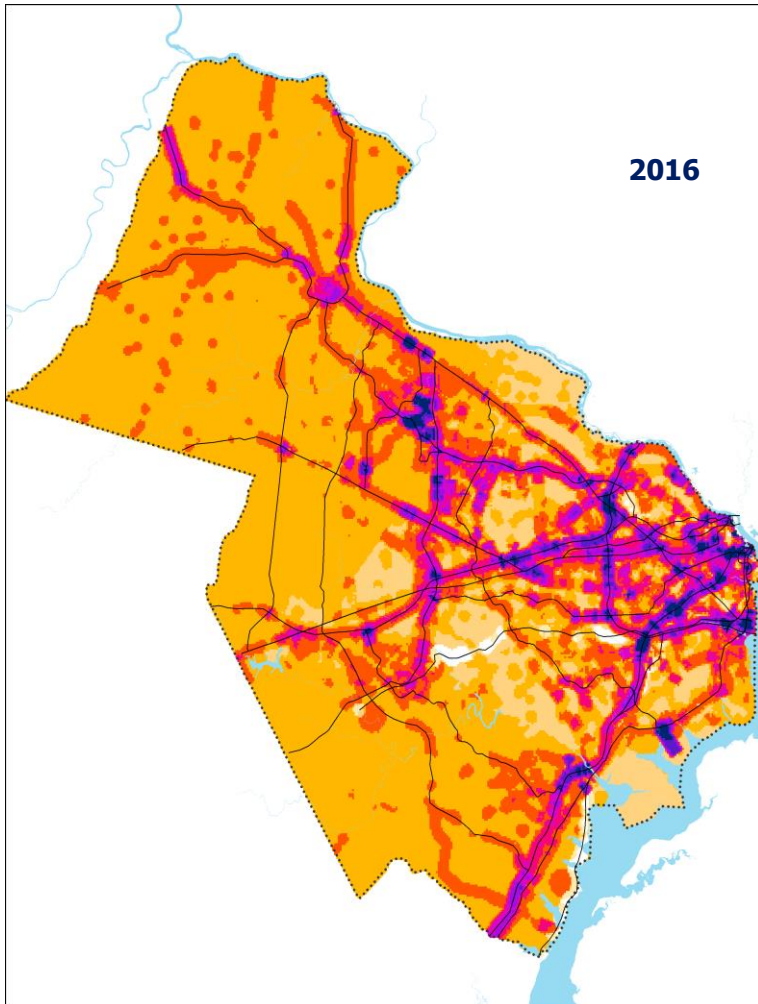


Growth in Population (24%) and Jobs (37%)...

