

I-95 IN THE FAMPO AREA

Virginia Commonwealth Transportation Board Meeting
September 17, 2013

Matthew Kelly - FAMPO Chairman

Lloyd Robinson - FAMPO Administrator



Background

- George Washington Region is the fastest growing Region in Virginia since 1970 (over 400% increase).
- Current population of 327,000 people (2010 Census).
- Growth has been largely low density and suburban in nature.
- Population is forecasted to grow to 617,000 people by 2040.
- Future growth is likely to be low density and largely suburban with pockets of moderate density.

Background

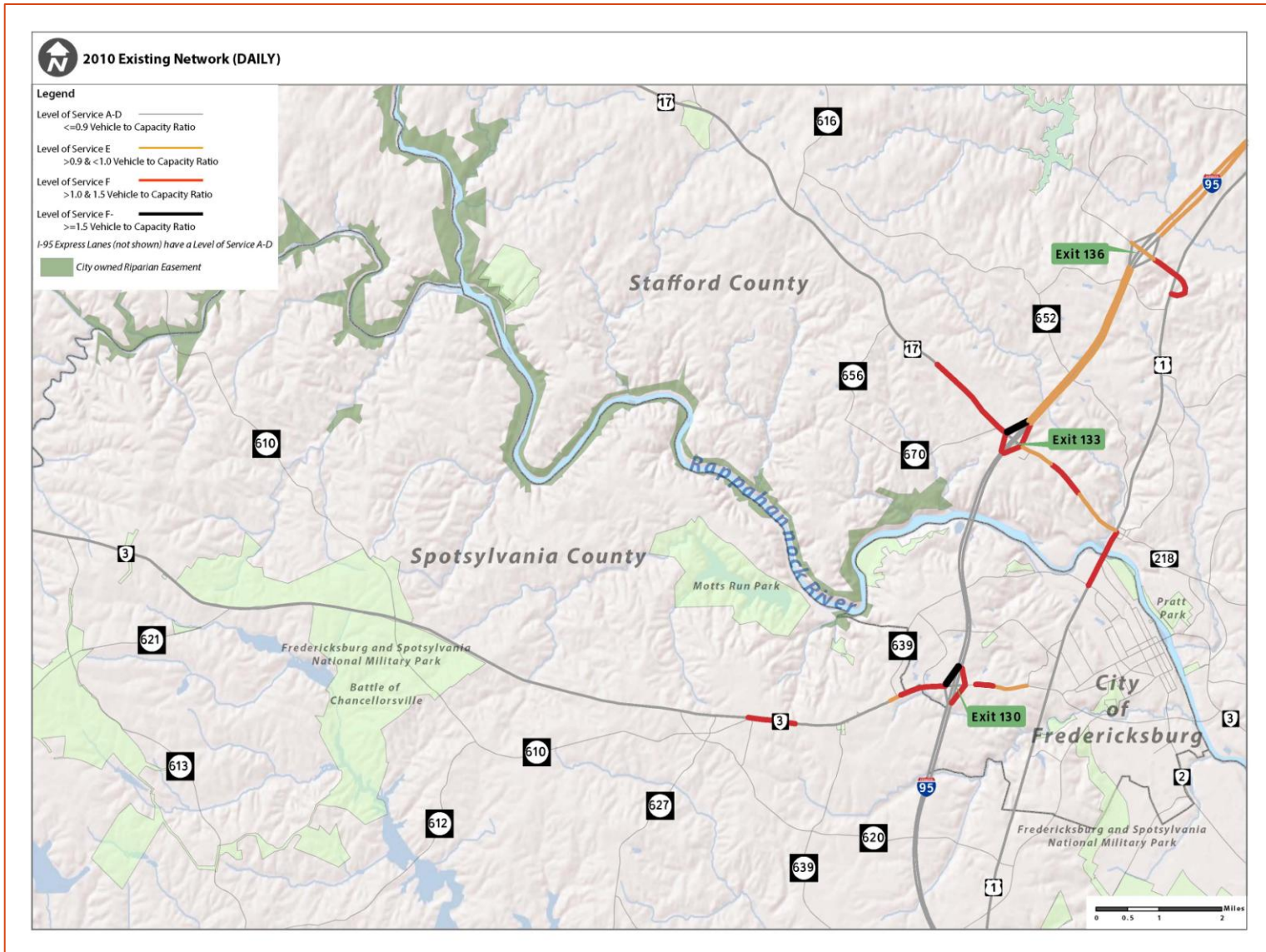
- Approximately 43% of the Region's labor force commutes outside of the Region to work.
- Traffic volumes on I-95 currently range from 124,000 vpd (Exit # 126) to 160,000 vpd (at Rappahannock River).
- I-95 routinely experiences failing levels of service in both the AM and PM peaks as well as on the weekends from Exit # 150 (MCB Quantico) to Exit #126 (Spotsylvania).
- Arterial roadways feeding I-95 also experience failing levels of service during the AM/PM peaks and on the weekends (US-1, US-17, and VA Route 3).

