Northern Virginia Transportation Authority

Project Description Form — 6A

Basic Project Information

1. **Submitting Agency:**
City of Falls Church

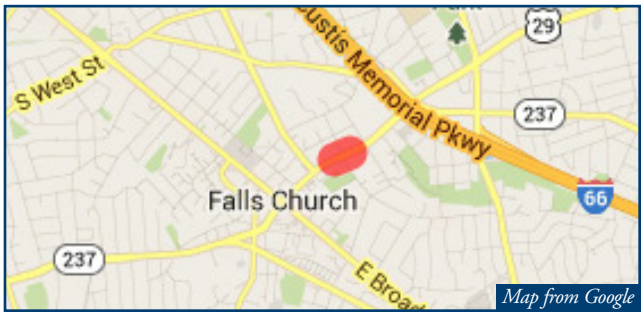
2. **Project Title:** Pedestrian Signal Improvement

3. **Project Type:**
☐ Roadway ☑ Multimodal ☐ Transit

4. **Project Description/Scope:** The project will install pedestrian signals at the intersection of East Columbia Street and North Washington Street. As part of the project, new poles must be installed to support the pedestrian countdown timers as well as wiring. Required wiring changes to the existing traffic lights are ancillary to the pedestrian signal components. This intersection is within 1 mile of the East Falls Church Metro Station, so the addition of pedestrian and bicycle infrastructure will increase accessibility and use of the metrorail system. Connecting this signal to the signal management system will ease traffic flow along South Washington Street for vehicles, pedestrians, and cyclists into and out of Arlington County, the I-66 corridor, East Falls Church Metro Station, and the W&OD multi-use trail.

5. **Route** *(if applicable)***/Corridor:**
Interstate 66 / Route 29 / Route 50 / Corridor 6

6. **Total Project Cost:** $300,000



7. **Total Funds Required:** $300,000

8. **Phase/s of Project Covered by Funding:** Design $45,000, Right of Way $20,000, and Construction $235,000

9. **Project Milestones** (*by phase, include all phases*)**:**
- Design Start: FY 2014
- Design Complete: FY 2015
- ROW Start: FY 2015
- ROW Complete: FY 2015
- Construction Start: FY 2015
- Construction Complete: FY 2015

10. **In TransAction 2040 plan?**
☑ Yes ☐ No

Technical Report Page # 4 – 16. This project is part of the City if Falls Church pedestrian, bicycle, and traffic calming improvements project.

11. **In CLRP, TIP or Air Quality Neutral?**
Yes. Air Quality Neutral

12. **Leverages Sources:**
☐ Local ☐ State ☐ Federal
☐ Other (*please explain*)

PROJECT ANALYSIS

Tier I ☑ Pass ☐ Fail

Tier II 4 out of 8 points

Tier III Congestion Reduction Relative to Cost:

Plan ☐ CLRP ☑ TA2040 only ***Rating*** ☑ High ☐ Med ☐ Low

Stated Benefits

1. **What regional benefit/s does this project offer?** This intersection is within 1 mile of the East Falls Church Metro Station, so the addition of pedestrian and bicycle infrastructure will increase accessibility and use of the Metro Rail system. Connecting this signal to the signal management system will ease traffic flow along South Washington Street for vehicles, pedestrians, and cyclists into and out of Arlington County, the I-66 corridor, Each Falls Church Metro Station, and the W&OD multi-use trail.

2. **How does the project reduce congestion?** The provision of pedestrian signals is part of a larger project for providing infrastructure that enables more mode choice when traveling in, to, and from the City of Falls Church. The current infrastructure is unbalanced and as such puts a strain on roadway capacity. This impacts both local conditions and regional conditions since Routes 7 and 29 are important regional travel routes. Creating more travel options will reduce the strain on roadway capacity and in turn reduce congestion.

3. **How does the project increase capacity?** *(Mass transit projects only)* N/A

4. **How does the project improve auto and pedestrian safety?** The addition of pedestrian signals will better define when and where pedestrians are expected to cross the road, and allow for pedestrians to call for the traffic signal to cycle. This will give pedestrians a sufficient amount of time to cross the travel lanes safely and eliminate the need to cross the street against the light.