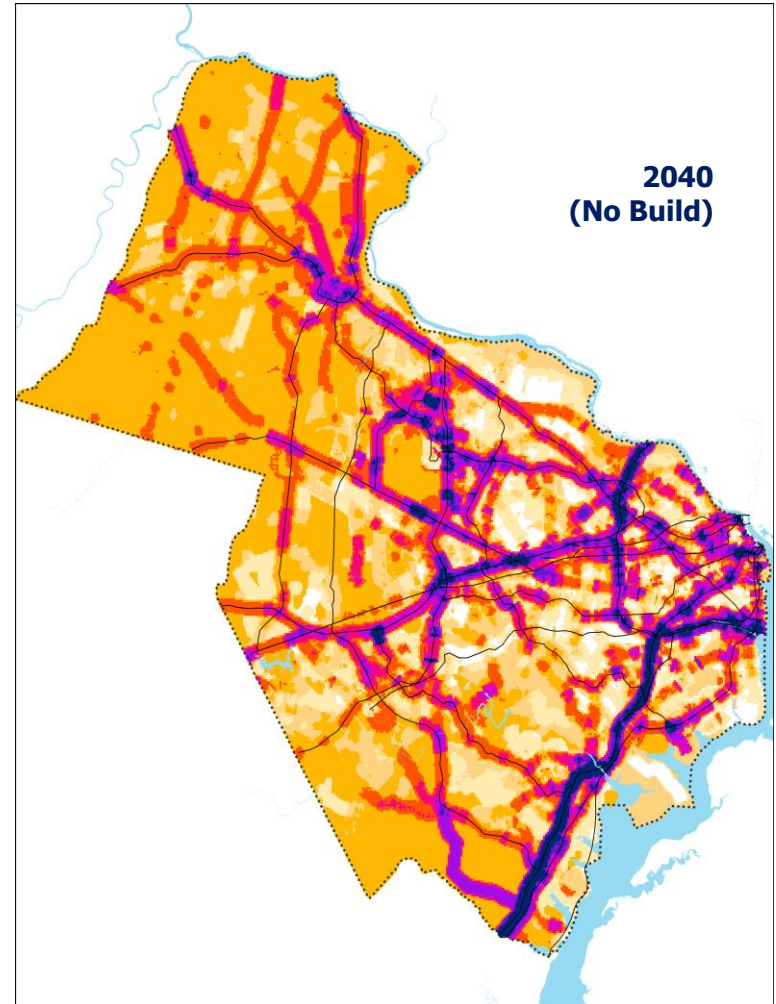




... will lead to worsening travel conditions



2016

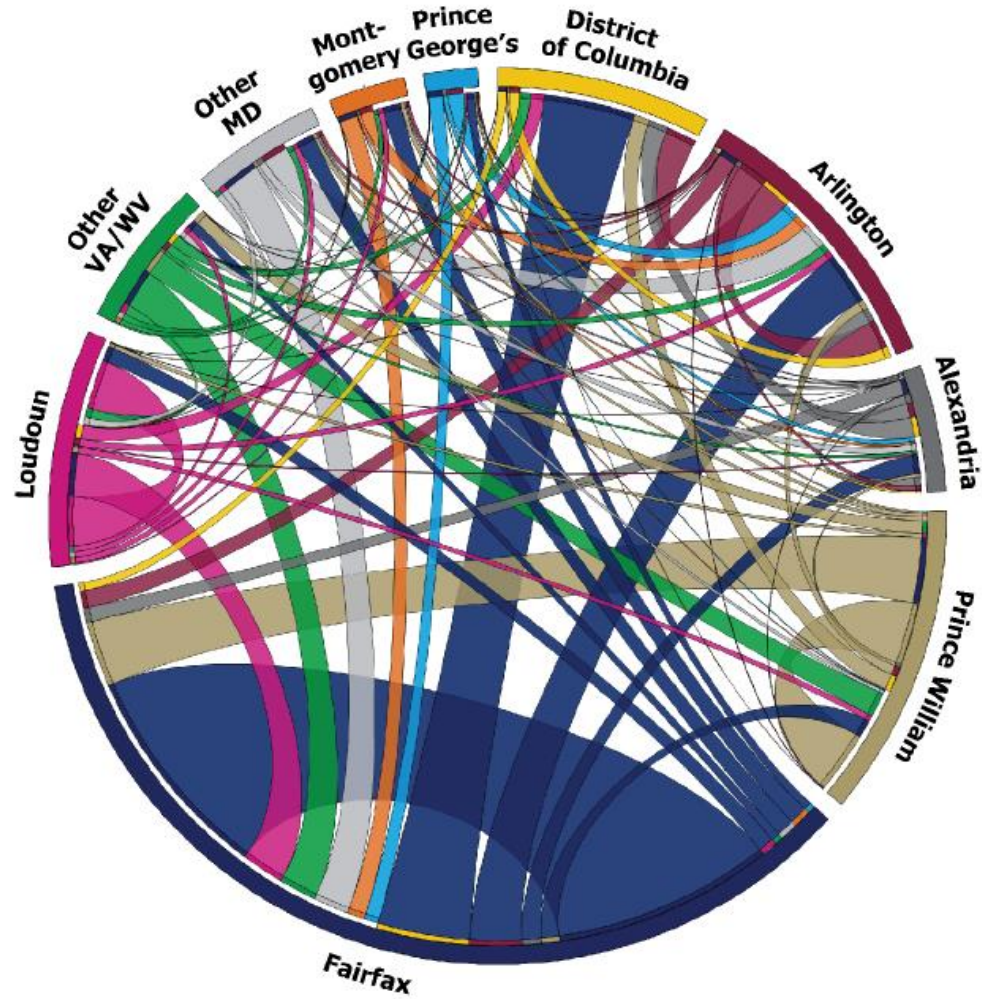


2040
(No Build)