Transportation Demand Management (TDM)

GW RideConnect

- Supports largest vanpool fleet in the Commonwealth
- 408 existing Vanpools
- Transport 1,233,792 persons per year
- Reduce 2,467,584 work trips per year
- 587,520 vehicle miles traveled reduced on daily basis
- 148,055,040 vehicle miles traveled reduced per year
- Manages the ADVANTAGE vanpool self-insurance program for the entire Commonwealth

Current Congestion Issues



Top Bottlenecks for July 2013

Interstate

1. I-95 SB at the Rappahannock River

- Average duration of bottleneck: 3h:14m
- Average maximum length: 17.5 miles
- Number of occurrences: 69

2. I-95 NB at Exit #140 (primarily occurs on weekends)

- Average duration of bottleneck: 5h:6m
- Average maximum length: 27.0 miles
- Number of occurrences: 19

3. I-95 SB at Exit #140

- Average duration of bottleneck: 2h:18m
- Average maximum length: 8.9 miles
- Number of occurrences: 40

4. I-95 SB at Exit #126

- Average duration of bottleneck: 3h:12m
- Average maximum length: 19.1 miles
- Number of occurrences: 11

Top Bottlenecks for July 2013

US Routes

1. **US-17 SB at I-95 (including SB ramps, Stafford County)**

- Average duration of bottleneck: 41m
- Average maximum length: 1.73 miles
- Number of occurrences: 152

2. **US-1 SB at VA-630 (Stafford County)**

- Average duration of bottleneck: 1h:17m
- Average maximum length: 4.2 miles
- Number of occurrences: 29

3. **US-17 NB at Berea Church Rd. (Stafford County)**

- Average duration of bottleneck: 25m
- Average maximum length: 1.9 miles
- Number of occurrences: 199

USER DELAY COST : \$799,905 (ENTIRE MONTH OF JULY)

Top Bottlenecks for July 2013

State Routes

1. VA Route 3 EB at I-95

- Average duration of bottleneck: 28m
- Average maximum length: 1.0 miles
- Number of occurrences: 221

2. VA Route 3 WB at Salem Church Rd.

- Average duration of bottleneck: 40m
- Average maximum length: 1.3 miles
- Number of occurrences: 80

3. VA Route 3 WB at I-95

- Average duration of bottleneck: 25m
- Average maximum length: 0.9 miles
- Number of occurrences: 177





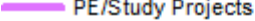
USER DELAY COST: \$429,136 (ENTIRE MONTH OF JULY)

