Project Information

Submitting Jurisdiction/Agency: VIRGINIA RAILWAY EXPRESS

Project Title: VRE Manassas Line Capacity Expansion and Real-time Multimodal Traveler Information Project

Project Location:
Project Description:
The project expands the capacity of the I-66 Outside the Beltway (OTB) corridor by increasing the number of seats on VRE Manassas Line trains that serve travelers who may otherwise drive on I-66. All Manassas Line trains will be lengthened to a minimum of 8 cars, and up to 10 cars based on demand. This will provide additional seating capacity on VRE trains and is consistent with the direction provided by the VRE Operations Board in February 2016 to pursue the Natural Growth service profile as a short-term means of system expansion. (see pgs. 1-5 of attachment)

The project involves acquisition of rolling stock and expansion of the Broad Run Yard necessary to store the new train cars. The platform at Broad Run station will need to be moved north to allow space for the yard expansion. Additional parking spaces at Manassas Park and Broad Run stations, improved access to an existing surface lot at Manassas station, and additional bike parking will be provided to facilitate access for the additional VRE riders.

The project also integrates real-time VRE train arrival, and seat and parking availability data with other multimodal information in the I-66 corridor that will be provided over VRE Mobile, the internet, and through displays at key decision points along I-66 and adjacent roads to allow travelers to make the most appropriate choice of mode for their trip.

PROJECT ELEMENTS

Rolling Stock (12 cars): VRE currently runs 5 train consists that are 6 to 8 cars in length. This project will add 11 new train cars to these consists (and 1 spare), resulting in over 1,700 additional seats for the morning trains and over 2,100 seats for evening service on the Manassas Line. This capacity expansion is expected to serve the 2030 VRE demand. Two train cars are already on order, and funding is requested for 10 cars.

Broad Run Station, Parking & Yard Expansion: In March 2017, the VRE Operations Board approved advancing the Broad Run Terminus (Alternative 1) identified in the VRE Gainesville-Haymarket Extension study into preliminary engineering and environmental analysis as the preferred alternative supporting VRE Manassas Line expansion (see pgs. 6-12 of attachment). This project includes the relocation of the Broad Run station platform and extending the storage tracks to accommodate train consists of up to 10 cars. The existing parking spaces at this station are currently over-subscribed, and additional parking spaces will be required to serve the 2030 demand. Parking expansion is anticipated to include parking on the west side of the Norfolk Southern (NS) tracks and a grade-separated connection is assumed to provide access to the platform from the western parking. Right-of-way acquisition will be necessary for this parking expansion. PE/Design for this project element will need to be coordinated with the longer-term planning study of the Broad Run Complex that is underway.

South Manassas Third Track: This track is required to increase VRE’s operational efficiency from Manassas station to the Broad Run Yard, and to increase train capacity for passenger and freight trains on the NS mainline in the vicinity of Manassas Junction.

Manassas Station Platform Extension: The existing station platform at Manassas will need to be extended to accommodate 10-car trains. An extension is proposed towards the north along with a pedestrian path to the existing surface lot on Prince William Street (Prince William lot).
Manassas Park Parking Garage & Bridge: There is an existing need for a parking expansion at Manassas Park station, and a project is underway to construct a 560-space parking garage on the opposite of the tracks from the platform (north). A bridge will provide grade-separated access between the garage and the existing platform and surface parking lot. PE/Design is funded by NVTA and is anticipated to be completed in early FY19.

Realtime Multimodal Traveler Information: VRE has a system-wide program to implement automatic passenger counters in all rail cars and automatic parking counters at all VRE parking facilities. While train location information is currently provided on the internet and on screens at the stations, there are plans to provide real-time train arrival information in the future. Software upgrades will be required to provide these real-time data feeds that can then be integrated with VRE Mobile and other third-party apps and websites, as well as on display screens at VRE stations and other locations along the I-66 corridor. This project element will also be coordinated with the VDOT-led effort on the Northern Virginia East West Integrated Corridor Management project. Funding has been committed for implementing automatic passenger counters and automatic parking counters at existing VRE facilities. Funding is being requested for parking counters at new parking facilities, as well as for software upgrades and display screens.