Weighted Performance Measures
Good > > > Poor



Vehicular Commute Trip Patterns

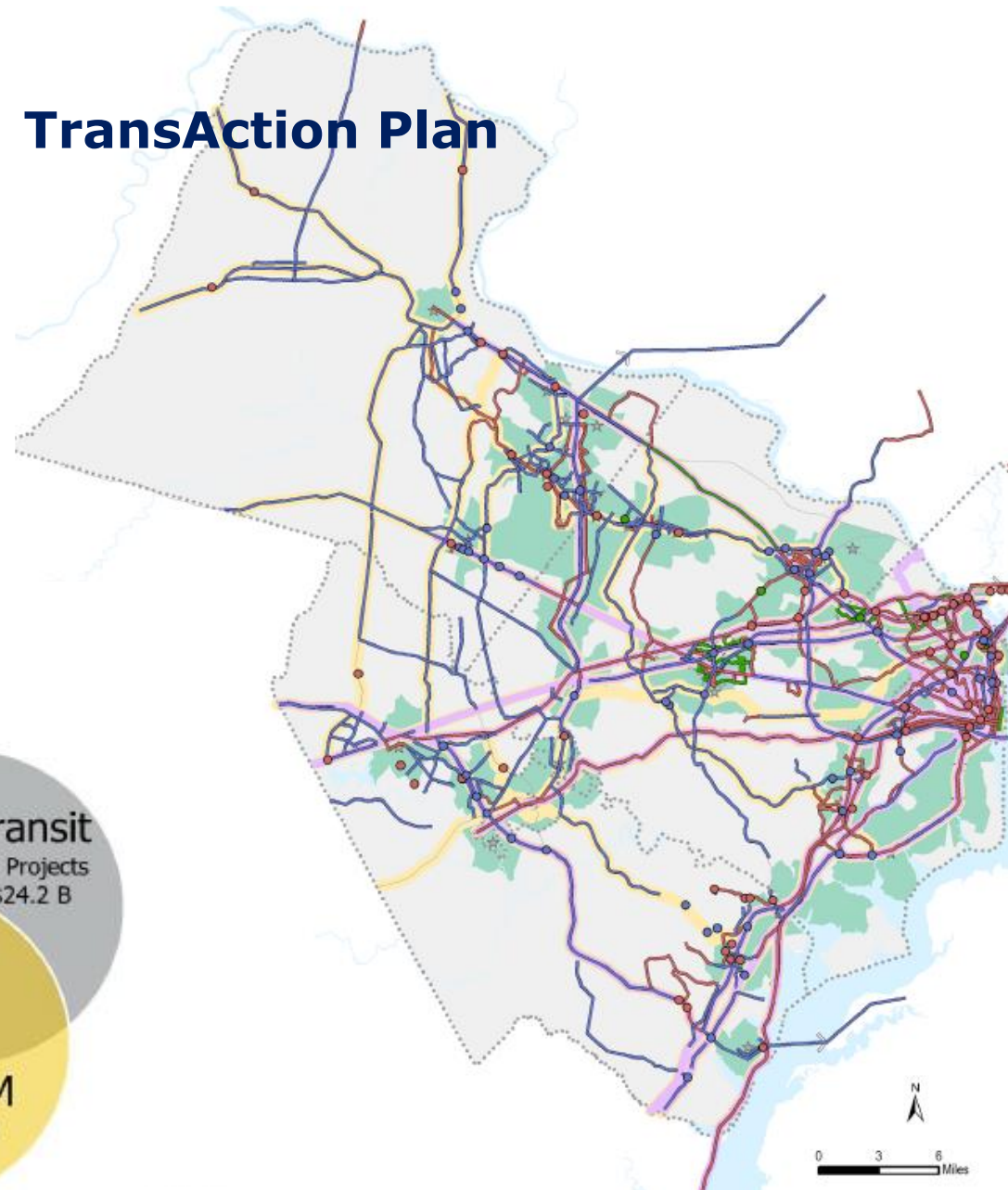
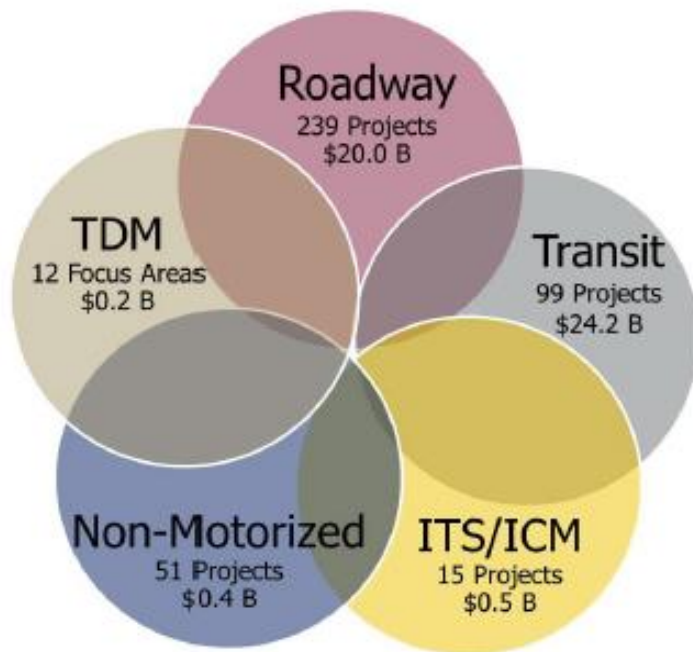




TransAction Plan

TransAction includes:

- 352 projects
- \$44 Billion





TransAction and Visualize 2045

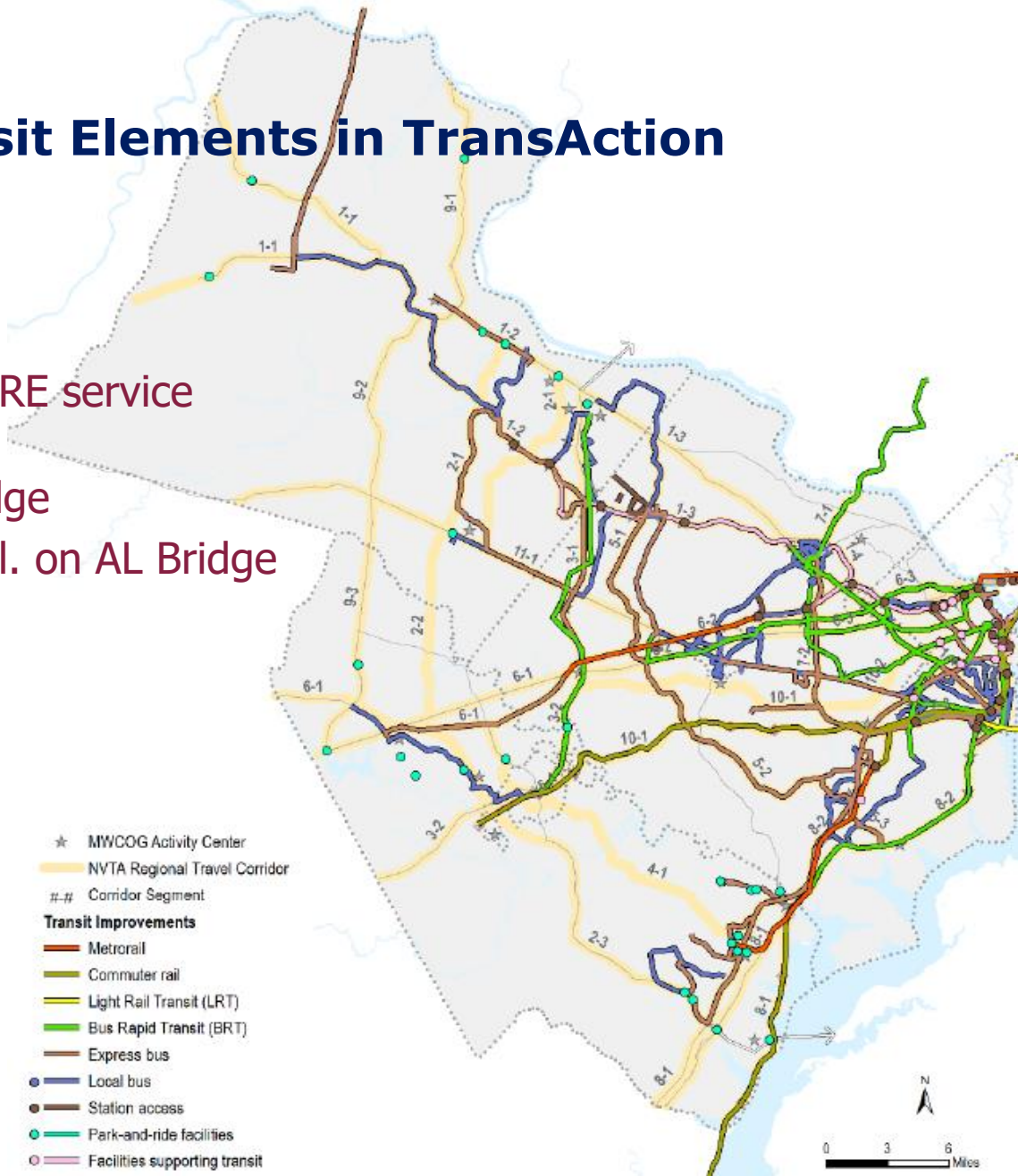
Common ground with aspirational elements

1. Bring jobs and housing closer together (Scenarios)
2. Expand bus rapid transit regionwide
3. Move more people on Metrorail
4. Increase telework and other options for commuting
5. Expand express highway network
6. Improve walk/bike access to transit
7. Complete National Capital Trail