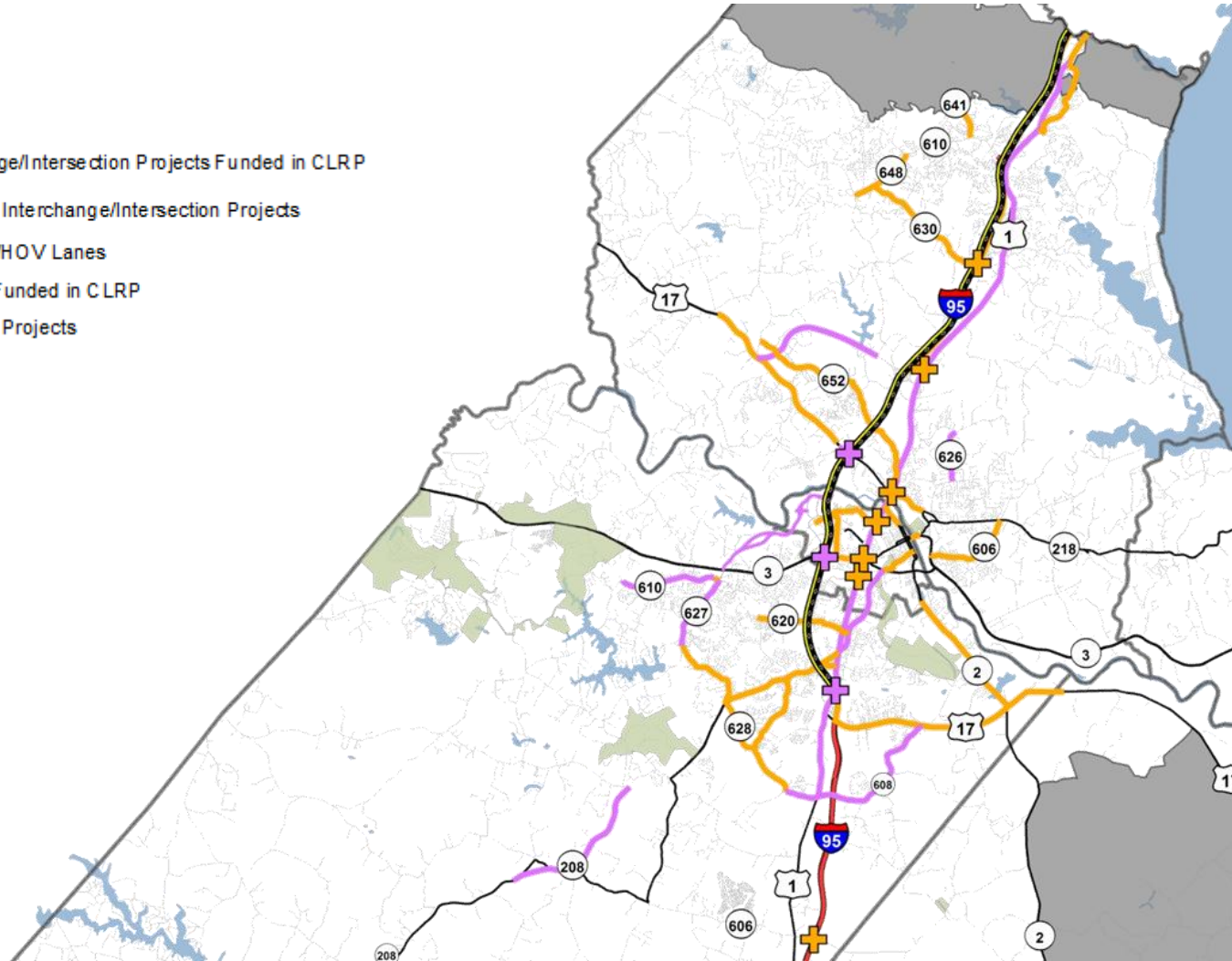
Current Projects & Initiatives

- VA Route 630/I-95 Interchange Replacement (Exit # 140)
- US-17 Widening (construction underway this fall)
- VA Route 3 Widening (recently completed)
- Falmouth Intersection Improvements (underway)
- Fall Hill Avenue Widening (underway FY14)
- Vanpool NTD Program

