

December 13, 2016  
Regular Meeting  
Res. No. 16-

**MOTION:**

**SECOND:**

**RE: SUPPORT TERMINATION OF THE VIRGINIA RAILWAY EXPRESS  
GAINESVILLE/HAYMARKET EXTENSION STUDY**

**ACTION:**

**WHEREAS**, on the October 18, 2016, Board of County Supervisors (BOCS) meeting, Virginia Railway Express (VRE) staff presented the Gainesville/Haymarket Extension Study to the Board of County Supervisors outlining the various options for extending/expanding rail service along the Gainesville/Haymarket rail corridor as well as relocated/expanded service at Broad Run; and

**WHEREAS**, the Board of County Supervisors expressed concerns regarding the cost effectiveness of the proposed expansion project and has asked County staff for a recommendation on how to proceed; and

**WHEREAS**, County staff has concluded that no options within the Study are financially viable at this time; and

**WHEREAS**, the proposed station locations at Innovation and Gainesville have long been considered as the catalyst for transit-oriented mixed use development opportunities within targeted activity centers. Pending Comprehensive Plan amendments and rezoning applications within these areas (Innovation Town Center and Prince William Station) are under consideration, and the decision to remove the proposed station locations will likely change staff's planning and negotiating positions; and

**WHEREAS**, staff can examine the impacts of the removal of the planned Innovation and Gainesville station locations through the Comprehensive Plan update for Land Use and Transit & Thoroughfare Plan and could recommend reorienting the short term and long term planning for these activity centers around alternate transportation modes or with additional transportation improvements; and

**WHEREAS**, the proposed Haymarket station location west of Route 15, does not appear to significantly advance the County's land use planning or economic development goals and does not appear to support pending and planned land use and development within that area; and

**WHEREAS**, all the Haymarket alternatives would likely necessitate a storage and maintenance facility within or in close proximity to the Rural Area; and

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**WHEREAS**, the County is currently working on a study, in partnership with the Metropolitan Washington Council of Governments and VRE, to identify design concepts that would better link the proposed transit locations to the planned Town Centers, and staff could now use this study as an opportunity to explore the integration of other transportation alternatives in the area;

**NOW, THEREFORE, BE IT RESOLVED** that the Prince William Board of County Supervisors does hereby support termination of the Virginia Railway Express Gainesville/Haymarket extension study.

**Votes:**

**Ayes:**

**Nays:**

**Absent from Vote:**

**Absent from Meeting:**

**For Information:**

Transportation Director

Doug Allen, Virginia Railway Express

**ATTEST:** \_\_\_\_\_

**Clerk to the Board**



Christopher E. Martino  
County Executive

## COUNTY OF PRINCE WILLIAM


OFFICE OF EXECUTIVE MANAGEMENT  
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### BOARD OF COUNTY SUPERVISORS

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December 1, 2016

**TO:** Board of County Supervisors

**FROM:** Ricardo Canizales   
Director of Transportation

**THRU:** Christopher E. Martino  
County Executive

**RE:** Support Termination of the Virginia Railway Express  
Gainesville/Haymarket Extension Study

**I. Background** in chronological order is as follows:

- A. Virginia Railway Express (VRE) Presentation on Gainesville/Haymarket Extension Study – At the October 18, 2016 Board of County Supervisors (BOCS) meeting VRE staff presented the Gainesville/Haymarket Extension Study to the Board of County Supervisors (BOCS) outlining various options for extending/expanding Manassas Line rail service along the Gainesville/Haymarket rail corridor as well as relocating/expanding service at Broad Run.
- B. VRE Request for Board Preference on Expansion Alternative – VRE has asked the BOCS to identify a preferred expansion option. This is intended to inform the VRE Operations Board for their discussion on December 16th regarding recommendation of expansion alternatives to advance for National Environmental Policy Act (NEPA) evaluation. Recommending an alternative to advance to NEPA is not a designation of a preferred alternative. The objective of this decision point is to identify a single, most viable alternative, or small set of viable alternatives, that will be subject to detailed environmental analysis. At the conclusion of the NEPA phase a locally preferred alternative will be designated by the VRE Operations Board.