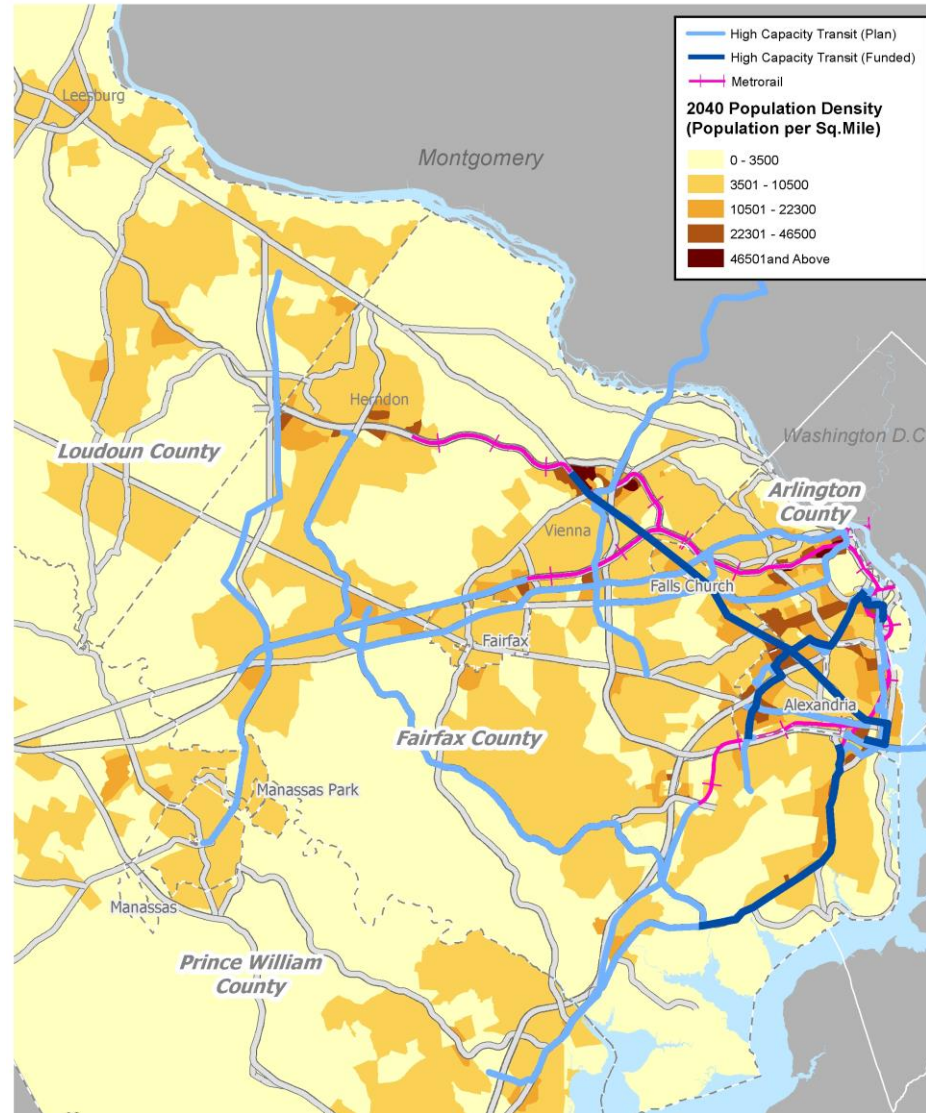
Transit Elements in TransAction

- Metrorail (second tunnel)
- Commuter rail (increased VRE service + cross over)
- Light rail (LRT) on WW Bridge
- Bus Rapid Transit (BRT) incl. on AL Bridge
- Express bus
- Local bus
- Station access
- Park n Ride facilities
- TSP/ITS



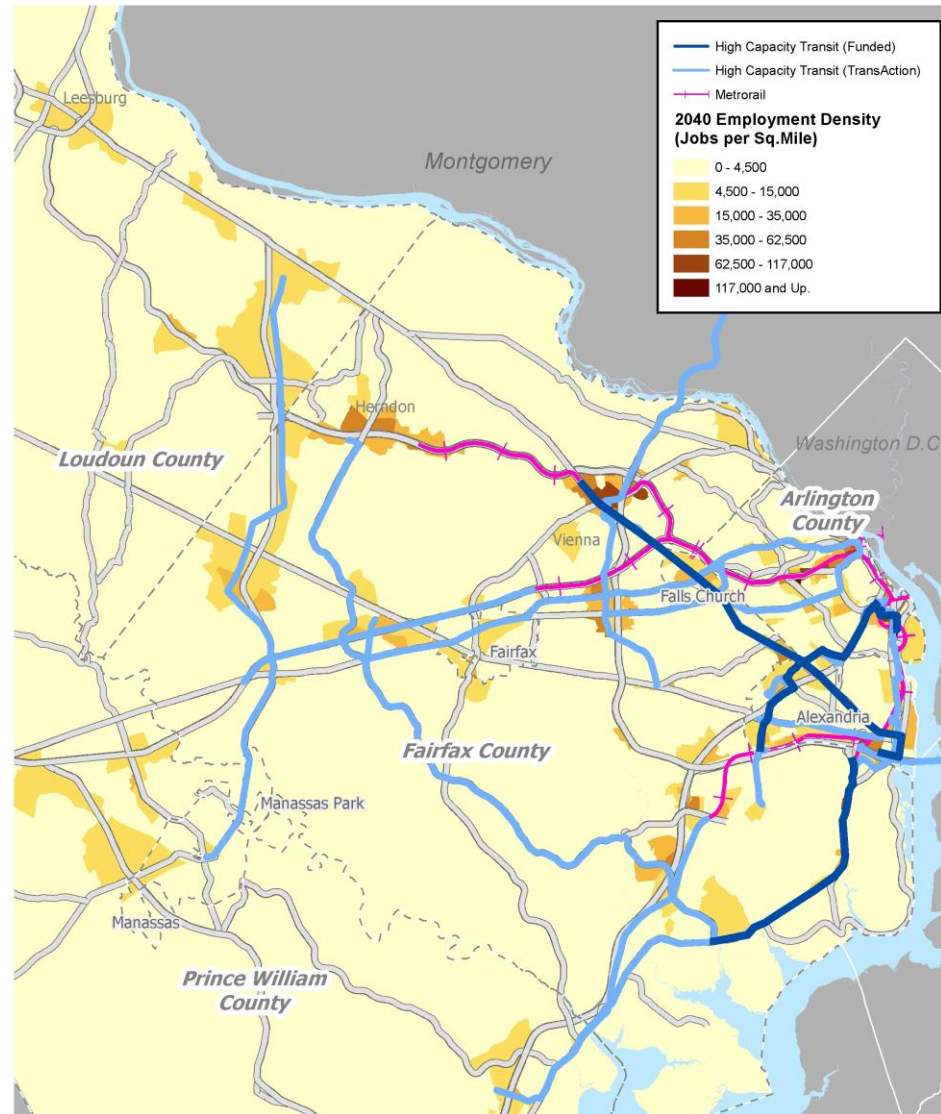


2040 Population Density





2040 Employment Density





Model Assumptions

- Different speed, capacity, and frequency assumptions for
 - Metrorail
 - VRE
 - LRT
 - BRT – dedicated lane (Richmond Highway)
 - BRT – mixed traffic
 - Express bus
 - Local bus