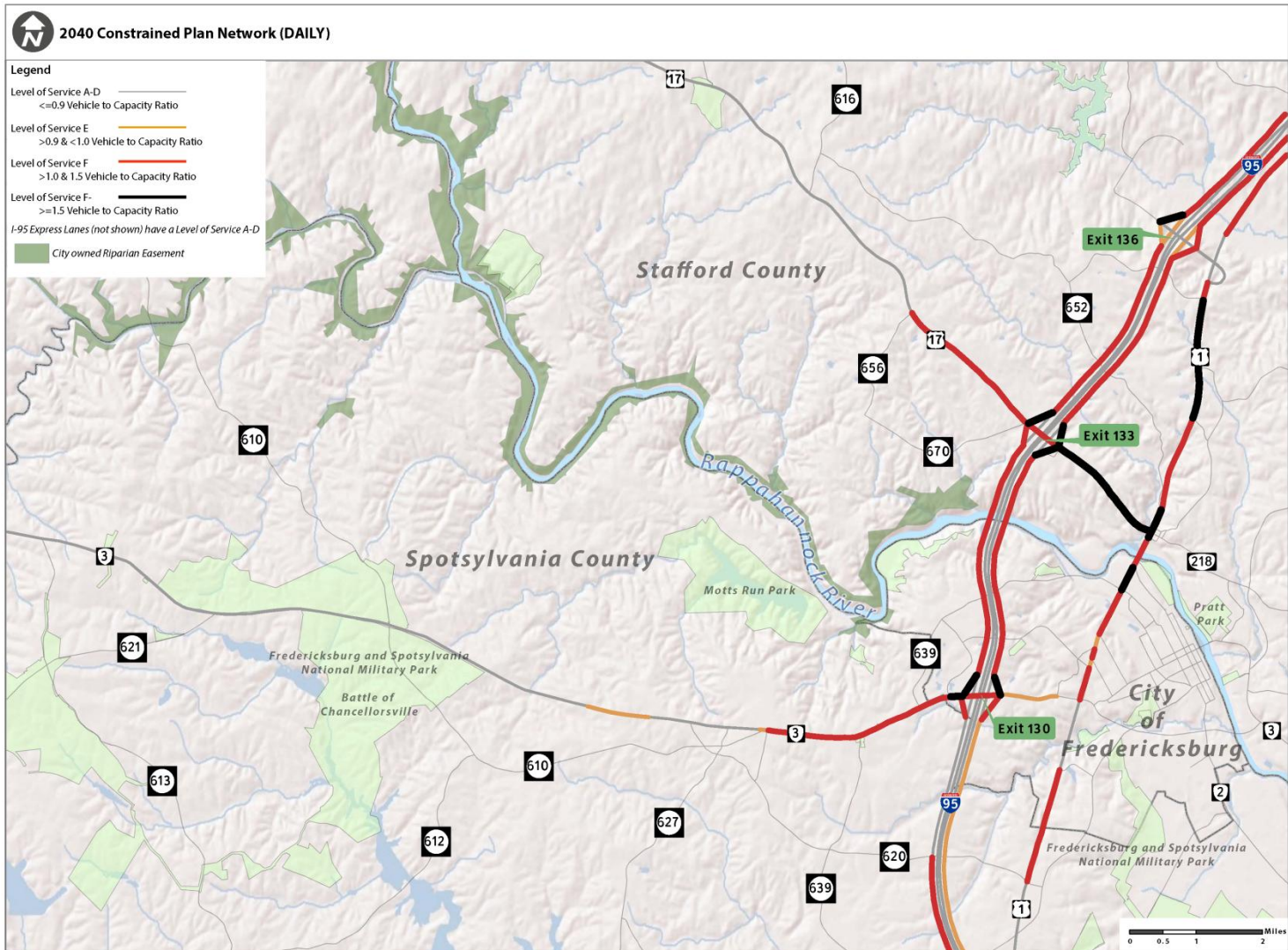
Financially Constrained 2040 Long-Range Plan

Legend:

-  Interchange/Intersection Projects Funded in CLRP
-  PE/Study Interchange/Intersection Projects
