To: Chairman Smedberg and the VRE Operations Board  
From: Doug Allen  
Date: February 17, 2017  
Re: Gainesville-Haymarket Extension Study Update

The VRE Gainesville-Haymarket Extension (GHX) Study was initiated in July 2015. 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. As a complement to the VRE System Plan 2040, a Financial Plan was completed in 2015. It identified a Natural Growth scenario, in addition to the full System Plan, as a short-term growth path focusing 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. All VRE growth plans must be developed in conjunction with Norfolk Southern (NS) and are subject to their approval.

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 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.

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 and subject to NS approval. Pursuing any VRE expansion plans requires 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. Any VRE expansion beyond that point requires construction of additional yard tracks at the Broad Run facility to accommodate storage of the longer trains, which may also necessitate relocation of the Broad Run Station.

Based on the GHX Study Phase A analysis, Alternative 1 (relocated 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 and would yield an estimated
5,100 more daily passenger trips compared to a “no-build” alternative. 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. Furthermore, the Phase A analysis concluded the four B-Line alternatives would not be competitive for federal funding, a crucial funding source for a capital investment of this size.

An action item was included on the December 2016 VRE Operations Board agenda requesting the Operations Board recommend advancing Alternative 1, relocated Broad Run Terminus, for analysis in Phase B of the GHX Study. A vote on that item was deferred at the request of Mr. Nohe to allow the Prince William Board of County Supervisors (BOCS) additional time to reach a consensus view over which alternative they feel is best for the county. Discussion and action by Prince William County to identify preferred next steps is expected at an upcoming BOCS meeting.