- C. Gainesville/Haymarket Expansion Alternatives - The expansion alternatives under consideration include:
1. Expand VRE service with a relocated Broad Run Station near Godwin Rd. and an expanded Broad Run equipment maintenance and storage facility
  2. Expand VRE service via a Norfolk Southern B Line extension to the Innovation area of Prince William County, construct a new storage facility, and close the Broad Run station and storage facility
  3. Expand VRE service via a Norfolk Southern B Line extension to the Gainesville area of Prince William County (2 stations at Innovation and Prince William Station), construct a new storage facility, and close the Broad Run station and storage facility
  4. Expand VRE service via a Norfolk Southern B Line extension to the Gainesville area of Prince William County (3 stations at Innovation, Prince William Station, and US29/VA55), construct a new storage facility, and close the Broad Run station and storage facility
  5. Expand VRE service via a Norfolk Southern B Line extension to the Haymarket area, construct new storage facility, and close the Broad Run station and storage facility

In each of the above alternatives, VRE service would be expanded to 22 daily Manassas Line trains (increase of 6 daily trains above today's service)

- D. Board Directive 16-33 - Request for Staff Recommendation – In discussing the options presented by VRE, members of the BOCS raised concerns regarding the cost benefit analysis of any projected expansion of the VRE Manassas Line. Following that discussion, the BOCS issued Directive 16-33 asking for a staff recommendation on the right way to move forward with this project.

II. Current Situation is as follows:

- A. Strategic Plan Transportation Goal – The 2013-2016 adopted Strategic Plan goal anticipates progress toward a transportation network that includes additional road lane miles, bike lanes, commuter and local mass transit, trails, paths, and sidewalks to improve vehicular and pedestrian travel. A multi-modal network also facilitates alternatives such as

telecommuting, infrastructure to support car and van pools and slugging, and travel management to reduce the demand for traditional transportation infrastructure.

- B. Land Use Planning - The proposed station locations at Innovation and Gainesville have long been considered as the catalyst for transit-oriented mixed use development opportunities within targeted activity centers. Pending Comprehensive Plan amendments and rezoning applications within these areas (e.g. Innovation Town Center and Prince William Station near Gainesville) are under consideration, and the decision to remove the proposed station locations will likely change staff's planning and negotiating positions. The proposed Haymarket station location west of Route 15 does not appear to significantly advance the County's land use planning or economic development goals and does not appear to support pending and planned land use and development within that area. There is also a proposed station location within the Town of Haymarket, however, Prince William County does not have jurisdiction over land use decisions within the town. Both of the Haymarket alternatives would likely necessitate a storage and maintenance facility within or in close proximity to the Rural Area.
- C. Economic Development - Long term development potential at both Innovation and Gainesville could benefit from multi-modal transportation opportunities, such as the proposed VRE stations, that support large transit oriented mixed use developments. However, it should be noted that the proposed B1 Broad Run Option is located within the Data Center Opportunity Zone recently established by the Board to facilitate data center development within targeted areas. Dependent upon the ultimate site location and design, a facility of this nature may be incompatible with the County's economic development goals at this particular site.
- D. Change in County Funding Support for VRE – The County has traditionally funded bus and commuter rail transit operation subsidies from the motor vehicle fuel tax. Motor vehicle fuel tax revenue has been significantly depressed by the combination of lower fuel prices and more fuel-efficient vehicles. In order to maintain both bus and commuter rail operations, in FY17 the Board began funding the County's VRE subsidy of \$6 million from the County's share of Northern Virginia Transportation Authority (NVTA) 30% local funding, which is the local share of the NVTA funds that is used to maintain the County's Transportation Program. The County's share of NVTA 30% revenues, which has been funding and matching grants for road projects countywide since FY14, was approximately \$12.2 million in FY16, and is projected to rise to \$13.8 million per year by FY21. Absent any increase in existing service, VRE has projected that the County's subsidy will increase to \$6.4 million per

year by FY21. As shown in the chart below, the remaining annual NVTA 30% local revenue that is not earmarked for VRE has reduced, by almost 50%, the funds given to the road construction program, which will in the future not have enough to completely match all federal and state grant opportunities for road construction projects.