-  I-95 HOT/HOV Lanes
-  Projects Funded in CLRP
-  PE/Study Projects



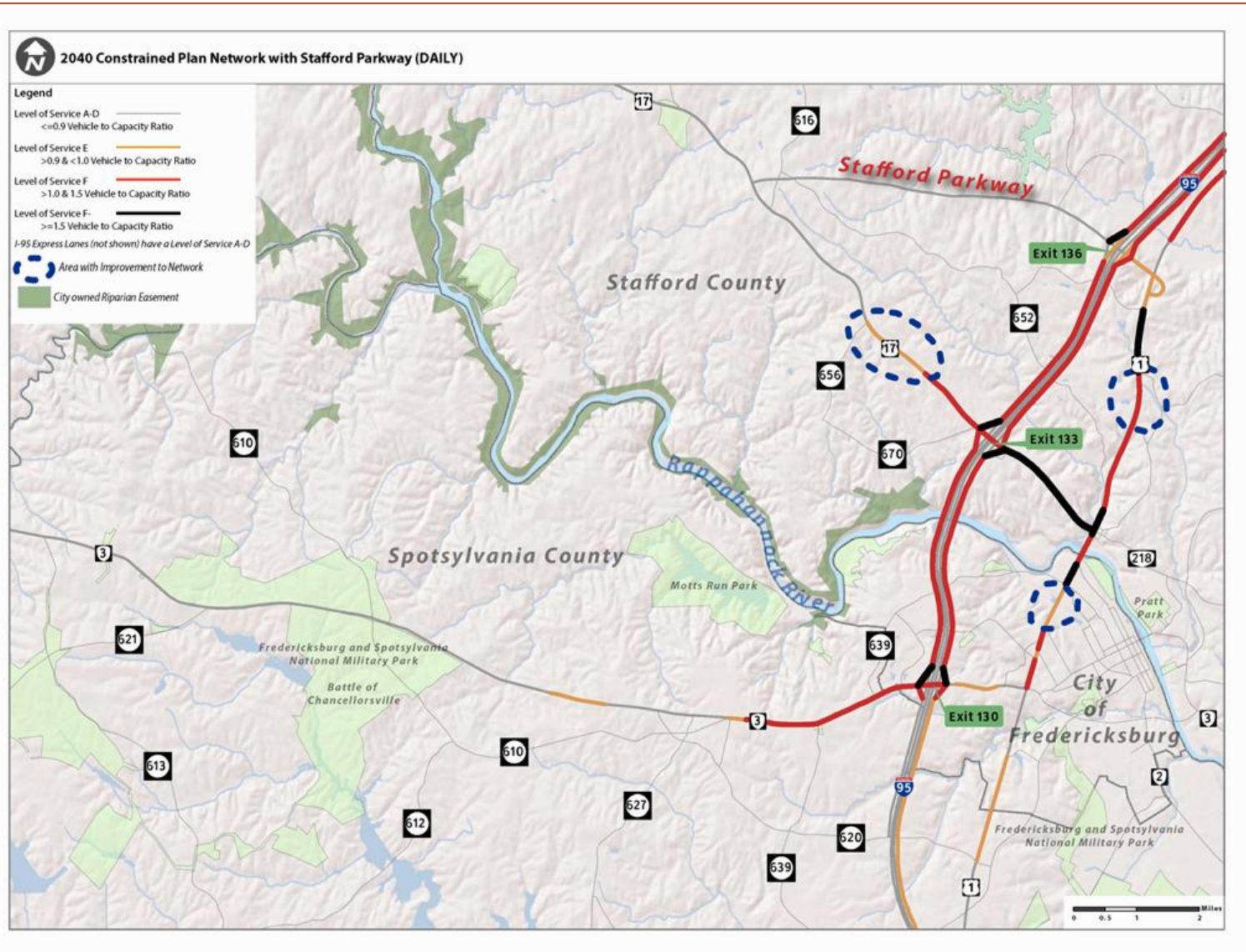
Financially Constrained 2040 Long-Range Plan LOS