5. **List internet address/link to any additional information or documentation in support of project benefits.** *(Optional)* N/A

6. **Project Picture/Illustratives**

Figure 1: Existing Intersection Lacks Pedestrian Signals

Northern Virginia Transportation Authority

Project Description Form — 6B

Basic Project Information

1. **Submitting Agency:**
   Washington Metropolitan Area Transit Authority (WMATA)

2. **Project Title:** Traction Power Upgrades on the Orange Line in Virginia

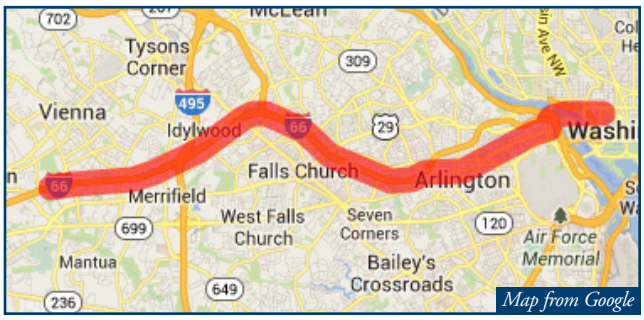
3. **Project Type:**
   ☐ Roadway ☐ Multimodal ☑ Transit

4. **Project Description/Scope:** WMATA's strategic plan includes a project to expand the Metrorail fleet to enable the operation of 100 percent eight-car trains. The eight-car train project includes not only the purchase of rolling stock and railyard expansion, but also associated traction power upgrades. This project will begin the process of upgrading traction power along the Orange Line in Virginia, a very busy Metrorail corridor.

5. **Route** *(if applicable)***/Corridor:**
   Other Corridor (Closest to Corridor 6, 8)

6. **Total Project Cost:** The TransAction 2040 estimate of the Virginia share for 100% 8-car trains is $496 million based on 33.0% share of a rough estimate of $1.5 billion for the region; as a component of WMATA's strategic plan, the cost and schedule are being updated.

7. **Total Funds Required:** $5,000,000 for the initial portion of Orange Line power upgrades.



8. **Phase/s of Project Covered by Funding:** Design, Construction of initial portion of power upgrades.

9. **Project Milestones** (*by phase, include all phases*)**:**
   - Design: FY 2014
   - Construction Start: FY 2014
   - Construction Complete: FY 2014

   Future phases of the total project include additional work on the Orange Line, upgrades to traction power on all other lines, purchase of additional railcars, and expansion of railcar storage capacity, with the schedule to be determined.

10. **In TransAction 2040 plan?**
    ☑ Yes ☐ No

    Technical Report Page # 4 – 42*
    *Project rated "High" for Reduce Roadway Congestion

11. **In CLRP, TIP or Air Quality Neutral?**
    Not in CLRP and beneficial for air quality.

12. **Leverages Sources:**
    ☐ Local ☐ State ☐ Federal
    ☐ Other (*please explain*)

PROJECT ANALYSIS

Tier I ☑ Pass ☐ Fail

Tier II 6 out of 8 points

Tier III Congestion Reduction Relative to Cost:

Plan ☐ CLRP ☑ TA2040 only ***Rating*** ☐ High ☐ Med ☑ Low

Stated Benefits

1. **What regional benefit/s does this project offer?** This project represents an initial step toward addressing traction power as part of the eight-car train project. Traction power on the Orange Line in Virginia represents the greatest need at this time. Region-wide, the operation of 100% eight-car trains would enable Metrorail to increase peak-hour capacity into the core by 35,000 persons, with the capacity increases most needed for the Virginia routes merging into the Rosslyn (Blue, Orange and Silver Lines) and L'Enfant Plaza (Yellow Line) stations.

2. **How does the project reduce congestion?** Without the Metrorail fleet expansion, the present congestion that's experienced only on the Orange Line (greater than 100 passengers per car (ppc) on average) will expand to all Virginia lines in the 2020s, with the Orange and Silver lines experiencing severe congestion (average greater than 120 ppc.) This fleet expansion will keep peak loadings on all lines near or below the 100 ppc for the 2025 timeframe.

3. **How does the project increase capacity?** *(Mass transit projects only)* The total project will increase overall peak-hour Metrorail capacity into the core by 35,000, including an increase of 10,000 passengers per hour (33 percent) from Virginia into the Foggy Bottom and L'Enfant Plaza stations in D.C.

4. **How does the project improve auto and pedestrian safety?** Reduced congestion on Metrorail will increase its attractiveness, resulting in a higher transit mode share and reduced vehicle-miles of auto travel (VMT). As a general rule, lower VMT results in fewer auto crashes, thereby improving safety.