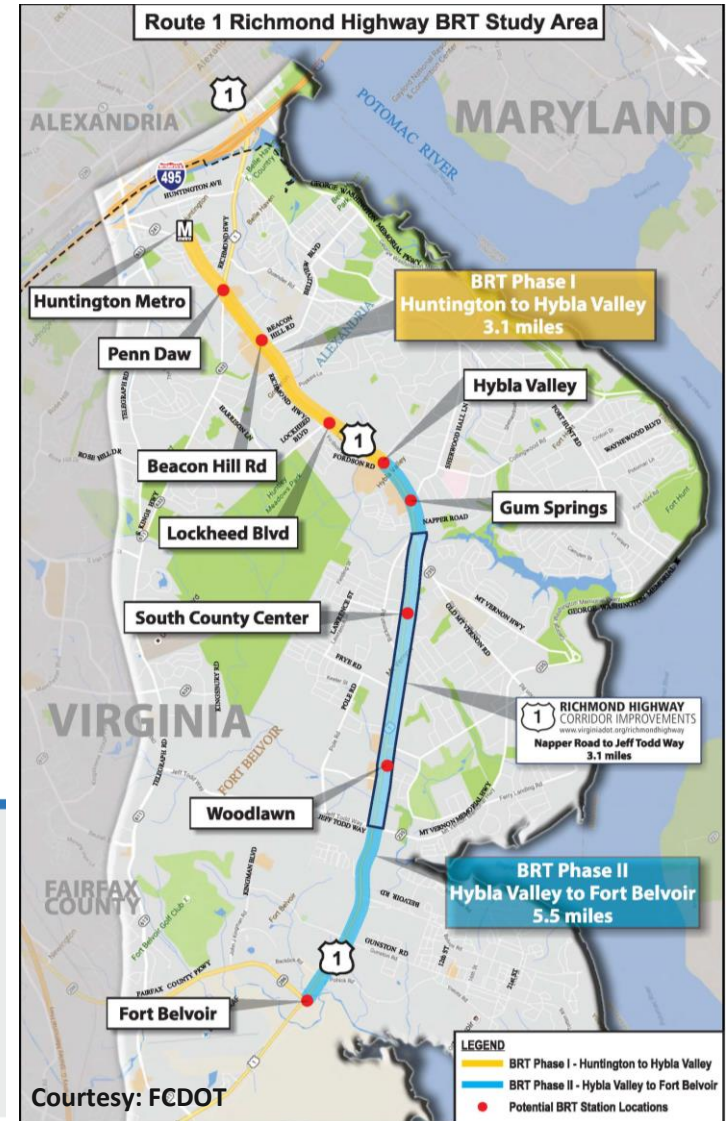
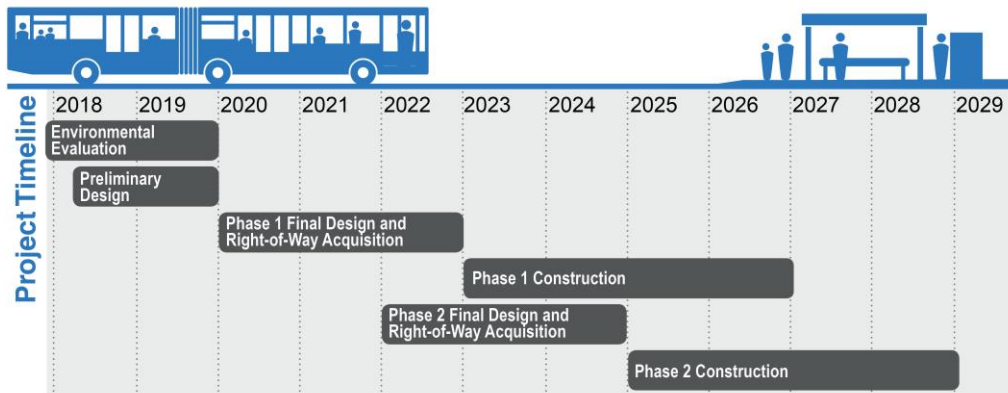


