MEETING OVERVIEW – June 7, 2018

Action Items Include:

- Minutes of the May 3, 2018 Meeting
- Contract Awards for NTD Data Collection Services, Technical Support Services for the I-66 Commuter Choice Program, and the Route 7 Conceptual Engineering Phase III Study
- Northern Virginia Regional Fare Collection Strategic Plan
- VRE CSXT Operating/Access Agreement Extension
- VRE Submission for USDOT BUILD Grant

Other Meeting Highlights:

- Recognition of Departing Commissioner Jeff Greenfield
- Presentation by Robert Puentes (Eno Foundation) on National Trends in Public Transportation
- I-66 Inside the Beltway Operations (Written Report)
- WMATA Board Report
- Long Bridge Project Update

TABLE OF CONTENTS

NVTC May 3, 2018 Commission Agenda ........................................................................ 3
Agenda Item 1 Opening Remarks
Agenda Item 2 Recognition of Departing Commissioner ........................................... 5
Agenda Item 3 Minutes .................................................................................................. 7
Agenda Item 4 Consent Agenda .................................................................................. 23
Agenda Item 5 I-66 Inside the Beltway Operations (Written Report) ......................... 27
Agenda Item 6 National Trends in Public Transportation ............................................. 49
Agenda Item 7 Regional Fare Collection Program ...................................................... 51
Agenda Item 8 Washington Metropolitan Area Transit Authority (WMATA) .......... 95
Agenda Item 9 Virginia Railway Express (VRE) ......................................................... 107
Agenda Item 10 Department of Rail and Public Transportation (DRPT) .............. 169
Agenda Item 11 Executive Director Report .............................................................. 173
AGENDA

1. Opening Remarks

2. Recognition of Departing Commissioner Jeff Greenfield

3. ACTION ITEM: Approve the Minutes of the May 4, 2018 NVTC Meeting

4. ACTION ITEM: Approve the CONSENT AGENDA (subject to approval by the Chairman)
   A. Authorize the Executive Director to Execute a Contract with Stantec Consulting for NTD Data Collection Services
   B. Authorize the Executive Director to Execute a Contract with Kimley-Horn for Technical Support Services for the FY2019 I-66 Commuter Choice Program
   C. Authorize the Executive Director to Execute a Contract with Kittelson & Associates, Inc. for the Route 7 Conceptual Engineering Phase III Study

5. I-66 Inside the Beltway Operations (Written Report)
   A. VDOT Report on Road and Tolling Operations
   B. NVTC Report on Transit Performance in the Corridor

6. National Trends in Public Transportation (Robert Puentes, Eno Foundation)

7. Regional Fare Collection Program
   A. ACTION ITEM: Approve Resolution #2360: Accept the Northern Virginia Regional Fare Collection Strategic Plan
   B. Program Update
8. Washington Metropolitan Area Transit Authority
   A. Board of Directors Report
   B. Committee Reports
   C. Other WMATA News
   D. Virginia Ridership and Parking Facility Utilization
   E. Preliminary Schedule of Upcoming Board Decisions

9. Virginia Railway Express
   A. VRE CEO Report and Minutes
   B. **ACTION ITEM: Resolution #2361: Authorize the VRE CEO to Execute a One-Year Extension of the Existing Amended and Restated Operating/Access Agreement with CSX Transportation**
   C. **ACTION ITEM: Resolution #2362: Authorize the VRE CEO to Submit VRE Projects to USDOT for FY2018 BUILD Grant Funding Consideration**
   D. VRE Automatic Passenger Count System

10. Department of Rail and Public Transportation (DRPT)
    A. DRPT Report
    B. Long Bridge Project Update

11. Executive Director Report
    A. Executive Director Newsletter
    B. NVTC Financial Report
TO: Chairman Smedberg and NVTC Commissioners
FROM: Kate Mattice
DATE: May 31, 2018
SUBJECT: Recognition of Departing Commissioner

NVTC will recognize the service of departing Commissioner Jeff Greenfield, who has represented the City of Fairfax on NVTC for 10 years.
This page intentionally left blank.
MINUTES
NVTC COMMISSION MEETING – MAY 3, 2018
NAVY LEAGUE BUILDING – FIRST FLOOR CONFERENCE ROOM
ARLINGTON, VIRGINIA

The meeting of the Northern Virginia Transportation Commission was called to order by Vice-Chairman Letourneau at 7:35 P.M.

**Members Present**
Sharon Bulova
John Cook
Jim Corcoran
Katie Cristol
Christian Dorsey
Adam Ebbin
John Foust
Libby Garvey
Catherine Hudgins
David LaRock
Matt Letourneau
David Meyer (Alternate, City of Fairfax)
Jennifer Mitchell (Alternate, Commonwealth of Virginia)
David Snyder
Jennifer Wexton

**Members Absent**
Jeff Greenfield
Tim Lovain
Jeff McKay
Ron A. Meyer
Paul Smedberg

**Staff Present**
Karen Finucan Clarkson
Matt Cheng
Andrew D’huyvetter
Nobuhiko Daito
Rhonda Gilchrest
Dan Goldfarb
Patricia Happ
Scott Kalkwarf
Aimee Perron Seibert
Kate Mattice
Doug Allen (VRE)
Tom Hickey (VRE)
Joe Swartz (VRE)
Opening Remarks

Vice-Chairman Letourneau stated he has been asked to chair the meeting since Chairman Smedberg is unable to attend.

Minutes of the April 5, 2018 NVTC Commission Meeting

Ms. Garvey moved, with a second by Ms. Bulova, to approve the minutes. The vote in favor was cast by Commissioners Bulova, Corcoran, Dorsey, Ebbin, Foust, Garvey, Hudgins, LaRock, Letourneau, Snyder and Wexton. Commissioners Cook, Cristol and Meyer abstained.

I-66 Commuter Choice FY2018 Program

Vice-Chairman Letourneau stated that the Commission is being asked to approve Resolution #2357, which will approve the I-66 Commuter Choice FY2018 Program of Projects and authorize staff to submit the program to the Commonwealth Transportation Board for consideration and action. Based on the evaluation by NVTC staff, the jurisdictional I-66 Commuter Choice Working Group, and the Commissioner Work Group, the recommended Program of Projects includes 15 projects for funding, totaling $12,077,068.

Ms. Happ, project manager, reviewed the FY2018 I-66 Commuter Choice program, evaluation and selection process, applications received, and the recommended projects for funding. NVTC received 17 applications with a total funding request of $29.6 million.

Ms. Happ stated that 60 percent of the program will fund new or enhanced bus service; 22 percent will provide access to park and ride lots, bus stops, and Metrorail and VRE stations; seven percent will directly serve to improve responsiveness to incidents along the I-66 corridor; and six percent will support transit incentives and alternate ways to travel such as carpool and vanpool. The collective benefits of the program will move an additional 2,000 people through the corridor during the morning peak period; save approximately 120,000 hours of travel delay per year during the commuter peak periods; connect people to more than 15 activity centers in Virginia and the District; provide two new bus routes and enhances service on three existing bus routes; and improve emergency and incident response capabilities to keep I-66 moving.

Ms. Happ reviewed the 12 projects recommended for funding for FY2018, which are listed in the following chart:
<table>
<thead>
<tr>
<th>FY2018 I-66 Commuter Choice Project Name</th>
<th>Applicant</th>
<th>Total Funding Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfax Connector Express Bus Service Between Vienna/Fairfax-GMU and Pentagon Metrorail Stations</td>
<td>Fairfax County</td>
<td>$ 3,452,618</td>
</tr>
<tr>
<td>Loudoun County Transit Metro Connection Route 88X Extension to Dulles South</td>
<td>Loudoun County</td>
<td>$ 1,706,040</td>
</tr>
<tr>
<td>On-Demand Commuter Lot Shuttles in Prince William County</td>
<td>PRTC</td>
<td>$ 1,087,796</td>
</tr>
<tr>
<td>Loudoun County Transit Metro Connection from New Purcellville Park and Ride</td>
<td>Loudoun County</td>
<td>$ 1,065,960</td>
</tr>
<tr>
<td>CUE Access and Technology Improvements</td>
<td>City of Fairfax/CUE</td>
<td>$ 965,000</td>
</tr>
<tr>
<td>Metrobus Route 3T Extension and Service Expansion</td>
<td>City of Falls Church</td>
<td>$ 845,754</td>
</tr>
<tr>
<td>I-66 Corridor Vienna/Merrifield Bike Share Expansion</td>
<td>Fairfax County</td>
<td>$ 497,100</td>
</tr>
<tr>
<td>I-66 Corridor Intelligent Transportation System Enhancements</td>
<td>Arlington County</td>
<td>$ 400,000</td>
</tr>
<tr>
<td>Traffic Management Center</td>
<td>Arlington County</td>
<td>$ 400,000</td>
</tr>
<tr>
<td>Expanded Transportation Demand Management Outreach to the I-66 Corridor</td>
<td>Arlington County</td>
<td>$ 350,000</td>
</tr>
<tr>
<td>Flexible Vanpool Program</td>
<td>PRTC</td>
<td>$ 317,600</td>
</tr>
<tr>
<td>Linton Hall OmniRide Metro Direct Bus Service Enhancement</td>
<td>PRTC</td>
<td>$ 134,200</td>
</tr>
<tr>
<td>Bicycle Parking Improvements at Manassas VRE Station</td>
<td>City of Manassas</td>
<td>$ 55,000</td>
</tr>
<tr>
<td>I-66 Commuter Choice Marketing and Outreach</td>
<td>NVTC</td>
<td>$ 400,000</td>
</tr>
<tr>
<td>Program Administration, Evaluation and Oversight</td>
<td>NVTC</td>
<td>$ 400,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$ 12,077,068</strong></td>
</tr>
</tbody>
</table>

Delegate LaRock asked about two projects (I-66 Corridor Intelligent Transportation System Enhancement and the Traffic Management Center), which both scored low with a Total Benefit Score of 8 and 13, respectively. Vice-Chairman Letourneau stated the Commissioner Working Group had similar questions and had a lengthy discussion of these two projects at their recent meeting. These two projects are geared more to commuters who are driving, especially those forced off I-66 because of the tolls, and are designed to improve traffic flow on the alternative roadways. The projects are designed to respond to incidents quicker and clear the corridor faster, which will also benefit the direct I-66 user. He stated that the evaluation criteria does not quantify the benefits of these projects very well. He explained that it is not possible to know ahead of time how many people can move through the corridor faster as a result of these projects. Ms. Mattice reminded Commissioners that the Total Benefits Score is only one part of the evaluation process. Ms. Cristol agreed it is hard to quantify this type of project compared to a project that can list the number of seats on a bus, for example.

Mr. Goldfarb gave a more detailed explanation of the evaluation process. He stated that the evaluation is done based on an average weekday. These reliability issues are hard to evaluate because they are random incidents. On the whole, it is difficult to evaluate reliability because it is controlled by random events in the corridor.
Delegate LaRock asked for the consultant to comment. Ms. Erin Murphy, from Kimley-Horn, stated that these incidents being described as random do happen in the corridor but are hard to quantify. The application process – and underlying data requested - was developed to match the logistics of preparing an application and the logistics of reviewing the applications to the amount of funding available. The scale of the program does not warrant complex analysis of these random events that require incident management. She stated that it goes back to the merits of the projects.

Vice-Chairman Letourneau assured Delegate LaRock that the Commissioner Working Group had some of the same questions. He came around and found more benefits to these projects than is shown in the numeric score. The Executive Committee discussed that the Commission may want to reevaluate the evaluation criteria for the next round of projects. There are also other issues that need to be addressed, such as the current criteria heavily weights low cost projects. Ms. Mattice stated the next round of call for projects will be in the fall, and staff can certainly reexamine the criteria and bring it back to the Commission prior to that call.

Ms. Bulova stated that the answers to these questions are persuasive and suggested staff footnote the explanation of why these two projects were included. Mr. Cook stated it is important to not change criteria to respond to specific projects. It is important to encourage thinking “outside the box” but he does not want to see it causing problems with the evaluation process. Senator Ebbin agreed criteria should be looked at but it shouldn’t be changed to just fit a project.

Delegate LaRock stated he is comfortable with the Commission revisiting the criteria that NVTC established, but for the Working Group to say their instincts would override the criteria is a big “ask” which he is not comfortable voting for since this is a large amount of funding.

Delegate LaRock also asked for more information about the two NVTC projects (I-66 Commuter Choice Marketing and Outreach; Program Administration, Evaluation and Oversight) at $400,000 each. Ms. Mattice stated that for last year, as well as the current year, NVTC was supported by consultants through VDOT. The ability to move this work in-house and have consultants directly under NVTC will be helpful to advance work on the call for projects. NVTC’s FY2019 Budget, approved by the Commission, identified $388,000 in costs associated with the I-66 Commuter Choice program. Since that time staff refined the cost estimate for consultant support and additional outreach, which raises it to $400,000. This would allow NVTC to pay consultants, do outreach, and in-house administration of the program. The second $400,000 is for running unified marketing and outreach across the region to encourage and support people to use transit and other transportation alternatives in the I-66 corridor. This is something the Secretary of Transportation and the Deputy Secretary of Transportation have asked NVTC to move in-house. The $400,000 would allow for staffing, conducting a needs assessment and preliminary marketing. In response to a question from Delegate LaRock, Ms. Mattice stated that these two projects have not been evaluated and scored because they are part of supporting the program.
Vice-Chairman Letourneau stated that NVTC was given this program and was told to administer it. The $400,000 is needed to administer the program. Ms. Mattice explained that VDOT has been paying these costs for the past two years out of their budget. It was intended to be moved under NVTC’s budget using toll revenues.

In response to a question from Delegate LaRock, Ms. Mattice explained an actual advertising budget could run into the million-dollar range. NVTC staff did not think it appropriate to include funding for advertising until the needs assessment is completed.

In response to a question from Mr. Foust, Mr. Cook explained that VDOT was temporarily administering the program costs out of their own budget until toll revenues were generated. Ms. Mattice stated that VDOT has specific responsibilities under the MOU, especially paying for the management of the roadway. Any costs incurred by NVTC is only for the I-66 Commuter Choice program.

Vice-Chairman Letourneau moved, with a second by Mr. Dorsey, to approve Resolution #2357.

Delegate LaRock introduced an amendment to the motion to remove the two NVTC projects from the Program of Projects. Senator Wexton seconded. There was one vote in favor by Delegate LaRock. Those voting in opposition were Commissioners Bulova, Cook, Corcoran, Cristol, Dorsey, Ebbin, Foust, Garvey, Hudgins, Letourneau, Meyer, Snyder and Wexton. The amendment did not pass.

The Commission then voted on the main motion to approve Resolution #2357. The vote in favor was cast by Commissioners Bulova, Cook, Corcoran, Cristol, Dorsey, Ebbin, Foust, Garvey, Hudgins, Letourneau, Meyer, Snyder and Wexton. Delegate LaRock voted no. The motion passed. (A copy of the resolution is attached.)

Vice-Chairman Letourneau asked staff to follow-up and return to a future meeting for a discussion of revising the evaluation criteria.

Report from the Co-Chairs of the Legislative and Policy Committee

Vice-Chairman Letourneau observed that it was a busy General Assembly Session, even though the outcome may not have been exactly what was hoped for; however, $154 million was dedicated for WMATA funding, $15 million for VRE, and a gas tax floor was established. Ms. Cristol stated that the region will need to wait until the next Session to see if legislation is passed regarding changes to the source of funding and to address the fiscal cliff. She observed that the transit legislation affects NVTC and its role in oversight of WMATA and collaboration of a streamlined WMATA Board. NVTC’s Strategic Planning Retreat will be a good opportunity to discuss these issues. Legislation impacting VRE includes the creation of a dedicated funding account called “Commuter Rail Operating and Capital” (C-ROC) which provides initial funding of $15 million from a portion of new revenue from the gas tax floor.

Mr. Corcoran left the meeting at 8:14 P.M. and did not return.
Vice-Chairman Letourneau asked General Assembly members for their comments on the Session. Delegate LaRock expressed his disappointment that little thought and collaboration went into the creating such an important piece of Metro legislation, as well as very limited discussion before coming out of conference. He stated that the sequencing of funding seems to be in question with Virginia out of sync with the District of Columbia and Maryland. He stated NVTC may want to make a recommendation on this issue. Ms. Mitchell stated that the Attorney General’s interpretation is that since the District and Maryland took action to create their source of funding, it enacts Virginia’s legislation and funds will flow. Virginia is not advance funding anything. Maryland and the District will be using existing funding sources to meet their Metro funding obligations. Ms. Hudgins stated all three jurisdictions have committed to their funding obligations, which is reflected in WMATA’s approved FY2019 Budget. Mr. Dorsey stated all three jurisdictions have approved the Capital Funding Agreement (CFA) as well, which is also binding. Delegate LaRock asked staff to share links to the FY2019 WMATA Budget and CFA.

Ms. Seibert stated Governor Northam must act on legislation by May 18, 2018. She also reported that Speaker of the House Kirk Cox appointed Delegates LaRock, Garrett and Watts to the Joint Commission on Transportation Accountability. Senator Ebbin encouraged staff to hold a legislator transit tour in Northern Virginia before the next Session. He observed the month of July would be a good time and he encouraged staff to coordinate with the Senate Finance Committee.

Ms. Mattice gave a brief update on the work of the Transit Services Delivery Advisory Committee (TSDAC). WMATA has its own set of requirements, but all of the other transit agencies will be subject to the changes in the operating and capital transit program. She will continue to brief the Commission as TSDAC makes progress. She has a working group of staff from jurisdictions across the region and transit agencies supporting her efforts at TSDAC.

On behalf of the Commission, Ms. Cristol thanked Ms. Seibert for all her hard work during the Session.

**Washington Metropolitan Area Transit Authority**

Ms. Mattice announced NVTC is hosting another WMATA Board Forum on May 31st at 7:00 P.M. at the Providence District Community Center, near the Vienna Metrorail Station. Commissioners were also provided with an updated chart on how WMATA is funded in Virginia, which reflects the new legislation.

Mr. Dorsey stated the WMATA Board has permanently adopted the University-Pass program (UPass), which provides a group-discount fare medium offering unlimited riding privileges on Metrobus and Metrorail to full-time students at accredited post-secondary institutions during the academic year. In 2018, WMATA enrolled 10 new schools in the pilot program. The UPass has generated over two million trips and $5.4 million in cumulative revenues since August 2016.

Mr. Dorsey also reported that WMATA has informed VRE that effective July 1, 2018, it will no longer open swing gates for VRE riders during service disruptions. VRE
passengers will have to purchase SmarTrip cards to use the Metro system. Mr. Allen stated VRE is communicating these changes with the swing gates to its riders. Mr. Dorsey stated NVTC needs to be front and center on all WMATA fare payment issues and implementation.

Mr. Snyder suggested WMATA provide some type of user manual for tourists on how to use the system and rules of conduct. Mr. Dorsey stated WMATA has a pilot at a few stations providing audible announcements. Mr. Snyder also noted that European rail systems partner with hotels to provide rail passes to guests and he encouraged WMATA to look into doing something similar. Ms. Hudgins stated WMATA has agreements with a few Maryland hotels located near Metrorail stations. Mr. Meyers suggested WMATA have video announcements in different languages at stations and on railcars. He also asked if USDOT is researching a nationwide fare system, which would significantly reduce costs. Ms. Mattice stated FTA is looking at fare technology and staff can provide an update at the next meeting. Ms. Garvey stated WMATA could partner with other regional agencies if not nationwide.

Virginia Railway Express

VRE CEO Report. Mr. Allen reported on several VRE safety initiatives, including preparedness training for Virginia State Police troopers and canine units; Positive Train Control (PTC) classroom training for VRE and Keolis personnel (PTC implementation is still on track to meet the deadline); and VRE’s Office of Development completed a safety certification, so as they are designing new facilities, they will design with safety in mind. Mr. Allen also reported that on Monday a trespasser was hit by a train just outside of the Woodbridge Station. He gave an update on how VRE responded to the incident. He also reported VRE’s average daily ridership for the month of March was 19,100 with on-time performance (OTP) of 92 percent.

Mr. Allen reported that at its April 20th meeting, the VRE Operations Board authorized a task order to PFM Solutions LLC for a financial modeling platform, which will allow VRE to migrate to a new, more robust financial modeling platform to support long-term financial planning. This will provide a greater capacity to do advanced reporting and graphic/charting capabilities to assist VRE in analyzing various scenarios and presenting results to the Operations Board, the Commissions, jurisdictional partners, and other stakeholders.

Authorization to Execute an Amendment for the Fourth Year of the First Option Period of the Contract for Operating Services for Commuter Rail. Ms. Bulova moved, with a second by Ms. Cristol, to approve Resolution #2358. The resolution will authorize the VRE CEO to execute an amendment to the Contract for Operating Services for Commuter Rail with Keolis Rail Services Virginia, LLC (KRSV) by approving up to $15,718,000 for the fourth year of the first option period, for a total contract value not to exceed $163,124,557, through June 30, 2019.

The Commission then voted on the motion and it passed. The vote in favor was cast by Commissioners Bulova, Cook, Cristol, Dorsey, Ebbin, Foust, Garvey, Hudgins, LaRock, Letourneau, Meyer, Snyder and Wexton. (A copy of the resolution is attached.)
Authorization to Execute an Amendment for the Third Year of the Contract for Maintenance Services for Commuter Rail. Ms. Bulova moved, with a second by Ms. Cristol, to authorize the VRE CEO to amend the Contract for Maintenance Services for Commuter Rail with Keolis Rail Services Virginia, LLC (KRSV) by increasing the total contract authorization by $7,674,000, for a total amount not to exceed $22,018,638, through June 30, 2019. This action covers contracted services for maintenance, inspection and repairs of VRE locomotives, passenger railcars and maintenance facilities for FY2019.

The Commission then voted on the motion and it passed. The vote in favor was cast by Commissioners Bulova, Cook, Cristol, Dorsey, Ebbin, Foust, Garvey, Hudgins, LaRock, Letourneau, Meyer, Snyder and Wexton.

Route 7 Conceptual Engineering Update

Mr. Goldfarb gave a brief update on the Envision Route 7 project, a proposed high capacity transit service that would run along Route 7 from Mark Center in the City of Alexandria to the Spring Hill Metro Station in Tysons. Phase II of the project was completed in early 2017, which resulted in a recommendation of Bus Rapid Transit (BRT) for the corridor. NVTC is now embarking on Phase III of this effort, which includes a conceptual engineering study. The study will help to refine the project costs, identify potential areas of concern, develop a potential staging strategy, and provide guidance on preserving the required right-of-way. This study will also identify right-of-way that could be utilized by the BRT and guide jurisdictions in their subarea and sector planning.

Mr. Goldfarb stated NVTC issued a Request for Proposal on March 26th and held a pre-proposal conference on April 6th, with nine firms attending. Proposals are due on May 4th and NVTC and jurisdictional staff will review the proposals and negotiate with the top qualified firm. The Commission will be requested to take action to award a contract at the June Commission meeting. NVTC anticipates issuing a notice to proceed by June 4, 2018. It is anticipated that the Phase III study will conclude by June 30, 2019.

NVTC FY2018 3rd Quarter Ridership Report

Ms. Mattice gave a brief overview of the FY2018 3rd Quarter Ridership Report. Overall, the third quarter saw ridership decreases across the board. Notably, Metrorail experienced an 11 percent decrease compared with the same period last year. Also, ART saw a 17 percent decrease in ridership. Just like the 2nd quarter, major SafeTrack work was underway last year during this period, one in February that shut down segments of the Blue Line for 18 days, and the other in March and April with single-tracking of sections of the Blue and Yellow Lines for 40 days. This work caused service disruptions of Metrorail and bus systems in the regions, and ridership’s fluctuated across the board.

Ms. Mattice explained that the region may be seeing some macro-level trends, such as growing teleworking, Transportation Network Companies (TNCs), like Uber and Lyft, and
land use changes. At the June meeting, the Commission will hear a presentation on the impact on TNCs on transit to the region.

Department of Rail and Public Transportation

Ms. Mitchell directed Commissioners to the written DRPT Report. She then gave an update on the Metro Safety Commission. The national deadline established by Congress is that all states must have their safety oversight organizations certified by FTA by April 2019. Any state or organization that does not meet this deadline FTA will withhold 100 percent of entire state’s federal transit dollars. FTA has notified the three jurisdictions that their certification package must be submitted by September 2018, which gives FTA approximately six months to evaluate the package and provide certification.

Ms. Mitchell reported that the MSC is now meeting bi-weekly at the Metropolitan Washington Council of Governments (MWCOG) offices. MSC Commissioners elected DC appointee Christopher Hart to serve as the chairman and Virginia appointee Mark Rosenker as vice-chairman. Both have previously served as chair of the National Safety Transportation Board (NTSB). On April 24th, the MSC announced that David Mayer has been hired to serve as the Executive Director beginning June 4th. Mr. Mayer served as chief safety officer for New York’s MTA; he also served as a former managing director of the NTSB. Vice-Chairman Letourneau recognize the hard work of MWCOG staff to assist the MSC.

Executive Director Report

Ms. Mattice directed Commissioners to her written Executive Director Newsletter. She updated Commissioners on several upcoming events, including the CTB meeting in Bristol and the WMATA Board Forum on May 31st at the Providence Community Center in Fairfax near the Vienna Metro Station.

Ms. Mattice noted that the Financial Report for January 2018 was provided to Commissioners. There were no questions.

Mr. Kalkwarf gave a brief presentation on the Draft FY2019 Six-Year Improvement Program (SYIP) regarding NVTC funding. NVTC applied for state transit assistance totaling $205.6 million for the NVTC member jurisdictions’ share of WMATA capital and operating subsidies, and the capital and operating needs of the WMATA jurisdictions’ local systems. This is an increase of $8.7 million (4.4 percent) from the FY2018 approved program. The draft SYIP reflects a provision in the WMATA funding bill which carves out 53.5 percent from DRPT’s overall program to be used by NVTC to assist the jurisdictions in making their WMATA capital and operating subsidy commitments. In prior years NVTC received funding based on the statewide operating and capital transit formulas in effect at the time. The draft SYIP includes $154.3 million in assistance for WMATA, an increase of $7.2 million (4.9 percent) from the FY2018 approved program.
State assistance for the capital and operating needs of the NVTC WMATA jurisdictions’ local systems totals $51.3 million, an increase of $1.5 million (3.1 percent) from the FY2018 approved program.

Mr. Kalkwarf stated that the draft SYIP also includes $40,000 from DRPT’s intern program to support NVTC’s Fellows program. It also includes the Commonwealth’s $50 million annual commitment to match one-third of the federal PRIIA funding for WMATA. This assistance is not applied for through NVTC, and will be contracted directly by DRPT with WMATA.

Ms. Mattice presented the first five original NVTC newsletters from 1965, which are just a few of many archived documents NVTC recently acquired from a long-time transit enthusiast who recently passed away. Ms. Bulova suggested incorporating some of the early transit projections versus what really happened as an icebreaker for the retreat.

Mr. Snyder reminded Commissioners about the Virginia Transit Association (VTA) Annual Conference in Richmond on May 22-23, 2018.

Adjournment

Without objection, Vice-Chairman Letourneau adjourned the meeting at 9:07 P.M.

Approved this 7th day of June 2018.