**General Project Eligibility Consideration Criteria. Please check all that apply.**

Provide supporting documentation

Project in a Regionally Adopted Plan/Document:

Project elements that were included in regional documents are the Broad Run Storage Track Expansion, Broad Run Parking Expansion, Manassas Platform Expansion, Manassas Park Parking Expansion, and Additional Railcars for the Manassas Line Trains.

- a. TransAction 2040 [X]
- b. VTrans 2040 [X]
- c. I-66 Corridor of Statewide Significance [X]
- d. Comprehensive Plan [X] (Prince William County, Manassas, & Manassas Park)
- e. Capital Improvement Plan [X] (VRE)
- f. Regional Transportation Priorities Plan [X]
- g. Constrained Long Range Plan [X]
- h. Transportation Improvement Program [X]
- i. Other Regionally Adopted Plan *(please specify)* [X] (VRE System Plan 2040, & NOVA EW ICM Study)
- j. Letter or resolution of support via formal approval by the governing body [X]
**Additional Project Criteria.**

*Provide supporting documentation*

**Projects must meet all of the following criteria:**

Projects must be in the I-66 Outside the Beltway Corridor or demonstrate a clear and compelling nexus to the I-66 Outside the Beltway Corridor.

The project expands the capacity of the VRE Manassas Line which is part of the I-66 Outside the Beltway Corridor and transports travelers that would otherwise drive along I-66 or adjacent roadways. The project also integrates real-time VRE data into the multimodal information that will be provided to drivers on I-66 from toll day 1 and expands their choices of viable modes of travel.

Projects must demonstrate utilization of concessionaire funding by toll day-one (mid- 2022).

If funding were made available by winter 2017, VRE anticipates all project elements will be completed and operational by mid-2022 (anticipated toll day 1), except the parking expansion at Broad Run station which will be needed to accommodate 2030 ridership. The construction of these spaces may extend into FY 2023.

Projects must demonstrate commitment of any required operation and/or maintenance funds.

The proposed project follows the Natural Growth scenario which was adopted by the VRE Operations Board as the short-term approach to implementation of System Plan 2040. The incremental operating cost of extending trains will be minimal and will be offset by additional revenue from passenger fares from the new riders. Station and parking facilities operations and maintenance agreements with jurisdictions vary by station location and are developed by mutual agreement; any modifications will be developed in the same process.

Projects must show benefit to users within the corridor.

Ridership modeling developed for the Manassas Line shows a 11% overall increase in demand for VRE service by 2030. This amounts to about 155,500 annual trips (or an estimated 311 daily boardings) associated with the three stations within the project area (i.e. Broad Run, Manassas, and Manassas Park). The forecasts project additional demand for VRE service at the other Manassas Line stations as well.

Expansion of the Manassas Line was studied recently during the Gainesville-Haymarket Expansion study. The study included an option to expand service by relocating Broad Run station and expanding the yard in its current location. While the analysis accounted for 2040 conditions and 6 additional VRE trains, a reduction of at least 52,000 vehicles miles traveled (VMT) was attributed to the Broad Run option (see pgs. 153-155 of attachment). The bar chart also shows the number of persons per hour carried by VRE on various segments in the I-66 corridor during the morning peak hour in 2040. Additionally, VRE riders were assured of a more reliable commute time than driving and had the option of using the time productively.

VRE capacity expansion would divert commuters that would otherwise be using the I-66 highway corridor as their primary travel mode. This is substantiated in the 2016 VRE Passenger Survey which showed that over 40% of riders drove alone to work before they started using VRE, and 35% drive alone on days they choose not to use VRE. The likelihood of retaining riders is high as well; VRE passengers are generally very satisfied and 89% of passengers rated the overall service quality as Excellent or Very Good.
Studies are ineligible for funding consideration.

If other funding sources is required to complete the project, project must demonstrate other such funding has been appropriated/allocated or otherwise currently available to the project.