Current BRT Projects with NVTA Funds

Richmond Highway BRT Fairfax County

Type: Median running
Length: 10.4 miles

Total Cost: \$730 million
NVTA Funds: \$250 million





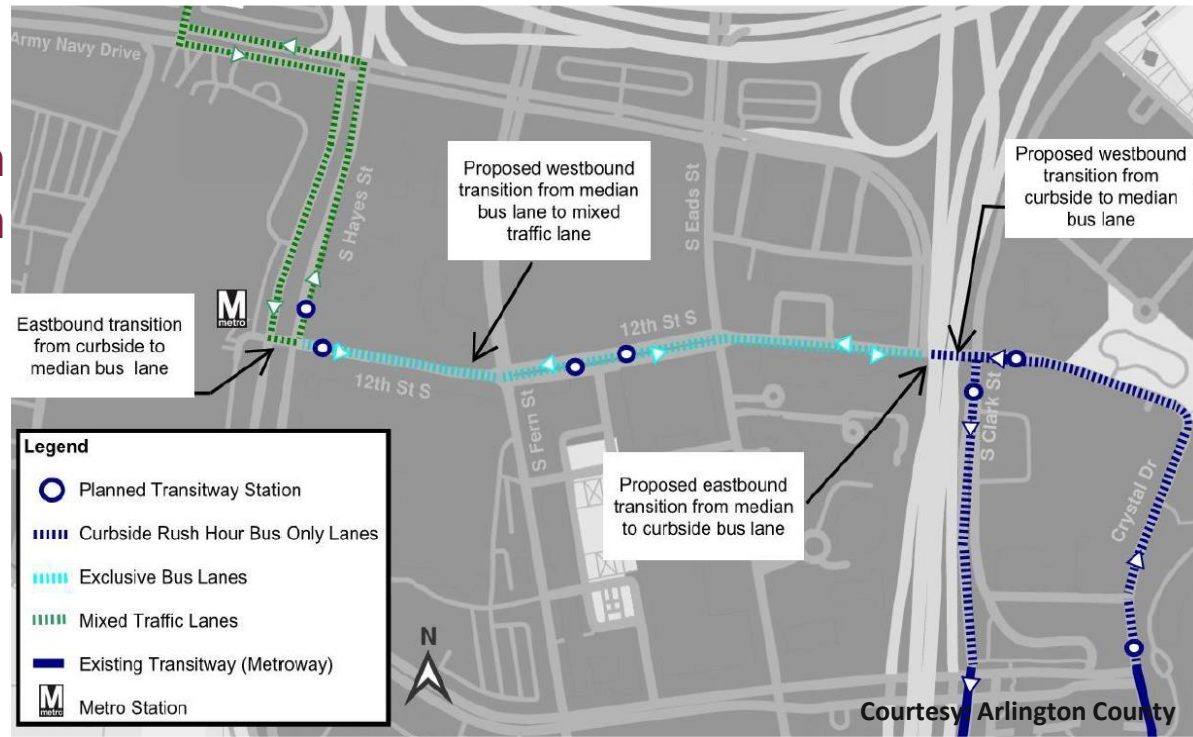
Current BRT Projects with NVTA Funds

Pentagon City Transitway Extension Arlington County

Type: Median/curbside exclusive lanes and mixed traffic
 Length: 1.5 mile

Total Cost: \$47 million
 NVTA Funds: \$29 million

Design: 2017-2019
 Construction: 2019-2021





Current BRT Projects with NVTA Funds

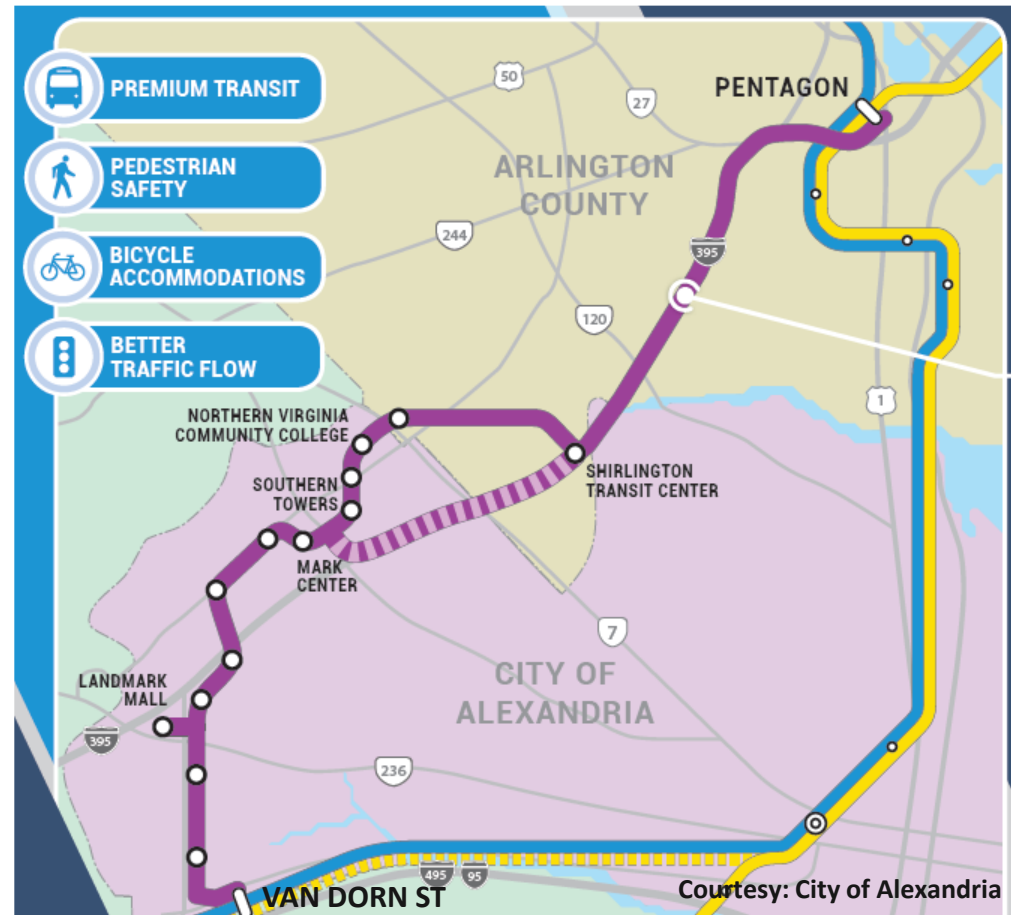
West End Transitway Phase 1 (Landmark Mall to Pentagon)