_________________________________________
Paul C. Smedberg
Chairman

_________________________________________
Katie Cristol
Secretary-Treasurer
RESOLUTION #2357

SUBJECT: Approval of the I-66 Commuter Choice FY2018 Program of Projects

WHEREAS: Under the Amended and Restated Memorandum of Agreement Transform66: Inside the Beltway Project (MOA), NVTC is responsible for selecting and administering multimodal projects that allow more people to travel faster and more reliably through the I-66 Inside the Beltway corridor;

WHEREAS: The principle objective of the Transform 66 Multimodal Project is to select projects that meet goals identified in the MOA, which are to (1) move more people, (2) enhance transportation connectivity, (3) improve transit service, (4) reduce roadway congestion, and (5) increase travel options;

WHEREAS: NVTC is responsible for component selection; financing and financial management; compliance, including evaluation, reporting, and quality assurance; and providing information to the public;

WHEREAS: NVTC’s September 7, 2017 FY2018 Call for Projects produced 17 applications for a total of $29.6 million in requests for projects designed to benefit toll payers by expanding transportation capacity in the I-66 Inside the Beltway corridor;

WHEREAS: Based upon the evaluation by NVTC staff, the jurisdictional I-66 Commuter Choice Working Group, and the Commission Working Group, staff recommends approval of the I-66 Commuter Choice FY2018 Program of Projects, which includes 15 projects of funding, totaling $12,077,068 (Attachment 1); and

WHEREAS: The projects support a diverse program that addresses the needs of the commuter and local bus riders, provides connections to key destinations, and helps to address critical first and last mile bus services, four access to transit projects, two park and ride lots, two roadway operations projects, a vanpool project, and transpiration demand management project, regional outreach, and program administration.

NOW, THEREFORE, BE IT RESOLVED that the Northern Virginia Transportation Commission hereby approves the I-66 Commuter Choice FY2018 Program of Projects and authorizes staff to forward the Program of Projects to the Commonwealth Transportation Board for action.

Approved this 3rd day of May 2018.

Paul C. Smedberg
Chairman

Katie Cristol
Secretary-Treasurer
## Attachment 1
Program of Projects Recommended for Funding under the FY 2018 I-66 Commuter Choice Program

<table>
<thead>
<tr>
<th>FY2018 I-66 Commuter Choice Project Name</th>
<th>Applicant</th>
<th>Total Funding Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfax Connector Express Bus Service Between Vienna/Fairfax-GMU and Pentagon Metrorail Stations</td>
<td>Fairfax County</td>
<td>$3,452,618</td>
</tr>
<tr>
<td>Loudoun County Transit Metro Connection Route 88X Extension to Dulles South</td>
<td>Loudoun County</td>
<td>$1,706,040</td>
</tr>
<tr>
<td>On-Demand Commuter Lot Shuttles in Prince William County</td>
<td>PRTC</td>
<td>$1,087,796</td>
</tr>
<tr>
<td>Loudoun County Transit Metro Connection from New Purcellville Park and Ride</td>
<td>Loudoun County</td>
<td>$1,065,960</td>
</tr>
<tr>
<td>CUE Access and Technology Improvements</td>
<td>City of Fairfax/CUE</td>
<td>$965,000</td>
</tr>
<tr>
<td>Metrobus Route 3T Extension and Service Expansion</td>
<td>City of Falls Church</td>
<td>$845,754</td>
</tr>
<tr>
<td>I-66 Corridor Vienna/Merrifield Bike Share Expansion</td>
<td>Fairfax County</td>
<td>$497,100</td>
</tr>
<tr>
<td>I-66 Corridor Intelligent Transportation System Enhancements</td>
<td>Arlington County</td>
<td>$400,000</td>
</tr>
<tr>
<td>Traffic Management Center</td>
<td>Arlington County</td>
<td>$400,000</td>
</tr>
<tr>
<td>Expanded Transportation Demand Management Outreach to the I-66 Corridor</td>
<td>Arlington County</td>
<td>$350,000</td>
</tr>
<tr>
<td>Flexible Vanpool Program</td>
<td>PRTC</td>
<td>$317,600</td>
</tr>
<tr>
<td>Linton Hall OmniRide Metro Direct Bus Service Enhancement</td>
<td>PRTC</td>
<td>$134,200</td>
</tr>
<tr>
<td>Bicycle Parking Improvements at Manassas VRE Station</td>
<td>City of Manassas</td>
<td>$55,000</td>
</tr>
<tr>
<td>I-66 Commuter Choice Marketing and Outreach</td>
<td>NVTC</td>
<td>$400,000</td>
</tr>
<tr>
<td>Program Administration, Evaluation and Oversight</td>
<td>NVTC</td>
<td>$400,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$12,077,068</strong></td>
</tr>
</tbody>
</table>
RESOLUTION #2358

SUBJECT: Authorize the VRE CEO to Execute an Amendment for the Fourth Year of the First Option Period of the Contract for Operating Services for Commuter Rail

WHEREAS: On October 16, 2009, the VRE Operations Board approved a five-year contract with Keolis Rail Services Virginia for VRE operations and maintenance services and mobilization in the amount of $18,459,348 through June 30, 2011;

WHEREAS: A contract amendment was approved on December 17, 2010 in the amount of $2,085,000;

WHEREAS: On May 20, 2011, the Operations Board approved the second contract year, through June 30, 2012, in the amount of $17,954,527, for a total contract value not to exceed $38,498,875;

WHEREAS: On April 20, 2012, the Operations Board approved the third contract year, through June 30, 2013, in the amount of $18,008,591, for a total contract value not to exceed $56,507,466;

WHEREAS: On April 19, 2013, the Operations Board approved the fourth contract year, through June 30, 2014, in the amount of $18,974,041, for a total contract value not to exceed $75,481,507;

WHEREAS: On April 18, 2014, the Operations Board approved the fifth contract year, through June 30, 2015, in the amount of $20,115,047, for a total contract value not to exceed $95,596,554;

WHEREAS: On May 15, 2015, the Operations Board approved the first year of the first option period, through June 30, 2016, in the amount of $20,931,000, for a total contract value not to exceed $116,527,554;

WHEREAS: On May 20, 2016, the Operations Board further authorized amending the agreement to remove the requirements for the Maintenance of Equipment and Facilities;

WHEREAS: On May 20, 2016, the Operations Board approved the second year of the first option period, through June 30, 2017, in the amount of $15,463,003, for a total contract value not to exceed $131,990,557;

WHEREAS: On April 21, 2017, the Operations Board approved the third year of the first option period, through June 30, 2018, in the amount of $15,416,000, for a total contract value not to exceed $147,406,557; and

WHEREAS: The VRE Operations Board recommends the following action.
NOW, THEREFORE, BE IT RESOLVED THAT, the Northern Virginia Transportation Commission authorizes the VRE CEO to amend the Contract for Operating Services for Commuter Rail with Keolis Rail Services Virginia, LLC by approving up to $15,718,000 for the fourth year of the first option period, for a total contract value not to exceed $163,124,557 through June 30, 2019.

Approved this 3rd day of May 2018.

Paul C. Smedberg
Chairman

Katie Cristol
Secretary-Treasurer
RESOLUTION #2359

SUBJECT: Authorize the VRE CEO to Execute an Amendment for the Third Year of the Contract for Maintenance Services for Commuter Rail

WHEREAS: In 2015, the VRE Operations Board recommended, and the Commissions approved, a five-year Contract for Maintenance Services for Commuter Rail with Keolis Rail Services Virginia, LLC (KRSV);

WHEREAS: The contract start date and total authorization was amended in May of 2016;

WHEREAS: On April 21, 2017, the Operations Board approved the second contract year, through June 30, 2018, in the amount of $7,092,267, for a total contract value not to exceed $14,344,638;

WHEREAS: The current contract authorization runs through June 30, 2018;

WHEREAS: The increase in contract authorization will allow for continued maintenance services and life cycle maintenance work scheduled for FY2019; and

WHEREAS: The VRE Operations Board recommends the following action.

NOW, THEREFORE, BE IT RESOLVED that the Northern Virginia Transportation Commission authorizes the VRE CEO to amend the Contract for Maintenance Services for Commuter Rail with Keolis Rail Services Virginia, LLC (KRSV) by increasing the total contract authorization by $7,674,000, for a total amount not to exceed $22,018,638 through June 30, 2019.

Approved this 3rd day of May 2018.

Paul C. Smedberg
Chairman

Katie Cristof
Secretary-Treasurer
This page intentionally left blank.
TO: Chairman Smedberg and NVTC Commissioners
FROM: Kate Mattice
DATE: May 31, 2018
SUBJECT: Consent Agenda (Subject to Chairman Approval)

ACTION ITEM: Approve the Consent Agenda

A. Authorize the Executive Director to Execute a Contract with Stantec Consulting for NTD Data Collection Services

The Commission is asked to authorize the Executive Director to execute a contract with Stantec Consulting for National Transit Database (NTD) Data Collection Services for a three-year contract with two, two-year options at a cost not to exceed $697,426.31 for the first three years. NVTC’s current contract for these services expires on June 30, 2018.

NVTC’s NTD project provides data collection services to six NVTC transit systems (ART, DASH, Alexandria Trolley, Fairfax Connector, CUE and Loudoun County Transit), and generates $10 million in additional annual federal assistance to WMATA, benefiting the entire region. Required services include updating the sampling plans, completing data reports and preparing reports. At the request of the Virginia Railway Express (VRE), an option in the RPF scope of work is included for VRE NTD related services.

Annually, the Management Advisory Committee (MAC) approves the scope of work to be performed under this contract. Funding for this effort is provided from state aid as determined in NVTC’s Subsidy Allocation Model (SAM) Resolution.

Tasks to be completed under the contract will include:

1. Sample new transit routes to revise sampling plans for collecting data necessary to complete NTD Form S10.
2. Using valid sampling plans, collect the ridership data necessary for completing NTD Form S10, in cooperation with each transit system.
3. Prepare NTD Form S10 for approval by each transit system.
4. Using data supplied by each transit system, complete all other required NTD forms for approval and submittal by the transit systems to meet FTA’s deadlines and cooperate with each transit system to respond to questions from FTA and NTD contractors. This task includes helping transit systems with the reporting of paratransit services. This task also includes advising and helping NVTC complete all NTD required forms.
5. Complete final year-end close out for all transit agencies with pending items that need to be finalized before closing out FY NTD reporting requirements.

6. Annual NTD Training for NVTC jurisdictions.

7. NTD data collection and reporting support for VRE.

NVTC sent direct solicitation notices to more than 45 firms plus an additional eight Disadvantaged Business Enterprise firms provided by the Virginia Department of Minority Business Enterprise program. NVTC also advertised this Request for Proposals via the Virginia Transit Association and the NVTC website as well as posted the RPF announcement on NVTC’s social media accounts. Despite these efforts, only one proposal from Stantec Consulting, the current NTD Data Collection Services contract incumbent, was received by NVTC by the RFP deadline of May 18, 2018. The proposal was evaluated by a technical evaluation committee, consisting of NVTC and jurisdictional staff, and was determined to demonstrate strong qualifications and past performance with a price proposal consistent with the previous contract. The technical evaluation team recommended Stantec Consulting for contract award.

B. Authorize the Executive Director to Execute a Contract with Kimley-Horn for Technical Support Services for the FY2019 I-66 Commuter Choice Program

The Commission is asked to authorize the Executive Director to execute a contract with Kimley-Horn to provide I-66 Commuter Choice Program technical support services at a cost not to exceed $202,900 for a one-year period.

In January 2017, NVTC and the Commonwealth of Virginia signed a 40-year Memorandum of Agreement authorizing NVTC to use toll revenues from I-66 Inside the Beltway to fund multimodal transportation projects through the I-66 Commuter Choice Program. For the FY2017 and FY2018 I-66 Commuter Choice programs, the Virginia Department of Transportation funded consulting support for NVTC’s call for projects and project evaluation under its I-66 General Engineering Support contract. Kimley-Horn was the firm provided by VDOT to support NVTC’s efforts during this time.

NVTC has determined that Kimley-Horn is the most qualified firm to perform this work. With the Commission’s approval, NVTC will issue the contract under the Department of Rail and Public Transportation (DRPT) Contract 505-13-CC0007 for Kimley-Horn to support program management support services including the following tasks:

1. Project Management
2. FY2019 I-66 Commuter Choice Program Launch Support
4. Online Content Development
5. Project Selection Process Support
6. Meetings
C. Authorize the Executive Director to Execute a Contract with Kittelson & Associates, Inc. for the Route 7 Conceptual Engineering Phase III Study

The Commission is asked to authorize the Executive Director to execute a 13-month contract with Kittelson & Associates, Inc. for the Route 7 Conceptual Engineering Phase III study at a cost to not exceed $300,000.

The Route 7 Conceptual Engineering Phase III study will help to refine the project cost, identify potential areas of concern, develop a potential staging strategy, and provide guidance on preserving the required right-of-way. This study will be identifying right-of-way that could be utilized by a Bus Rapid Transit (BRT) and guide jurisdictions in their subarea and sector planning. As development occurs along Route 7, including Mark Center, Seven Corners, City of Falls Church, and Tysons, the Envision Route 7 Conceptual Engineering Phase III study covers a critical step by identifying right-of-way concerns for advancing a BRT along Route 7.

On March 26, 2018, NVTC issued a Request for Proposals to perform the defined scope of work for the Phase III Conceptual Engineering, with proposals due on May 4, 2018. NVTC received seven proposals, which were evaluated by a technical review committee comprised of NVTC and jurisdictional staff. Following in-person presentations by the top three ranked firms, the technical review committee selected Kittelson & Associates. Following Commission approval, staff anticipates issuing a notice to proceed by June 14, 2018. The Phase III study will conclude by June 30, 2019.
This page intentionally left blank.
At NVTC’s January 2018 meeting, the Commission requested an update on the performance of the I-66 inside the Beltway tolling operation, including the performance of transit in the corridor. Regarding the tolling, the Virginia Department of Transportation (VDOT) has reported performance of the tolling operation, including pricing, impacts on traffic volume and speed, and traffic conditions on parallel routes. A complimentary report done by NVTC staff describes performance of public transit systems serving the I-66 corridor.

Deputy Secretary of Transportation Nick Donohue is not able to attend the June 7th NVTC meeting, but will participate in a discussion of I-66 inside the Beltway tolling operations at the July 5th meeting.

A. VDOT Report on Road and Tolling Operations

Since tolling began on I-66 inside the Beltway, VDOT has been releasing monthly performance reports. These reports present rush hour traffic volumes, pricing levels, the use of E-Z Pass, and impact on parallel routes' traffic conditions. The April 2018 report is included as an attachment.

Previous reports are also available online from the following links:

March 2018
February 2018
January 2018
First Week Update
Toll Day One Analysis

B. NVTC Report on Transit Performance in the Corridor

NVTC’s Transit Performance in the I-66 Inside the Beltway Corridor report summarizes the performance of public transportation systems serving the I-66 corridor. Public transportation plays a vital role in serving commuting travel demand along the corridor. Following larger trends of public transportation demand, ridership of public transit serving the corridor generally declined before and after I-66 tolling began. In contrast, express
buses experienced ridership growth, especially those that are funded by the I-66 Commuter Choice program. Express buses also demonstrated faster and more reliable travel time running on I-66, due to tolling and improved traffic conditions on the facility.

In order to evaluate transit performance in the corridor, staff recommends the continuation of periodic mode share surveys of person throughput of the corridor as well as the regular collection of ridership statistics for public transportation serving the corridor.
HIGHLIGHTS
Morning and afternoon commutes were faster on average and travel times more reliable compared to April 2017.

- Travel speeds on I-66 averaged 51.3 miles per hour (mph) during morning commutes compared to 46.7 mph.
- Travel speeds on I-66 averaged 55.0 mph during afternoon commutes compared to 47.9 mph.
- Travel times on I-66 averaged 1.0 minute shorter during morning commutes, and 2.4 minutes shorter during afternoon commutes.
- Drivers on most parallel arterial roadways including Routes 7, 29, and 50 experienced similar travel speeds and times. Data indicate reduced travel speeds on the George Washington Memorial Parkway.

EXPRESS LANES USE
- 14,832 average daily trips eastbound between 5:30 and 9:30 a.m.
- 17,398 average daily trips westbound between 3 and 7 p.m.
- 44.4% of all vehicle trips were carpools (peaked at 67.5% HOV at 8:36 a.m. on April 5.)

E-ZPASS USE
- 88.4% of vehicles traveled with an E-ZPass or E-ZPass Flex.
- 44.4% of all vehicle trips with E-ZPass in HOV (free) mode.
- 44.0% of all vehicle trips with E-ZPass in toll mode.

PRICING INFORMATION
- $14.13 – Average price for round trips (a.m. and p.m. averages combined.)
  » $9.27 – Average price for eastbound trips.
  » $4.86 – Average price for westbound trips.
- 1971 trips (out of 676,840 total) with price of $40 or more - 0.29% of all Express Lanes trips.
- $2.42 – Average price for eastbound trips between 5:30 and 6:30 a.m. (period prior to former HOV hours.)

SINCE EXPRESS LANES OPENED ON DEC. 4, 2017:
- 13,328 average daily trips eastbound and 16,141 average daily trips westbound.
- $12.72 – Average price for round trips.
  » $8.28 – Average price for eastbound trips.
  » $4.44 – Average price for westbound trips.
APRIL 2018 PERFORMANCE REPORT

I-66 Express Lanes Inside the Beltway

<table>
<thead>
<tr>
<th>EASTBOUND</th>
<th>WESTBOUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 PM - 7:00 PM</td>
<td>Average Speed (MPH)</td>
</tr>
<tr>
<td>April 2017</td>
<td>47.9</td>
</tr>
<tr>
<td>April 2018</td>
<td>55.0</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>13.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EASTBOUND</th>
<th>WESTBOUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:30 AM - 9:30 AM</td>
<td>Average Speed (MPH)</td>
</tr>
<tr>
<td>April 2017</td>
<td>46.7</td>
</tr>
<tr>
<td>April 2018</td>
<td>51.3</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>13.8</td>
</tr>
</tbody>
</table>

I-66 | AVERAGE SPEED

I-66 | AVERAGE TRAVEL TIME

66expresslanes.org
# APRIL 2018 PERFORMANCE REPORT

**Route 50 - I-66 Parallel Arterials**

## EASTBOUND

<table>
<thead>
<tr>
<th>Time</th>
<th>April 2017</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed (MPH)</td>
<td>28.9</td>
<td>28.7</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>20.9</td>
<td>21.1</td>
</tr>
</tbody>
</table>

## WESTBOUND

<table>
<thead>
<tr>
<th>Time</th>
<th>April 2017</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed (MPH)</td>
<td>27.4</td>
<td>26.9</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>22.1</td>
<td>22.4</td>
</tr>
</tbody>
</table>

## ROUTE 50 | AVERAGE SPEED

![Average Speed Graph - Eastbound](image)

![Average Speed Graph - Westbound](image)

## ROUTE 50 | AVERAGE TRAVEL TIME

![Travel Time Graph - Eastbound](image)

![Travel Time Graph - Westbound](image)
## Route 29 - I-66 Parallel Arterials

### NORTHBOUND

<table>
<thead>
<tr>
<th>Time Period</th>
<th>April 2017</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed (MPH)</td>
<td>20.7</td>
<td>21.8</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>26.8</td>
<td>26.0</td>
</tr>
</tbody>
</table>

### SOUTHBOUND

<table>
<thead>
<tr>
<th>Time Period</th>
<th>April 2017</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed (MPH)</td>
<td>20.0</td>
<td>18.9</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>26.8</td>
<td>30.0</td>
</tr>
</tbody>
</table>

### ROUTE 29 | AVERAGE SPEED

**NORTHBOUND**

- **5:30 AM - 9:30 AM**
  - **April 2017**: 20.7 MPH
  - **April 2018**: 21.8 MPH

**SOUTHBOUND**

- **3:00 PM - 7:00 PM**
  - **April 2017**: 20.0 MPH
  - **April 2018**: 18.9 MPH

### ROUTE 29 | AVERAGE TRAVEL TIME

**NORTHBOUND**

- **5:30 AM - 9:30 AM**
  - **April 2017**: 26.8 minutes
  - **April 2018**: 26.0 minutes

**SOUTHBOUND**

- **3:00 PM - 7:00 PM**
  - **April 2017**: 26.8 minutes
  - **April 2018**: 30.0 minutes
APRIL 2018 PERFORMANCE REPORT

Route 7 - I-66 Parallel Arterials

<table>
<thead>
<tr>
<th>Time Period</th>
<th>April 2017</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EASTBOUND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Speed (MPH)</td>
<td>20.1</td>
<td>20.5</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>13.8</td>
<td>13.5</td>
</tr>
<tr>
<td><strong>WESTBOUND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Speed (MPH)</td>
<td>19.3</td>
<td>20.2</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>14.3</td>
<td>13.6</td>
</tr>
</tbody>
</table>

ROUTE 7 | AVERAGE SPEED

ROUTE 7 | AVERAGE TRAVEL TIME
# APRIL 2018 PERFORMANCE REPORT

## GW Parkway- I-66 Parallel Arterials

### SOUTHBOUND

<table>
<thead>
<tr>
<th>Time Period</th>
<th>April 2017</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed (MPH)</td>
<td>38.9</td>
<td>35.2</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>15.1</td>
<td>18.1</td>
</tr>
</tbody>
</table>

### NORTHBOUND

<table>
<thead>
<tr>
<th>Time Period</th>
<th>April 2017</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed (MPH)</td>
<td>35.8</td>
<td>32.6</td>
</tr>
<tr>
<td>Travel Time (Minutes)</td>
<td>14.8</td>
<td>16.2</td>
</tr>
</tbody>
</table>

## GW PARKWAY | AVERAGE SPEED

<table>
<thead>
<tr>
<th>Time</th>
<th>Average Speed (MPH)</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:30 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:30 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## GW PARKWAY | AVERAGE TRAVEL TIME

<table>
<thead>
<tr>
<th>Time</th>
<th>Average Travel Time (Minutes)</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:30 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:30 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:30 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:30 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This report summarizes the performance of public transportation systems serving the I-66 inside the Beltway corridor in Northern Virginia. In December 2017, the Commonwealth of Virginia instituted dynamic tolling during peak periods along I-66, from the Capital Beltway in Fairfax County to the Roosevelt Bridge leading to Washington, D.C. This stretch of roadway was previously a restricted facility, limited to high occupancy vehicles (HOV2) during commuting hours, inbound (east) in the morning and outboard (west) in the afternoon. Upon implementation of the dynamic tolling, the Northern Virginia Transportation Commission (NVTC) initiated the I-66 Commuter Choice program, a multimodal grant program that funds transit and transportation demand management services to complement the tolling in order to move more people through the corridor during peak periods. As part of this effort, NVTC began tracking the overall transit performance changes along this corridor.

OVERVIEW

Public transportation plays an important role along the I-66 inside the Beltway corridor, transporting approximately 40 percent of commuters during peak periods. That’s a more than three times greater transit mode share than Northern Virginia as a whole. Public transit ridership along the corridor generally follows regional and national public transportation ridership trends, which have showed some decline. In contrast to this trend, express buses, some of which are funded by the I-66 Commuter Choice program, experienced strong and growing ridership, while demonstrating faster and more reliable running times due to I-66 tolling and resulting traffic condition improvements.

KEY FINDINGS

- Public transportation plays a vital role along the I-66 corridor. According to a 2015 mode share survey, approximately 60 percent of person throughput was solo drivers and carpoolers, while 40 percent was commuters travelling via Metrorail, Virginia Railway Express (VRE), express bus, and local bus.

- Transit ridership in the I-66 inside the Beltway Corridor is largely dictated by regional transit ridership trends, which are influenced by employer transit benefits, transit service reliability, telework, and real estate development, among others.¹ There is insufficient data to disentangle the effect of tolling on transit ridership from these larger trends.

- Consistent with regional trends, local bus routes in the corridor showed ridership declines.

- Commuter and express bus routes in the corridor showed significant increases in ridership coinciding with the implementation of tolling and the introduction of new service related to the I-66 Commuter Choice program.

- Transit providers have reported that commuter bus running times have improved since I-66 tolling began due to improved traffic conditions. Transit providers are in various stages of data collection to assess travel time savings and will continue to monitor run times.

- NVTC will continue to work with local and regional transit agencies to monitor corridor transportation performance.

¹WMATA (2017). Understanding Rail and Bus Ridership, presentation at WMATA Board Finance Committee Meeting, October 12.
BACKGROUND

At NVTC’s January 2017 meeting, Deputy Secretary of Transportation Nick Donohue presented an update on the performance of I-66 inside the Beltway since the inception of tolling, noting that continued monitoring and evaluation would be necessary to determine the performance of the facility and corridor. At that meeting, the Commission requested that the Commonwealth return to brief the Commission on roadway performance and asked that transit be included in the performance evaluation. This memo supplements performance updates of the I-66 tolling program with performance statistics of public transportation services in the corridor. These public transportation services include all that service the corridor, whether or not they are funded through the I-66 Commuter Choice program.

The I-66 corridor is a multimodal transportation network that moves commuters between Northern Virginia’s outer and inner suburbs as well as Washington D.C. On a typical weekday AM peak period, approximately 60,000 commuters travel the corridor toward Washington D.C., over 40 percent of whom use public transportation (Metrorail, VRE, and commuter and local buses).²

The following sections present passenger throughput in the I-66 corridor and ridership statistics of public transportation systems along the corridor. The limited amount of data currently available highlights the need for continuous monitoring of both vehicular and public transportation traffic to evaluate the performance of transportation systems in the corridor.

I-66 Inside the Beltway Corridor

The I-66 inside the Beltway corridor serves commuters from the suburbs along the interstate including Loudoun and Fairfax counties, the cities of Fairfax and Falls Church, and communities served by PRTC’s OmniRide, running between Prince William County and job centers in Washington, D.C. and Arlington County (Figure 1). The corridor consists of highways and arterials including I-66, US 50, US 29, VA 237 (Washington Blvd.), and Wilson Blvd., as well as public transportation systems such as Metrorail, VRE, and express and local buses.

This report follows a study conducted by the Transportation Planning Board (TPB) in 2016 in defining the I-66 multimodal corridor as consisting of roads and public transportation services. The roads included:

- I-66 (east and west bound)
- U.S. 29 (Lee Highway, north and south bound)
- VA 237 (Washington Blvd., east and west bound)
- Wilson Blvd. (east and west bound)
- U.S. 50 (east and west bound)

The following railway lines serve the I-66 corridor:

- Metrorail’s Orange and Silver lines
- VRE’s Manassas Line, which runs parallel to I-66
The following local bus routes also serve the corridor:

- Metrobus: 1A, 1B, 1E, 1Z, 2A, 3Y, 4A, 5A, 22A, 22B, 22C and 25B
- ART – Arlington Transit: 41, 51, 52, 55 and 75

The following express bus services travel through the corridor:

- Fairfax Connector 599 (Pentagon–Crystal City Express) and 699 (Government Center– Downtown D.C.)
- Loudoun County Transit commuter bus from Dulles North Transit Center, Dulles South, Brambleton, Telos, Stone Ridge, Ashburn North, and Christian Fellowship Church, to Rosslyn, Crystal City, the State Department, or Independence Avenue and 12th Street, SW in Washington, D.C.
- PRTC OmniRide Manassas Route (from the Manassas Mall or Portsmouth commuter lots to the Pentagon) and Gainesville Route (from the Cushing Road commuter lot to the State Department).