5. **List internet address/link to any additional information or documentation in support of project benefits.** *(Optional)*

   WMATA's strategic plan includes a project to expand the Metrorail fleet to enable the operation of 100 percent eight-car trains. See: http://www.wmata.com/momentum/

6. **Project Picture/Illustratives** N/A

Northern Virginia Transportation Authority

Project Description Form — 6C

Basic Project Information

1. **Submitting Agency:**
City of Falls Church

2. **Project Title:** Pedestrian Access to Transit

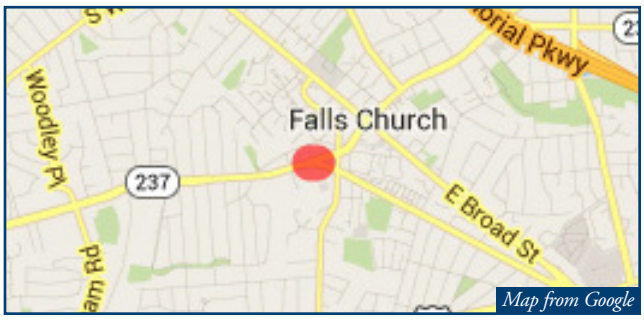
3. **Project Type:**
☐ Roadway ☐ Multimodal ☑ Transit

4. **Project Description/Scope:** This project will provide safer, more direct, and more attractive pedestrian connections to the Intermodal Plaza currently being designed for the intersection of South Washington Street and Hillwood Avenue in the City of Falls Church. Once completed, the plaza will serve as a focal point for bus transportation in the area and provide bicycle infrastructure, such as repair equipment. The plaza is located adjacent to several recent and ongoing redevelopment projects. Additional funds are required to complete the necessary pedestrian connections to the Intermodal plaza. These connections will increase ridership on transit lines that serve the Intermodal Plaza.

5. **Route** *(if applicable)***/Corridor:**
Interstate 66 / Route 29 / Route 50 / Corridor 6

6. **Total Project Cost:** $2,900,000

7. **Total Funds Required:** $700,000



8. **Phase/s of Project Covered by Funding:** Design $100,000, ROW $30,000, Construction $570,000

9. **Project Milestones** (*by phase, include all phases*)**:**
   - Design Start: FY 2017
   - Design Complete: FY 2018
   - ROW Start: FY 2019
   - ROW Complete: FY 2019
   - Construction Start: FY 2020
   - Construction Complete: FY 2020

10. **In TransAction 2040 plan?**
☑ Yes ☐ No
Technical Report Page # 4 – 26. This project is part of the City of Falls Church intermodal transit plaza.

11. **In CLRP, TIP or Air Quality Neutral?**
Yes. Air Quality Neutral

12. **Leverages Sources:**
☐ Local ☑ State ☑ Federal
☐ Other (*please explain*)

PROJECT ANALYSIS

Tier I ☑ Pass ☐ Fail

Tier II 7 out of 8 points

Tier III Congestion Reduction Relative to Cost:

Plan ☐ CLRP ☑ TA2040 only ***Rating*** ☑ High ☐ Med ☐ Low

Stated Benefits

1. **What regional benefit/s does this project offer?** The new plaza currently lacks key pedestrian connections along Route 29 to existing neighborhoods as well as recent mixed-use developments in the vicinity. These new pedestrian connections will provide better and safer routes throughout the local area, increasing pedestrian access to local activities. The new connections will also provide residents of Falls Church and Fairfax County better access to Metro Bus stops, which in turn will increase access to the East Falls Church Metro Station.

2. **How does the project reduce congestion?** The intermodal plaza and associated pedestrian access improvements will expand transportation options for area residents, workers, and shoppers. Expanding travel options helps reduce congestion by enabling travelers to select modes other than automobile, thereby reducing congestion.

3. **How does the project increase capacity?** *(Mass transit projects only)* In urban areas, most trips to and from transit are done on foot. The capacity of a transit system is therefore limited by how many people can walk to and from the stations. Making transit easier and faster to reach will increase the capacity of the transit system by making that transit accessible to more people. Increasing the pedestrian sheds or catchment areas of transit stations can be expected to have a significant impact as already nearly 20% of city residents use transit to get to and from work.