NVTA 30%	FY17	FY18	FY19	FY20	FY21
<b>VRE</b>	\$6.0M	\$5.4M	\$6.2M	\$6.2M	\$6.4M
<b>Road CIP</b>	\$6.2M	\$7.2M	\$6.8M	\$7.2M	\$7.4M

In addition to the change in County funding support, VRE also plans to open a new station at Potomac Shores in 2017. Ridership is used to allocated VRE's net costs. The County's share of fare revenue is then subtracted from net costs to determine operating subsidy. As such, while VRE has not provided an estimate of the new station's impact to the systemwide operating subsidy, it can be safely assumed that the majority of new system riders will be County residents.

- E. Projected County Subsidy Amount for Current Service Levels - VRE's six-year plan has total jurisdictional subsidy increasing by 3% every other year from FY18 through FY23. Total jurisdictional subsidy for the current level of service (32 revenue trains) would increase from \$17.3 million in FY18 to \$18.9 million in FY23. By FY23, assuming no change in jurisdictional ridership percentage, the County's annual subsidy would increase to approximately \$6.4M. This amount includes both the operating subsidy and the local match requirements for VRE system capital projects.
  
- F. VRE Gainesville-Haymarket Project Not Endorsed by Board of County Supervisors for State Funding – On September 6, 2016, the Board endorsed a list of transportation and transit projects to be submitted to the state for potential funding. The Board declined to endorse the Gainesville-Haymarket Extension project on the basis that it was premature given that the VRE project feasibility study was not yet complete.
  
- G. VRE Feasibility Study Options – The options with associated costs presented by VRE during the October 18, 2016 presentation are summarized in the chart below. VRE anticipates that most, if not all, of the capital costs can be covered by a combination of federal and state grants, and proffered site-specific improvements. The operating costs would be systemwide, allocated to the member jurisdictions by the annual ridership survey. Currently, Prince William County riders account for 35% of the total ridership and the County pays 35% of the system-wide operating subsidy. *Source: VRE Presentation 10/18/2016, slide 19.*

## DRAFT Capital and Operating Cost

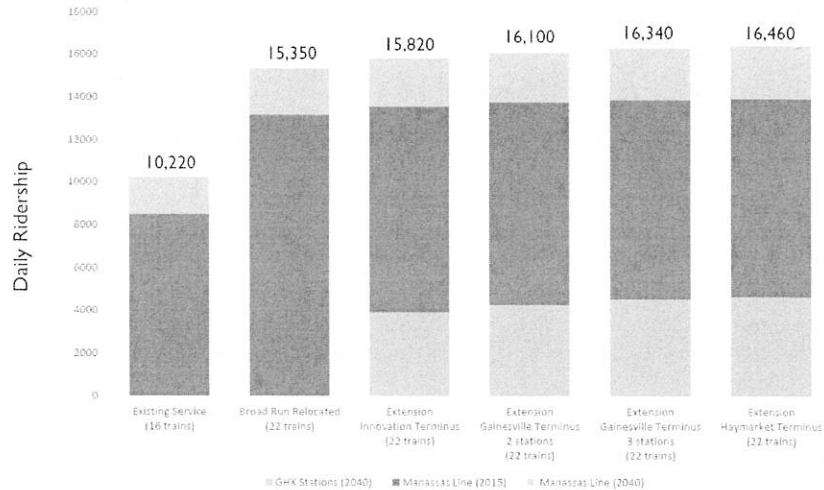
	Broad Run Relocated	Innovation Terminus	Gainesville Terminus		Haymarket Terminus
			2 stations	3 stations	
<b>Stations</b>	\$31 M	\$36 -40 M	\$51 – 60 M	\$64 – 78 M	\$68 – 73 M
<b>Railroad ROW</b>	NA	\$22 M	\$27 – 29 M	\$27 – 29 M	\$27 – 32 M
<b>Track and Signals</b> One additional B Line track	\$11 M	\$97 – 154 M	\$144 – 195 M	\$146 – 197 M	\$177 – 225 M
<b>Equipment Storage and Maintenance Facility</b>	\$63 M	\$181 M	\$101 M	\$101 M	\$95 M
<b>Rolling Stock</b> Diesel locomotives, cab cars, coaches incl. spares	\$240 M	\$240 M	\$240 M	\$240 M	\$240 M
<b>Total Capital Cost</b>	<b>\$345 M</b>	<b>\$580 – 633 M</b>	<b>\$572 – 616 M</b>	<b>\$592 – 631 M</b>	<b>\$612 – 660 M</b>
<b>Annual Operating Cost</b>	<b>\$36 M</b>	<b>\$37 M</b>	<b>\$40 M</b>	<b>\$40 M</b>	<b>\$45 M</b>
<b>Current Manassas Line Annual Operating Cost</b>	<b>\$29 M</b>				