MODAL SHARE OF I-66 COMMUTING TRIPS

The Transportation Planning Board’s “2015 Mode Share Study: I-66 Corridor Inside the Beltway,” provides a snapshot of how people move through the corridor. The study counted passengers in transit vehicles, carpools and automobiles, as well as those on bicycle or foot. This recurring mode share study provides the most complete understanding of movement through and mode shifts within the corridor. Future mode share studies are recommended to comprehensively evaluate the performance of tolling, transit, and transportation demand management programs in the corridor.

Table 1 and Figure 2 summarize the modal share of I-66 corridor passenger throughput, illustrating how vital public transportation is to this multimodal transportation system. On a weekday during the AM peak period (6:30-9:30 a.m., as defined in the TPB study), person throughput in the I-66 corridor as measured at Glebe Road was 59,300. Fifty-nine percent of these commuters drove or carpooled, while 41 percent took public transportation, namely Metrorail, VRE or commuter/local bus services. In contrast, the American Community Survey 5-Year estimates (2016) found that 12 percent of commuters residing in the NVTC region travel to work by public transportation (excluding taxi).

Table 1: I-66 Corridor AM Peak Person Throughput by Route & Mode, 2015

<table>
<thead>
<tr>
<th>Facility or Service</th>
<th>Drive Solo</th>
<th>Carpool</th>
<th>Person Throughput</th>
<th>Share by Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-66</td>
<td>33%</td>
<td>67%</td>
<td>14,600</td>
<td></td>
</tr>
<tr>
<td>U.S. 29</td>
<td>82%</td>
<td>18%</td>
<td>3,500</td>
<td></td>
</tr>
<tr>
<td>VA 237</td>
<td>82%</td>
<td>18%</td>
<td>3,200</td>
<td></td>
</tr>
<tr>
<td>U.S. 50</td>
<td>83%</td>
<td>17%</td>
<td>10,600</td>
<td></td>
</tr>
<tr>
<td>Wilson Blvd</td>
<td>80%</td>
<td>20%</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Driving</td>
<td></td>
<td></td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>Metrorail</td>
<td></td>
<td></td>
<td>17,800</td>
<td></td>
</tr>
<tr>
<td>VRE</td>
<td></td>
<td></td>
<td>2,400</td>
<td></td>
</tr>
<tr>
<td>Express buses</td>
<td></td>
<td></td>
<td>2,300</td>
<td></td>
</tr>
<tr>
<td>Local Buses</td>
<td></td>
<td></td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Public Transportation</td>
<td></td>
<td></td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>59,300</td>
<td></td>
</tr>
</tbody>
</table>

Note: Numbers may not add up due to rounding. Source: Transportation Planning Board (2016)

---

3 Metrobus Route 3A was replaced by ART 55 on December 16, 2015.
4 ART 55 replaced Metrobus Route 3A on December 16, 2015.
5 The following services started with the support from I-66 Commuter Choice program in 2017: Fairfax Connector 699; Loudoun County Transit Stone Ridge service; and PRTC OmniRide Gainesville to Pentagon service.
Looking at Metrorail’s Orange and Silver lines, which run in the interstate’s median, and express buses, which transport 2,300 commuters each rush hour, public transportation’s person throughput is more than 30 percent larger than that of solo drivers and carpoolers combined. Relying on the Transportation Research Board’s Highway Capacity Manual, which shows that the capacity of an interstate class highway is approximately 1,600 vehicles per hour per managed lane, one can infer that express buses save more than one lane for one hour during the AM peak period. Similarly, Metrorail plays a vital role in transporting commuters along this corridor, saving capacity of over 11 managed lanes for one hour during the AM peak period.

![Figure 2: Corridor-wide Person Throughput by Mode, 2015](image)

**IMPACT OF I-66 TOLLING ON PUBLIC TRANSPORTATION**

Tolling on I-66 inside the Beltway began on December 4, 2017. Tolls influence operation of public transportation systems serving the I-66 corridor in various ways. This report focuses on two of them: ridership and running time.

Local and regional transit operators provided average weekday ridership from July 2016 through February or March 2018. As only four months’ data is available, the ability to analyze the impact of tolling on transit ridership is limited. It is expected that toward the end of 2018 more comprehensive data will become available. The following subsections report weekday average ridership of I-66 corridor transit services by railways (Metrorail and VRE), local buses (Metrobus and ART-Arlington Transit), and express buses (Loudoun County Transit, Fairfax Connector, and PRTC OmniRide).

In regard to running time, limited data is available to evaluate the impact of I-66 tolling. This report presents a collection of available quantitative and qualitative information provided by operators of express buses that use I-66.
Impact of I-66 Tolling on Public Transit Ridership

Ridership of public transportation systems serving the I-66 corridor is largely dictated by Metrorail, which constitutes over 60 percent of the corridor’s public transportation travel demand. Since July 2017, Metrorail’s ridership has shown increases compared to the same month in the previous year, due in part to SafeTrack, which accelerated track work to improve safety and reliability of the Metrorail in the previous year, and associated service disruptions. Other public transit providers, however, generally experienced ridership decreases. While this was especially so with local buses (Metrobus and ART-Arlington Transit), express bus services experienced increases.

Railways: Metrorail and VRE

Figure 3 shows average weekday ridership on Metrorail’s Orange and Silver lines, between stations west of Ballston and Ballston and stations eastward, as well as VRE’s Manassas Line from July 2016 to February 2018. Metrorail ridership increased in FY2018 which started in July 2017, due in part to SafeTrack and associated service disruptions in the previous year. In February 2018, two months into I-66 tolling, average weekday ridership of Metrorail was 4 percent higher than February 2017, while the average weekday ridership of VRE decreased by 5 percent from February 2017 to February 2018. It is difficult to discern the influence of I-66 tolling from these statistics.

Figure 3: Average Weekday Ridership of I-66 Corridor (Railways)

Note: Metrorail average weekday ridership of trips between Wiehle-Reston East, Spring Hill, Greensboro, Tysons Corner, McLean, Vienna, Dunn Loring, West Falls Church, and East Falls Church and all other stations. Ridership includes peak and non-peak periods.
Source: WMATA and VRE

WMATA SafeTrack (www.wmata.com/service/SafeTrack.cfm)
Local Buses: Metrobus and ART-Arlington Transit

Local buses serving the I-66 corridor generally experienced declining ridership trends between July 2016 and February 2018 (Figure 4). Average weekday ridership of Metrobus I-66 corridor routes decreased 10 percent from February 2017 to February 2018, following a trend that extends to July 2016, the beginning of the study period. Similarly, the average weekday ridership of ART-Arlington Transit I-66 corridor routes decreased by 12 percent from February 2017 to February 2018. These declines persist before and after the I-66 tolling, and the impact of tolling is unclear with available statistics.

Express Buses: Loudoun County Transit, Fairfax Connector, and PRTC OmniRide

With the implementation of tolling on I-66 in December 2017, the average weekday ridership of express buses show increases. The aggregate average weekday ridership of Loudoun County Transit, Fairfax Connector and PRTC OmniRide I-66 corridor routes, which run only during peak periods in contrary to railway and local bus services, increased 8 percent from February 2017 to February 2018 (Figure 5). The increase is in part due to new capacity funded by the I-66 Commuter Choice program as well as tolling on I-66, though data is insufficient to quantify the impact of each of these factors. At the transit provider level, Fairfax Connector and PRTC’s OmniRide experienced average weekday ridership increases of 32 percent and 58 percent respectively, between February 2017 and February 2018. The average weekday ridership of Loudoun County Transit I-66 corridor routes decreased by 12 percent between February 2017 and February 2018.

Note: Metrobus average weekday ridership of 1A,B,E,Z; 2A; 3A; 3Y; 4A,B; 5A; 22A,B,C,F; and 25B. ART – Arlington Transit average weekday ridership of 41, 51, 52, 55, and 75. Ridership includes peak and non-peak periods.

Source: WMATA and Arlington County
While public transportation systems transport significant numbers of commuters from the Washington, D.C. suburbs to downtown, overall transit ridership in Northern Virginia has shown a gradual decline, which is influenced by employer transit benefits, transit service reliability, telework, and real estate development, among others.\(^7\) However, new commuter and express bus services supported by the I-66 Commuter Choice program have demonstrated stable demand and are expected to grow.

**Public Transit Services Funded by the I-66 Commuter Choice Program**

In fiscal year 2017, the I-66 Commuter Choice program began supporting new and enhanced public transportation services in the corridor. The FY2017 program funded 10 projects worth $9.8 million, in Arlington, Fairfax, Loudoun, and Prince William counties and the City of Falls Church (Figure 6). Public transportation services added to the I-66 corridor included:\(^8\)

- Arlington County Peak Period Service Expansion to Metrobus Route 2A (Washington Blvd.-Dunn Loring). The project, which started in June 2017, features improvements in peak time headways from 15 to 10 minutes.


---

\(^7\)WMATA (2017).

\(^8\)In FY2017, Commuter Choice program also supported following projects: Arlington Bus Stop Consolidation and Accessibility Improvements; City of Falls Church Expanded Transit Access; Arlington Multimodal Real-Time Transportation Information Screens; Loudoun County Transportation Demand management; and Arlington Expanded TDM Outreach. Implementations of these projects are at various stages. They are beyond the scope of this report since they are not public transportation services.
• ART – Arlington Transit Route 55 Peak Period Service Expansion. The project, which started in June 2017, features peak time headway improvement from 16 to 12 minutes.
• Fairfax Connector Route 699 (Government Center-Downtown DC). The project, which started in December 2017, features 10 service runs each peak period.
• Loudoun County Transit Stone Ridge Enhanced Service. The project, which opened in July 2017, features 11 service runs from the newly constructed Stone Ridge II park and ride lot.
• PRTC OmniRide Gainesville to Pentagon Commuter Service. The project, which started in December 2016, features five service runs each peak period.

The public transportation service capacity added in FY2017 through the I-66 Commuter Choice program has met with stable demand. A ramp-up in demand is expected in the coming years. The ridership trends of the new and enhanced services compared to the existing public transportation services provided by each operator in the corridor are detailed below.

Fairfax County Connector
Fairfax County Connector started the 699 (Government Center – Downtown D.C.) service concurrent with the implementation of tolling on I-66 inside the Beltway in December 2017. The average weekday ridership grew over the first three months of operation (Figure 7). With demand for the existing 599 (Pentagon-Crystal City Express) service stable, the addition of the 699 route increased the Connector’s average weekday ridership in the corridor by 58 percent in February 2018 compared to February 2017. These services run only during peak periods.
Figure 7: Fairfax Connector I-66 Corridor Services Average Weekday Ridership

Note: Services only during peak periods.
Source: Fairfax County

PRTC OmniRide

Supported by the I-66 Commuter Choice program, PRTC’s G200 service (Gainesville – Pentagon) began in December 2016. Ridership was stable through December 2017 (Figure 8). After I-66 tolling started, aggregate ridership of PRTC’s I-66 corridor services experienced a significant increase. Overall, I-66 Corridor Routes of OmniRide increased by 32 percent from February 2017 to February 2018. These services run only during peak periods.

Figure 8: PRTC OmniRide I-66 Corridor Services Average Weekday Ridership

Note: Other OmniRide I-66 corridor routes are LH, G-100, M-100, & M-200. Services are only during AM and PM peak periods.
Source: PRTC
Loudoun County Transit

Loudoun County Transit also improved its commuter bus services with the addition of the newly built Dulles South park and ride lot and two bus routes each peak period, starting in February 2017. Ridership on the new routes – 210, 211, 611 and 612 – was 26 percent higher in February 2018 compared to February 2017 (Figure 9). These services run only during peak periods.

![Figure 9: Loudoun County Transit I-66 Corridor Services Average Weekday Ridership](image)

Note: Other Loudoun County Transit I-66 Corridor Routes are 101-111, 201-209, 251-253, 301-309, 401-420, 501-511, 601-610, 651-654, 701-708, 800D, & 801-822. Services are only during AM and PM peak periods.

Source: Loudoun County Transit

ART – Arlington County Transit

ART expanded its 55 bus service frequency to every 12 minutes during the AM and PM peak periods, starting June 2017. I-66 corridor routes of ART, which consists of 41, 51, 52, 55, and 75 decreased by 12 percent from February 2017 to February 2018. The ridership of ART 55, with the added service frequency, decreased by 7 percent during the same period (Figure 10). The services run during peak and non-peak periods.

![Figure 10](image)
Metrobus 2A (Washington Boulevard – Dunn Loring), frequency was expanded from every 15 to 10 minutes during peak periods. Average weekday ridership decreased by 10 percent from February 2017 to February 2018, with the increase in 2A’s service frequencies. Figure 11 summarizes the route’s average weekday ridership from December 2016 to February 2018. The services run during peak and non-peak periods.

Figure 11: Metrobus I-66 Corridor Services Average Weekday Ridership

Note: Other I-66 Corridor Routes are 1A, 2B, E, Z; 3A; 3Y; 4A, B, 5A; 22A, 22B, 22C, 22F, & 25B. Services extend peak and non-peak periods. Source: WMATA
Impact of I-66 Tolling on Express Bus Running Time

Tolling on I-66 affects public transportation not only in terms of ridership but also the running times of bus services using the facility. Vehicular speed on I-66 inside the Beltway increased by 15 percent from February 2017 to February 2018\(^9\). Available data and anecdotal evidence strongly suggest that running times of express bus services using I-66 have also improved.

Transit operators noted the following service impacts:

- Loudoun County Transit commuter bus drivers are reporting easier travel into and out of the District of Columbia.
- Fairfax County Connector 599 (Pentagon – Crystal City Express) buses are experiencing improved running time on AM and PM trips, while 699 (Government Center – Downtown D.C.) buses are operating within expected running time parameters.
- PRTC OmniRide is experiencing improved reliability and running times for services using I-66. Prior to tolling, OmniRide was using I-495 express lanes and I-395 HOV lanes for services from western Prince William County to the Pentagon instead of I-66 and Route 110, because they offered comparable travel time and greater reliability. After tolling started, OmniRide switched these services to I-66/Route 110 due to improved run time reliability and time savings of up to 15 minutes compared to I-495/I-395.
- Average weekday running time of Metrobus 5A, which includes time spent on roads other than I-66, improved by up to 7 percent from December 2016 to December 2017. WMATA will continue to monitor the performance of Metrobus routes using the facility.

NEXT STEPS

This report highlights the need for more information to evaluate the impact of tolling on the I-66 Commuter Choice program and, more broadly, public transportation services along the I-66 corridor. NVTC will continue to work with regional and jurisdictional partners to monitor the performance of public transportation services in the corridor. Staff recommend the following next steps:

- Continuation of periodic mode-share surveys of person throughput in the corridor. The next survey currently is scheduled for 2019, with funding from VDOT.
- Regular, biannual collection of ridership statistics for public transportation serving the corridor.

TO: Chairman Smedberg and NVTC Commissioners
FROM: Kate Mattice
DATE: May 31, 2018
SUBJECT: National Trends in Public Transportation

At the June meeting, Robert Puentes, President and CEO of the Eno Center for Transportation, will brief the Commission on how we are living through an era of historic change that is changing the need, purpose, and function of our transit systems. His presentation will focus on the financial and political complexities inherent today and how new solutions for the delivery, design and financing of transportation are becoming the norm rather than the exception.
This page intentionally left blank.
At the June meeting, staff will update Commissioners on NVTC’s efforts in progressing the Regional Fare Collection Program on behalf of the region. The update will focus on coordinating Northern Virginia’s transit providers on the following:

1) The Northern Virginia Regional Fare Collection Strategic Plan;
2) WMATA’s mobile fare initiative;
3) Implementation of critical upgrades to the existing bus fare collection system;
4) Regional expansion of WMATA’s University Pass program; and
5) Amending the SmarTrip Operations Funding Agreement between the region and WMATA.

NVTC leads the coordination, planning, and technical assistance to the Northern Virginia transit systems on fare collection, as well as organization between NVTC and WMATA for transit fare payment technologies led by WMATA.

A. ACTION ITEM: Approve Resolution #2360: Accept the Northern Virginia Regional Fare Collection Strategic Plan

The Commission is asked to accept the Northern Virginia Regional Fare Collection Strategic Plan to allow the transit systems to collectively organize around a shared vision for future regional fare collection. The Strategic Plan provides a guide for advancing fare collection in the region and provide input into WMATA fare collection modernization initiatives. The Strategic Plan establishes a vision, identifies strategic priorities and initiatives, and translates these into actions to be taken by NVTC and the transit systems in the coming years.

Fare payment often defines a transit customer experience, so its ease of use and reliability are extremely important. The region will benefit from a system that is reliable, customer-friendly, and economical to operate. In August of 2017, NVTC jurisdictions and transit agencies entered into the Memorandum of Agreement Regarding Coordination of Technical Analysis, Testing, Funding and Administration for the Regional Fare Collection Program (MOA) for NVTC to allocate grant funding and provide resources to coordinate upgrades to existing regional fare collection systems and explore options and enhancements for the regional fare collection program. To ensure these upgrades and enhancements are based on the transit system needs and that consensus is achieved on
the activities and options to be pursued, NVTC implemented a strategic planning process, resulting in the Northern Virginia Regional Fare Collection Strategic Plan.

While efforts are underway to maintain operations for the existing fareboxes, there is an urgent need to plan for fare collection alternates and upgrades to keep the system running and continue to meet customer expectations. To this end, NVTC led an effort with Northern Virginia regional partners to develop a Northern Virginia Regional Fare Collection Strategic Plan to outline a collective vision for a future fare collection system. The planning process, which began in the fall of 2017, consisted of a workshop with the transit systems, surveys and individual interviews with each system to gather a deeper understanding of specific issues and needs, as well as a comprehensive review process with agency staff and leadership. The outreach findings were synthesized into the plan.

The Strategic Plan documents the processes and principles to guide the NVTC fare collection activities, and outlines the features, functions, and capabilities that should be addressed through regional fare collection initiatives. This work concluded that there was broad agreement on the need for a regional fare collection system to complement and coexist with local solutions to meet the transit systems’ needs. Strategic priorities identified include the need to:

- Increase the role of Northern Virginia transit systems in WMATA fare collection planning,
- Provide seamless travel and payment with neighboring or intersecting transit systems,
- Retain and improve interoperability with SmartBenefits®, and
- Replace obsolete components and improve system maintainability.

In response to the priorities gathered throughout the process, NVTC developed the following actions. The actions identify the areas NVTC will assist the transit systems in fare collection efforts, but not all transit systems will have required involvement in each action depending on specific needs.

1. Continue Farebox Obsolescence Management
2. Implement a Coordinated Local Platform for Mobile Ticketing
3. Engage with WMATA on SmartBenefits® Enhancements
4. Engage with WMATA on SmarTrip® Upgrades
5. Support Retail Network Expansion
6. Initiate Long-Term Regional Fare Collection System Planning and Enhancements

The Strategic Plan articulates short, medium and long-term goals, and NVTC will continually measure progress and report to the transit systems as the actions of this Strategic Plan are taken. NVTC understands the importance of ongoing flexibility to changes in needs, technology, and funding availability. Progress will be assessed based on how the overall purpose and need of the Strategic Plan is being addressed.
B. Program Update

The MOA between NVTC and its regional partners outlines the formal coordination between NVTC jurisdiction transit operators (Fairfax Connector, CUE, ART, DASH, and Loudoun County Transit,) VRE, City of Alexandria, and PRTC. Under the MOA, NVTC is responsible for leading the effort to progress the Regional Fare Collection Program on behalf of the jurisdictions. The following updates focus on NVTC’s recent efforts.

WMATA Mobile Initiative

On April 10th, WMATA announced that it was working with its fare payment vendor on a mobile initiative, enabling customers to pay for their Metro trip and manage SmarTrip accounts using a mobile device. The goals of the initiative include improved customer experience for commuters and visitors, support of a ‘bring your own device’ approach to fare payment, and reduce operations and maintenance costs. The announcement articulated that mobile payments will be supported on Metrorail, Metrobus, and NVTC regional bus services that accept SmarTrip. NVTC was not provided information on this WMATA effort prior to its release to the public, and NVTC staff are working with WMATA to gain information regarding the technical details and implications to the region of the initiative.

In response to requests from the region, WMATA and the developer Cubic provided an in-person briefing with the region to provide technical details and respond to questions. They shared that there is a three-phased rollout planned, including trip planning and SmarTrip account management via phone app, SmartBenefits, and bus and rail boarding using a phone app acting as virtual SmarTrip card.

To facilitate a smooth transition for the region, NVTC has requested regional involvement in ongoing status meetings, testing, training, and roll-out of the mobile app. NVTC has also requested that WMATA provide the contract, requirements documentation, as well as information about ongoing costs associated with the initiative. NVTC staff will continue to work with regional partners to communicate benefits, funding impacts, plans, and implications to the region.

Bus Fare Collection Upgrades

At the March Commission meeting, NVTC requested that WMATA provide and adhere to a timetable for completion of farebox upgrades by January 2019 and provide detailed ongoing transparency into the farebox upgrade schedule and process.

At NVTC’s request, WMATA is now providing weekly updates on the status of the upgrade development. NVTC has been monitoring these updates and working with WMATA to fix issues critical to the region and keep the project on schedule to enable delivery of replacement parts beginning January 2019.
Background

Because of the integrated nature of SmarTrip fare technologies, bus farebox hardware and software used by Northern Virginia bus providers are dependent on procurement, testing and implementation activities at WMATA. This integrated technology is used by all Northern Virginia bus providers, including ART, CUE, DASH, Loudoun County Transit, OmniRide and Fairfax Connector. Major fare collection system components including fare boxes are designed with a 15-year lifespan, and the aging SmarTrip system relies on components that are no longer supported or manufactured.

The current SmarTrip system has been operating for 19 years, and there is a need to replace or upgrade the system as components near end of life, and keep pace with customer expectations and changing technology. WMATA’s 2014 plan to modernize the fare payment system, an initiative called the New Electronic Payments Program (NEPP), was canceled in 2016. With the termination of NEPP and near-concurrent notification from the current fare system provider that certain parts could no longer be sourced, regional transit providers urgently needed a new plan to keep the fareboxes operational.

To address these needs, WMATA, in consultation with NVTC and regional partners, decided to invest in extending the life of the existing fare payment system through a SmarTrip system update referred to as DCU Upgrade project. This effort required NVTC to work with WMATA and the greater region for hardware and software design, testing, and equipment procurement to allow continued operation and maintenance of fareboxes for bus operators in the region. Fairfax Connector and Loudoun County Transit will participate in the First Article Testing of the new hardware and software.

In January 2018, NVTC learned WMATA was facing software upgrade delays as well as pilot upgrade kit lead times of 18 weeks. NVTC calculated that these initial delays have a compounding effect on the overall project schedule, delaying the farebox upgrade availability to January 2019. NVTC is working with WMATA to ensure that NVTC agencies are not negatively impacted and that there are no future schedule delays.

University Pass Coordination

NVTC has been coordinating with WMATA and Northern Virginia partners on the expansion of WMATA’s University Pass (U-Pass) program, which provides students at participating higher education institutions unlimited rides on Metrobus and Metrorail at a discounted price. After a successful pilot program, the WMATA Board voted to formalize the program and expand to additional educational partners and interested regional transit providers. NVTC continues to coordinate with the region and WMATA to evaluate the benefits and revenue impacts of the program on behalf of Northern Virginia transit agencies. In addition, WMATA has agreed to provide a U-Pass program briefing to regional partners to provide information and answer questions.

Operations Funding Agreement

WMATA and the region have finalized the amendment to the SmarTrip Operations Funding Agreement for the regional SmarTrip system, which sets forth a plan for appropriating operating costs of the regional SmarTrip system among WMATA and
participating jurisdictions. The changes include the removal of Maryland Transit Administration and the addition of DC Circulator to the agreement, as well as other changes related to procurement transparency and coordination. NVTC staff worked on behalf of the region to understand and communicate the proposed changes and ensure that NVTC agencies were not negatively impacted by the changes. The document has been distributed for approval and execution by the signatories.
This page intentionally left blank.
RESOLUTION #2360

SUBJECT: Accept the Northern Virginia Regional Fare Collection Strategic Plan

WHEREAS: The region’s transit fare collection system needs to be upgraded and replaced as components near end of life, and to keep pace with customer expectations and changing technology;

WHEREAS: The Northern Virginia Transportation Commission (NVTC) continues to take a leading role in planning and coordinating improvements among the Northern Virginia transit systems;

WHEREAS: These transit systems include Arlington Transit (ART), City of Fairfax CUE, Alexandria DASH, Fairfax Connector, Loudoun County Transit, Potomac and Rappahannock Transportation Commission (PRTC), and the Virginia Railway Express (VRE);

WHEREAS: NVTC is working to ensure current and future needs for regional fare collection are met and assist in coordination with the Washington Metropolitan Area Transit Authority (WMATA), a major partner in regional fare collection, to allow interconnectivity between all the transit systems;

WHEREAS: In August 2017, the transit systems entered into a Memorandum of Agreement (MOA) for NVTC to allocate grant funding and provide resources to coordinate upgrades to existing regional fare collection systems and explore options and enhancements for the regional fare collection program;

WHEREAS: In the fall of 2017, NVTC, in collaboration with its regional partners, initiated a strategic planning process to allow the transit systems to collectively organize around a shared vision for future regional fare collection methods;

WHEREAS: The purpose of the plan is to provide a roadmap for advancing fare collection in the region and to provide input into WMATA fare collection modernization initiatives; and

WHEREAS: The process culminated in a Northern Virginia Regional Fare Collection Strategic Plan, which lays out a vision, identifies strategic priorities and initiatives, and translates these into actions to be taken by NVTC and the transit systems in the coming years.

NOW, THEREFORE, BE IT RESOLVED that the Northern Virginia Transportation Commission hereby accepts the Northern Virginia Regional Fare Collection Strategic Plan for NVTC and the transit systems to move forward with the recommendations of the plan.

Approved this 7th day of June 2018.

__________________________________________
Paul C. Smedberg
Chairman

__________________________________________
Katie Cristol
Secretary-Treasurer
Northern Virginia Regional Fare Collection
Strategic Plan

May 2018
# Table of Contents

Executive Summary........................................................................................................ iii
Introduction .................................................................................................................. 1
Background and Need .................................................................................................... 1
Approach and Process ................................................................................................... 2
  Workshop ....................................................................................................................... 2
  Survey and Follow-Up ................................................................................................ 3
  Organization of the Plan ............................................................................................. 3
Vision Statement ............................................................................................................ 4
Strategic Priorities and Initiatives ................................................................................... 4
  Program Priorities ....................................................................................................... 4
  System Priorities ......................................................................................................... 5
Objectives and Actions .................................................................................................. 7
Assessment ................................................................................................................... 13
Background Documentation ........................................................................................... 14
Attachment A – Visioning Workshop Summary ............................................................ A-1
Attachment B – Follow-Up Survey ............................................................................... B-1
Attachment C – Transit System Profiles ....................................................................... C-1
EXECUTIVE SUMMARY

There is a need to replace or upgrade the regional fare collection system as components near end of life, and keep pace with customer expectations and changing technology. The Northern Virginia Transportation Commission (NVTC) has taken a leading role in planning and coordinating improvements among the Northern Virginia transit systems. This plan, developed by NVTC with input from the transit systems, justifies the need for improvements and identifies a path forward.