4. **How does the project improve auto and pedestrian safety?** This project will improve pedestrian safety by shortening street-crossing distances, providing designated pedestrian signals, and marking additional crosswalks.

5. **List internet address/link to any additional information or documentation in support of project benefits.** *(Optional)* N/A

6. **Project Picture/Illustratives**

Figure 1: Existing Conditions

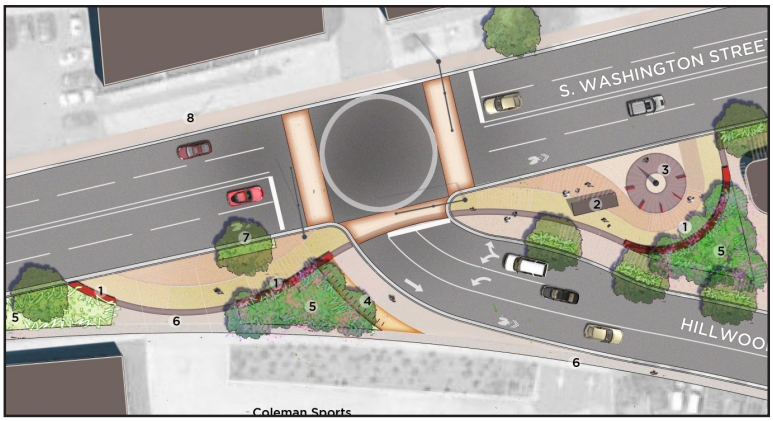


Figure 2: Proposed Intermodal Plaza

Northern Virginia Transportation Authority

Project Description Form — 6D

Basic Project Information

1. **Submitting Agency:**
   City of Falls Church

2. **Project Title:** Pedestrian Bridge providing safe access to the East Falls Church Metro Station.

3. **Project Type:**
   ☐ Roadway ☑ Multimodal ☐ Transit

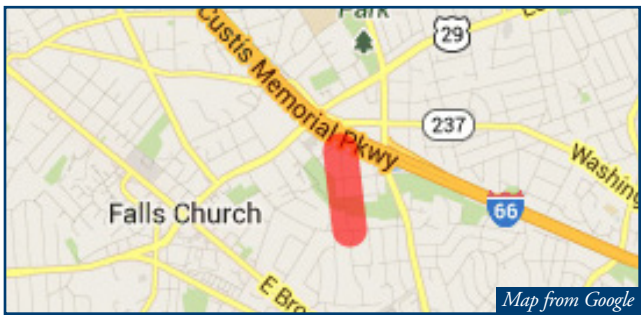
4. **Project Description/Scope:** This project will expand an existing bridge on Van Buren Street by adding a segregated pedestrian area. The existing bridge lacks such a facility and requires pedestrians to detour onto the pavement in order to access the Metro Station.

5. **Route** *(if applicable)***/Corridor:**
   Interstate 66 / Route 29 / Route 50 / Corridor 6

6. **Total Project Cost:** $300,000

7. **Total Funds Required:** $300,000

8. **Phase/s of Project Covered by Funding:** Design $45,000, Construction $235,000



9. **Project Milestones** (*by phase, include all phases*)**:**
   - Current Status: Assessment of Current Conditions
   - Design Start: FY 2014
   - Design Complete: FY 2014
   - Construction Start: FY 2014
   - Construction Complete: FY 2015

10. **In TransAction 2040 plan?**
    ☑ Yes ☐ No

    Technical Report Page # 4 – 26. This project is part of the City of Falls Church pedestrian, bicycle, and traffic calming improvements.

11. **In CLRP, TIP or Air Quality Neutral?**
    Yes. Air Quality Neutral.

12. **Leverages Sources:**
    ☐ Local ☐ State ☐ Federal
    ☐ Other (*please explain*)

PROJECT ANALYSIS

Tier I ☑ Pass ☐ Fail

Tier II 5 out of 8 points

Tier III Congestion Reduction Relative to Cost:

Plan ☐ CLRP ☑ TA2040 only ***Rating*** ☑ High ☐ Med ☐ Low

Stated Benefits

1. **What regional benefit/s does this project offer?** The current bridge forces pedestrians to leave the sidewalk and cross the bridge using a parking lane before returning to the sidewalk on the far side of the bridge. This bridge is part of a frequently used pedestrian path to the East Falls Church Metro Station and is important for expanding access to Metro Rail.