**Project Milestones**
Specify start and end dates

**Project Milestones by Project Phase:**

<table>
<thead>
<tr>
<th>Project Element</th>
<th>PE / Design</th>
<th>Right Of Way Acquisition</th>
<th>Construction</th>
<th>Capital Asset Acquisition</th>
<th>Other (Software Upgrade &amp; Equipment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolling Stock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FY19 - FY22</td>
</tr>
<tr>
<td>Broad Run Station, Parking &amp; Yard Expansion</td>
<td>FY18 – FY20</td>
<td>FY20 – FY21</td>
<td>FY20 – FY23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Manassas Third Track</td>
<td>FY18 – FY19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manassas Station Platform Extension</td>
<td>FY18 – FY19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manassas Park Parking Garage and Bridge</td>
<td></td>
<td>FY19 – FY21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realtime Multimodal Traveler Information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FY19 - FY22</td>
</tr>
</tbody>
</table>

**Project Cost**

See pg.156 of Supporting Documentation for Detail Project Costs by Phase

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Total Cost</th>
<th>Total I-66 OTB Request</th>
<th>Percent Funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolling Stock</td>
<td>$33,370,000</td>
<td>$28,120,000</td>
<td>16%</td>
</tr>
<tr>
<td>Broad Run Station, Parking and Yard Expansion</td>
<td>$56,252,000</td>
<td>$44,156,000</td>
<td>22%</td>
</tr>
<tr>
<td>South Manassas Third Track</td>
<td>$20,131,000</td>
<td>$20,131,000</td>
<td>0%</td>
</tr>
<tr>
<td>Manassas Station Platform Extension</td>
<td>$9,125,000</td>
<td>$9,125,000</td>
<td>0%</td>
</tr>
<tr>
<td>Manassas Park Parking Garage and Bridge</td>
<td>$25,983,000</td>
<td>$23,483,000</td>
<td>10%</td>
</tr>
<tr>
<td>Realtime Multimodal Traveler Information</td>
<td>$6,561,000</td>
<td>$3,481,000</td>
<td>47%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$151,422,000</td>
<td>$128,496,000</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Sources of Committed Funding**
(see pgs 87-95 for VRE CIP in Supporting Documentation)

- Rolling Stock: Federal Formula Funds, State Mass Transit, VRE System Funds, State STP, VRE Capital Reserve
- Broad Run Parking: CMAQ
- Manassas Park Parking Garage & Bridge: NVTA FY15-16 and FY17
- Realtime Multimodal Traveler Information: Federal Formula Funds, State Mass Transit, VRE System Funds
**Prioritization**
Priority consideration will be given to projects that can accomplish two or more of the following:

- Project has undergone a performance based evaluation process (i.e. TransAction 2040, SmartScale).
  Yes, the Gainesville-Haymarket project (Haymarket terminus) to expand the VRE Manassas Line and the Manassas Park Parking Garage has undergone the HB 599 evaluation. The Gainesville-Haymarket project (Haymarket terminus) has undergone the SmartScale evaluation.

- Project can demonstrate the ability to reduce congestion.
  The 2016 Department of Rail and Public Transportation’s report on the review of the VRE System Plan 2040 found that VRE’s impact on Interstates 66, 95, and 395 as follows: “VRE’s Natural Growth scenario provides service levels similar to approximately 58 lane miles of interstate which could be valued as high as $5.5-8.7B. Through avoided highway construction and highway maintenance costs, VRE provides an alternative transportation option to congested highway travel, which has economic benefits to the Commonwealth.” (see pgs 157-159 of attachment).

- Project is a joint effort between two or more localities or agencies.
  This project is located in Prince William County, City of Manassas, and City of Manassas Park. The VRE Operations Board is made up of representatives of all the member jurisdictions and has adopted a resolution to submit this project application. The project will also be coordinated with the VDOT-led effort on the Northern Virginia East West Integrated Corridor Management.

- Project is an extension/expansion of a project currently encompassed as part of the Transform 66 OTB project.

- Project was requested to be included in the Transform 66 OTB project (must be demonstrated via documentation).

- Project can be constructed prior to toll day one (mid-2022).
  If funding were made available by winter 2017, VRE anticipates all project elements will be completed and operational by mid-2022 (anticipated toll day 1), except the parking expansion at Broad Run station which will be needed to accommodate 2030 ridership. The construction of these spaces may extend into FY 2023.

**Additional Documentation/Information in Support of this Project**

Please see the attachment for Supporting Documentation referred to in the application above.