NVTC leads the coordination, planning, and technical assistance to the Northern Virginia transit systems on fare collection:

- Arlington Transit (ART)
- City of Fairfax CUE
- Alexandria DASH
- Fairfax Connector
- Loudoun County Transit
- Potomac and Rappahannock Transportation Commission (PRTC)
- Virginia Railway Express (VRE)

Currently the bus systems in Northern Virginia collect fares through the regional SmarTrip® system operated by the Washington Metropolitan Area Transit Authority (WMATA). SmarTrip® is a smart-card-based fare collection system that also supports cash payment on buses. VRE has its own paper and mobile phone ticketing-based fare collection systems but participates in the regional transit benefits program, SmartBenefits®, which also is operated by WMATA and linked to SmarTrip®.

In August of 2017, the transit systems entered into a Memorandum of Agreement (MOA) for NVTC to allocate grant funding and provide resources to coordinate upgrades to existing regional fare collection systems and explore options and enhancements for the regional fare collection program. To ensure these upgrades and enhancements are based on the transit system needs and that consensus is achieved on the activities and options to be pursued, NVTC implemented a strategic planning process. This process is intended to allow the transit systems to collectively organize around a shared vision for future regional fare collection methods. This document summarizes the results of this process, key takeaways, and the activities that are to be undertaken to support the region in enhancement of fare collection systems.

The planning process consisted of a workshop with the transit systems, a survey, and individual interviews with each system to gather a deeper understanding of specific issues and needs. The outreach findings were synthesized into this plan, which lays out a vision, identifies strategic priorities and initiatives, and translates these into actions to be taken by NVTC and the transit systems in the coming years.

STRATEGIC PLAN VISION STATEMENT

Northern Virginia transit systems envision an enhanced regionally-integrated fare collection system with local flexibility to meet evolving customer expectations.

This plan documents program priorities, or needs that describe the processes and principles that should guide the Northern Virginia fare collection activities, and system priorities, or needs that describe the features, functions, and capabilities that should be addressed through regional fare collection activities. Example strategic priorities include the need to:

- Increase the role of Northern Virginia transit systems in WMATA fare collection planning,
- Provide seamless travel and payment with neighboring or intersecting transit systems,
- Retain and improve interoperability with SmartBenefits®, and
- Replace obsolete components and improve system maintainability
In response to the gathered priorities, NVTC developed the following actions:

<table>
<thead>
<tr>
<th>STRATEGIC PLAN ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continue Farebox Obsolescence Management</td>
</tr>
<tr>
<td>2. Implement a Coordinated Local Platform for Mobile Ticketing</td>
</tr>
<tr>
<td>3. Engage with WMATA on SmartBenefits® Enhancements</td>
</tr>
<tr>
<td>4. Engage with WMATA on SmarTrip® Upgrades</td>
</tr>
<tr>
<td>5. Support Retail Network Expansion</td>
</tr>
<tr>
<td>6. Initiate Long-Term Regional Fare Collection System Planning and Enhancements</td>
</tr>
</tbody>
</table>

This work determined that there was broad agreement on the continued need for an upgraded and enhanced, D.C. regional fare collection system but this can coexist and be complemented by local solutions to meet the transit systems’ needs.
INTRODUCTION
The Northern Virginia Transportation Commission (NVTC), in coordination with Northern Virginia transit systems, developed this document to serve as a strategic plan for fare collection initiatives for Northern Virginia. There is a need to replace or upgrade the system as components near end of life, and to keep pace with customer expectations and changing technology.

In August of 2017, Northern Virginia’s transit systems entered into a Memorandum of Agreement (MOA) for NVTC to allocate grant funding and provide resources to coordinate these upgrades and explore options and enhancements for the regional fare collections initiatives. This plan is the first step in implementing the goals of the MOA and outlines the specific actions to be taken by NVTC and the transit systems to advance fare collection in the region such as making improvement to the existing regional fare collection system, SmarTrip®, and implementing a local mobile ticketing platform.

NVTC manages most state and some regional funding for six bus systems, Metrorail, and Virginia Railway Express (VRE), which it co-owns. It also facilitates the planning and development of transit systems in Northern Virginia and provides technical assistance to its member jurisdictions. As such, NVTC is working with the Northern Virginia transit systems to ensure current and future needs for regional fare collection are met and assist in coordination with the Washington Metropolitan Area Transit Authority (WMATA), a major partner in regional fare collection.

NVTC organized a Regional Fare Collection Working Group to facilitate upgrades, which includes staff from the following transit systems and a representative from WMATA:

- Arlington Transit (ART)
- City of Fairfax CUE
- Alexandria DASH
- Fairfax Connector
- Loudoun County Transit
- Potomac and Rappahannock Transportation Commission (PRTC)
- VRE

Members of the group serve as representatives of their respective transit system on the topic of fare collection and discuss ongoing activities monthly. The group also provided NVTC input needed to develop this plan. The actions of the plan will enhance the fare collection systems used by these seven transit systems.

BACKGROUND AND NEED
The Northern Virginia bus systems (ART, CUE, DASH, Fairfax Connector, Loudoun County Transit, and PRTC) currently collect fares through the regional SmarTrip® system operated by WMATA. SmarTrip® is a smart-card-based fare collection system that also supports cash payment on buses and was first deployed by WMATA in 1999. The system was expanded to other regional partners, with many Northern Virginia transit systems joining in 2006.

The Virginia Railway Express (VRE) has its own paper and mobile phone ticketing-based fare collection systems but participates in the regional
transit benefits program, SmartBenefits®, which also is operated by WMATA and linked to SmarTrip®.

The existing SmarTrip® system has served the Washington D.C. region including Northern Virginia for the past 19 years. However, there is a need to replace or upgrade the system as components near end of life, and to keep pace with customer expectations and changing technology.

In 2014, WMATA awarded a contract to a systems integrator for its New Electronic Payment Program (NEPP), which was intended to replace the complete fare collection system with a modernized approach and provide more payment options. After a pilot program, WMATA cancelled NEPP in April 2016 and the region shifted its focus to maintaining and extending the life of the existing system.

Still, the need remains for enhanced fare collection options in the near- and long-term plans for a regional system that can enhance the customer experience and transit system operations.

With the cancellation of the regional NEPP and no alternate plan from WMATA, there was agreement between NVTC and the regional transit systems that undertaking a Northern Virginia regional fare collection planning exercise was necessary. NVTC has taken a lead role in planning and coordinating improvements among the Northern Virginia transit systems and with WMATA.

Without a cohesive plan and agreement on next steps for advancing the fare collection system, Northern Virginia transit systems face the following risks:

- Obsolete equipment for the existing fare collection system
- Costly inefficiencies from pursuing uncoordinated enhancements
- Reduced ability to collect fares
- Falling short of customer expectations for a convenient and modern travel experience

**APPRAOCH AND PROCESS**

**Workshop**

To begin the planning process, NVTC held a workshop on November 1, 2017. The purpose of the workshop was threefold:

1. Share information with regional transit systems on current and emerging technologies/approaches to fare collection
2. Discuss and identify current needs and issues to be addressed by fare collection systems
3. Develop a collective vision for what an enhanced regional fare collection system might look like
The workshop was attended by all seven of the Northern Virginia transit systems, WMATA, and the Federal Transit Administration (FTA).

The workshop included presentations on current and emerging fare collection technologies and procurement approaches as well as updates on off-board fare collection activities from WMATA. The workshop ended with an open discussion and brainstorming of needs for a next-generation system. A summary of the workshop can be found in Attachment A – Visioning Workshop Summary.

Survey and Follow-Up

After the workshop, NVTC followed up individually with each of the Northern Virginia transit systems through a survey and interview to obtain consistent input to the strategic plan. The objective of this follow-up was to gather a greater understanding of issues and needs from each transit system. The survey covered the performance of the existing fare collection system, regional collaboration, cash acceptance, and other challenges with fare collection. Plans for mobile ticketing were also explored, since many transit systems had indicated interest in this technology as a next step. The survey questions can be found in Attachment B – Follow-Up Survey.

Individual transit system profiles documenting findings from the survey and interviews are included in Attachment C – Transit System Profiles.

Organization of the Plan

The results of the workshop, survey and follow-up calls have been synthesized to develop a strategic plan, which is structured according to Figure 3. The plan has been developed by NVTC and was validated by the Northern Virginia transit systems.

The vision statement was defined to capture at a high-level what Northern Virginia transit systems would like to achieve with their fare collection efforts in the coming years. The findings from the outreach activities have been documented in terms of strategic priorities and initiatives. These findings were then used to develop a list of actions to be taken by NVTC and the transit systems to advance the state of fare collection in Northern Virginia.
VISION STATEMENT

A vision statement was developed by NVTC and validated by the transit systems to describe what Northern Virginia would like to achieve with its next-generation regional fare collection activities as follows:

Northern Virginia transit systems envision an enhanced regionally-integrated fare collection system with local flexibility to meet evolving customer expectations.

This vision statement should be used to guide current and future actions to enhance the transit fare collection system(s) in Northern Virginia.

STRATEGIC PRIORITIES AND INITIATIVES

The findings from the workshop and individual outreach have categorized into two areas:

- **Program Priorities**—needs that describe the processes and principles that should guide the Northern Virginia fare collection activities during the coming years. Program priorities cover how the transit systems should work together to deploy fare collection to best meet customer needs. NVTC’s directive will be to carry out these processes and principles on behalf of and in coordination with the transit systems.

- **System Priorities**—needs that describe the features, functions, and capabilities that should be addressed through regional fare collection activities. NVTC plays an important role in ensuring that fare collection system enhancements are made in an efficient and cost-effective manner to meet the needs of the transit systems.

Program Priorities

Program priorities describe the processes and principles that should guide the Northern Virginia fare collection activities during the coming years. The following needs were gathered from the Northern Virginia transit systems and support the actions presented in the next section. The detailed needs have been grouped under five high-level needs:

- **P-1. Retain a broader regional fare collection system, but allow for local fare collection solutions**
  
  - Maintain a multi-transit system fare collection system, such as SmarTrip®, for regional travel
  - Implement local fare collection solutions, either individually or in partnership among multiple transit systems, to meet local needs
  - Provide interfaces between regional and local backend systems to allow multi-jurisdiction fare collection where feasible

- **P-2. Continue regional coordination between WMATA, Northern Virginia, D.C., and Maryland transit systems**
  
  - Continue information sharing amongst NVTC Regional Fare Collection Working Group
  - Continue monthly SmarTrip® calls between transit systems to discuss fare collection topics and latest developments
  - Participate in other regional coordination efforts that are both public and private
  - Establish biweekly coordination call between NVTC and WMATA
P-3. Maintain WMATA’s centralized role of operating a regional fare collection system with enhanced service to regional transit systems

- Improve communication channels between local transit systems and WMATA for technical and customer service issues
- Identify opportunities to provide more local transit system control of fare products
- Reduce lead time required by WMATA Automated Fare Collection (AFC) engineering to implement fare table changes

P-4. Increase role of Northern Virginia transit systems in WMATA fare collection planning

- Ensure NVTC involvement in all stages of fare collection enhancements that impact the region—concept, planning, procurement, and contracting—as a full partner with WMATA
- Obtain full visibility for Northern Virginia transit systems and NVTC into the WMATA fare collection planning process
- Ensure input is gathered by WMATA from regional partners and NVTC early in planning processes for changes to the regional fare collection system
- Ensure regional transit systems are involved in the development of technical requirements

P-5. Identify opportunities to coordinate fare collection procurements

- Coordinate or consolidate fare collection procurements among Northern Virginia transit systems to reduce duplication of effort and maximize customer benefit while permitting each transit system to deploy a customized solution to meet its specific goals
- Provide for coordinated but separate procurements across the broader region with D.C. and Maryland
- Establish contract mechanisms to allow transit systems in the region to benefit from negotiated pricing and provisions

System Priorities

System priorities describe the features, functions, and capabilities that should be addressed through regional fare collection activities. The following system needs were gathered from the Northern Virginia transit systems and support the actions presented in the next section. They are broadly categorized as:

1. Fare Media and Payment (S-1 to S-5)
2. Support for All Customer Groups (S-6 to S-7)
3. Technology (S-8)
4. Transit System Control and Flexibility (S-9 to S-12)

Fare media are the physical or electronic elements that fare products are carried on while fare products are stored value, passes or tickets usable for travel.

Fare Media and Payment:

S-1. Provide common fare media across multiple travel modes

- Provide customers with a fare media option that can be used across bus, heavy rail, and commuter rail, and complementary modes such as bike share, ride share companies, and parking

S-2. Provide seamless travel and payment with neighboring or intersecting transit systems

- Provide a platform for regional trips, maintaining transfer agreements and regional fare products
- Maximize the ability for local fare collection initiatives to provide compatibility across multiple transit systems

S-3. Provide fare collection alternatives that allow for self-service and bring your own device
• Provide ability for customers to purchase and use fare products with a smartphone
• Shorten the time required to transfer fare value/products from online purchases onto fare media

S-4. Provide customers with multiple payment options

• Implement solutions to support smart cards; mobile payments; mobile ticketing app(s); and credit, debit and prepaid cards
• Remove barriers related to fare collection and provide readily available, easy to use payment options to attract new riders

S-5. Retain and improve interoperability with SmartBenefits®

• Simplify use of SmartBenefits® funds for fare payment platforms other than SmarTrip®, including mobile ticketing

Support for All Customer Groups:

S-6. Expand support for cash customers

• Continue to provide the ability for transit systems to accept cash payments on buses, as decided locally by the transit systems
• Provide expanded off-board cash payment options to reduce cash payments on buses
• Increase ease and availability of point of sale, retail fare payment for cash customers

S-7. Expand SmarTrip® retail network

• Provide more options and locations for off-board reloading and purchase to support transit systems that choose to eliminate on-board cash loading to smart cards
• Increase ease of cash payment elsewhere to incentivize off-board transactions
• Increase speed of retail network transactions

Technology:

S-8. Replace obsolete components and improve system maintainability

• Pursue solutions to hardware obsolescence that use widely available hardware instead of custom parts
• Consider future enhancement of system functionality in solutions to obsolescence
• Modernize technology used for point-of-sale retail network transactions

Transit System Control and Flexibility:

S-9. Enhance ability to design and provide local fare products

• Improve ease and speed of implementing short-term or special fare products at the transit system level
• Provide ability to offer local fare promotions
• Provide capability to offer additional fare levels
• Provide greater transit system control over implementing changes, subject to sufficient training
• Integrate data from all new fare collection methods into existing fare data reporting system for consolidated transit system reporting

S-10. Improve fare data reporting capabilities

• Improve reporting by reducing data latency
  Use standard data format for interoperability with other transit business intelligence software
• Integrate any new fare collection systems into one backend reporting system to aggregate all fare data
• Provide access to data on customers’ regional travel patterns (e.g., where they board or alight on connecting systems)
• Provide the ability to track ridership by bus stop with farebox data
• Provide web-based access to reporting, allowing multiple users and locations

S-11. Support off-vehicle payment and on-board inspection
- Provide solutions for all-door boarding for transit systems seeking to minimize dwell time
- Provide solutions for visual fare inspection and enforcement as well as electronic validation for VRE

S-12. Provide capabilities to integrate other customer services with fare payment solutions

- Provide solutions to integrate multimodal trip planning with fare payment

**OBJECTIVES AND ACTIONS**

NVTC developed actions in response to the program and system priorities synthesized in the previous section. The actions identify the areas NVTC will assist the transit systems in fare collection efforts, but not all transit systems will have required involvement in each action depending on its specific needs.

The actions have roles and responsibilities identified for NVTC, applicable transit systems, and WMATA, and are categorized into the following time frames:

- Short term (completed within two years)
- Medium term (completed within four years)
- Longer term (completed within five or more years)

*Table 1* presents a summary of key features of the existing regional fare collection system and identifies those features that were identified as important to be retained and those which could be improved upon. The objective of the actions is to enhance and provide additional capabilities to the existing system.

*Table 2* provides a traceability matrix that maps each action to the strategic priorities identified in the previous section.
Table 1. Existing Regional Fare Collection Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic fare payment medium that can be used for fare payment across the D.C. region (SmarTrip® card)</td>
<td>Keep and expand to other electronic media such as mobile phones</td>
</tr>
<tr>
<td>Regional fare products that can be used on multiple transit systems</td>
<td>Keep</td>
</tr>
<tr>
<td>Ability to provide fare transfers between different transit systems</td>
<td>Keep</td>
</tr>
<tr>
<td>Revenue sharing mechanism for fairly distributing fare revenues for different fare products and transfers</td>
<td>Keep</td>
</tr>
<tr>
<td>Ability for customers to add value to fare payment medium at retail locations across region</td>
<td>Enhance to provide increased number of locations and options for adding value</td>
</tr>
<tr>
<td>Ability for customers to add value to fare payment via internet and automatic loading</td>
<td>Enhance to improve speed of loading</td>
</tr>
<tr>
<td>Ability to support transit benefits</td>
<td>Enhance to make it easier for customers to use SmartBenefits® on non-SmarTrip® fare payment</td>
</tr>
<tr>
<td>Vehicle-based equipment for electronic and cash fare payment</td>
<td>Upgrade to mitigate obsolescence</td>
</tr>
<tr>
<td>Regional lab for configuring fare products and providing testing and technical oversight for regional fare collection technology</td>
<td>Keep</td>
</tr>
<tr>
<td>Ability to configure specialized local agency fare products</td>
<td>Change to provide additional capabilities to deploy fare products that are under the control of individual agencies</td>
</tr>
<tr>
<td>Consolidated fare collection and ridership reporting</td>
<td>Keep and enhance to incorporate any new fare collection initiatives and wider data access</td>
</tr>
</tbody>
</table>
Actions

1. **Continue Farebox Obsolescence Management**  
   *Short to Medium Term (within four years)*

   Northern Virginia transit systems and NVTC will continue working with WMATA to develop a solution for obsolescence of the current fareboxes. The following activities are required for this action:

   - Coordinate the NVTC transit systems in the integration and testing of the farebox upgrade being led by WMATA
   - Explore and coordinate funding and contracting mechanisms for transit systems to purchase and install upgrades
   - Monitor progress of the implementation farebox/driver control unit (DCU) testing and upgrades
   - Identify mitigation strategies and support transit systems in exploring these strategies where schedule, scope, or cost risks occur
   - Continue coordination with WMATA on upcoming farebox modernization initiatives

<table>
<thead>
<tr>
<th>Roles &amp; Responsibilities: L = Lead, S = Support, C = Coordinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVTCA</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>C S L</td>
</tr>
<tr>
<td>C C C</td>
</tr>
</tbody>
</table>

2. **Implement a Coordinated Local Platform for Mobile Ticketing**  
   *Short to Medium Term (within four years)*

   Multiple Northern Virginia transit systems are interested in mobile ticketing and have expressed a desire to coordinate planning, procurement, implementation, and project management. The following activities are required for this action:

   - Coordinate with WMATA’s mobile app initiative and determine whether Northern Virginia systems’ mobile ticketing requirements can be met through one of the following: 1) WMATA’s existing mobile app initiative scheduled for early 2019, or 2) NVTC provides input into WMATA’s design to meet NVTC’s requirements, or 3) Northern Virginia implements and deploys separate product(s)
   - Develop a Northern Virginia regional mobile ticketing approach
   - Coordinate with VRE mobile ticketing
   - Define performance targets
   - Develop requirements for common elements and flexibility for transit systems to implement their own features
   - Identify need and opportunities for pilot projects
   - Identify opportunities to incentive mobile ticket usage over on-board cash payment
   - Identify funding sources
   - Issue a request for proposal and establish a blanket contract that transit systems can use to deploy custom mobile ticketing solutions
   - Support the implementation of local mobile ticketing applications

<table>
<thead>
<tr>
<th>Roles &amp; Responsibilities: L = Lead, S = Support, C = Coordinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVTCA</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>L C C</td>
</tr>
<tr>
<td>L S</td>
</tr>
<tr>
<td>S L</td>
</tr>
</tbody>
</table>

---
### Actions

#### 3. Engage with WMATA on SmartBenefits® Enhancements

**Short Term** *(within two years)*

WMATA is working on updates to the SmartBenefits® program. Currently there is limited, coordinated regional participation. This effort would strengthen coordination to improve the program with the goal of making it easier for customers to use SmartBenefits® on other regional fare payment platforms. The following activities are required for this action:

- Work with WMATA to incorporate Northern Virginia requirements
- Monitor implementation of program enhancements

#### 4. Engage with WMATA on SmarTrip® Upgrades

**Medium Term** *(within four years)*

WMATA will remain responsible for supporting and enhancing the SmarTrip® system in the near term. To ensure that NVTC’s Northern Virginia transit systems needs and timelines are addressed, the following activities are required:

- Participate in WMATA analysis and planning for SmarTrip® continuation and improvement
- Define performance targets for needed enhancements
- Seek implementation of changes to provide enhancements including:
  - Faster autoload to fareboxes
  - Faster fare product changes
  - Improved access to reporting, including web-based access and travel pattern analysis
  - Coordination with WMATA’s mobile app initiative
  - Coordination with WMATA’s faregate procurement to determine the need for hardware supporting future acceptance of mobile ticketing technology

#### 5. Support Retail Network Expansion

**Medium Term** *(within four years)*

There are limited retail locations in Northern Virginia where value can be added to SmarTrip® cards. To expand the retail network, the following activities are required:

- Gather lessons learned from the existing network to understand barriers to retail expansion
- Identify how regional transit systems can promote and coordinate expansion and mitigate barriers to expansion
- Identify SmarTrip® improvements needed to address barriers to retail expansion and pursue implementation through the short-term improvements action
- Identify opportunities for promotion and incentives to expand network
- Identify opportunities to continue to allow cash payment in support unbanked and underbanked customers
Roles & Responsibilities: L = Lead, S = Support, C = Coordinate

Actions

6. Initiate Long-Term System Planning and Enhancements

The region must look at the long-term electronic fare collection system needs to determine whether upgrade, enhancement, or migration to a new system is required. This is a broader regional effort that WMATA is expected to lead with the participation of regional partners. To ensure Northern Virginia’s needs are properly represented, this action will require the following activities:

- Coordinate, through all phases of WMATA activity, as a full partner including concept analysis, strategy development, planning, procurement, and contracting for the future of regional fare collection
- Establish role of retail network and cash payment in long-term system
- Identify and log issues, concerns, and decisions on a regular basis and seek input from Northern Virginia transit systems
- Coordinate and communicate with WMATA at least biweekly
- Continue coordination with all parties – WMATA and regional transit systems

Roles & Responsibilities

<table>
<thead>
<tr>
<th>Actions</th>
<th>NVTC</th>
<th>WMATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate, through all phases of WMATA activity, as a full partner including concept analysis, strategy development, planning, procurement, and contracting for the future of regional fare collection</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Establish role of retail network and cash payment in long-term system</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Identify and log issues, concerns, and decisions on a regular basis and seek input from Northern Virginia transit systems</td>
<td>L</td>
<td>S</td>
</tr>
<tr>
<td>Coordinate and communicate with WMATA at least biweekly</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Continue coordination with all parties – WMATA and regional transit systems</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>
### Table 2. Regional Fare Collection Strategic Priorities, Initiatives, and Actions

<table>
<thead>
<tr>
<th>Strategic Priorities and Initiatives</th>
<th>ACTION #1</th>
<th>ACTION #2</th>
<th>ACTION #3</th>
<th>ACTION #4</th>
<th>ACTION #5</th>
<th>ACTION #6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Priorities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-1. Retain a broader regional fare collection system, but allow for local fare collection solutions</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>P-2. Continue regional coordination between WMATA, Northern Virginia, D.C., and Maryland transit systems</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>P-3. Maintain WMATA’s centralized role of operating a regional fare collection system with enhanced service to regional transit systems</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>P-4. Increase role of Northern Virginia transit systems in WMATA fare collection planning</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>P-5. Identify opportunities to coordinate fare collection procurements</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>System Priorities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-1. Provide common fare media across multiple travel modes</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-2. Provide seamless travel and payment with neighboring or intersecting transit systems</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-3. Provide fare collection alternatives that allow for self-service and bring your own device</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-4. Provide customers with multiple payment options</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-5. Retain and improve interoperability with SmartBenefits®</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-6. Expand support for cash customers</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-7. Expand SmarTrip® retail network</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-8. Replace obsolete components and improve system maintainability</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-9. Enhance ability to design and provide local fare products</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-10. Improve fare data reporting capabilities</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-11. Support off-vehicle payment and on-board inspection</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>S-12. Provide capabilities to integrate other customer services with fare payment solutions</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
**ASSESSMENT**

NVTC will continually measure progress and report to the transit systems as the actions of this strategic plan are taken. It will be important to remain flexible to changes in needs, technology, and funding availability. Progress will be assessed based on how the overall purpose and need of the strategic plan is being addressed. The annual assessment and reporting cycle that NVTC will use with support from the transit systems and WMATA is as follows, beginning upon implementation of this plan:

*Provide a roadmap for advancing fare collection in the region*
- Complete and adopt strategic plan
- Complete actions from strategic plan
- Report progress on actions to transit systems every six months; reflect changes to needs, technology, and funding

*Provide input into WMATA fare collection modernization initiatives*
- Document and report monthly to transit systems on coordination efforts with WMATA

*Replace or upgrade the system as components near end of life*
- Gather input from each transit systems quarterly on completed replacements and upgrades; document schedule to reflect changes to needs, technology, and funding

*Keep pace with customer expectations*
- Monitor customer feedback gathered by transit systems

*Keep pace with changing technology*
- Attend relevant industry conferences and report on findings
- Produce best practice research, as needed, to reflect changes in technology
BACKGROUND

DOCUMENTATION

- Attachment A – Visioning Workshop Summary
- Attachment B – Follow-Up Survey
- Attachment C – Transit System Profiles
ATTACHMENT A – VISIONING WORKSHOP SUMMARY

Next-Generation Regional Fare Collection Visioning Workshop
November 1, 2017 10 a.m. - 1 p.m.
NVTC Offices, 2300 Wilson Blvd., Suite 620, Arlington, VA 22201

Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lynn Rivers</td>
<td>Arlington County</td>
</tr>
<tr>
<td>Steve Yaffe</td>
<td>Arlington County</td>
</tr>
<tr>
<td>Pierre Holloman</td>
<td>City of Alexandria</td>
</tr>
<tr>
<td>Chloe Ritter</td>
<td>CUE</td>
</tr>
<tr>
<td>Wendy Sanford</td>
<td>CUE</td>
</tr>
<tr>
<td>Raymond Mui</td>
<td>DASH</td>
</tr>
<tr>
<td>Tristan Cunningham</td>
<td>DASH</td>
</tr>
<tr>
<td>Kris Miller</td>
<td>Fairfax County</td>
</tr>
<tr>
<td>Richard Wood</td>
<td>Fairfax County</td>
</tr>
<tr>
<td>Brian Jackson</td>
<td>FTA</td>
</tr>
<tr>
<td>Murat Omay</td>
<td>FTA</td>
</tr>
<tr>
<td>Jeremy Siviter</td>
<td>IBI Group</td>
</tr>
<tr>
<td>John Ward</td>
<td>IBI Group</td>
</tr>
<tr>
<td>Paul Lavallee</td>
<td>IBI Group</td>
</tr>
<tr>
<td>Mike Harris</td>
<td>Kimley-Horn</td>
</tr>
<tr>
<td>Tyler Beduhn</td>
<td>Kimley-Horn</td>
</tr>
<tr>
<td>Scott W Gross</td>
<td>Loudoun County</td>
</tr>
<tr>
<td>Matt Cheng</td>
<td>NVTC</td>
</tr>
<tr>
<td>Patricia Happ</td>
<td>NVTC</td>
</tr>
<tr>
<td>Byron Lloyd</td>
<td>PRTC</td>
</tr>
<tr>
<td>Chuck Steigerwald</td>
<td>PRTC</td>
</tr>
<tr>
<td>Chris Henry</td>
<td>VRE</td>
</tr>
<tr>
<td>Clint Leslie</td>
<td>WMATA</td>
</tr>
<tr>
<td>Greg Garback</td>
<td>WMATA</td>
</tr>
<tr>
<td>Mark Phillips</td>
<td>WMATA</td>
</tr>
<tr>
<td>Terri Anomnachi</td>
<td>WMATA</td>
</tr>
</tbody>
</table>

Workshop Purpose

The purpose of the workshop was threefold: 1) educate the NVTC regional partners on current and emerging technologies and approaches to fare collection; 2) discuss and identify current needs and issues to be addressed by the fare collection system; and 3) develop a collective vision for what a next-generation fare collection system might look like. The vision will be communicated to WMATA as input to regional fare system planning for the next 10 years.