2. **How does the project reduce congestion?** As noted in the response to the previous question, this pedestrian-way is an important means of accessing the East Falls Church Metro. Increasing access to Metro will reduce congestion by enabling more travelers to use transit.

3. **How does the project increase capacity?** *(Mass transit projects only)* N/A

4. **How does the project improve auto and pedestrian safety?** The existing bridge lacks segregated facilities for pedestrian and automobile traffic. Currently, pedestrians walking on the Van Buren Street sidewalk to access the Metro Station must step down onto the pavement in order to cross the bridge. Creating segregated facilities for pedestrian and automobile traffic will prevent conflicts, thereby increasing safety.

5. **List internet address/link to any additional information or documentation in support of project benefits.** *(Optional)* N/A

6. **Project Picture/Illustratives** N/A

Northern Virginia Transportation Authority

Project Description Form — 6E

Basic Project Information

1. **Submitting Agency:**
City of Fairfax

2. **Project Title:** Chain Bridge Road Widening/Improvements from Route 29/50 to Eaton Place

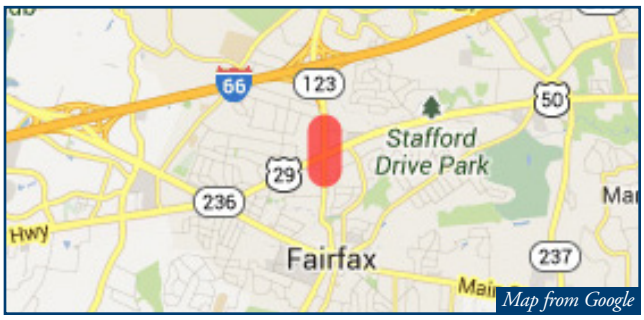
3. **Project Type:**
☑ Roadway ☐ Multimodal ☐ Transit

4. **Project Description/Scope:** This project will provide road improvements on Chain Bridge Road (Route 123) from Route 29/50 (Fairfax Blvd.) to Eaton Place. The project will widen Route 123 (Chain Bridge Road) to six lanes from Route 29/50 to Eaton Place, improve the geometrics (lane alignments) of the roadway approaches for the intersection of Route 29/50 (Fairfax Boulevard) at Route 123 (Chain Bridge Road) and improve pedestrian accommodations at all legs of the intersection. The project will also make extensive culvert improvements to eliminate roadway flooding caused by the inadequate culvert under Route 123.

5. **Route** *(if applicable)***/Corridor:**
Route 50 / Route123 / Corridor 6

6. **Total Project Cost:** $21,000,000

7. **Total Funds Required:** $5,000,000



8. **Phase/s of Project Covered by Funding:** Design, ROW, Construction

9. **Project Milestones** (*by phase, include all phases*)**:**
   - Design: Summer/Fall 2013
   - ROW Start: Spring 2014
   - Construction Plans: Spring 2015
   - Advertisement for Construction Bids: Spring 2015
   - Construction Start: Winter 2016

10. **In TransAction 2040 plan?**
☑ Yes ☐ No

11. **In CLRP, TIP or Air Quality Neutral?**
Yes. CLRP, ID# 1891

12. **Leverages Sources:**
☑ Local ☑ State ☑ Federal
☐ Other (*please explain*)

PROJECT ANALYSIS

Tier I ☑ Pass ☐ Fail

Tier II 7 out of 8 points

Tier III Congestion Reduction Relative to Cost:

Plan ☑ CLRP ☐ TA2040 only ***Rating*** ☑ High ☐ Med ☐ Low

Stated Benefits

1. **What regional benefit/s does this project offer?** This intersection in the City of Fairfax provides an important connection in the region between I-66, Route 29/50, and Chain Bridge Road (Route 123). This project will improve both vehicular and pedestrian mobility in the area and eliminate roadway flooding.

2. **How does the project reduce congestion?** The roadway improvements will improve traffic flow as well as both vehicular and pedestrian mobility in the vicinity of Route 123 and Route 29/50.

3. **How does the project increase capacity?** *(Mass transit projects only)* N/A

4. **How does the project improve auto and pedestrian safety?** The project will improve pedestrian accommodations at all legs of the intersection. It will also make extensive culvert improvements to eliminate roadway flooding.