DRAFT results based on analysis through 9/26/16  
 Subject to Norfolk Southern review and approval



H. Cost Effectiveness Analysis of Proposed Options – Based on the information presented by VRE on October 18 and the subsequent Board discussion of the projected ridership and costs associated with the various options, county staff has concluded that only the Broad Run Relocated option is a viable alternative. As shown in the table below, the Broad Run Relocation Option would achieve 93% of the total projected 2040 ridership for the Manassas Line. This would add 5,130 new riders by 2040 with an expected increase of \$7 million in gross operating costs. The remaining options provide incremental ridership gains at a higher per rider cost. The Broad Run Relocation Option would cost approximately \$345 million, or half of the projected capital cost of the Innovation/ Gainesville Terminus (\$580-\$633M) and/or the Haymarket Terminus option (\$612-\$660M). All alternatives assume adding an additional six trains, raising the gross operating cost of the Manassas Line by \$7-16 million per year depending on the alternative. *Source: VRE Presentation 10/18/2016, slide 18.*

## DRAFT Ridership Forecasts



VIRGINIA RAILWAY EXPRESS  
 Gainesville-Haymarket Extension

Source: VRE/MWCOG Travel Demand Model, results as of 9/26/16

- I. Operating Cost Estimate - System operating revenues (fares, state operating assistance and federal formula funding) that support train operations do not fully cover operating expenditures. The VRE Master Agreement requires that VRE achieve a minimum of 50% recovery of operating costs from fare revenue. Adding the Broad Run Relocated option net operating costs to the County's current annual VRE subsidy is estimated between \$892,500 and \$997,500 in FY 2023. More detail follows below.
  
- J. Impact of Broad Run Relocated Option on County VRE Subsidy - In FY16 the estimated cost to add two eight car trains to the Manassas line was \$1.3 million. Staff estimates that the net total cost of adding two eight car trains in FY 2023 would range from \$1.7-\$1.9 million. Fifty percent of this expense would be recovered in fare revenue resulting in a net system subsidy between \$850,000 and \$950,000 of which the County's share would be 35% (assuming no change in the percentage of County ridership). This would result in a County subsidy increase between \$297,500 and \$332,500 for two trains beginning in FY23. Since VRE proposes to add six additional trains to achieve 20 minute intervals during the peak period, the total County impact is estimated between \$892,500 and \$997,500 in FY23.
  
- K. Board Action Requested – Staff recommends that the Board of County Supervisors support termination of the Virginia Railway Express Gainesville/Haymarket Extension Study.



**III. Issues** in order of importance are:

- A. Fiscal Impacts – What are the estimated costs of the proposed Gainesville/Haymarket Extension?
- B. Service Level/Policy Issues – What service level benefits would be achieved with the proposed Gainesville/Haymarket Extension?
- C. Timing – When will the VRE Operations Board vote on the next steps of the Gainesville/Haymarket Extension project?
- D. Legal – What legal issues arise from VRE’s feasibility study on the Gainesville/Haymarket Extension project?

**IV. Alternatives** in order of feasibility are:

- A. Support Termination of the Virginia Railway Express Gainesville/Haymarket Extension Study.
  - 1. Fiscal Impact – The capital cost of the proposed commuter rail extension to Gainesville/Haymarket ranges from \$345 million to \$660 million. It is anticipated that most of the capital costs would be covered by the VRE system using federal, state and local funding. The annual operating cost increase for the County’s subsidy is estimated between \$892,500 and \$997,500 in FY23 for the Broad Run Relocation Option. The County does not have sufficient capacity in the NVTA 30% funding for both road construction projects and additional commuter rail subsidy.
  - 2. Service Level/Policy Issues – Without the extension, the proposed anticipated increase in average daily ridership on the Manassas Line from 10,220 in FY 2016 to 16,460 in FY 2040 will not occur. Without the extension, funding remains available for County road construction projects. During the upcoming Comprehensive Plan update, staff can examine the impacts of the removal of the planned Innovation and Gainesville station locations to the land use and transportation plans. Staff may recommend reorienting our short term and long term planning for these activity centers around alternate transportation modes or with additional transportation improvements.
  - 3. Timing – VRE has requested that the County Board express its preference for an expansion option prior to the VRE Operations Board vote on the next steps of the Gainesville/ Haymarket Extension Study, which is planned for December 16, 2016.