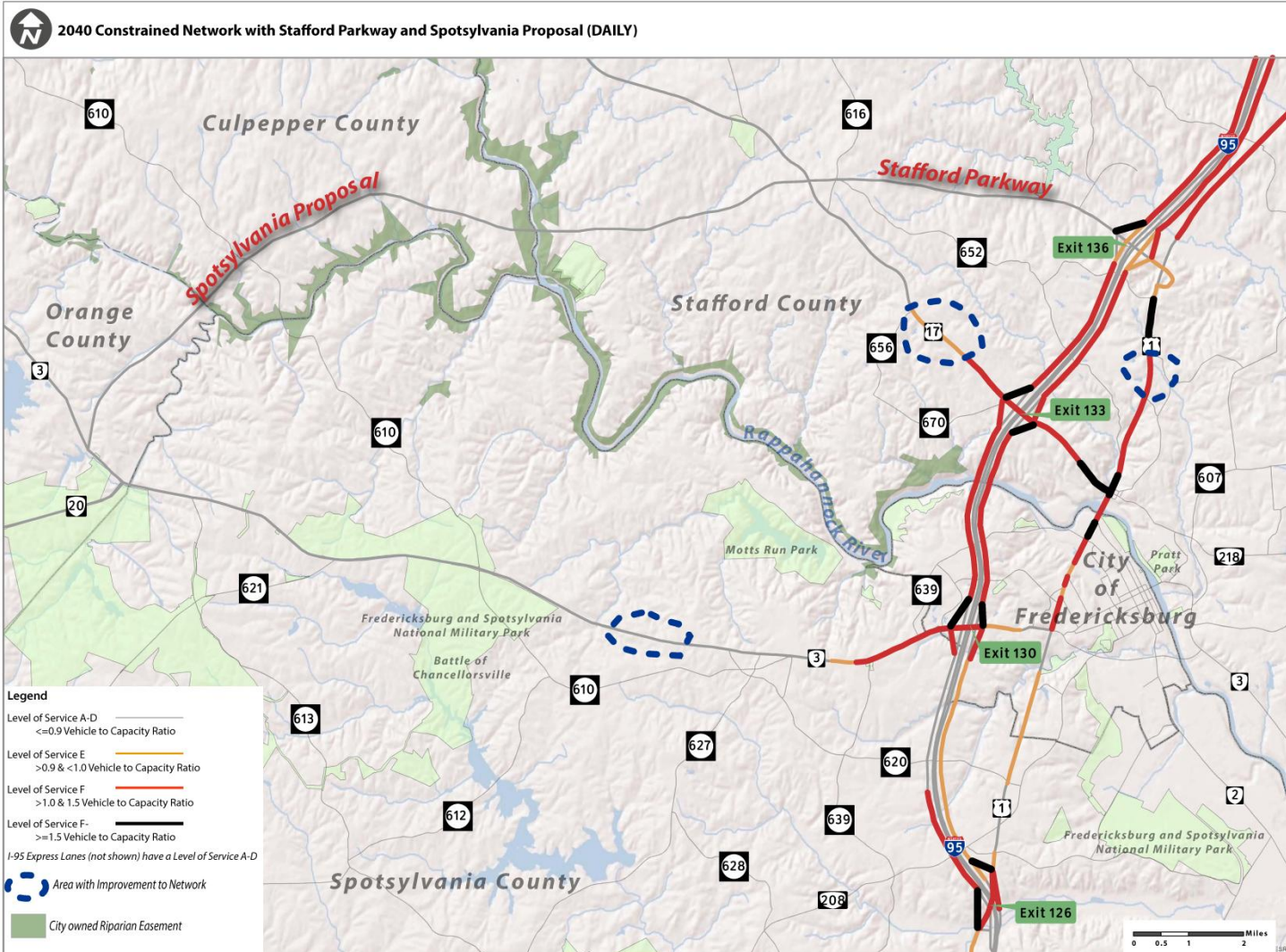
Other Potential Highway Improvements

- Stafford Parkway
- Rappahannock River Crossing/Parkway
- Outer Connector
- I-95 Improvements in the Jackson Gateway Area
- Route 1 Widening (Telegraph Road to Massaponax Church Road)
- Expansion of I-95 Transit/TDM Services

