To: Chairman Skinner and the VRE Operations Board

From: Doug Allen

Date: December 16, 2016

Re: Recommendation of Gainesville-Haymarket Extension Study Alternative for Preliminary Engineering and National Environmental Policy Act Evaluation

Recommendation:

The VRE Operations Board is asked to recommend advancing Alternative 1 (Broad Run Terminus) to Phase B of the GHX Study to complete Preliminary Engineering and prepare National Environmental Policy Act evaluation.

Background:

The VRE Gainesville-Haymarket Extension (GHX) Study was initiated in July 2015. As background, a VRE extension to Haymarket has been a part of VRE’s long-range growth plans since 2004. The VRE System Plan 2040, adopted in 2014, outlined the need to expand VRE capacity and service to provide expanded VRE travel options, including the Gainesville-Haymarket area of Prince William County, as regional population and employment grows and highway congestion increases on I-66 and parallel roadways. The VRE System Plan Financial Plan, completed in 2015, identified the Natural Growth scenario, in addition to the full System Plan, as a short-term growth path that focuses on expanding VRE capacity by running longer trains while VRE continues to pursue funding for the implementation of System Plan 2040 service concepts (e.g., additional peak trains, extension, reverse peak and off-peak trains).
The purpose of the GHX study is to evaluate alternatives for serving the western end of the Manassas Line to cost effectively meet future ridership growth while accommodating freight rail needs. Other objectives include adding capacity to the I-66 corridor of statewide significance and supporting local economic development goals. The study consists of two phases:

Phase A: Develop and evaluate service, station, and railroad alignment alternatives, resulting a recommendation of one or more alternatives for further investigation in Phase B; and

Phase B: Develop preliminary engineering and environmental documentation in accordance with the National Environmental Policy Act (NEPA) for the Phase A alternative(s), resulting in a recommendation of a Locally Preferred Alternative (LPA).

After 18 months, Phase A is complete. A long list of alternatives was winnowed down to five short-list alternatives, which were subjected to more detailed planning, analysis, outreach and evaluation:

1. **Broad Run Terminus**: Operate Manassas Line service out of a larger Broad Run Station about one mile east of the existing station, expanding the capacity of the existing Broad Run Maintenance and Storage Facility (MSF).

2. **Innovation Terminus**: Operate Manassas Line service out of a new station on the Norfolk Southern (NS) B-Line in the vicinity of Innovation Park with a new MSF nearby. The existing Broad Run MSF and station would be closed.

3. **Gainesville Terminus (Option A)**: Operate Manassas Line service out of a new station on the NS B-Line east of University Boulevard, with one additional new station (Innovation) and a new MSF west of Lee Highway (US 29). The existing Broad Run MSF and station would be closed.

4. **Gainesville Terminus (Option B)**: Operate Manassas Line service out of a new station on the NS B-Line west of Lee Highway (US 29) with two additional new stations (Innovation and Gainesville) and a new MSF west of Lee Highway (US 29). The existing Broad Run MSF and station would be closed.

5. **Haymarket Terminus**: Operate Manassas Line service out of a new station on the NS B-Line in the vicinity of Haymarket with a new MSF nearby and two additional new stations (Innovation and Gainesville). The existing Broad Run MSF and station would be closed.

For consistency, all alternatives were evaluated on the basis of 22 daily VRE trains (the maximum allowable under VRE’s current railroad agreements), an increase from the 16 daily trains presently operated on the Manassas Line. The actual level of future Manassas Line service would be set by the VRE Operations Board independent of this study as part of
the annual budgeting process. It should be noted that pursuing any VRE expansion plans, including Natural Growth, require increasing the capacity of the Broad Run MSF. That facility will reach capacity when the expansion coaches currently being manufactured are received beginning in FY2018. Three of the 14 expansion coaches will be assigned to the Manassas Line in order to lengthen one of the current train consists. Expansion beyond that point – whether continuing to lengthen existing trains consistent with the Natural Growth scenario or adding new trains – requires construction of additional yard tracks at the Broad Run facility to accommodate storage of the longer trains, which also necessitates relocation of the Broad Run Station.

Based on the GHX Study Phase A analysis, Alternative 1 (Broad Run Terminus) was determined to be the most cost-effective means, on a cost per rider basis, to meet ridership growth on the western end of the Manassas Line (see Slide 19 in the attached presentation). In 2040, this alternative would yield about 5,100 more daily passenger trips compared to a “no-build” alternative. It enables expansion of VRE station and MSF capacity to support multiple future growth scenarios, including the Natural Growth scenario as well as the 22 train scenario evaluated in the GHX Study.

In contrast, the four alternatives that would extend Manassas Line service over the B-Line would yield from 470 to 1,110 more daily passenger trips than Alternative 1 but at considerably more capital and operating expense. Each would also require closing the exiting Broad Run Station and MSF. Furthermore, the Phase A analysis concluded the four B-Line alternatives would not be competitive for federal funding, a critical funding source for a capital investment of this size.

The VRE Operations Board is requested to recommend staff advance Alternative 1 (Broad Run Terminus) for analysis in Phase B of the GHX Study. The alternative will be evaluated along with a No Build alternative to identify potential impacts to the natural and built environment. Preliminary engineering plans will also be prepared in Phase B.

**Fiscal Impact:**

The GHX Study was included in the FY 2015 Capital Budget, through a Virginia Rail Enhancement Fund (REF) grant and funding from the Northern Virginia Transportation Authority (NVTA).
WHEREAS, the VRE Gainesville-Haymarket Extension (GHX) Study was initiated in July 2015 to address the natural growth potential of VRE Manassas Line ridership and evaluate VRE’s role in contributing to the I-66 Corridor of Statewide Significance; and,

WHEREAS, the GHX study consists of Phase A, Alternatives Analysis, and Phase B, National Environmental Policy Act (NEPA) evaluation and Preliminary Engineering (PE) design; and,

WHEREAS, Phase A is now complete and has resulted in five short-list alternatives which were subjected to detailed planning, analysis, outreach and evaluation; and,

WHEREAS, Alternative 1, Broad Run Terminus, is the most cost-effective means of addressing the future needs of the VRE Manassas Line service area on the basis of cost per rider and other metrics;

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board does hereby recommend advancing Alternative 1 (Broad Run Terminus) to Phase B of the GHX Study to complete Preliminary Engineering and prepare National Environmental Policy Act evaluation.

Approved this 16th day of December 2016.

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Gary Skinner
Chairman

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Maureen Caddigan
Secretary