Workshop Summary

Introduction

- NVTC presented desired outcomes and a brief program history
- Meeting participants introduced themselves; staff from all Northern Virginia transit operators, WMATA, FTA, NVTC, and consultants were in attendance
- Murat Omay, Senior Transportation Program Analyst, presented background information on FTA programs and initiatives, focusing on fare collection
  - Major themes: technology, collaboration, and partnership
Focus has shifted to the customer trip (point A to point B) agnostic of travel mode

Mobility On-Demand Sandbox Program (MOD)
- Aims to provide a network of safe, reliable, affordable options for all
- Project selection made in 2016 for funding 11 MOD public transportation projects

Accessible Transportation Technologies Research Initiative (ATTRI)
- Research and development of applications and systems to help all people, particularly those with disabilities, plan and execute their travel

Multimodal Payment Integration
- Allows FTA to better understand what is going on in the payment landscape and what the US Department of Transportation’s (DOT) role is
- Research activities are starting with an industry scan and will involve calls and forums with transit agencies and other organizations in the payment industry
- Outcomes will be a roadmap and whitepapers

Current and Emerging Technologies

- Paul Lavallee, Director, presented current and emerging fare collection technologies, trends, and examples
- Card-based—all fare information held on the card and does not require online communications (most existing systems)
- Account-based—card or other forms of payment are simply a token and all fare computation is done in the "back end" with online communications. Open payment and closed loop are two forms of account-based systems
- Mobile and self-service are trends—customers want a choice
- Transit agencies have been driving the push towards account-based systems
- Most transit customers still prefer a card over other media or payment methods
- There is a high penetration of open payment in Europe because the penetration rate of contactless credit cards is very high. This is not the case in the U.S.
- In the U.S., contactless credit cards likely will be overtaken by mobile payment systems
- Vancouver is a hybrid account and card-based system; paratransit transactions are handled through the dispatch center, which has worked well
- Mobile ticketing
  - Good for tying fare payment to trip planning
  - Trying for lighter solutions; getting more sophisticated
  - Generic hardware still lacking
  - Low penetration rates overall—people still prefer cards
  - Barcode and low energy Bluetooth are the current focuses

Procurement Approaches

- Paul Lavallee, Director, presented procurement approaches for fare collection systems
- The ideal model (which does not fully exist yet) is a modularized system with individual subsystems interfacing with Application Programming Interfaces (API)
- Four approaches were presented, each with its own advantages and disadvantages
  1. “Forklift” replacement—entire system with single vendor
  2. Upgrade—modernize elements of existing system
3. Distributed systems (integrated)—deploy separate systems with front- and back-end integration
4. Distributed systems (non-integrated)—deploy separate systems with no integration

- Public-private partnerships may be challenging because private organizations would not have a lot of control of the revenue stream (ridership, quality of service, etc.); there needs to be a financial attractiveness to the private sector
- There is no universal model—agencies must determine their comfort with a range of control, risk, desired features, and funding approaches
- Risk and funding are major drivers to procurement approaches

**Roundtable Updates on Fare Collection in the Region**

- **City of Alexandria**—funding for its off-board payment initiatives has been repurposed or delayed
- **DASH**—began accepting student identification (ID) and have had some challenges with students properly displaying IDs; interested in implementing mobile ticketing and have had talks with a few vendors
- **Arlington County**—has expanded its iRide program (SmarTrip® product) for middle and high school students; has been participating in the Fast & Flexible Fare Payment Study with WMATA, DDOT, and Federal City Council (see below)
- **VRE**—launched mobile ticketing in 2015 and now about 30 percent of tickets are through mobile; allocation of SmartBenefits® is a challenge along with requiring passengers to be aware and awake for mobile ticket validation
- **CUE**—participating in a free student program in partnership with Fairfax County; the program is administered through the schools and requires students to show their ID when boarding
- **Loudoun County**—considering mobile ticketing for local fixed routes and is interested in understanding how SmartBenefits® can be incorporated. Loudoun is adamant that any new fare collection systems have to be integrated with the SmarTrip® backend reporting system so that ridership reports reflect the total system usage.
- **WMATA**—will begin working on their strategic plan for fare collection in the first quarter of 2018 in coordination with regional partners; making investments into SmartBenefits®; making website improvements
- **PRTC’s OmniRide**—interested in implementing mobile ticketing within the next 18 months; have a request for proposals (RFP) out for a real-time passenger info mobile application; interested in microtransit
- **Fairfax Connector**—the student pass has been successful; recent upgrades to West Ox garage

Mark Phillips, *Senior Planner*, presented on the ongoing Fast & Flexible Fare Payment Study (Arlington, WMATA, the District Department of Transportation (DDOT), and the Federal City Council)
- The study was motivated by the costs of bus dwell time and cash collection—a disproportionate amount of dwell time is due to cash transactions
- Two related studies, a technical feasibility study and a financial analysis, provide a scenario-based assessment of costs and benefits of moving away from cash transactions
- Will lead to limited pilot
- After assessing technology options, mobile ticketing was selected for assessment under three scenarios and on five corridors in D.C. and Arlington
Financial analysis is ongoing

Visioning

- Workshop participants began discussing goals, guiding principles, and the needs to guide planning for a next-generation fare collection system; NVTC will continue gathering input on the vision
- **Goals**—the following ideas were gathered for goals of a next-generation fare collection system:
  - Forward-thinking system
  - Reliability
  - Flexibility
  - Single platform
  - Agility
  - Simple for customers to use
  - Maintain pace with customer expectations
  - Attractive to the next-generation of transit users
  - Remove barriers—promote ease of access
- **Guiding Principles**—the following ideas were gathered on how fare collection should be deployed throughout the region to meet the needs of the customer. Remain regional in some form, but agency-specific solutions may be needed
  - There is not a “one size fits all” approach
  - Different customers and trip types require different fare collection solutions
- **Needs (Customer)**—the following ideas were gathered on customer needs:
  - Multimodal—payment accepted on bus, Metrorail, VRE, and bike share
  - Bring your own device (BYOD)—self-service
  - Support cash customers
- **Needs (Agency)**—the following ideas were gathered on agency needs:
  - Backend reporting
  - Backend processing to apply discount
  - Leverage emerging retail networks
  - Forward compatible hardware
  - Cost effective
  - Maintainability
  - Scalability

Next Steps

- NVTC will follow up with meeting participants to continue gathering input on the vision
ATTACHMENT B – FOLLOW-UP SURVEY

Next-Generation Regional Fare Collection Visioning

Follow-Up Questions

Instructions: The following questions are intended to create a greater understanding of your agency’s vision for next-generation regional fare collection. They are follow-ups from the in-person workshop held at NVTC on November 1, 2017. NVTC will gather information from each of the Northern Virginia transit agencies to develop a draft vision plan. Agencies will then review and provide additional input to the vision.

Please complete one survey on behalf of your agency and return it by email to Tyler Beduhn (tyler.beduhn@kimley-horn.com) before your scheduled call with NVTC. Do your best to answer all questions to facilitate a productive discussion call with the NVTC team.

Name: __________________________ Jurisdiction/Agency: __________________________ Date: ______________

1. Please respond to the following questions regarding your current fare collection system.
   a. What is working well? What do you like about it?
   
   b. What are your concerns with the fare collection system? In what ways is it not meeting your needs?
   
   c. What changes or additional capabilities would you like to see that are not offered now?
   
   d. What don’t you want to see go away?
   
   e. Are you comfortable with the current governance structure for SmarTrip® or do you have suggestions on ways to improve?

2. Where is your agency on the scale below regarding preferences for a next generation fare collection system and regional involvement?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Completely local fare system; little to no regional interoperability</td>
<td>Retain a regional fare system but allow local fare collection methodologies; some regional interoperability</td>
<td>Completely regional fare system; full regional interoperability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Where is your agency on the scale below regarding cash customers and the tradeoff between providing cash customer convenience and efficient transit operations?

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Provide high convenience to cash customers

Achieve significantly improved transit operations

4. Which of the following goals for a fare collection system are relevant and most important to your agency?

Mark your top 5 goals from the list below with an X.

- [ ] Meet expectations of customers – provide a superior customer experience
- [ ] Increase ease of use for customer
- [ ] Increase ridership (identify rider types you would like to target)
- [ ] Achieve seamless travel with neighboring or intersecting transit agencies
- [ ] Achieve seamless travel across multiple modes
- [ ] Increase pricing flexibility (fare products and passes, more direct control over creation of fare product)
- [ ] Interoperability with SmarTrip
- [ ] Interoperability with SmartBenefits
- [ ] Reduce use of cash
- [ ] Improve accessibility to cash customers
- [ ] Improve transit operations (reduced dwell time, etc.)
- [ ] Improve reliability of fare equipment
- [ ] Provide forward-capable technology
- [ ] Common reporting platform for all fare collection methods (e.g., SmarTrip and mobile ticketing reported together)
- [ ] Other

5. What major trends, if any, are you seeing in customer expectations and preferences for payment?

6. What are your leadership and Board’s expectations and desires for fare collection?
7. In what areas does your agency anticipate having concern when implementing a future fare collection system?

Place an X in the appropriate row.

___ Funding - capital
___ Funding – operations and maintenance
___ Staff resources – skills and expertise
___ Staff resources – operations and maintenance staff
___ Business rules
___ Customer issues
___ Technical constraints
___ Other __________________________________

8. Where is your agency on the scale below regarding desire to coordinate fare collection procurements at the Northern Virginia level and greater regional level (Virginia, D.C., Maryland)?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Virginia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Low need for coordinated procurements
Coordination but separate procurements
High need for regional procurements

9. How important is it for you to understand what WMATA is planning on this topic? Is it relevant to your agency’s plans?

10. What other areas do you want support and coordination with the other Northern Virginia transit systems? With WMATA?
Answer the following questions if your agency is interested in implementing mobile ticketing in the near-term:

11. What is your timeline for implementing mobile ticketing?

12. How important are the following features of a mobile ticketing app for the near- and long-term?

Place an X in the appropriate column for each feature.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Near-Term Desire</th>
<th>Long-Term Desire</th>
<th>Not Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual validation</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Barcode validation</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Agency-specific app branding and visual appearance</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Trip planner</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Integration with transportation network companies (Uber, Lyft, etc.)</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Integration with bikeshare</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Integration with parking</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Real-time info</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Emergency alerts</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Ability to accept cash payment for mobile tickets</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Ability for mobile ticketing system to provide account-based fare collection and support other electronic tokens (e.g. smart watch, NFC etc.)</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Other</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>
13. **What are your expectations for mobile ticketing?**

Place an X in the rows that align with your expectations for mobile ticketing.

- [ ] Improve customer perception of service
- [ ] Improve agency brand recognition
- [ ] Increase ridership
- [ ] Reduce reliance on cash on the bus
- [ ] Reduce dwell time
- [ ] Reduce reliance on ticket vending machines
- [ ] Provide a means to communicate with customers
- [ ] Generate non-fare revenue
- [ ] Benefits outweigh the costs
- [ ] Other __________________________

14. **In what areas would you benefit by collaborating with other Northern Virginia transit systems on mobile ticketing?**

Place an X in the rows to indicate areas of collaboration you would benefit from.

- [ ] Developing functional requirements
  - Procurement – e.g., NVTC establishes contract vehicle and base capabilities; agencies purchase from contract and work directly with vendor for custom deployment
- [ ] Implementation and project management
- [ ] Customer service
- [ ] Marketing
- [ ] Interagency mobile tickets and transfers
  - Ensure customer can use app to buy tickets for other regional agencies without new download
- [ ] Other __________________________

15. **What are your ideas about partial or full regional procurements?**

16. **Are you interested in seeking regional funding through NVTC and/or pooling resources for implementing mobile ticketing?**
ATTACHMENT C – TRANSIT SYSTEM PROFILES

Individual transit system profiles that document findings from the follow-up survey and calls after the workshop are included on the following pages.
Arlington Transit

Summary
Arlington Transit’s position is characterized by a desire for a regional, multimodal payment system. ART also wants to reduce cash handling and acceptance, particularly on priority corridors like Columbia Pike and the Metroway. There is a desire to proceed alongside WMATA with mobile ticketing given that Metrorail and Metrobus provide a lot of service in Arlington, though ART is not opposed to coordinating with other Northern Virginia transit systems on this effort.

Top Goals for Fare Collection
- Achieve seamless travel with neighboring or intersecting transit systems
- Achieve seamless travel across multiple modes
- Interoperability with SmartBenefits®
- Improve transit operations
- Utilize forward-capable technology

Existing Fare Collection System

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single, regionwide system</td>
<td>Delays caused by on-board cash loading to SmarTrip® cards</td>
</tr>
<tr>
<td>Financial transactions on backend</td>
<td>Obsolete components</td>
</tr>
<tr>
<td>Seven-day regional bus pass</td>
<td></td>
</tr>
</tbody>
</table>

Desired Capabilities
- Single, multimodal platform for payment and information
- Multiple payment options, including mobile
- Shift cash to retail networks
- Non-proprietary and interoperability
- Off-vehicle payment and on-board inspection
- All-door boarding

Customer Expectations
- Fast and easy payment

Transit System Expectations
- Transition away from cash

Regional Involvement Position

- Completely local fare system; little to no regional interoperability
- Retain a regional fare system but allow local fare collection methodologies; some regional interoperability
- Completely regional fare system; full regional interoperability

Cash Collection Position

- Provide high convenience to cash customers
- Achieve significantly improved transit operations

Mobile Ticketing Position

Timeline: Implementation within 18 months

Status:
- Completed off-board fare payment feasibility study with WMATA, DDOT, and Federal City Council
- Considering piloting mobile ticketing with all-door boarding with WMATA
- Open to coordination with other Northern Virginia transit systems
City of Fairfax CUE

Summary
CUE’s position is characterized by a desire and need for regional involvement given its small size and many transit connections to the larger region. Its vision is to make fare payment as easy as possible for the customer, increasing transit’s attractiveness. While there is a desire to reduce delays caused by on-board cash loading to SmarTrip® cards, other options need to be provided to maintain convenience for cash customers.

Top Goals for Fare Collection
- Achieve seamless travel with neighboring or intersecting transit systems
- Achieve seamless travel across multiple modes
- Increase pricing flexibility
- Improve reliability of fare equipment
- Utilize forward-capable technology

Existing Fare Collection System

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individually fare structures</td>
<td>Delays caused by on-board cash loading</td>
</tr>
<tr>
<td>Ability to promote and monitor local fares and programs</td>
<td>Obsolete components</td>
</tr>
</tbody>
</table>

Desired Capabilities

<table>
<thead>
<tr>
<th>Must Keep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridership by stop tied to farebox</td>
</tr>
<tr>
<td>Mobile and open ticketing</td>
</tr>
<tr>
<td>Options to eliminate on-board cash loading</td>
</tr>
<tr>
<td>More off-the-shelf parts instead of custom</td>
</tr>
</tbody>
</table>

Customer Expectations

<table>
<thead>
<tr>
<th>Transit System Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimize capital and operating costs</td>
</tr>
<tr>
<td>Opportunities for efficiencies</td>
</tr>
<tr>
<td>Maintain ridership and service quality</td>
</tr>
</tbody>
</table>

Regional Involvement Position

Wants to be as regional as today in the future, if not more. Wants to be as, if not more, regional in the future than it is today. Local autonomy over fare policies is needed. High desire for coordinated Northern Virginia procurements.

Cash Collection Position

Desires efficiency but needs to support cash customers. Most delays come from loading value, not single-ride customers.

Mobile Ticketing Position

Timeline: Unknown
Status:
- Interested, but not actively pursuing; would be willing to pilot technologies
- Desires coordination with other Northern Virginia transit systems
Alexandria DASH

**Summary**

DASH’s position is characterized by a desire to coordinate on a regional fare collection system but to also innovate on some efforts independently of WMATA. Its vision is to eliminate fare-related barriers to using the service. DASH is planning to implement mobile ticketing and is open to coordinating this effort with other Northern Virginia transit systems on the same timeline.

**Top Goals for Fare Collection**

- Increase ease of use for customer
- Increase ridership
- Achieve seamless travel with neighboring or intersecting transit systems
- Interoperability with SmarTrip®
- Improve transit operations

**Existing Fare Collection System**

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Widespread acceptance of SmarTrip®</td>
<td>• Not keeping pace with technology and customer expectations</td>
</tr>
<tr>
<td>• Simplicity of stored value</td>
<td>• Not enough transit system control over fare products</td>
</tr>
<tr>
<td>• Mature product</td>
<td></td>
</tr>
</tbody>
</table>

**Desired Capabilities**

<table>
<thead>
<tr>
<th>Must Keep</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improved, point of sale capabilities</td>
</tr>
<tr>
<td>• Promotions or limited-use fare products</td>
</tr>
<tr>
<td>• Streamline customer complaint response and required involvement of AFC Engineering</td>
</tr>
<tr>
<td>• Faster availability of products after purchase</td>
</tr>
<tr>
<td>• Leverage existing communication capabilities of buses</td>
</tr>
<tr>
<td>• Widespread regional acceptance</td>
</tr>
</tbody>
</table>

**Customer Expectations**

- Credit card acceptance

**Transit System Expectations**

- Reduce fare-related barriers
- Pilot new technologies that make it simpler and easier to pay fares

**Regional Involvement Position**

- Completely local fare system; little to no regional interoperability
- Retain a regional fare system but allow local fare collection methodologies; some regional interoperability
- Completely regional fare system; full regional interoperability

High desire for regionalism and coordinated Northern Virginia procurements

**Cash Collection Position**

- Provide high convenience to cash customers
- Achieve significantly improved transit operations

Has eliminated on-board loading and wants to reduce barriers to using the service

**Mobile Ticketing Position**

**Timeline:** Implementation within 12-18 months

**Status:**

- Exploratory phase; have had discussion with vendors and VRE
- Open to coordination with other Northern Virginia transit systems that can move on the same timeline
Fairfax Connector

Summary
Fairfax Connector’s position is characterized by a desire to coordinate closely with WMATA on fare collection efforts. It prefers WMATA maintain its centralized role for the region. Fairfax Connector has many in-house technical experts and is willing to use its scale to support other Northern Virginia transit systems in fare collection collaborations. Fairfax County plans to implement mobile ticketing for the Richmond Highway bus rapid transit (BRT), which is in preliminary design.

Top Goals for Fare Collection
- Increase ease of use for customer
- Achieve seamless travel with neighboring or intersecting transit systems
- Achieve seamless travel across multiple modes
- Interoperability with SmartBenefits®
- Utilize forward-capable technology

Existing Fare Collection System

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use for customers</td>
<td>Obsolete components</td>
</tr>
<tr>
<td>Regionally seamless system</td>
<td>Limited by quantity of fare levels allowed</td>
</tr>
<tr>
<td></td>
<td>Data latency when generating reports</td>
</tr>
<tr>
<td></td>
<td>Slow process of fare table changes</td>
</tr>
</tbody>
</table>

Desired Capabilities

<table>
<thead>
<tr>
<th>Must Keep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web-based access to fare and ridership data by multiple users</td>
</tr>
<tr>
<td>Promotions</td>
</tr>
<tr>
<td>Off-board loading and payment</td>
</tr>
<tr>
<td>Mobile ticketing</td>
</tr>
</tbody>
</table>

Customer Expectations

<table>
<thead>
<tr>
<th>Transit System Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotions and benefits for riding</td>
</tr>
<tr>
<td>Supportable technology</td>
</tr>
<tr>
<td>Seamless travel</td>
</tr>
<tr>
<td>Regional system</td>
</tr>
<tr>
<td>Ease of use for customer</td>
</tr>
</tbody>
</table>

Regional Involvement Position

- Completely local fare system; little to no regional interoperability
- Retain a regional fare system but allow local fare collection methodologies; some regional interoperability
- Completely regional fare system; full regional interoperability
- Will mirror WMATA but wants to expand fare levels

Cash Collection Position

- Provide high convenience to cash customers
- Achieve significantly improved transit operations
- Will not be eliminating on-board loading in the near-future. Cash use varies by location in the county.

Mobile Ticketing Position

Timeline: With rollout of Richmond Highway BRT
Status:
- Interested, but not actively pursuing
- Wants to be involved in all regional conversations as initiatives can change quickly
Loudoun County Transit

Summary
Loudoun County Transit’s position is characterized by a desire to maintain a regional fare collection system without forcing the system to do everything. It desires a system that is reliable, easy to maintain, and flexible to meet local needs and the evolving expectations of customers. It is planning to implement electronic fare collection on its local routes and is evaluating mobile ticketing.

Top Goals for Fare Collection
- Increase ease of use for customer
- Achieve seamless travel with neighboring or intersecting transit systems
- Increase pricing flexibility
- Interoperability with SmartBenefits®
- Utilize forward-capable technology

Existing Fare Collection System
Pros
- Historical reliability
- Ease of maintenance
- One card for multiple systems

Cons
- Obsolete components
- Not keeping pace with technology and customer expectations
- Growing expense of operations

Desired Capabilities
- More flexibility and greater ease in implementing fare products
- Ability to accept multiple payment methods
- Customer- and operator-friendliness
- Ongoing training
- The regional electronic fare collection system itself
- Accountability the system provides for drivers
- Data reporting capabilities

Customer Expectations
- Technology savvy customers
- Mobile payment and credit/debit card acceptance

Transit System Expectations
- Maintain pace with current technology
- Accountability and traceability
- Agility in implementing upgraded system—not dependent on WMATA

Regional Involvement Position

Cash Collection Position

- Accommodate cash customers but encourage transition to electronic payment. Commuter buses could go cashless, and loading could be first eliminated on buses serving Metro.

Mobile Ticketing Position
Timeline: Unknown
Status:
- Data gathering and evaluation
- Needs clear answers on concerns related to transfers, SmartBenefits®, multi-system integration, and data reporting before making a decision
- Open to coordination with other Northern Virginia transit systems if there is benefit
PRTC

Summary
PRTC’s position is characterized by a desire to maintain a regional fare collection system with flexibility to pursue its own fare collection initiatives. PRTC’s vision is to be more forward-thinking and attract new customers to the service, and fare collection technology should support this. PRTC may implement mobile ticketing for local routes on its own but is open to coordination with other Northern Virginia transit systems on this effort.

Top Goals for Fare Collection
- Meet expectations of customers
- Achieve seamless travel with neighboring or intersecting transit systems
- Increase pricing flexibility
- Interoperability with SmartBenefits®
- Utilize forward-capable technology

Existing Fare Collection System

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Relatively seamless regional mobility with single fare media</td>
<td>• Aging technology</td>
</tr>
<tr>
<td>• Farebox data reporting</td>
<td>• Limited ability to design and provide fare products</td>
</tr>
</tbody>
</table>

Desired Capabilities

<table>
<thead>
<tr>
<th>Must Keep</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• More flexibility and greater ease in implementing fare products</td>
<td></td>
</tr>
<tr>
<td>• Short-term special fares</td>
<td></td>
</tr>
<tr>
<td>• Ability to accept new payment methods (Apple Pay, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

Customer Expectations
- Fare payment is not a major concern
- In general, mobile payment and multimodal integration

Transit System Expectations
- Ease of use and customer experience
- Innovative technology
- Flexible products

Regional Involvement Position

- Maintain current level of regional involvement but pursue some initiatives on its own

Cash Collection Position

- Provide high convenience to cash customers
- Currently still need to allow onboard cash payment and loading

Mobile Ticketing Position

Timeline: Implementation within 18-24 months

Status:
- Exploratory phase; have had discussions with vendors
- Likely to do mobile ticketing on a self-contained service like local routes
- Open to coordination with other Northern Virginia transit systems that can move on the same timeline
VRE

Summary
Unlike the bus operators in Northern Virginia, VRE currently operates its own paper ticket and mobile ticketing fare collection systems. VRE plans to continue operating and innovating its existing fare collection systems. It recognizes the importance of finding a regional solution that meets VRE’s needs and can be utilized across all modes, and desires involvement in the planning of such a system. VRE’s vision is to transition more customers to mobile ticketing.

Top Goals for Fare Collection
- Meet expectations of customers
- Increase ease of use for customer
- Achieve seamless travel with neighboring or intersecting transit systems
- Achieve seamless travel across multiple modes
- Interoperability with SmartBenefits®

Existing Fare Collection System

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall effectiveness of paper ticket and mobile ticketing systems</td>
<td>Cannot directly access SmartBenefits® for mobile ticketing</td>
</tr>
<tr>
<td>Cost-effectiveness of mobile ticketing</td>
<td>Conductor effort and required customer awareness for ticket validation</td>
</tr>
<tr>
<td>Backend customer service of mobile ticketing</td>
<td></td>
</tr>
</tbody>
</table>

Desired Capabilities

Must Keep
- Ability to accept new payment methods (Google Wallet, Apple Pay)

Customer Expectations

Transit System Expectations
- Interoperability with regional system
- Cost-effectiveness
- Passenger convenience

Regional Involvement Position
Finding a regional platform that truly meets VRE’s needs is important but VRE does not have the flexibility to change existing procedures and infrastructure

Cash Collection Position
Currently does not accept cash at ticket vending machines and is not getting pressure from customers

Mobile Ticketing Position
Timeline: Already implemented

Status:
- Adding additional features to the app: real-time train arrivals, customer feedback, app links to Lyft, Car2Go, Zipcar, and Capital Bikeshare (still separate payment)
- No plans to change to a different mobile ticketing system but interested in advancing the adoption of mobile ticketing across the region
- Open to participating in a Northern Virginia solution if the integration is technically feasible
TO: Chairman Smedberg and NVTC Commissioners
FROM: Kate Mattice and Andrew D'huyvetter
DATE: May 31, 2018
SUBJECT: Washington Metropolitan Area Transit Authority (WMATA)

The WMATA Board members will provide highlights of recent WMATA activities.