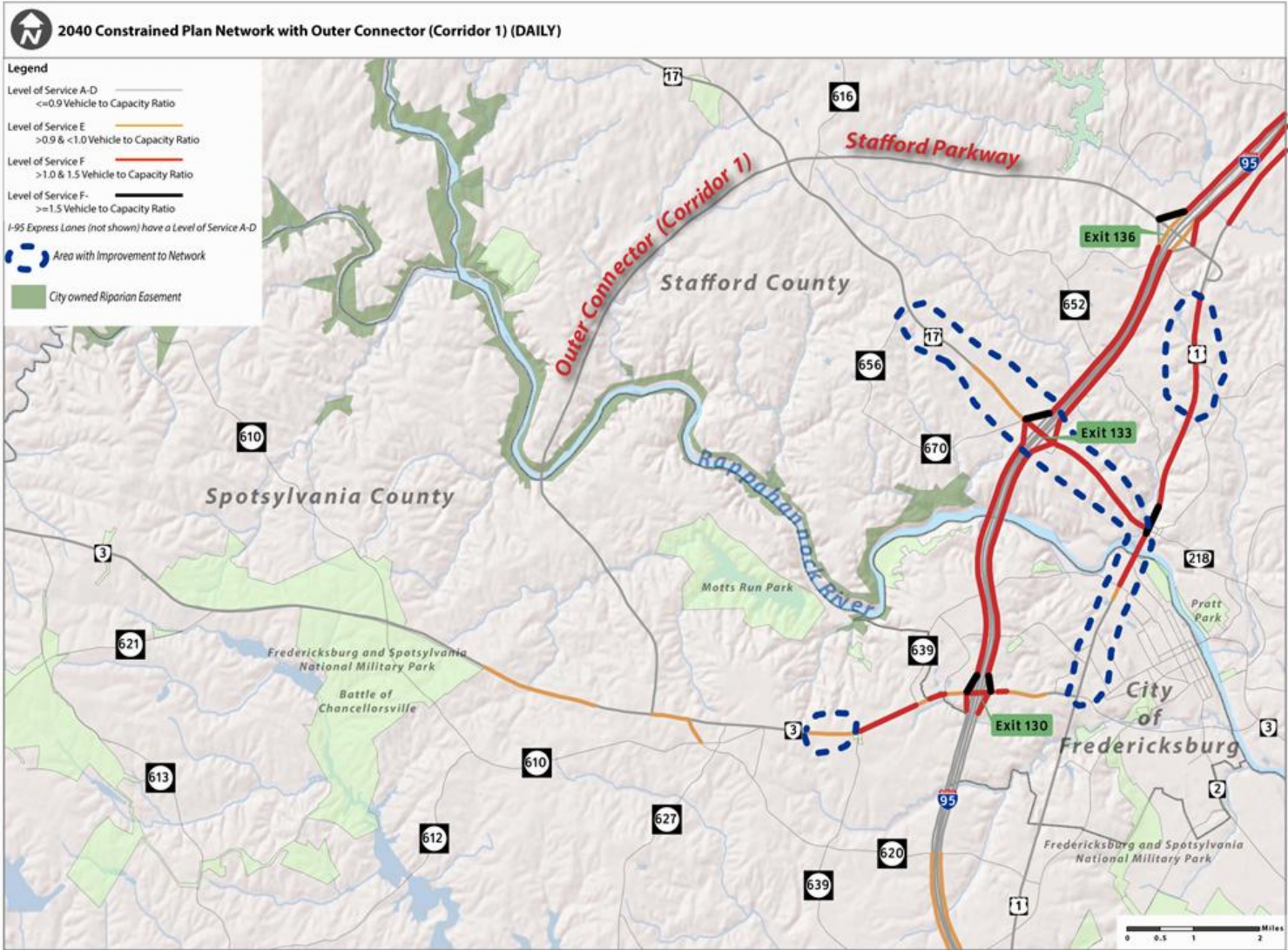
Effects of the Stafford Parkway



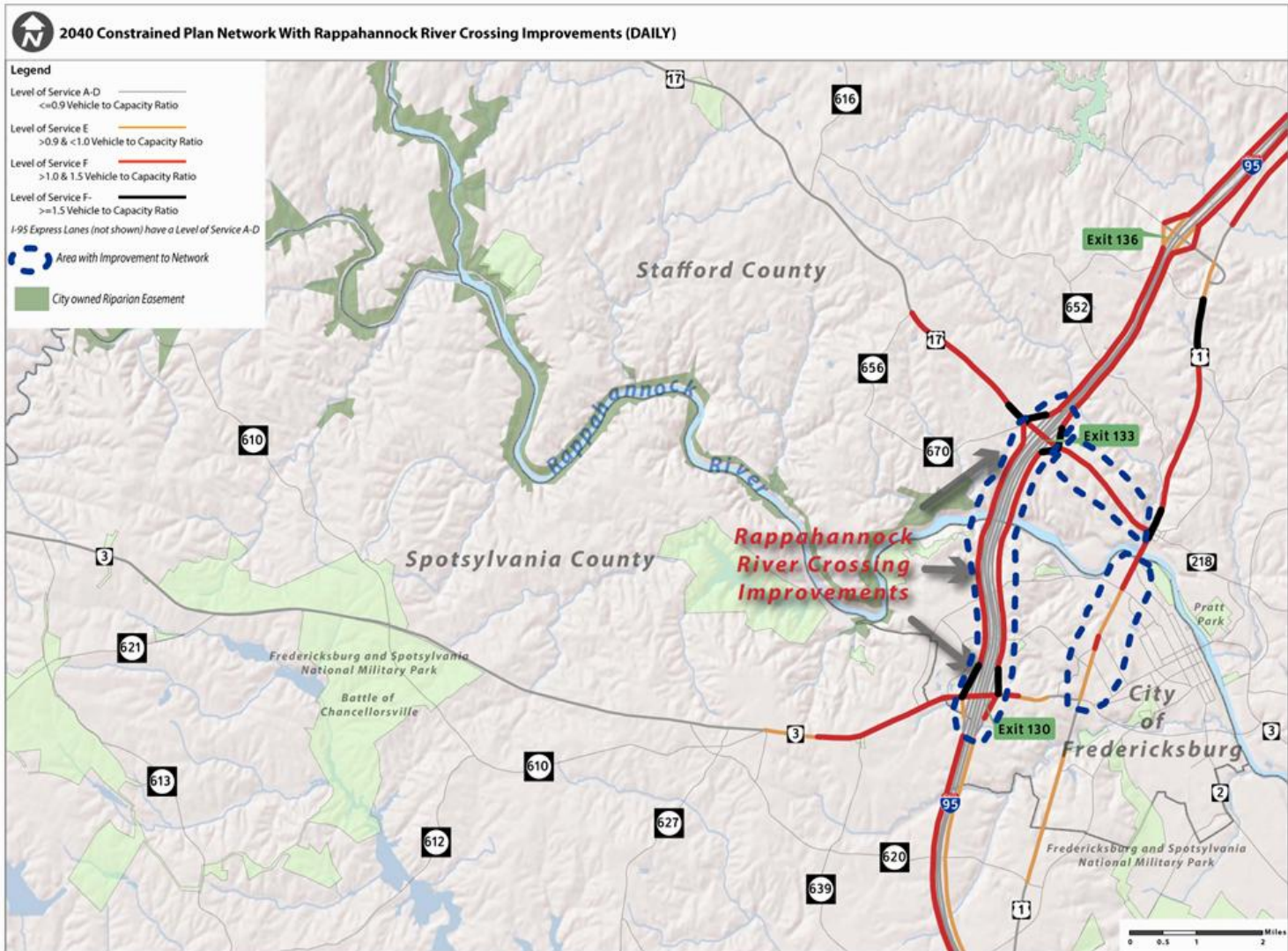
Effects of the Stafford Parkway with the Spotsylvania Bypass Proposal