4. Legal – The Board’s decision is not legally binding on the VRE Operations Board. Future development applications will be limited in their ability to contribute toward capital infrastructure improvements. Any future decision to remove the planned stations from the Comprehensive Plan would be subject to a public hearing process before both the Planning Commission and the BOCS.

B. Take No Action

1. Fiscal Impact – VRE may continue the Gainesville/Haymarket Extension study, but funding for the capital and operating phase of this project may be difficult to acquire without the County’s expressed support of the planned expansion. In addition, in accordance with SB549, residential development applications filed prior to July 1, 2016 can offer site-specific capital facility improvements to mitigate the impacts of new residential development. It is anticipated that the above referenced pending applications at Innovation and Prince William Station (which were submitted prior to July 1) if approved would construct, or would significantly contribute to construction of, the proposed VRE stations. However, future applications would be limited by the proffer legislation with regard to the County’s ability to negotiate such infrastructure improvements.
2. Service Level/Policy Issues – The County will examine all transportation alternatives through the Comprehensive Plan update. The County is currently working on a study, in partnership with the Metropolitan Washington Council of Governments and VRE, to identify design concepts that would better link the proposed transit locations to the proposed Town Centers at Innovation and Gainesville. This study could be reoriented to explore the integration of other transportation alternatives (e.g. bus rapid transit) in the area.
3. Timing – The VRE Operations Board will vote on December 16, 2016 on the next steps of the Gainesville/Haymarket Extension Study.
4. Legal – N/A

V. **Recommendation** is that the Board of County Supervisors concurs with Alternative A and approves the attached Resolution.