5. **List internet address/link to any additional information or documentation in support of project benefits.** *(Optional)* N/A

6. **Project Picture/Illustratives**

Northern Virginia Transportation Authority

Project Description Form — 6F

Basic Project Information

1. **Submitting Agency:**
   Fairfax County

2. **Project Title:** Route 29 Widening (Fairfax City to Legato Road)

3. **Project Type:**
   ☑ Roadway ☐ Multimodal ☐ Transit

4. **Project Description/Scope:** Add third lane Northbound (NB) from Legato Road to Shirley Gate Road, including reconstruction of existing pavement segments, and provide pedestrian facility. The project is already funded for design and partial Right-Of-Way (ROW) acquisition. Funding is requested to complete ROW acquisition, utility relocation and construction..

5. **Route** *(if applicable)***/Corridor:**
   Route 29 / Corridor 6

6. **Total Project Cost:** $11,500,000

7. **Total Funds Required:** $7,500,000

8. **Phase/s of Project Covered by Funding:** ROW Acquisition, Utility Relocation, and Construction

9. **Project Milestones** (*by phase, include all phases*)**:**
   - ROW Acquisition Start: Summer 2013
   - ROW Acquisition Complete: Winter 2014
   - Utility Relocation: June 2014
   - Utility Relocation Complete: July 2015
   - Construction Start: May 2015
   - Construction Complete: September 2016

10. **In TransAction 2040 plan?**
    ☑ Yes ☐ No

11. **In CLRP, TIP or Air Quality Neutral?**
    Yes. CLRP, ID# 1933.

12. **Leverages Sources:**
    ☑ Local ☐ State ☐ Federal
    ☐ Other (*please explain*)
    Design and a portion of land acquisition funded at $4,000,000 from 2007 Transportation Bond.

PROJECT ANALYSIS

Tier I ☑ Pass ☐ Fail

Tier II 7 out of 8 points

Tier III Congestion Reduction Relative to Cost:

Plan ☑ CLRP ☐ TA2040 only ***Rating*** ☑ High ☐ Med ☐ Low

Stated Benefits

1. **What regional benefit/s does this project offer?** The project provides additional capacity on heavily congested Route 29, which provides travel through and between several counties in Virginia, and provides a direct connection to other regional highways, such as I-66 and US Route 50.

2. **How does the project reduce congestion?** The project will add one lane in the northbound direction of Route 29, which currently carries 36,000 vehicles per day, for a Level of Service (LOS) E. The project will also provide a sidewalk on the south side of Route 29, improving pedestrian capacity and safety.

3. **How does the project increase capacity?** *(Mass transit projects only)* N/A

4. **How does the project improve auto and pedestrian safety?** By adding capacity and reducing congestion, the project reduces the occurrence of vehicular conflicts. By improving intersections, vehicle conflicts are reduced, making the road safer for both vehicles and pedestrians/bicyclists. The sidewalk facility increases pedestrian safety.

5. **List internet address/link to any additional information or documentation in support of project benefits.** *(Optional)*

   The project is in conformance with the Transportation element of the Fairfax County Comprehensive Plan: http://www.fairfaxcounty.gov/dpz/comprehensiveplan/

6. **Project Picture/Illustratives**

Route 29 Northbound, Approaching Forum Drive

Northern Virginia Transportation Authority

Project Description Form — 6G

Basic Project Information

1. **Submitting Agency:**
   Virginia Railway Express (VRE)

2. **Project Title:** VRE Gainesville-Haymarket Extension Project Development

3. **Project Type:**
   ☐ Roadway ☐ Multimodal ☑ Transit

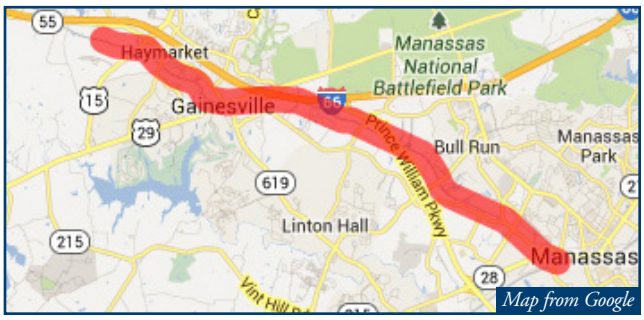
4. **Project Description/Scope:** This project involves a corridor study and preliminary project development for a potential 11 mile VRE extension from Manassas to the Gainesville-Haymarket area of Prince William County. An extension along the Norfolk Southern (NS) B Line will be studied; other VRE options that address the need for the service may be investigated as well. The project will also identify VRE existing core system capacity improvements necessary to support the existing service and the extension.