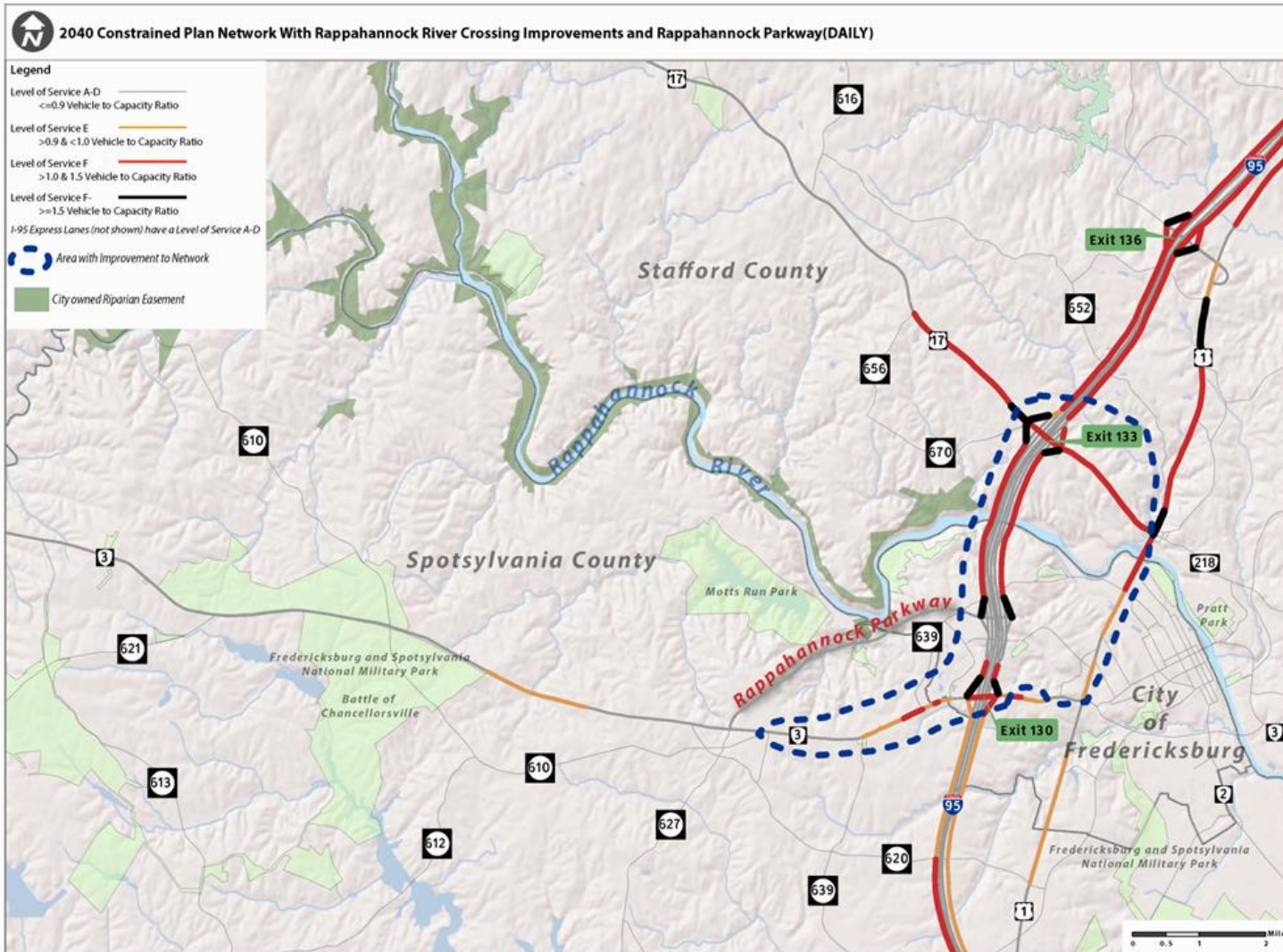
Effects of the Outer Connector



Effects of the Rappahannock River Crossing



Effects of the Rappahannock River Crossing with Rappahannock Parkway



Conclusions

- Traffic is projected to increase significantly over the next 27 years.
- No “fix all” single highway improvement for I-95 and the Region.
- Dispersed land use patterns make providing economical, efficient public transportation on a regional basis a challenge.
- Continued support and expansion of transit and TDM is essential for the future of the I-95 Corridor.