Prince William County Government  
Board of County Supervisors

## Virginia Railway Express Planned Expansion to Gainesville/Haymarket December 13, 2016

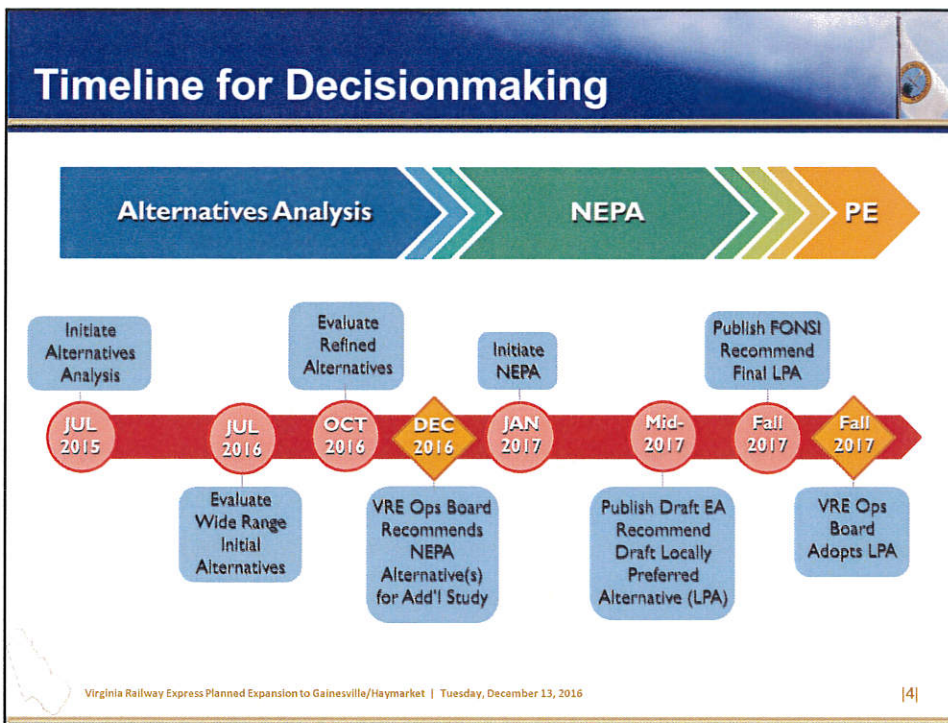
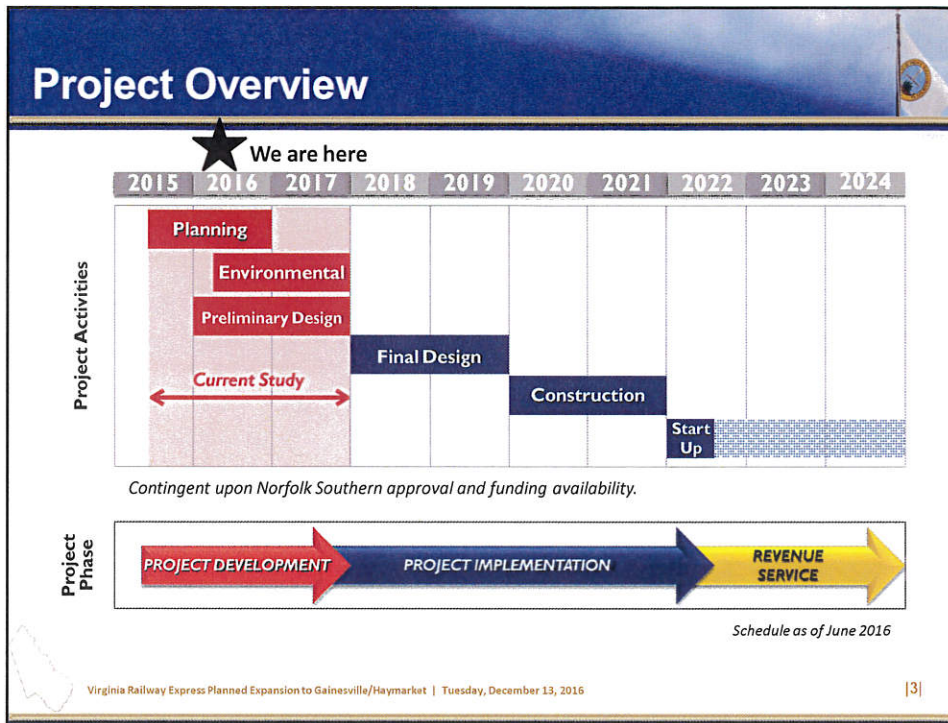
*Ricardo Canizales – Director  
Department of Transportation*