5. **Route** *(if applicable)***/Corridor:**
   I-66 / U.S. 29 / U.S. 50 / Corridor 6

6. **Total Project Cost:** $1,500,000

7. **Total Funds Required:** $1,500,000

8. **Phase/s of Project Covered by Funding:** Planning, project development and conceptual design.



9. **Project Milestones** (*by phase, include all phases*)**:**
   - Project development: FY 2014

10. **In TransAction 2040 plan?**
    ☑ Yes ☐ No

11. **In CLRP, TIP or Air Quality Neutral?**
    Yes. CLRP, ID # 2420

12. **Leverages Sources:**
    ☐ Local ☑ State ☑ Federal
    ☐ Other (*please explain*)

    The project advances the investigation and identification of enhancements to the VRE system as an initial step to enable the project/VRE to potentially leverage future state (Rail Enhancement Fund or Mass Transit) and federal (Fixed Guideway Capital Investment) grant programs. The NVTA funding will provide the local match to a state Rail Enhancement Fund grant if VRE's request for funding is approved by the Commonwealth Transportation Board.

PROJECT ANALYSIS

Tier I ☑ Pass ☐ Fail

Tier II 6 out of 8 points

Tier III Congestion Reduction Relative to Cost:

Plan ☑ CLRP ☐ TA2040 only ***Rating*** ☑ High ☐ Med ☐ Low

Stated Benefits

1. **What regional benefit/s does this project offer?** This project will expand VRE commuter rail service to the Gainesville-Haymarket corridor in western Prince William County and expand the transit options to an area that currently has limited transit choices. The corridor encompasses the Gainesville Regional Activity Center and is projected to experience some of the highest employment and population growth in the Washington, DC region.

   The project will also determine the VRE core capacity improvements necessary to address long-range growth in travel demand. Expanded VRE service in the Gainesville-Haymarket corridor is projected to attract up to 1,500+ new riders to the VRE system and remove an equivalent number of vehicles from the highway network each AM and PM, reducing regional congestion and benefiting regional safety and air quality. By expanding VRE Manassas Line capacity and frequency, the extension benefits travelers in Prince William County (and the Town of Haymarket), the City of Manassas, Fairfax County, and jurisdictions beyond the NVTA boundaries.

2. **How does the project reduce congestion?** The Gainesville-Haymarket extension is estimated to attract up to 3,000+ new trips/day within the extension corridor plus additional trips within the existing VRE core network as a result of the expanded Manassas Line service frequency the extension enables. VRE helps reduce regional congestion by providing an alternative commuting mode to the single occupancy vehicle. Two VRE trains in an hour carry the equivalent capacity as one lane of traffic on I-66. By supporting expansion of VRE core capacity in the corridor and region, the project expands the capacity of the I-66 travel corridor and contributes to the reduction of regional congestion.

3. **How does the project increase capacity?** *(Mass transit projects only)* Extending VRE service to the Gainesville-Haymarket corridor expands VRE capacity in the corridor and core network and provides additional transit options to an underserved and growing area of northern Virginia. The extension will expand the operational capacity of the Norfolk-Southern B Line for VRE and freight trains as well as eliminate potential bottlenecks on the NS main line at Manassas where it intersects the B Line, and potentially elsewhere in the VRE core network. This study will consider potential ridership from both the Broad Run branch and a potential future Gainesville-Haymarket branch. The VRE operating plan for the proposed VRE Gainesville-Haymarket extension has not yet been determined. Conceptual operating plans will be developed as the extension project advances through the planning and design process. Any changes to existing VRE schedules would be the subject of public hearings prior to the change being implemented.

4. **How does the project improve auto and pedestrian safety?** Commuter Rail is one of the safest modes of travel. Automobile and pedestrian safety is improved in the region by directly moving commuters and their vehicles from freeway system (one of the most dangerous) and other regional roads to commuter rail (one of the safest ways to commute).

5. **List internet address/link to any additional information or documentation in support of project benefits.** *(Optional)*

   The project is also included in the Prince William County Comprehensive Plan, Transportation Element found at:
   http://www.pwcgov.org/government/dept/planning/Pages/Comprehensive-Planning.aspx

6. **Project Picture/Illustratives** N/A