NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

Project Description Form — 9E

Basic Project Information

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

2. **Project Title:** VRE Rolling Stock Purchase

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

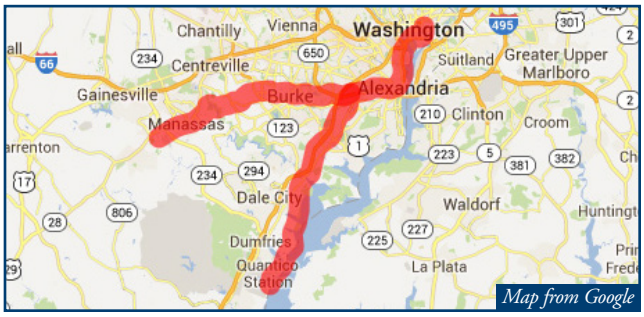
4. **Project Description/Scope:**
   VRE rolling stock purchase (9 additional coaches) at $2,200,000M each/$19,800,000 total request. This project is for the purchase of 9 VRE coaches to expand system capacity to accommodate existing and future passenger demand. Options have been developed to deploy these vehicles in a way that provides the additional capacity in the NVTA area only.

5. **Route** *(if applicable)***/Corridor:**
   Other Corridor 9 (in multiple corridors)

6. **Total Project Cost:** $19,800,000

7. **Total Funds Required:** $19,800,000

8. **Phase/s of Project Covered by Funding:** This project is for the purchase of 9 VRE coaches to expand system capacity to accommodate existing and future passenger demand.



9. **Project Milestones** (*by phase, include all phases*)**:**
   - Beginning Date: VRE has an open contract with an equipment manufacturer and can execute an option order for the coach purchase with the vendor within two months of funding being made available
   - Completion Date: Approximately 18 – 24 months

10. **In TransAction 2040 plan?**
    ☑ Yes ☐ No
    Technical Report Page #4 – 42

11. **In CLRP, TIP or Air Quality Neutral?**
    Yes, CLRP. Yes ,TIP, ID # T4315

12. **Leverages Sources:**
    ☐ Local ☐ State ☐ Federal
    ☑ Other (*please explain*)
    Opportunities to leverage NVTA funds with state and federal funds will be explored.

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?** Implementing the project is one of the fastest returns on investment the region can make as the coaches can be manufactured and in service in two years or less. The alternative to VRE for most of the VRE customer base is driving alone in the rush hour, so the added VRE capacity directly removes these cars from existing, highly congested, rush hour roadway conditions. At a seating capacity of 132 persons/coach and assuming they operate only one trip in the peak hour, the nine coaches can carry approximately 1,188 persons/peak hour or 2,376 persons/day or remove 1,188 vehicles from the region's roadways in the AM and PM peak periods.

   Looking at it another way, by comparison, a freeway lane can carry approximately 2,200 persons/hour. The nine coaches have the equivalent person-carrying capacity of ½ a freeway lane (i.e., 1,188/2,200 = 0.54 lane). At an average travel distance of 32 mile for the Fredericksburg or Manassas Line in the NVTA region, the nine coaches add the equivalent highway capacity of approximately 16 freeway lane miles in the peak hour on the I-95/I-395 or I-66 corridors (i.e., ½ lane x 32 miles = 16 lane miles).

2. **How does the project reduce congestion?** The project expands VRE on-board carrying capacity by approximately 1,188 persons or 2,376 trips/day. As noted above, 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-95/I-395 or I-66. By supporting expansion of VRE capacity in the region, the project expands the capacity of the I-95/I-66 travel corridors and contributes to the reduction of regional congestion.

3. **How does the project increase capacity?** *(Mass transit projects only)* The additional rolling stock will allow VRE to lengthen existing trains and/or add new trains that otherwise would not be possible without the purchase. The seating capacity of each coach is 132 persons/trip or a total additional possible capacity of 1,188 persons/trip. Expanding VRE capacity and service is an extremely cost effective way to reduce congestion and expand the person-carrying capacity of the regional transportation system relative to adding highway capacity.

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)*

   Information on VRE rolling stock is on the VRE web site at:
   http://www.vre.org/about/projects/railcars.html

6. Project Picture/Illustratives

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