A. Board of Directors Report

   - Continuation of Reduced Metrorail Span of Service and Supplemental Bus Service and Preventive Maintenance Update

On May 24th, the WMATA Board received the Preventive Maintenance Mid-Program Report and reaffirmed the current hours of service for FY2019 to allow for additional time for preventive maintenance (PM) activities. WMATA initiated six PM programs after SafeTrack: Traction Power Cable Meggering, Earth to Ground Stray Current Testing, Switch Maintenance, Torqueing, Track Geometry, and Track Bed Cleaning. The six programs require one to five years to complete system wide, and they have resulted in less emergency requests for roadway access for urgent, corrective maintenance work and more productive work time on the roadway. The program is showing benefits to customers, with a three percent reduction in fire incidents, a 35 percent reduction in track defect incidents, and a 59 percent reduction in emergency track requests.

   - Approval of Cash Free Bus Pilot

On May 24th, the WMATA Board approved a Cash Free Bus Pilot on the MetroExtra Route 79, which services the Georgia Avenue corridor in the District of Columbia and in Silver Spring, Maryland. This pilot will eliminate cash fares and SmarTrip card value-add transactions on the route to improve travel times and reliability. This route was chosen for a pilot because it has several Metrorail stations, numerous retail locations where customers can purchase and reload SmarTrip cards, and a local route running the corridor which would continue accept cash.

If the pilot is successful, staff will return to the Board with the results of the public hearing, outreach, and Title VI analysis to request Board approval to make the cash-free boarding program permanent on Route 79 and may also recommend the creation of a Cash-Free Bus Program. This program would delegate to the General Manager the authority to pilot selected bus routes as cash-free, including MetroExtra routes, Metroway, and any other similar routes. These routes are included in the public hearing on Route 79 so that the Program may be enacted in the fall if the initial pilot is successful. In Virginia, these routes include the 16X, 16Y, REX, and Metroway.
B. Committee Reports

1. Business Oversight Committee

   - Small Business Program Update

   On May 10th, the Business Oversight Committee received an update on the Small Business Program. WMATA continues to implement corrective actions to address deficiencies in the Disadvantaged Business Enterprise program. The WMATA federal fiscal year 2017 DBE goal was 22 percent, of that 21.94 percent was attained. An automated prompt payment tracking tool has been developed to ensure that payments to prime and sub-contractors, including DBEs, are tracked and reported in a timely and accurate manner.

   - Acceptance of Inspector General’s Reports

   On May 10th, the Business Oversight Committee accepted two Office of the Inspector General Audit reports. One report found that WMATA’s manual payroll systems are prone to data input and processing errors. These errors were caused by a lack of mandatory training for supervisors and timekeepers and can be corrected with WMATA’s ongoing timekeeping automation project. The second report evaluated several incidents at Rhode Island Avenue – Brentwood Station where two separate incidents on consecutive days prompted the closure of the station for temporary repairs in 2016. The evaluation found that inspection and repair improvements are needed in assessing non-visual and hard-to-reach areas, reflecting current conditions when reporting on inspections, and completing permanent repairs at the station. The review found that some inspection reports contained the same remarks as the previous year’s inspection reports, suggesting weak controls over the process. The OIG audit unit referred the issue to the OIG investigative unit. The OIG made recommendations to improve the control and accountability over the inspection and repair program. WMATA management agreed with the findings of both reports.

2. Safety and Service Delivery Committee

   - Employee Reporting Systems

   On May 10th, WMATA provided the Committee with an update on the Employee Safety Reporting system. This system includes three different routes for WMATA employees to report safety concerns: the internal WMATA safety hotline, the external Department of Transportation’s Bureau of Transportation Statistics’ Close Call Program, and WMATA’s Office of Inspector General. Employee safety reporting is strong and growing. If current trends continue, the 2018 year-end total will be 86 percent higher than last year. WMATA has mitigated 89 percent of all safety issues reported since January 2016.

   - Quarterly Metro Performance Report

   On May 10th, WMATA staff provided a briefing on the Q3/FY2018 Metro Performance Report. This report provides an overview of WMATA’s performance in the areas of quality service, safety, security, and financial responsibility. As of the third quarter year to date,
15 measures were at or above target, two measures were near target, and six measures were not met (Figure 1).

**Figure 1: FY2018 Fiscal Year to Date Performance (July 2017 to March 2018)**

**Rail and Bus On-time Performance and Fleet Reliability**

Rail customer on-time performance has improved to 87 percent and railcar delays have decreased by 20 percent thanks to improved maintenance and the addition of new 7000 series trains. While WMATA’s rail infrastructure renewal program lowers on-time performance by about two to three percentage points in the short run, overall rail infrastructure reliability is showing signs of improvement. Electrical/smoke incidents are down 6 percent, track incidents are down 35 percent, and emergency maintenance requests are down 59 percent. Railcar performance is the best reported in eight years, reaching over 87,000 miles between delays and resulting in 40 percent fewer offloads. At 79 percent, bus on-time performance is now at the best third quarter result since reporting began in 2010. Bus fleet reliability continues to be impacted by the increased use of older, less reliable buses as newer buses have been removed from service to address safety concerns. Buses on average traveled 7,174 miles between service interruption during the first three quarters of FY18, a decline of 14 percent from the same period last year.

**Crime and Safety**

The fiscal year to date Part I Crime Rate decreased 18 percent when compared to the previous year. Red signal overruns have decreased with 50 percent fewer red signal overruns than during the first nine months of FY2017. Fiscal year to date, fire incidents decreased by 7.5 percent while derailments decreased by 45 percent. Rail collisions decreased 38 percent fiscal year to date.
**Rail and Bus Loading**

The quarterly performance report also provides a snapshot of rail and bus loading. For rail loading, the report provides loading information for October 2017 to January 2018 (Figure 2). For bus loading, the report provides the 10 routes with the highest passenger load per jurisdiction for Q2 FY2018 (Figure 3). Only the Virginia bus routes are shown below.

**Figure 2: Rail Loading for October 2017 to January 2018**

<table>
<thead>
<tr>
<th>RAIL LOADING (OPTIMAL PASSENGERS PER CAR PPC) OF 100, WITH MINIMUM OF 88 AND MAXIMUM OF 120 PPC</th>
<th>AM Rush Max Load Points</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallery Place</td>
<td>Red</td>
<td>98</td>
<td>96</td>
<td>79</td>
<td>82</td>
<td>104</td>
<td>97</td>
<td>87</td>
</tr>
<tr>
<td>Dupont Circle</td>
<td>87</td>
<td>112</td>
<td>67</td>
<td>81</td>
<td>92</td>
<td>108</td>
<td>89</td>
<td>98</td>
</tr>
<tr>
<td>Pentagon</td>
<td>Blue</td>
<td>86</td>
<td>85</td>
<td>91</td>
<td>98</td>
<td>86</td>
<td>75</td>
<td>59</td>
</tr>
<tr>
<td>Rosslyn</td>
<td>85</td>
<td>79</td>
<td>71</td>
<td>102</td>
<td>68</td>
<td>63</td>
<td>50</td>
<td>59</td>
</tr>
<tr>
<td>L’Enfant Plaza</td>
<td>Orange</td>
<td>66</td>
<td>56</td>
<td>55</td>
<td>56</td>
<td>44</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Court House</td>
<td>81</td>
<td>83</td>
<td>96</td>
<td>86</td>
<td>101</td>
<td>98</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>L’Enfant Plaza</td>
<td>Orange</td>
<td>66</td>
<td>70</td>
<td>57</td>
<td>54</td>
<td>76</td>
<td>69</td>
<td>59</td>
</tr>
<tr>
<td>Pentagon</td>
<td>Yellow</td>
<td>86</td>
<td>73</td>
<td>78</td>
<td>80</td>
<td>126</td>
<td>120</td>
<td>100</td>
</tr>
<tr>
<td>Waterfront</td>
<td>Green</td>
<td>93</td>
<td>97</td>
<td>84</td>
<td>76</td>
<td>94</td>
<td>92</td>
<td>82</td>
</tr>
<tr>
<td>Shaw-Howard</td>
<td>Green</td>
<td>76</td>
<td>120</td>
<td>69</td>
<td>73</td>
<td>119</td>
<td>119</td>
<td>89</td>
</tr>
<tr>
<td>Rosslyn</td>
<td>Green</td>
<td>90</td>
<td>82</td>
<td>64</td>
<td>88</td>
<td>104</td>
<td>110</td>
<td>93</td>
</tr>
<tr>
<td>L’Enfant Plaza</td>
<td>Silver</td>
<td>56</td>
<td>61</td>
<td>68</td>
<td>61</td>
<td>58</td>
<td>59</td>
<td>42</td>
</tr>
<tr>
<td>PM Rush Max Load Points</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro Center</td>
<td>Red</td>
<td>91</td>
<td>99</td>
<td>75</td>
<td>113</td>
<td>98</td>
<td>107</td>
<td>84</td>
</tr>
<tr>
<td>Farragut North</td>
<td>103</td>
<td>124</td>
<td>85</td>
<td>84</td>
<td>87</td>
<td>96</td>
<td>70</td>
<td>88</td>
</tr>
<tr>
<td>Rosslyn</td>
<td>Blue</td>
<td>91</td>
<td>87</td>
<td>97</td>
<td>97</td>
<td>98</td>
<td>84</td>
<td>73</td>
</tr>
<tr>
<td>Foggy Bottom-GWU</td>
<td>Blue</td>
<td>91</td>
<td>80</td>
<td>94</td>
<td>102</td>
<td>91</td>
<td>82</td>
<td>83</td>
</tr>
<tr>
<td>Smithsonian</td>
<td>20</td>
<td>44</td>
<td>64</td>
<td>65</td>
<td>50</td>
<td>46</td>
<td>56</td>
<td>48</td>
</tr>
<tr>
<td>Foggy Bottom-GWU</td>
<td>Orange</td>
<td>78</td>
<td>98</td>
<td>84</td>
<td>93</td>
<td>95</td>
<td>88</td>
<td>78</td>
</tr>
<tr>
<td>Smithsonian</td>
<td>Orange</td>
<td>69</td>
<td>65</td>
<td>77</td>
<td>57</td>
<td>68</td>
<td>63</td>
<td>57</td>
</tr>
<tr>
<td>L’Enfant Plaza</td>
<td>Yellow</td>
<td>74</td>
<td>73</td>
<td>73</td>
<td>71</td>
<td>123</td>
<td>116</td>
<td>95</td>
</tr>
<tr>
<td>L’Enfant Plaza</td>
<td>Green</td>
<td>85</td>
<td>73</td>
<td>71</td>
<td>71</td>
<td>103</td>
<td>98</td>
<td>84</td>
</tr>
<tr>
<td>Mt. Vernon Square</td>
<td>Green</td>
<td>69</td>
<td>93</td>
<td>50</td>
<td>62</td>
<td>103</td>
<td>100</td>
<td>72</td>
</tr>
<tr>
<td>Foggy Bottom-GWU</td>
<td>Silver</td>
<td>72</td>
<td>93</td>
<td>70</td>
<td>76</td>
<td>70</td>
<td>69</td>
<td>52</td>
</tr>
<tr>
<td>L’Enfant Plaza</td>
<td>Silver</td>
<td>60</td>
<td>60</td>
<td>54</td>
<td>50</td>
<td>55</td>
<td>55</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: WMATA Safety and Service Delivery Committee presentation on the FY2018 Q3 Metro Performance Report.
3. Capital and Strategic Planning Committee

- FY2018 Third Quarter Capital Program Updates

On May 10th, WMATA provided an update on the FY2018 Third Quarter Capital Program. This update provided an overview of WMATA’s performance in executing the FY2018 capital program from both a project delivery and benefits to customers’ perspectives. Capital investments of $810 million were made through the third quarter, with a full year capital investment forecasted between $1.17 and $1.25 billion (compared to a budget of $1.25 billion).

Programmatic investments in nine key focus areas represent 75 percent of capital investment in FY2018:

- Railcars: WMATA placed 520 7000-series railcars into revenue service as of March 30th. During the same period, WMATA removed 130 5000-series railcars from service. Investments contributed to increased reliability and resulted in a nearly 37 percent decline in customer offloads due to equipment failure.
• **Rail Infrastructure:** WMATA completed the installation of 7,538 orange boots and 8,651 linear feet of cables. WMATA installed six tie breakers, four traction power substations, and three uninterruptable power supplies. The completion of these power projects contributed to a 46 percent reduction in train offloads due to power issues. WMATA also experienced a 48 percent reduction in speed restrictions due to improved track.

• **Cellular Phone and Radio System Upgrade:** Customers benefited from underground cell phone service between Metro Center and Potomac Avenue as well as Benning Road to Addison Road. New Metro Transit Police Department (MTPD) radios will also improve interoperability.

• **Rail Station Lighting and Improvements:** WMATA completed 55 of 61 mezzanine lighting improvements, improving light levels and saving on energy costs. WMATA replaced 23 escalators, with escalator availability exceeding the 93 percent target. WMATA also rehabilitated nine elevators, with elevator availability meeting the target of 97 percent.

• **Bus Investments and Andrews Bus Garage:** Delivery of bus replacements are slightly behind schedule, but other bus projects are on or ahead of schedule. Andrews bus garage (located in Prince George’s County, Maryland) is 82 percent complete with a projected service date of July 2019.

• **Station Platform Reconstruction Capital Project**

On May 10th, WMATA provided the committee with a briefing on the Station Platform Reconstruction Capital project. This is a three-year station platform reconstruction project to address structural deficiencies and improve passenger safety. Of the 45 outdoor Metrorail station platforms, 20 require rebuilding to ensure rider safety. While temporary measures have been installed to stabilize platforms and ensure rider safety, reconstruction is a necessary safety project (Figure 4). The rebuilding process will take place over the next three summers, with the first major shutdown taking place between Memorial and Labor Day 2019. This rebuilding effort will shut down the Blue and Yellow Line stations south of National Airport.

*Figure 4: State of Existing Platforms at Braddock Road Station (left), King Street Station (center), and Van Dorn Station (right).*

This project is estimated to cost $300 to $400 million over the three-year span. WMATA solicited industry input for rebuilding platforms to maximize efficiency and minimize the
duration of customer inconvenience. The phases of the program were developed by grouping stations on platform conditions and location, evaluation station configuration and service impacts, and other service considerations. The project is split into four phases, with the first phase being the most defined.

The outline of **Phase I** is listed below:

**Summer 2019**: Braddock Road, King Street, and Eisenhower Ave.  
*Shutdown of Blue and Yellow Lines south of National Airport*

**September 2019**: Van Dorn Street  
*Continuous single tracking affecting Blue Line only*

**October-December 2019**: Franconia-Springfield  
*No significant service impacts expected*

**January-May 2020**: National Airport and Huntington  
*No significant service impacts expected*

WMATA will perform additional work on nearby tracks and infrastructure beyond the platform reconstruction during the shutdown period. This work includes demolishing the Huntington Parking Garage, repairing the rail bridge near Van Dorn Station, installing a new crossover north of King Street station, replacing traction power equipment for three substations, conducting a repair blitz of the Alexandria railyard, commencing invasive work for the Potomac Yard Station, and repairing the crossover at Huntington Station. WMATA is currently coordinating with jurisdictional and transportation partners to develop service alternatives for customers during Phase I. NVTC staff are assisting WMATA with regional transit coordination as part of this effort.

Phases II-IV are summarized below (service impacts to be determined):

**Phase II**
- Summer 2020: West Hyattsville, College Park, and Greenbelt  
- September 2020: Rhode Island Avenue

**Phase III**
- Summer 2020: Vienna and Dunn Loring  
- September – December 2020: West Falls Church  
- Winter 2021: East Falls Church

**Phase IV**
- Summer 2021: Cheverly, Landover, and New Carrolton  
- September – December 2021: Addison Road  
- September 2021: Arlington Cemetery

4. **Finance and Budget Committee**

   - *Metrobus and Metrorail Service Changes*

On May 10th, WMATA staff briefed the Finance Committee on proposed [FY2019 Metrobus and Metrorail service changes](#), but they were not acted upon by the Committee.
This item is anticipated to come to the Finance Committee and WMATA Board for consideration in June.

**Metrobus changes**

The proposed 24 Metrobus changes were presented in July 2017, went through public outreach and Title VI analysis, and were recommended for implementation in a November 2017 staff report. Nine lines are considered minor changes. Of the remaining 15, the District of Columbia has requested changes to 10 lines and Arlington County has requested changes to five lines. In Virginia, these include changes to the following Metrobus lines:

- **7A, 7F (Lincolnia – North Fairlington):** Line restructure to provide additional travel time between Pentagon and Pentagon City
- **10E (Huntington Point – Pentagon):** Line restructure to shorten route and discontinue service to Rosslyn
- **22B (Barcroft – South Fairlington):** Modification of service to operate via Pentagon City between Petnagon and Shirlington
- **16G, 16H (Columbia Heights West – Pentagon City):** Implementation of Columbia Pike Improvement Plan
- **16B, 16J, 16X (Columbia Pike):** Implementation of Columbia Pike Improvement Plan

DC has also requested that the G9 pilot be transition to permanent service as a non-regional route to be funded by D.C. All Metrobus service adjustments represent an estimated $3.7 million annual subsidy, with Virginia’s share being $0.7 million. The proposed Board action would approve the implementation of the bus service and increase the FY2019 operating budget. A full list of all proposed metrobus service changes is shown WMATA Committee materials.

**Metrorail Changes**

[Board Resolution 2015-37](#) directed staff to prepare for the Board’s consideration a proposal for the elimination of the Grosvenor Turnback, such that all peak period Red line trains would originate or terminate at Shady Grove rather than have some trains terminate and return south at the Grosvenor station in Maryland. In March 2018, WMATA staff presented the Safety and Service Delivery Committee three alternatives for increased service on the red line pertaining to the Grosvenor turnback. Staff will report to the Board in July 2018 on the public outreach and Title VI analysis. Full elimination of the Grosvenor turnback will cost an estimated $2.5 million annually in operating subsidy, with no additional revenue included as it is estimated there will be minimal impact to ridership.

The proposed Board action would commence the elimination of the Grosvenor turnback in January 2019 if the Board 1) later accepts the Title VI equity analysis report and 2) later approves implementation of full or partial elimination of the turnback. The Board action would also increase the FY2019 operating budget to cover this additional service. In FY2019, this increase is estimated to be $1.25 million in operating subsidy for half the fiscal year, of which $0.39 million would be attributed to Virginia.
FY2018 Third Quarter Financial Update

On May 10th, WMATA staff briefed the committee on the FY2018 Third Quarter Financial Update. The operating budget through the third quarter was $18 million favorable, and the full year operating budget is forecast to be $6 million favorable. Operating revenues through the third quarter of FY2018 were $601 million, or $20 million below budget. Operating expenses totaled $1.33 billion, or $38 million below budget. The favorability was primarily driven by savings in salaries and wages due to continued vacancies and by lower spending on services contracts. WMATA made $810 million in capital investments were made through the third quarter, with a full year capital investment forecasted between $1.17 and $1.25 billion.

C. Other WMATA News

Preventative Maintenance and Major Capital Projects

WMATA has announced a revised schedule of major track work for 2018. The following major projects will affect Metrorail service in Virginia:

- Blue, Orange, and Silver Lines (August 11 – August 26)
  WMATA will rebuild track infrastructure on the tightest curve in the Metrorail system between McPherson Square and Smithsonian Stations. This will be a 24/7 work zone with single tracking between McPherson Square and Smithsonian.

- Blue and Yellow Lines (November 2 – November 5)
  WMATA will upgrade several switches outside the Reagan National Airport Station and install new concrete pads beneath the rails along the aerial structure of the station. Reagan National Airport and Crystal City Stations will be closed.

- Yellow Line (November 26 – December 9)
  In order to provide structural repairs and rail infrastructure improvements to the Yellow Line Bridge, the Yellow Line Bridge will be closed for 14 days. There will be no Yellow Line service between Virginia and D.C., as the Yellow Line will only run between Huntington and Reagan National Airport Stations.

WMATA has also scheduled additional planned Metrorail track work that includes single tracking and weekend shutdowns. Like done during SafeTrack, WMATA staff has asked NVTC to again coordinate Northern Virginia jurisdictional response during times of system disruption.

Corrective Action Plan Monitoring and Tracking, Internal Reviews, and OIG Reports

WMATA updated its Overview of Regulatory Compliance Actions on May 25, 2018.

As mentioned in the Business Oversight Committee section, two new audit reports were added to the OIG Audit report website. These include an Evaluation of the Rhode Island Avenue-Brentwood Station Incidents and a report on the Manual Payroll System.
Nine new internal reviews were added to WMATA’s Internal Reviews webpage. Summary reports provide an overview of the engineering and maintenance and safety and security review areas which focused on the following categories:

D. Virginia Ridership and Parking Facility Utilization

The following tables show WMATA ridership by mode in Virginia for April 2018. When comparing ridership data to 2017, it is important to reference if there were any service disruptions due to SafeTrack.

Between March 4th through April 12, 2017, the Blue Line had continuous single tracking between Braddock Rd and Van Dorn St Stations and the Yellow Line had continuous single tracking between Braddock Rd and Huntington Stations.

Between April 15th through May 14, 2017, the SafeTrack work on the Green Line resulted in a discontinuation of Rush Plus Yellow service to Franconia Springfield in Virginia.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metrorail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong>¹</td>
<td>8,617,642</td>
<td>7,416,334</td>
<td>8,008,960</td>
<td>-7%</td>
<td>+8%</td>
</tr>
<tr>
<td><strong>Weekday Average</strong>²</td>
<td>317,254</td>
<td>283,709</td>
<td>298,617</td>
<td>-6%</td>
<td>+5%</td>
</tr>
<tr>
<td><strong>Saturday Average</strong>²</td>
<td>142,520</td>
<td>134,154</td>
<td>140,418</td>
<td>-1%</td>
<td>+5%</td>
</tr>
<tr>
<td><strong>Sunday Average</strong>²</td>
<td>109,118</td>
<td>89,750</td>
<td>88,271</td>
<td>-19%</td>
<td>-2%</td>
</tr>
<tr>
<td>Metrobus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong>¹</td>
<td>1,758,546</td>
<td>1,561,309</td>
<td>1,447,375</td>
<td>-18%</td>
<td>-7%</td>
</tr>
<tr>
<td><strong>Weekday Average</strong>¹</td>
<td>72,782</td>
<td>65,577</td>
<td>59,707</td>
<td>-18%</td>
<td>-9%</td>
</tr>
<tr>
<td>MetroAccess¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27,653</td>
<td>26,955</td>
<td>29,779</td>
<td>+8%</td>
<td>+10%</td>
</tr>
</tbody>
</table>

1: Unlinked Passenger Trips
2: Based on Station Entries and Exits
Source: WMATA
On February 5th, WMATA instituted new parking changes that include expanding parking revenue collection hours, lowering parking fees at select stations, and charging higher fees for “non-riders” at additional stations. The following table shows weekday parking utilization. As of February 2018, utilization data includes the above parking changes. The new parking revenue collection periods are 7:30 A.M – 12:30 A.M. (Monday – Thursday) and 7:30 A.M. – 2:00 A.M. (Friday).

<table>
<thead>
<tr>
<th>Station/Lot</th>
<th>April 2016</th>
<th>Y-T-D FY16</th>
<th>April 2017</th>
<th>Y-T-D FY17</th>
<th>April 2018</th>
<th>Y-T-D FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huntington</td>
<td>82%</td>
<td>72%</td>
<td>59%</td>
<td>64%</td>
<td>75%</td>
<td>69%</td>
</tr>
<tr>
<td>West Falls Church</td>
<td>59%</td>
<td>55%</td>
<td>50%</td>
<td>49%</td>
<td>59%</td>
<td>48%</td>
</tr>
<tr>
<td>Dunn Loring</td>
<td>83%</td>
<td>77%</td>
<td>75%</td>
<td>59%</td>
<td>74%</td>
<td>71%</td>
</tr>
<tr>
<td>Vienna</td>
<td>84%</td>
<td>80%</td>
<td>74%</td>
<td>63%</td>
<td>78%</td>
<td>72%</td>
</tr>
<tr>
<td>Franconia</td>
<td>72%</td>
<td>68%</td>
<td>51%</td>
<td>53%</td>
<td>61%</td>
<td>55%</td>
</tr>
<tr>
<td>Van Dorn</td>
<td>113%</td>
<td>107%</td>
<td>90%</td>
<td>95%</td>
<td>108%</td>
<td>103%</td>
</tr>
<tr>
<td>East Falls Church</td>
<td>122%</td>
<td>116%</td>
<td>121%</td>
<td>113%</td>
<td>121%</td>
<td>113%</td>
</tr>
<tr>
<td>Wiehle-Reston East</td>
<td>94%</td>
<td>89%</td>
<td>91%</td>
<td>82%</td>
<td>98%</td>
<td>91%</td>
</tr>
<tr>
<td>Northern Virginia Total</td>
<td>80%</td>
<td>75%</td>
<td>67%</td>
<td>63%</td>
<td>75%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Source: WMATA

On February 10, 2018, WMATA started charging a $2 fee for Saturday parking. Saturday parking revenue collection periods are 10:00 A.M. – 2:00 A.M. Saturday parking utilization data is currently being collected by WMATA. Later this summer, the General Manager will present findings, recommendations, and a Title VI equity analysis to the Board for its consideration of whether to permanently adopt parking fare and/or operational changes.

E. Preliminary Schedule of Upcoming Board Decisions (subject to change)

<table>
<thead>
<tr>
<th>Agenda</th>
<th>Meeting</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway Worker Protection Update (I)</td>
<td>Safety &amp; Services</td>
<td>June 14, 2018</td>
</tr>
<tr>
<td></td>
<td>Delivery Committee</td>
<td></td>
</tr>
<tr>
<td>Approval to Amend FY2019 Operating</td>
<td>Finance &amp; Budget</td>
<td>June 14, 2018</td>
</tr>
<tr>
<td>Budget for Metrobus and Metrorail</td>
<td>Committee</td>
<td></td>
</tr>
<tr>
<td>Service Changes (A)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(A) Action  (I) Information
This page intentionally left blank.
TO: Chairman Smedberg and NVTC Commissioners
FROM: Kate Mattice and Rhonda Gilchrest
DATE: May 31, 2018
SUBJECT: Virginia Railway Express (VRE)

__________________________________________________________________

A. VRE CEO Report and Minutes

At the June meeting, VRE CEO Doug Allen will update the Commission on VRE activities. The Minutes of the May 18th VRE Operations Board Meeting and the VRE CEO Report for May 2018 are attached.

B. ACTION ITEM: Resolution #2361: Authorize the VRE CEO to Execute a One-Year Extension of the Existing Amended and Restated Operating/Access Agreement with CSX Transportation

The VRE Operations Board recommends the Commissions authorize the VRE CEO to execute a one-year extension to the existing Amended and Restated Operating/Access Agreement with CSX Transportation through June 30, 2019. VRE’s current agreement expires on June 30, 2018.