City of Alexandria

Type: Exclusive lanes/mixed traffic
Length: 5.3 miles

Total Cost: \$128 million
NVTA Funds: \$4.6 million

Design: 2017-2019
Construction: 2020-2023





Current BRT Projects with NVTA Funds

Route 7 BRT

Fairfax Co-Arlington Co-Falls Church-Alexandria

Type: Exclusive lanes/mixed traffic

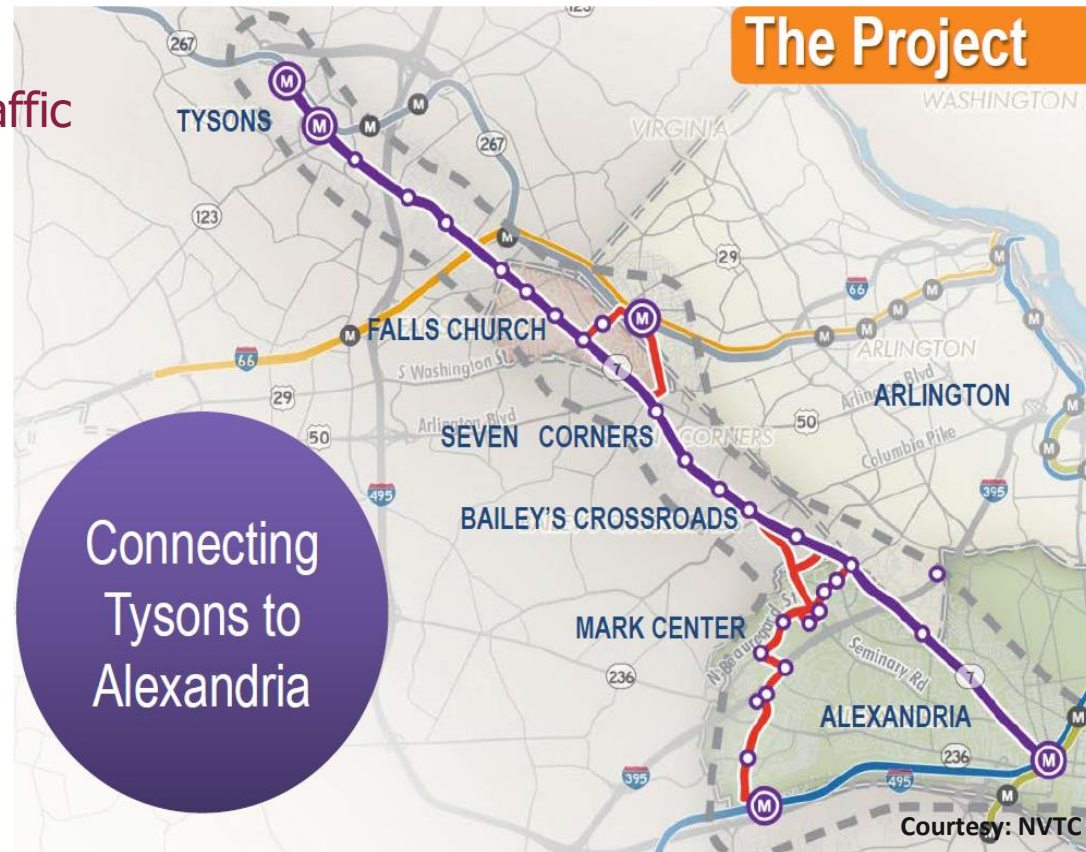
Length: 12 miles

Total Cost: \$300 million

NVTA Funds: \$800,000

Current status:

Conceptual engineering study





Conclusion

NVTA's TransAction Plan developed a vision for high capacity transit corridors in Northern Virginia including connections to the District of Columbia and Maryland.

NVTA's SYP is already moving multiple BRT projects in the region.

Common ground between Visualize 2045 and NVTA's TransAction Plan and SYP projects.

NVTA continue to collaborate with regional agencies in Moving Region Forward.



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