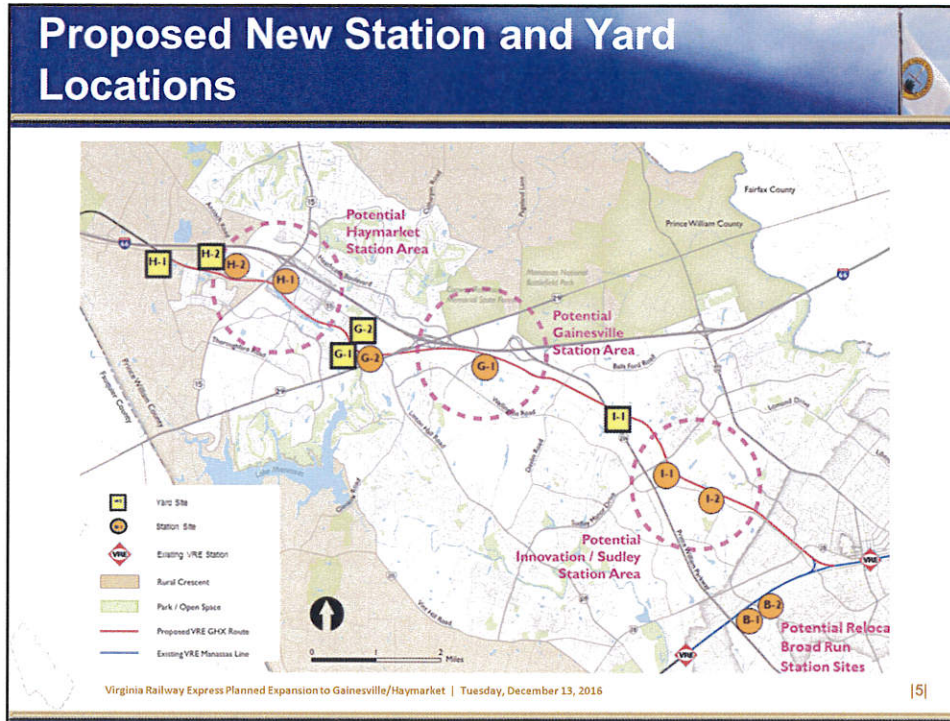
### Background

- On October 18, 2016, VRE presented the various options for the Gainesville/Haymarket Extension project (GHX) to the PWC Board of County Supervisors (BOCS).
- VRE has requested that the BOCS select expansion preferences to move forward to the environmental phase (NEPA) of the planned GHX project prior to December 16, 2016.
- BOCS issued directive 16-33 requesting County staff recommendation on next steps.

Virginia Railway Express Planned Expansion to Gainesville/Haymarket | Tuesday, December 13, 2016

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- ## Potential Impacts
- Land Use and Economic Development Goals
    - Transit-oriented mixed use development
      - Pending Rezoning (Innovation Town Center, PW Station)
      - Innovation and Gainesville Stations
    - Haymarket Station and Maintenance Yard
      - Does not advance land-use goal
      - Town makes land-use decisions
      - Rural Area
    - Data Center Overlay District
      - Broad Run re-located
      - Does not advance economic development goals
  - Transportation Goals
    - Envisions a multi-modal network
    - Includes Innovation and Gainesville stations in Comprehensive Plan
    - Board did not endorse as part of SmartScale Applications
- Virginia Railway Express Planned Expansion to Gainesville/Haymarket | Tuesday, December 13, 2016

## DRAFT Capital and Operating Costs

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DRAFT results based on analysis through 9/26/16  
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Virginia Railway Express Planned Expansion to Gainesville/Haymarket | Tuesday, December 13, 2016

- ## Potential Impacts
- **Budgetary Constraints**
    - **Capital Costs**
      - Relocation of Broad Run estimated at \$345M
      - All other extensions estimated between \$580M - \$660M
    - **Operating Costs (assuming 6 additional trains)**
      - System-wide between \$7M - \$16M a year
      - Broad Run Relocated would increase County subsidy by almost \$1M a year by FY23
      - All other alternatives would have even higher subsidies.
    - **Current and Future VRE Subsidy**
      - With no additional service subsidy would increase to \$6.6M in FY23 (\$6M in FY17)
    - **VRE Funding and NVTA 30%**
      - Currently \$6M (almost 50%) of NVTA funding is being used for VRE
      - Less funding for County Road Construction Program
- Virginia Railway Express Planned Expansion to Gainesville/Haymarket | Tuesday, December 13, 2016

### Current Transportation Network Funding

Funding Sources	County Road Construction	VRE Commuter Rail Operations	PRTC Local & Commuter Bus Operations
General Fund	✓		
Recordation Tax	✓		
NVTA 30% Funds	✓	✓	
Motor Fuels Tax			✓

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### Transit Funding Constraints

NVTA 30%	FY17	FY18	FY19	FY20	FY21
VRE	\$6.0M	\$5.4M	\$6.2M	\$6.2M	\$6.4M
Road CIP	\$6.2M	\$7.2M	\$6.8M	\$7.2M	\$7.4M

■ Road construction capacity has been reduced by almost 50%, or more than \$30M less between FY17-21.

Virginia Railway Express Planned Expansion to Gainesville/Haymarket | Tuesday, December 13, 2016 |9|

## Next Steps/Recommendations

- Although the Broad Run Station Relocation Option with 6 additional trains generates 5,130 new riders system-wide (93% of total through the GHX); it comes at a cost of \$345M in capital needs and almost \$1M in additional subsidy from the County.
- On December 16, 2016, the VRE Operations Board will review and vote on alternatives to move forward on the Gainesville-Haymarket Expansion Project
- Staff recommends that the Prince William Board of County Supervisors support termination of the Virginia Railway Express Gainesville/Haymarket Extension Study
- Staff also recommends that the Prince William Board of County Supervisors request staff to examine the impacts of removing the planned stations through the Comprehensive Plan Update