During the one-year extension, VRE staff will continue to work with CSXT on a long-term agreement to include elements to meet VRE’s commitment to constructing a third main line. VRE, CSXT and DRPT will work to determine capacity enhancement projects, prioritize these projects, establish methodologies to identify how the capacity enhancements will result in additional service for VRE and identify potential funding sources. VRE anticipates these elements will be integrated into the new Amended and Restated Agreement. CSXT has requested during the one-year extension period that VRE and CSXT will continue to work to identify a mutually agreed upon cost sharing methodology for the implementation and ongoing operations for Positive Train Control (PTC) and update the Master Facilities Lease Agreement. VRE will also work with CSXT to incorporate the scheduling of VRE trains into, and out of, the L’Enfant storage tracks. These changes will have no impact to the passenger train schedules. Funding is incorporated into the FY2019 VRE budget to allow VRE to continue its operations over CSXT tracks during this extension.
C. ACTION ITEM: **Resolution #2362**: Authorize the VRE CEO to Submit VRE Projects to USDOT for FY2018 BUILD Grant Funding Consideration

The VRE Operations Board recommends the Commissions authorize the VRE CEO to submit, on behalf of the Commissions, application(s) for VRE station improvements under the [USDOT Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program](https://www.build.gov/), to make any necessary corrections to project amounts or descriptions in the application, and execute all project funding agreements that may result from consideration of the projects. The non-federal match for the BUILD Grants is expected to be up to $5,270,000 and, in the event the VRE grants are approved, authorization for grant matching funds will be presented to the Operations Board and the Commissions for approval.

The BUILD program, previously known as the Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant program, allows up to $15 million of the total program funding for the planning, preparation, or design of surface transportation projects. In order to keep pace with the associated Alexandria Fourth Track Project and the Long Bridge project, VRE projects being recommended for submission for consideration include the Crystal City Station Improvements (related and expanded station with longer platform for full-length trains and service on two tracks) and the L’Enfant Station/VA to L’Enfant Fourth Track improvements (related and expanded station with longer platform from full-length trains from two tracks and addition of related fourth through the station from Virginia interlocking to L’Enfant interlocking). [More information is available in the attached VRE memorandum.](#)

D. VRE Automatic Passenger Count System

At the May 18th VRE Operations Board meeting, the Board authorized the VRE CEO to execute a contract with Infodev EDI Inc. for an automatic passenger count system. This system will collect data as VRE passengers board and detrain at each station. The real-time, accurate passenger load data will be used for National Transit Database (NTD) reporting. The data can also be used for:

- Safety and Security – real-time information about passenger loads, by car, which is critical data for use by first responders in the event of an incident.
- Operations – real-time passenger load information can be utilized by onboard crew to help determine platforming strategy to evenly distribute passenger load. This will help to ensure all available seats can be accessed.
- Customer Service – real-time alerts can be provided through VRE Mobile of seat availability by car so passengers waiting on the platform will know where to board or better guarantee a seat.
- Planning – real-time, accurate boarding information by train can assist with long-term planning for both consists makeup and parking strategies by station.
# Minutes

VRE Operations Board Meeting
PRTC Headquarters – Prince William County, Virginia
May 18, 2018

## Members Present

<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharon Bulova (NVTC)</td>
<td>Fairfax County</td>
</tr>
<tr>
<td>Maureen Caddigan (PRTC)</td>
<td>Prince William County</td>
</tr>
<tr>
<td>John C. Cook (NVTC)</td>
<td>Fairfax County</td>
</tr>
<tr>
<td>Katie Cristol (NVTC)</td>
<td>Arlington County</td>
</tr>
<tr>
<td>Mark Dudenhefer (PRTC)</td>
<td>Stafford County</td>
</tr>
<tr>
<td>John D. Jenkins (PRTC)</td>
<td>Prince William County</td>
</tr>
<tr>
<td>Matt Kelly (PRTC)</td>
<td>City of Fredericksburg</td>
</tr>
<tr>
<td>Martin E. Nohe (PRTC)</td>
<td>Prince William County</td>
</tr>
<tr>
<td>Pamela Sebesky (PRTC)</td>
<td>City of Manassas</td>
</tr>
<tr>
<td>Paul Smedberg (NVTC)</td>
<td>City of Alexandria</td>
</tr>
</tbody>
</table>

## Members Absent

<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wendy Maurer (PRTC)</td>
<td>Stafford County</td>
</tr>
<tr>
<td>Jennifer Mitchell</td>
<td>DRPT</td>
</tr>
<tr>
<td>Suhas Naddoni (PRTC)</td>
<td>City of Manassas Park</td>
</tr>
<tr>
<td>Gary Skinner (PRTC)</td>
<td>Spotsylvania County</td>
</tr>
</tbody>
</table>

## Alternates Present

<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Todd Horsley</td>
<td>DRPT</td>
</tr>
<tr>
<td>Jeanine Lawson (PRTC)</td>
<td>Prince William County</td>
</tr>
<tr>
<td>Paul Trampe (PRTC)</td>
<td>Spotsylvania County</td>
</tr>
</tbody>
</table>

## Alternates Absent

<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruth Anderson (PRTC)</td>
<td>Prince William County</td>
</tr>
<tr>
<td>Pete Candland (PRTC)</td>
<td>Prince William County</td>
</tr>
<tr>
<td>Jack Cavalier (PRTC)</td>
<td>Stafford County</td>
</tr>
<tr>
<td>Hector Cendejas (PRTC)</td>
<td>City of Manassas Park</td>
</tr>
<tr>
<td>Libby Garvey (NVTC)</td>
<td>Arlington County</td>
</tr>
<tr>
<td>Tim Lovain (NVTC)</td>
<td>City of Alexandria</td>
</tr>
<tr>
<td>Jeff McKay (NVTC)</td>
<td>Fairfax County</td>
</tr>
<tr>
<td>Michael McLaughlin</td>
<td>DRPT</td>
</tr>
<tr>
<td>Cindy Shelton (PRTC)</td>
<td>Stafford County</td>
</tr>
<tr>
<td>Billy Withers (PRTC)</td>
<td>City of Fredericksburg</td>
</tr>
<tr>
<td>Mark Wolfe (PRTC)</td>
<td>City of Manassas</td>
</tr>
</tbody>
</table>

## Staff and General Public

<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doug Allen – VRE</td>
<td>Mike Lake – Fairfax County DOT</td>
</tr>
<tr>
<td>Monica Backmon – NVTA</td>
<td>Lezlie Lamb – VRE</td>
</tr>
<tr>
<td>Paolo Belita – Prince William County</td>
<td>Bob Leibbrandt – Prince William County</td>
</tr>
<tr>
<td>Nydia Blake – Prince William County</td>
<td>Steve Maclsaac – VRE Legal Counsel</td>
</tr>
<tr>
<td>Rick Canizales – Prince William County</td>
<td>Betsy Massie – PRTC</td>
</tr>
<tr>
<td>Rich Dalton – VRE</td>
<td>Kate Mattice – NVTC</td>
</tr>
<tr>
<td>Andrew D’huyvetter – NVTC</td>
<td>Kristen Nutter – VRE</td>
</tr>
<tr>
<td>Julie Elliott – Stafford County</td>
<td>Paul Rink – VRE</td>
</tr>
<tr>
<td>Lucy Gaddis – VRE</td>
<td>Bob Schneider – PRTC</td>
</tr>
<tr>
<td>Rhonda Gilchrest – NVTC</td>
<td>Mark Schofield – VRE</td>
</tr>
<tr>
<td>Tom Hickey – VRE</td>
<td>Steve Sindiong – Alexandria</td>
</tr>
<tr>
<td>Christine Hoefner – VRE</td>
<td>Sonali Soneji – VRE</td>
</tr>
<tr>
<td>Pierre Hohlman – Arlington County</td>
<td>Alex Sugatan – VRE</td>
</tr>
<tr>
<td>Todd Johnson – First Transit</td>
<td>Joe Swartz – VRE</td>
</tr>
<tr>
<td>John Kerins – Keolis</td>
<td>Cambria Ungaro – VRE</td>
</tr>
<tr>
<td>Cindy King – VRE</td>
<td>Ciara Williams – DRPT</td>
</tr>
</tbody>
</table>
Chairman Nohe called the meeting to order at 9:08 A.M. Following the Pledge of Allegiance, Roll Call was taken.

Approval of the Agenda – 3

Mr. Kelly moved, with a second by Mr. Dudenhefer, to approve the Agenda. The vote in favor was cast by Board Members Caddigan, Cook, Cristol, Dudenhefer, Horsley, Jenkins, Kelly, Nohe, Sebesky, Smedberg and Trampe.

Approval of the Minutes of the April 20, 2018 Operations Board Meeting – 4

Mr. Kelly moved, with a second by Ms. Cristol, to approve the Minutes. The vote in favor was cast by Board Members Caddigan, Cook, Cristol, Dudenhefer, Horsley, Jenkins, Kelly, Nohe, Sebesky, Smedberg and Trampe.

Chairman’s Comments – 5

Chairman Nohe announced upcoming VRE committee meetings and membership. The CEO Evaluation Committee members include himself, Ms. Caddigan, Mr. Cook, Mr. Kelly and Mr. Smedberg (chair). The committee will meet immediately following this meeting.

The Audit Committee members include Mr. Nohe, Ms. Caddigan, Ms. Cristol, Mr. Cook and Mr. Dudenhefer. The Audit Committee will meet prior to the June Operations Board meeting, in lieu of the Executive Committee.

The Capital Committee members include Ms. Cristol (chair), Mr. Cook, Mr. Jenkins and Mr. Skinner. The Capital Committee will meet immediately following the June Operations Board meeting.

Chief Executive Officer’s Report – 6

Mr. Allen introduced Paul Rink, VRE’s new Operations and Communications Administrator.

Mr. Allen gave an update on the implementation of Positive Train Control (PTC), including conducting PTC training for operators, installing and testing Wi-Fi at yards, working on initialization software, and participating in an APTA workshop on PTC. VRE and the host railroads are still on track to meet the December 2018 deadline. He also reported on a trespasser incident near Woodbridge several weeks ago.

[Ms. Bulova arrived at 9:13 A.M.]

Mr. Allen reported average daily ridership for the month of April was 19,000 with on-time performance (OTP) of 93 percent. He reviews several weather issues impacting OTP.

Mr. Allen announced VRE has held its first two Meet the Management events at Union Station (May 9) and L’Enfant Station (May 23), to be followed by Crystal City (May 24),
Alexandria (May 30) and Franconia-Springfield (June 6). VRE will also participate in the annual Manassas Rail Festival on June 2nd by running excursion trains to Clifton.

Mr. Allen discussed several WMATA-related issues. WMATA has informed VRE it will no longer be able to open swing gates for VRE riders during service disruptions. Without the ability to open the swing gates, the “Metro Option” will need to be discontinued. VRE will inform riders of this change, which is effective July 1, 2018, and encourage them to purchase a SmarTrip card for future incidents. VRE is also continuing discussions with WMATA on the non-Metro rider parking surcharge for VRE riders at Franconia-Springfield. Finally, with the announced Metrorail shutdown on the Yellow and Blue lines next summer, VRE is working on how it can respond to the change in commuting options during this period.

Mr. Allen announced the refinance of VRE’s Railroad Rehabilitation and Improvement Financing (RRIF) loan has been completed with the Virginia Resource Authority, which will save $8.5 million over the term of the loan. He acknowledged Mr. Schofield and his staff, as well as VRE’s consultant PFM, for their hard work.

VRE Riders’ and Public Comment – 7

There were no rider or public comments.

Consent Agenda – 8

Mr. Kelly moved, with a second by Mr. Cook, to approve the following Consent Agenda:

- Resolution #8A-05-2018: Authorization to Issue a Task Order for Renovations to VRE Headquarters Suite 201
- Resolution #8B-05-2018: Authorization to Issue a Task Order for Tactile Warning Strip Replacement at L’Enfant Station
- Resolution #8C-05-2018: Authorization to Issue a Task Order for Pavement Repairs and Stripping at Crossroads and Broad Run Yards

In response to a question from Mr. Smedberg, Mr. Allen provided more information about the renovations to VRE headquarters. VRE has leased office space adjacent to its current office, which will allow the Office of Development to move out of leased space across the street. Mr. Smedberg expressed his opinion that the amount of funding seems low. Mr. Allen responded staff is confident the work can be done within budget.

The Board then voted and passed the Consent Agenda. The vote in favor was cast by Board Members Bulova, Caddigan, Cook, Cristol, Dudenhefer, Horsley, Jenkins, Kelly, Nohe, Sebesky, Smedberg and Trampe.

Authorization to Execute a Contract for Disaster Management Services – 9A

Mr. Allen stated the Operations Board is being asked to authorize him to execute a contract with FEI Behavioral Health, Inc. of Milwaukee, Wisconsin for disaster management services
in the amount of $34,850, plus a 10 percent contingency of $3,485, for a total amount not to exceed $38,335, for a base year and four option years, with the CEO exercising the option years at his discretion. Resolution #9A-05-2018 would accomplish this.

Chairman Nohe asked about what these services entail. Mr. Dalton explained the contractor will be on retainer to provide incident response training and to have personnel available to immediately mobilize and provide family assistance services, personal effects inventory and other support services in the event of a rail accident involving a VRE train. VRE hopes to never use this service, but it is important to have it in place.

Ms. Cristol asked who decides what constitutes a disaster. Mr. Dalton stated VRE has protocols in place that determine when to mobilize this assistance. In response to a question from Mr. Cook, Mr. Dalton stated the contractor is based in Milwaukee but they have local offices across the country. They can mobilize within hours of an accident.

Ms. Cristol moved, with a second by Ms. Bulova, to approve Resolution #9A-05-2018. The voted in favor was cast by Board Members Bulova, Caddigan, Cook, Cristol, Dudenhefer, Horsley, Jenkins, Kelly, Nohe, Sebesky, Smedberg and Trampe.

Authorization to Execute a Contract for an Automatic Passenger Count System – 9B

Mr. Allen stated the Operations Board is being asked to authorize him to execute a contract with Infodev EDI Inc. of Quebec City, Quebec for an automatic passenger count system in the amount of $1,090,911, plus a 10 percent contingency of $109,091, for a total amount not to exceed $1,200,002. Resolution #9B-05-2018 would accomplish this.

In response to a question from Mr. Dudenhefer, Mr. Allen stated that technology will provide real-time data and reporting capabilities, which can be used for safety and security operations, customer service, planning and NTD data reporting. In response to a question from Mr. Smedberg, Mr. Dalton explained the contract is for the purchase of the equipment and covers the entire system (technology, software, central webhost equipment, etc.). Ms. Bulova asked how the technology works. Mr. Allen explained the equipment is installed on ceilings and scans bodies as they pass through the railcars and in between the cars.

Mr. Smedberg observed the selected firm is from Canada and he asked about the selection process. Ms. Nutter explained Infodev EDI was selected because their proposal was the lowest price, received very positive references and feedback, and met the criteria on accuracy and reliability of the equipment, with minimal maintenance.

Ms. Cristol asked when the system will be operational systemwide. Mr. Dalton explained the first phase is proof of concept and the contractor will have six months to equip the first eight railcars. VRE will install the balance. It will take about one-year to fully implement the system.

Ms. Bulova moved, with a second by Mr. Smedberg, to approve Resolution #9B-05-2018. The vote in favor was cast by Board Members Bulova, Caddigan, Cook, Cristol, Dudenhefer, Horsley, Jenkins, Kelly, Nohe, Sebesky, Smedberg and Trampe.
Recommend Authorization to Extend the Amended and Restated Operating/Access Agreement with CSX Transportation – 9C

Mr. Allen stated the Operations Board is being asked to recommend the Commissions authorize him to execute a one-year extension of the existing Amended and Restated Operating/Access Agreement with CSX Transportation (CSXT) through June 30, 2019. Resolution #9C-05-2018 would accomplish this.

Mr. Allen explained during the next year, VRE will continue to work with CSXT on the implementation and ongoing operations for Positive Train Control (PTC). Once PTC has been fully implemented, VRE and CSX will be in a better position to address a new Operating/Access Agreement.

Mr. Kelly requested an update at a future meeting on these discussions and progress of outstanding issues related to the host railroads, since there are several new Board Members. Mr. Kelly stated VRE’s 40-year plan is predicated on putting more trains into service. Mr. Allen discussed VRE’s relationship with CSXT and the projects in the Capital Improvement Program (CIP) to create more capacity within the VRE service area.

Ms. Bulova moved, with a second by Ms. Caddigan, to approve Resolution #9C-05-2018. The vote in favor was cast by Board Members Bulova, Caddigan, Cook, Cristol, Dudenhefer, Horsley, Jenkins, Kelly, Nohe, Sebesky, Smedberg and Trampe.

Recommend Authorization to Submit VRE Projects to USDOT for FY 2018 BUILD Funding Consideration and Authorization of VRE Funds for Required Match – 9D

Mr. Allen stated the Operations Board is asked to recommend the Commissions authorize him to submit, on behalf of the Commissions, application(s) for the Crystal City Station improvements and L’Enfant Station Improvements under the USDOT Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program, to make any necessary corrections to project amounts or description in the application, and execute all project funding agreements that may result from consideration of projects. Authorization is also asked for the commitment of VRE funds up to $5,270,000 as a match. Resolution #9D-05-2018 would accomplish this.

Ms. Cristol moved, with a second by Mr. Kelly, to approve Resolution #9D-05-2018. The vote in favor was cast by Board Members Bulova, Caddigan, Cook, Cristol, Dudenhefer, Horsley, Jenkins, Kelly, Nohe, Sebesky, Smedberg and Trampe.

Publication of Proposed Disadvantaged Business Enterprise Overall Annual Goal for Federal Fiscal Years 2019-2021 – 10A

Mr. Allen reported PRTC and VRE have established a DBE goal in accordance with USDOT regulations of 11.3 percent for federal fiscal years 2019-2021 and provisionally adopted the goal for FTA-assisted contracts. FTA requires all agencies with a DBE program to
advertise their proposed goals for a period of 30 days and seek public comment for 45 days from the date of publication.

Mr. Smedberg asked how the goal is determined. Ms. Massie, of PRTC staff, explained the proposed 11.3 percent DBE goal is based on an assessment of projects expenditures for FFY 2019-2021, a review of U.S. Census and other sources concerning the availability of DBE companies in the industries and geographic markets relevant to PRTC and VRE, and consideration of PRTC's and VRE's historical utilization of DBE companies. There is no minimum requirement. PRTC’s and VRE’s previous DBE goals were 10.7 percent and 11.1 percent.

[Ms. Lawson arrived at 9:45 A.M.]

Broad Run Expansion Project Update – 10B

Mr. Allen stated after last month’s presentation and discussion, staff followed up on Board Member’s comments on ways to explore options for the new parking lot. Mr. Allen and VRE staff met with Chairman Nohe, Supervisor Lawson and Prince William County Staff to discuss ways to partner with Prince William County on a new parking lot. Chairman Nohe stated additional parking is needed and it’s just a matter of where. It was hoped Prince William County could take on the parking lot project and build a lot north of the tracks with a connecting pedestrian tunnel funded and built by VRE. There was discussion on the expected cost for a north lot. It may be possible for the county to provide some funding but it may require additional VRE funding as well. In response to a question from Mr. Cook, Chairman Nohe explained currently the project is fully funded with I-66 Outside the Beltway Concessionaire funding, but to build a lot north of the tracks was estimated by VRE to cost an additional $20 million. Chairman Nohe stated the county thought if it could defederalize the project, it could be done for around $10 million.

Mr. Allen stated the advantage to the north parking option is access/egress to the parking site and a closer distance to the station. Mr. Cook stated the north option seems to be a better option and Ms. Bulova agreed.

Mr. Allen stated the Operations Board seems to agree this option is worth pursuing, so staff will continue to work with Prince William County. Mr. Cook stated he is comfortable moving forward if VRE and Prince William County can split the added cost of the north parking lot option.

Mr. Kelly stated it is important to identify how VRE will fund its share of the added cost. Mr. Allen stated that one option is to recommend the Operations Board approve the use of C-ROC funds. Ms. Cristol observed this would be a good discussion for the Capital Committee to have at its June meeting. She encouraged caution to make sure VRE is using C-ROC funding for transformative projects and not just to solve problematic funding issues. Mr. Allen stated staff will return at the June meeting with an update on the parking options.

Spending Authority Report –10C
The written report includes one task order for $74,500 to Vanasse Hangen Brustlin, Inc., for development of a preliminary Maser Program Schedule.

Closed Session – 11

Chairman Nohe stated no Closed Session is needed.

Operations Board Member Time – 12

There were no comments.

Adjournment

Without objection, Chairman Nohe adjourned the meeting at 10:04 A.M.

Approved this 15th day of June 2018.

_____________________________
Martin Nohe
Chairman

_____________________________
Maureen Caddigan
Secretary

CERTIFICATION

This certification hereby acknowledges the minutes for the May 18, 2018 Virginia Railway Express Operations Board Meeting have been recorded to the best of my ability.

_____________________________
Rhonda Gilchrest
Virginia Railway Express
Operations Board

Resolution
8A-05-2018

Authorization to Issue a Task Order for Renovations
to VRE Headquarters Suite 201

WHEREAS, in July 2017, the VRE Operations Board authorized the Chief Executive Officer to execute a 15-year lease with one 5-year option with IARW, the owner of the office space on the second floor of 1500 King Street in Alexandria, adjacent to the current VRE offices; and,

WHEREAS, the additional space will be utilized by VRE’s Office of Development, currently occupying leased office space on South Peyton Street in Alexandria, as well as VRE executive staff; and,

WHEREAS, this will allow VRE to house all corporate staff in a single office; and,

WHEREAS, renovation work is necessary prior to utilizing the new office space, in order to maximize the efficiency of its use by Office of Development and executive personnel;

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board does hereby authorize the Chief Executive Officer to issue a Task Order under the Maintenance Services for VRE Facilities contract to NVE, Inc. for construction services to renovate the newly leased VRE Headquarters Suite 201 in the amount of $195,100, plus a 10% contingency of $19,510, for a total not to exceed $214,610.

Approved this 18th day of May 2018

Martin Nohe
Chairman

Maureen Caddigan
Secretary
Virginia Railway Express
Operations Board

Resolution
8B-05-2018

Authorization to Issue a Task Order for Tactile Warning Strip Replacement at L’Enfant Station

WHEREAS, the tactile warning strips at most of VRE’s stations were installed many years ago; and,

WHEREAS, due to years of exposure to the elements, they have experienced fading, delamination and chipping; and,

WHEREAS, information gathered through the execution of the work will be used by VRE staff to determine the most efficient procurement method moving forward for similar replacement projects; and,

WHEREAS, the requested authorization under the Maintenance Services for VRE Facilities Contract will allow NVE, Inc. to perform the above referenced tactile warning strip replacement services;

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board does hereby authorize the Chief Executive Officer to issue a Task Order under the Maintenance Services for VRE Facilities contract to NVE, Inc. for replacement of the tactile warning strip at the L’Enfant station in the amount of $124,000, plus a 10% contingency of $12,400, for a total not to exceed $136,400.

Approved this 18th day of May 2018

[Signature]
Martin Nohe
Chairman

[Signature]
Maureen Caddigan
Secretary
Virginia Railway Express
Operations Board

Resolution
8C-05-2018

Authorization to Issue a Task Order for Pavement Repairs and Striping at Crossroads and Broad Run Yards

WHEREAS, in February 2018, the rail storage yards at Crossroads and Broad Run were assessed for necessary pavement repairs; and,

WHEREAS, it was determined minor pavement repairs, crack filling, sealcoating and restriping were necessary in both yards and milling and repaving were needed on the access road that serves the Crossroads yard; and,

WHEREAS, the requested authorization under the Maintenance Services for VRE Facilities Contract will allow NVE, Inc. to perform the above referenced pavement repairs and striping services;

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board does hereby authorize the Chief Executive Officer to issue a Task Order under the Maintenance Services for VRE Facilities contract to NVE, Inc. for pavement repairs and striping at the Crossroads and Broad Run Yards in the amount of $158,500, plus a 10% contingency of $15,850, for a total not to exceed $174,350.

Approved this 18th day of May 2018

[Signature]
Martin Nohe
Chairman

[Signature]
Maureen Caddigan
Secretary
Virginia Railway Express
Operations Board

Resolution
9A-05-2018

Authorization to Execute a Contract for Disaster Management Services

WHEREAS, VRE currently retains the services of a professional disaster management provider as recommended by the National Transportation Safety Board; and,

WHEREAS, the VRE Operations Board authorized the CEO to issue a Request for Proposals (RFP) on November 17, 2017 for disaster management services; and,

WHEREAS, a competitive procurement process was undertaken, yielding two proposals; and,

WHEREAS, the proposal received from FEI Behavioral Health Inc. of Milwaukee, Wisconsin was determined by a technical evaluation team to be the most responsive; and,

WHEREAS, the Operations Board’s approval of this procurement does not represent its independent assessment of the candidate’s responses to the solicitation or of each step in the procurement process followed by staff; rather, the Operations Board’s action is premised upon its conclusion, after review of the information before it, that the process used by the staff was in accordance with law and that the staff recommendation appears to be reasonable;

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board does hereby authorize the Chief Executive Officer to execute a contract with FEI Behavioral Health Inc. of Milwaukee, Wisconsin for Disaster Management Services in the amount of $34,850, plus a 10% contingency of $3,485, for a total amount not to exceed $38,335. The contract will be for a base year and four option years, with the VRE CEO exercising the option years at his discretion.

Approved this 18th day of May 2018

Martin Nohe
Chairman

Maureen Caddigan
Secretary
Virginia Railway Express
Operations Board

Resolution
9C-05-2018

Recommend Authorization to Extend the Amended and Restated Operating/Access Agreement with CSX Transportation

WHEREAS, the Commissions currently have an Amended and Restated Operating/Access Agreement with CSX Transportation (CSXT) relating to VRE operations in the Fredericksburg to Washington corridor, with the agreement ending June 30, 2018; and,

WHEREAS, VRE staff is currently engaged in ongoing discussions with CSXT concerning a new agreement and does not anticipate conclusion of these discussions prior to the expiration of the Amended and Restated Operating/Access Agreement on June 30, 2018; and,

WHEREAS, the purpose of this extension is to allow time to identify and negotiate additional capacity improvement projects in the corridor; and,

WHEREAS, necessary funding has been incorporated into the FY 2019 budget to allow VRE to continue its operations over CSXT tracks via this extension;

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board recommends the Commissions authorize the Chief Executive Officer to execute an extension of the existing Restated and Amended Operating/Access Agreement with CSXT through June 30, 2019.

Approved this 18th day of May 2019

[Signature]
Martin Nohe
Chairman

[Signature]
Maureen Caddigan
Secretary
Virginia Railway Express
Operations Board

Resolution
9D-05-2018

Recommend Authorization to Submit VRE Projects to USDOT for FY 2018
BUILD Funding Consideration and Authorization of VRE Funds for
Required Match

WHEREAS, the VRE Crystal City Station Improvements and L’Enfant Station and VA to LE
4th Track projects are high-priority projects that are partially funded through the
completion of Preliminary Engineering and Environmental Review; and,

WHEREAS, funding is needed to allow the Final Design for the Crystal City and L’Enfant
projects to be completed; and,

WHEREAS, the U.S. Department of Transportation issued a Notice of Funding Opportunity
for Better Utilizing Investments to Leverage Development Transportation Discretionary
Grants program on April 25, 2018 to solicit applications for grants to be awarded on a
competitive basis for projects that will have a significant local or regional impact; and,

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board does hereby
recommend the Commissions authorize the VRE Chief Executive Officer to submit, on
behalf of the Commissions, application for VRE station improvements under the U.S.
Department of Transportation Better Utilizing Investments to Leverage Development
Transportation Discretionary Grants program, to make any necessary corrections to
project amounts or descriptions in the application(s), and execute all project funding
agreements that may result from consideration of the projects; and,

BE IT FURTHER RESOLVED THAT, the VRE Operations Board does hereby commit the use
of VRE funds up to $5,270,000, as the match for the Better Utilizing Investments to
Leverage Development Transportation Discretionary Grants program application(s).

Approved this 18th day of May 2018

Martin Nohe
Chairman

Maureen Caddigan
Secretary
The Virginia Railway Express, a joint project of the Northern Virginia Transportation Commission and the Potomac Rappahannock Transportation Commission, will provide safe, cost-effective, accessible, reliable, convenient, and customer responsive commuter-oriented rail passenger service. VRE contributes to the economic vitality of its member jurisdictions as an integral part of a balanced, intermodal regional transportation system.
# TABLE OF CONTENTS

## CEO REPORT | MAY 2018

### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUCCESS AT A GLANCE</td>
<td>3</td>
</tr>
<tr>
<td>ON-TIME PERFORMANCE</td>
<td>4</td>
</tr>
<tr>
<td>AVERAGE DAILY RIDERSHIP</td>
<td>6</td>
</tr>
<tr>
<td>SUMMONSES ISSUED</td>
<td>7</td>
</tr>
<tr>
<td>TRAIN UTILIZATION</td>
<td>8</td>
</tr>
<tr>
<td>PARKING UTILIZATION</td>
<td>9</td>
</tr>
<tr>
<td>FINANCIAL REPORT</td>
<td>10</td>
</tr>
<tr>
<td>FACILITIES UPDATE</td>
<td>14</td>
</tr>
<tr>
<td>UPCOMING PROCUREMENTS</td>
<td>16</td>
</tr>
<tr>
<td>CAPITAL PROJECTS UPDATES</td>
<td>17</td>
</tr>
<tr>
<td>PROJECTS PROGRESS REPORT</td>
<td>21</td>
</tr>
<tr>
<td>RIDE MAGAZINE, MAY 2018 ISSUE</td>
<td>26</td>
</tr>
</tbody>
</table>
SUCCESS AT A GLANCE

The total number of parking spaces used in the VRE system during the month, divided by the total number of parking spaces available.

AVERAGE DAILY RIDERSHIP
The average number of boardings each operating day inclusive of Amtrak Step-Up boardings but excluding “S” schedule operating days.
   ▲ Same month, previous year.

ON-TIME PERFORMANCE
Percentage of trains that arrive at their destination within five minutes of the schedule.
   ▲ Same month, previous year.

SYSTEM CAPACITY
The percent of peak hour train seats occupied. The calculation excludes reverse flow and non-peak hour trains.

OPERATING RATIO
The monthly operating revenues divided by the monthly operating expenses, which depicts the percent of operating costs paid by the riders.
   ✶ Board-established goal.

Data provided reflects March 2018 information.
ON-TIME PERFORMANCE

OUR RECORD

<table>
<thead>
<tr>
<th></th>
<th>March 2018</th>
<th>February 2018</th>
<th>March 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manassas Line</td>
<td>96%</td>
<td>96%</td>
<td>93%</td>
</tr>
<tr>
<td>Fredericksburg Line</td>
<td>89%</td>
<td>95%</td>
<td>85%</td>
</tr>
<tr>
<td>System Wide</td>
<td>92%</td>
<td>95%</td>
<td>89%</td>
</tr>
</tbody>
</table>

REASONS FOR DELAYS

VRE operated 624 trains in March.

Our on-time rate for March was 92%.

Forty-seven of the trains arrived more than five minutes late to their final destinations. Thirteen of those late trains were on the Manassas Line and thirty-four of those late trains were on the Fredericksburg Line.

*Includes those trains that were delayed due to late turns, weather, signal/switch failures and maintenance of way.

LATE TRAINS

<table>
<thead>
<tr>
<th></th>
<th>System Wide</th>
<th>Fredericksburg Line</th>
<th>Manassas Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total late trains</td>
<td>68</td>
<td>28</td>
<td>47</td>
</tr>
<tr>
<td>Average minutes late</td>
<td>25</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Number over 30 minutes</td>
<td>6</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Heat restriction days / total days</td>
<td>0/21</td>
<td>0/19</td>
<td>0/20</td>
</tr>
</tbody>
</table>
ON-TIME PERFORMANCE

VRE SYSTEM

FREDERICKSBURG LINE

MANASSAS LINE

3-Year Rolling Average  Current Stats
MAY 2018
RIDERSHIP UPDATES

Average daily ridership (ADR) in March was approximately 18,800.

SUMMONSES ISSUED
VRE SYSTEM

<table>
<thead>
<tr>
<th>Reason for Dismissal</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger showed proof of a monthly ticket</td>
<td>67</td>
</tr>
<tr>
<td>One-time courtesy</td>
<td>13</td>
</tr>
<tr>
<td>Per the request of the conductor</td>
<td>11</td>
</tr>
<tr>
<td>Defective ticket</td>
<td>0</td>
</tr>
<tr>
<td>Per Ops Manager</td>
<td>0</td>
</tr>
<tr>
<td>Unique circumstances</td>
<td>0</td>
</tr>
<tr>
<td>Insufficient information</td>
<td>0</td>
</tr>
<tr>
<td>Lost and found ticket</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>Total Waived</td>
<td>91</td>
</tr>
</tbody>
</table>

SUMMONSES WAIVED OUTSIDE OF COURT

MONTHLY SUMMONSES COURT ACTION
TRAIN UTILIZATION

FREDERICKSBURG LINE

MANASSAS LINE
PARKING UTILIZATION

**FREDERICKSBURG LINE**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Spaces</th>
<th>Number in Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spotsylvania</td>
<td>1500</td>
<td>750</td>
</tr>
<tr>
<td>Fredericksburg</td>
<td>1300</td>
<td>650</td>
</tr>
<tr>
<td>Leeland Road</td>
<td>1200</td>
<td>600</td>
</tr>
<tr>
<td>Brooke</td>
<td>1000</td>
<td>500</td>
</tr>
<tr>
<td>Quantico</td>
<td>900</td>
<td>450</td>
</tr>
<tr>
<td>Rippon</td>
<td>800</td>
<td>400</td>
</tr>
<tr>
<td>Woodbridge</td>
<td>700</td>
<td>350</td>
</tr>
<tr>
<td>Lorton</td>
<td>600</td>
<td>300</td>
</tr>
</tbody>
</table>

**MANASSAS LINE**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Spaces</th>
<th>Number in Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Run</td>
<td>1400</td>
<td>700</td>
</tr>
<tr>
<td>Manassas</td>
<td>1200</td>
<td>600</td>
</tr>
<tr>
<td>Manassas Park</td>
<td>1100</td>
<td>550</td>
</tr>
<tr>
<td>Burke Centre</td>
<td>1600</td>
<td>800</td>
</tr>
<tr>
<td>Rolling Road</td>
<td>500</td>
<td>250</td>
</tr>
<tr>
<td>Backlick Road</td>
<td>300</td>
<td>150</td>
</tr>
</tbody>
</table>

Number of Spaces | Number in Use
FINANCIAL REPORT

Fare revenue through the first nine months of FY 2018 is $1.50 million above budget (a favorable variance of 5.0%) and is up 0.1% compared to the same period in FY 2017.

The operating ratio through March is 58%. VRE’s budgeted operating ratio for the full twelve months of FY 2018 is 50%.

A summary of the FY 2018 financial results through March follows, including information on the major revenue and expense categories. Please note that these figures are preliminary and unaudited.

<table>
<thead>
<tr>
<th>FY 2018 Operating Budget Report</th>
<th>Month Ended March 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CURR. MO. ACTUAL</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Operating Revenue</strong></td>
<td></td>
</tr>
<tr>
<td>Passenger Ticket Revenue</td>
<td>3,477,009</td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>1,904</td>
</tr>
<tr>
<td>Subtotal Operating Revenue</td>
<td>3,478,913</td>
</tr>
<tr>
<td>Jurisdictional Subsidy (1)</td>
<td></td>
</tr>
<tr>
<td>Federal/State/Other Jurisdictional Subsidy</td>
<td>2,602,635</td>
</tr>
<tr>
<td>Appropriation from Reserve/Other Income</td>
<td>0</td>
</tr>
<tr>
<td>Interest Income</td>
<td>54,618</td>
</tr>
<tr>
<td><strong>Total Operating Revenue</strong></td>
<td>6,136,166</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Departmental Operating Expenses</td>
<td>5,896,675</td>
</tr>
<tr>
<td>Debt Service</td>
<td>559,753</td>
</tr>
<tr>
<td>Other Non-Departmental Expenses</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>6,456,428</td>
</tr>
<tr>
<td><strong>Net income (loss) from Operations</strong></td>
<td>(320,262)</td>
</tr>
</tbody>
</table>

**Operating Ratio**

| 58% | 52% | Goal | 50% |

(1) Total jurisdictional subsidy is $17,250,240. Portion shown is attributed to Operating Fund only.
**MAY 2018**

**VRE Investment Portfolio**

*As of March 31, 2018*

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Institution</th>
<th>Amount</th>
<th>Comments</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking Account</td>
<td>PNC</td>
<td>$6,727,633</td>
<td>Operating checking account</td>
<td>0.00%</td>
</tr>
<tr>
<td>LGIP (Local Government Investment Pool)</td>
<td>LGIP</td>
<td>$37,965,218</td>
<td>Operating and Capital Reserves</td>
<td>1.65%</td>
</tr>
<tr>
<td>LGIP (Local Government Investment Pool)</td>
<td>LGIP</td>
<td>$1,088,997</td>
<td>Proceeds from Woodbridge Kiss &amp; Ride Lot</td>
<td>1.65%</td>
</tr>
<tr>
<td>LGIP (Local Government Investment Pool)</td>
<td>LGIP</td>
<td>$54,171</td>
<td>Revolving account for small liability claims</td>
<td>1.65%</td>
</tr>
<tr>
<td>Insurance Trust Fund</td>
<td>DRM</td>
<td>$10,414,145</td>
<td>Minimum required balance of $10 million</td>
<td>0.82%</td>
</tr>
<tr>
<td><strong>Total Portfolio</strong></td>
<td></td>
<td><strong>$56,250,165</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- PNC contract allows for earnings credit of 0.35% on average monthly balance as an offset to banking service costs; credit earnings through March were 0.17%
- LGIP earnings calculated based on the monthly average balance
- Insurance trust fund rate based on interest earned through three quarters annualized to full fiscal year.

<table>
<thead>
<tr>
<th>Percentage of Portfolio:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking-PNC</td>
<td>12.0%</td>
</tr>
<tr>
<td>LGIP</td>
<td>69.5%</td>
</tr>
<tr>
<td>Insurance Trust Fund</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

**FY 2018 YEAR-END FINANCIAL FORECAST**

Each month, the VRE Operations Board receives financial information summarizing year-to-date operating revenues and expenses relative to budget. At the midpoint of the fiscal year, an amended budget is prepared for Board approval based on actual results as of that date. This FY 2018 year-end forecast of revenues and expenses is based on the amended budget presented to the Board in December 2017.

The operating net position for FY 2018 is forecast at a surplus of $6.6 million. Approximately $0.3 million of this surplus is associated with unspent project expenses that may be carried forward into the next year, as described below.

**Operating Revenues – $2.4 million positive variance**

- **Fare Revenue** is forecast at $42.5 million for the year, an increase of $2.0 million or 4.8% over budget. Ridership and revenue projections for FY 2018 were conservative due to uncertainty over the impacts of the completion of the WMATA SafeTrack program, but VRE ridership has remained stable, leading to higher revenue.
- **Other Revenue** is forecast to be above budget by $0.5 million or 27%, primarily due to rising interest rates resulting in greater interest earnings on VRE’s reserves.
- **Federal and State Revenue** is forecast to be below budget by $0.1 million or 0.3%, primarily due to slightly lower than expected grant and project management reimbursement.
Operating Expenses – $3.2 million positive variance

- The largest single expense variance is in Diesel Fuel, which was budgeted at $4.8 million and is forecast to be under budget by $1.0 million. Fuel price increases that were expected in FY 2018 did not materialize, and VRE has already reduced its fuel price projections in the approved FY 2019 budget.

- All other operating expenses are forecast to be under budget by $2.2 million, or 3.4% of budgeted operating expenditures:
  - Information Technology costs are forecast to be $0.7 million below budget. This includes unspent amounts for Other Professional Services of $0.2 million related to a revised schedule for the SharePoint project. The unspent funds may be carried forward into FY 2019. Total projected savings for Hardware/Software Maintenance is $0.4 million, related to the development of several ongoing IT projects.
  - Total projected savings for Facilities Maintenance is projected to be $0.6 million, primarily due to projected savings in Non-Routine Yard Maintenance and in Non-Routine Station/Facility Maintenance and Office Maintenance. Unspent funds of $0.1 million may be carried forward into FY 2019 for the VRE office renovation.
  - Executive Management costs are projected to be $0.4 million under budget, primarily due to lower expenditures on Legal Fees (under budget by $0.3 million).
  - Total projected savings for salary and fringe benefits in the Chief of Staff and Project Implementation divisions is $0.3 million due to staffing vacancies.
  - Other net departmental savings are projected at $0.2 million, chiefly in Marketing and Safety and Security.

Non-Operating Expenses – $1.0 million positive variance

Certain ‘non-operating’ expenses that are not part of the Capital Improvement Program (CIP) are also included in the year-end operating forecast. The forecast of $1.0 million combined positive variance on these items includes unspent contingency of $0.7 million, unused Bad Debt expense of $50,000, and Insurance expenses under budget by $0.3 million.

A recommendation on the use of the projected surplus will be presented as part of the Proposed FY 2020 Budget in December 2018. Preliminary uses for the projected surplus are to carry forward $0.3 million into the FY 2019 budget for uncompleted projects, to fund one-time items in FY 2020, and to increase the Capital Reserve.
The chart below summarizes actual to budget data by major category:

<table>
<thead>
<tr>
<th>Description</th>
<th>Revised Budget</th>
<th>Year-End Forecast</th>
<th>Variance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fare Revenue</td>
<td>$40.5</td>
<td>$42.5</td>
<td>$2.0</td>
<td>4.8%</td>
</tr>
<tr>
<td>Local Subsidy*</td>
<td>12.9</td>
<td>12.9</td>
<td>0.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Fed/State Revenue</td>
<td>30.7</td>
<td>30.6</td>
<td>-0.1</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>1.3</td>
<td>1.7</td>
<td>0.5</td>
<td>27.4%</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$85.3</strong></td>
<td><strong>$87.8</strong></td>
<td><strong>$2.4</strong></td>
<td><strong>2.7%</strong></td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$73.9</td>
<td>$70.7</td>
<td>$3.2</td>
<td>4.6%</td>
</tr>
<tr>
<td>Non-Operating Expenses</td>
<td>4.7</td>
<td>3.7</td>
<td>1.0</td>
<td>26.8%</td>
</tr>
<tr>
<td>Debt Service</td>
<td>6.7</td>
<td>6.7</td>
<td>0.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Contribution to Reserve</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$85.3</strong></td>
<td><strong>$81.1</strong></td>
<td><strong>$4.2</strong></td>
<td><strong>4.9%</strong></td>
</tr>
<tr>
<td>Net Income (Loss)</td>
<td>$0.0</td>
<td>$6.6</td>
<td>$6.6</td>
<td></td>
</tr>
</tbody>
</table>

*The local subsidy amount shown here is the amount needed for operations; total subsidy is $17.25M.*
FACILITIES UPDATE

The following is a status update of VRE facilities projects:

Completed projects:
1. Removal of vegetation along north edge of L’Enfant storage track
2. Replacement of light poles and fixtures at Manassas Station platforms and canopies

Projects scheduled to be completed this quarter:
1. Repairs to fascia and soffit at Woodbridge Station east building
2. Replacement of ADA parking signage at Brooke and Leeland Road Stations
3. Repairs to concrete and erosion control on ADA ramp and stairs at Leeland Road Station
4. Upgrades to electrical power supply for new communication cabinet at Burke Centre Station
5. Repairs to platform concrete at Manassas Station
6. Replacement of light fixtures at Manassas Station depot
7. Repainting of platform warning messages at Broad Run Station
8. Cleaning of HVAC ductwork at Alexandria Headquarters, Woodbridge Station vendor spaces, Quantico Station, Fredericksburg office, and Crossroads and Broad Run storage yard buildings

Projects scheduled to be initiated this quarter:
1. Design of platform widening at L’Enfant Station
2. Replacement of tactile warning strip at L’Enfant Station
3. Replacement of signage at Franconia-Springfield and Fredericksburg Stations
4. Painting of Franconia-Springfield Station
5. Continuation of painting of Woodbridge Station
6. Replacement of light poles and fixtures at Fredericksburg Station
7. Repairs to platform lighting and communications conduits at Manassas Park Station
8. Replacement of parking lot signage at various stations
9. Installation of monitoring wells on two outfall drainage pipes at Broad Run Yard to allow for accurate discharge sampling for VPDES General Permit compliance
10. Repairs to pavement and striping at Crossroads and Broad Run yards
11. Renovations to Alexandria Headquarters (leased Suite 201, adjacent to current VRE offices)
12. Replacement of parking lot entrance signs at majority of stations
13. Replacement of waste and recycling receptacles throughout VRE system

Ongoing projects:
1. Development of specifications for modernization of Woodbridge Station east elevator
2. Development of IFB for Canopy Roof Replacement at the Backlick Road Station and second station (TBD)
3. Repairs to pavement and striping at Franconia-Springfield, Rippon, Quantico and Leeland Road Stations and parking lot G in Fredericksburg
UPCOMING PROCUREMENTS

Scope of Work Pending:

• Purchase of Passenger Elevators
• Construction of the Lifecycle Overhaul and Upgrade Facility
• Program Management Services
• Graphic Design Services
• Canopy Roof Replacement at the Backlick and Rolling Road Stations
• Passenger Railcar Truck Overhaul Services
• Modernization of VRE Woodbridge Station East Elevator
• Repair and Overhaul of Passenger Car HVAC Assemblies
• Repair and Overhaul of Passenger Car Wheelchair Lift Assemblies
• Seat Bottoms for Passenger Cars
• Automated Electric Motor Parking Brake Systems
• Facility Security Services
• Railcar End Body Door Diaphragm Kits
• Construction of Benchmark Road Slope Stabilization
• Construction of Rolling Road Platform Extension
CAPITAL PROJECTS UPDATES

AS OF APRIL 6TH, 2018

Broad Run Expansion Study (BRX)

- Participated in Project Management Team (PMT) meeting on March 7th
- Participated in cost estimate format reviews on March 12th and March 15th
- Continued finalizing conceptual design details and preliminary evaluation of parking alternatives and other design elements
- Participated in Federal Transit Administration (FTA) coordination meeting on March 19th
- Participated in workshop planning meeting on March 19th
- Participated in a conference call on March 12th with AECOM to discuss the approach of the different parts of the cost estimate
- Forwarded two approved-for-payment invoices from Continental Field Services through VHB’s General Planning Contract Task Order to VRE Manager of Project Development
- Discussed property mosaic with Continental Field Services
- Requested base map for Continental Field Services to use from AECOM which was delivered March 6th and then forwarded to Continental Field Services
- Spoke to Prince William County staff regarding the Route 28 project
- Participated in internal review with VRE Chief Executive Officer (CEO) on March 22nd
- Participated in calls on project on March 21st and March 23rd with team
- Participated in catch-up meeting with VRE Manager of Project Development on March 23rd
- Participated in a conference call on March 30th with AECOM on cost estimate for additional work
- Reviewed meeting notes from March 19th conference call with FTA and forwarded to VRE Manager of Project Development
- Reviewed meeting notes from March 19th conference call on parking proposals and forwarded to VRE Manager of Project Development
- Reviewed meeting notes from March 2nd PMT meeting/conference call and forwarded to VRE Manager of Project Development
- Participated in a conference call with Prince William County transportation staff on April 2nd to discuss adjacent proposed County roadway projects and Route 28 expansion for which the design builder has received NTP
- Participated in the bi-weekly PMT meeting on April 4th
- Met with Continental Field Services and discussed property issues on April 4th
- Participated in conference call with VRE Manager of Project Development and K & J Consultants about Safety and Security analysis for project

System Plan 2040 Update

- Completed Task Order (TO) scope of work, TO forms, and Independent Cost Estimate (ICE)

FY18 National Transit Database 100 Percent Survey

- TO approved on March 16th by VRE Operations Board
- TO signed and Notice to Proceed (NTP) issued on March 22nd
- Kick-off meeting held on March 29th
Constrained Long Range Plan (CLRP) Update/Quadrennial CLRP Financial Analysis
• Coordinate development of CLRP project forms for SmartScale-funded, I-66 Outside the Beltway (OTB) Concession Payment funded VRE projects with Virginia Department of Transportation (VDOT)

Midday Storage Replacement Facility
• Reviewed draft Categorical Exclusion (CE) with additional traffic and cultural resource analysis requested by FTA
• Participated and led discussion on March 30th with District of Columbia State Historic Preservation Office (SHPO) with respect to cultural resources issues

Rolling Road Platform Extension
• Participated in field visit with VRE Chief Engineer and VRE Project Manager on March 29th
• Finalized TO for Construction Management (CM) activities

Crossroads Real Estate Acquisition
• Prepared and submitted offer package to VRE Legal on February 8th

Long Bridge Expansion Study
• Provided contact information for Threat and Vulnerability Assessment analysis to consultant team
• Draft Memorandum of Agreement (MOA) with Federal Railroad Administration (FRA) comments received and forwarded for Legal review

Southeast High Speed Rail Corridor (DC2RVA) Coordination
• Participated in coordination call with DRPT and the consultant team on March 27th

Washington Union Station Project Environmental Impact Statement (EIS)
• Provided comments to Amtrak on 90 percent drawings

Lorton Platform Extension
• Final invoice for Hammerhead processed and paid in March

Quantico Station Improvements
• 90 percent design for station and 90 percent design for site, civil, drainage, track, and retaining wall in vicinity of station continue to be reviewed and commented on by stakeholders
• Utility location and potential conflicts coordinated on site through CSXT, Marine Corps Base Quantico (MCBQ), and other existing utilities and one call systems
• FRA and FTA review of temporary platform in progress
• Progress calls held March 15th and March 29th

Franconia-Springfield Station Improvements
• 30 percent plan revisions pending final emergency egress and American with Disabilities Act (ADA) access decisions by VRE, as well as design review comments by CSXT engineering and operations staff

Lorton Station Improvements (Second Platform)
• 30 percent plan revisions pending final emergency egress and ADA access decisions by VRE, as well as design review comments by CSXT engineering and operations staff
Rippon Station Improvements
- Continued development of 30 percent plans and environmental documents

Leeland Road Station Improvements
- Continued development of 30 percent plans and environmental documents

Brooke Station Improvements
- Continued development of 30 percent plans and environmental documents

Alexandria Pedestrian Tunnel Project
- Reviewed and revised list of assumptions
- Participated in conference call on March 13th with Gannett Fleming (GF) to review plans received and additional information required from GF
- Review comparison matrix provided by GF
- Corresponded with GF about baggage cart and size; forwarded information to Amtrak for confirmation
- Reviewed GF-prepared study report components and cost estimate
- Participated in VRE internal meeting to review report and cost estimates from GF
- Participated in conference call on March 22nd with GF
- Received revisions to GF-prepared study plans, report components and cost estimate from GF on April 6th

Crossroads Lifecycle Overhaul & Upgrade Facility (LOU)
- Reviewed draft LOU Preliminary Hazard Analyses (PHAs) sent by Kensington Consulting on March 5th
- Coordinated with Kensington Consulting for Office of Development (OoD) Safety Awareness training on March 30th
- Revised CM Request for Proposals (RFP) and sent back to procurement/contracts department
- Provided additional comments to VRE procurement/contracts on LOU CM
- Discussed Kensington Consulting Hazard report with VRE Chief Safety, Security & Compliance Officer
- Identified CSXT property easement/agreement for April Board meeting
- Received comments from Michael Baker International about Crossroads Yard drainage
- Reviewed draft Lease Agreement with CSXT language and attachments and provided comments to VRE Chief Operating Officer (COO)
- Received draft Preliminary Hazard Analysis (PHA) and Draft Criteria Conformance Checklist (DCCC) from K&J Consultants

L’Enfant (North) Storage Track Wayside Power
- Power connection to test train made on March 16th
- Met with staff from VRE Contracts Department to discuss contract close-out
- Discussed close-out with C3M Power, LLC
- Finalized TO change order proposal request, and procurement sent to HDR
- Prepared required forms for VRE procurement to process contract amendment

L’Enfant (South) Storage Track Wayside Power

MAY 2018
• Received and processed invoice from HDR
• Contacted Pepco regarding two additional items including plan reviews; requested meeting on April 3rd
• Contacted HDR regarding Pepco changes and meeting on April 3rd
• Discussed agreement with CSXT for this project and agreed to revision of the current agreement
• Visited site with VRE Chief Engineer prior to meeting with Pepco and HDR on April 3rd
• Contacted CSXT for dates to schedule a meeting about the wayside power and trees that CSXT needs to place in same area

Slaters Lane/Alexandria Track 1 Access
• One outstanding progress report was passed through from CSXT to Northern Virginia Transportation Authority (NVTA); no additional progress reports are due
• Requested final design plans reported to have been completed in May 2017

Manassas Park Station Parking Expansion
• Spoke with VHB regarding the outstanding items from Phase A and preparation of a scope of work for Phase B
• Attended review meeting with City of Manassas Park and VHB to review Traffic Impact Analysis (TIA) and 30 percent plan comments
• Reviewed, revised and distributed meeting minutes from the meeting with the City of Manassas Park
• Discussed close-out items of Phase A with VRE Planning Program Administrator
• Drafted scope for Phase B design and limited construction services
• Conducted conference call with VHB on April 6th
Projects Progress Report to Follow
### PASSENGER FACILITIES

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alexandria Station Improvements</strong></td>
<td>Pedestrian tunnel to METRO and eliminate at-grade track crossing.</td>
<td>CD PD EC RW FD CN</td>
</tr>
<tr>
<td></td>
<td>Modify Slaters Lane Interlocking for passenger trains on Track #1.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extend and widen East Platform and elevate West Platform.</td>
<td></td>
</tr>
<tr>
<td><strong>Franconia-Springfield Station Improvements</strong></td>
<td>Extend both platforms and widen East Platform for future third track.</td>
<td></td>
</tr>
<tr>
<td><strong>Lorton Station Improvements</strong></td>
<td>Construct new second platform with pedestrian overpass.</td>
<td></td>
</tr>
<tr>
<td><strong>Rippon Station Improvements</strong></td>
<td>Extend existing platform, construct new second platform with pedestrian overpass.</td>
<td></td>
</tr>
<tr>
<td><strong>Potomac Shores Station Improvements</strong></td>
<td>New VRE station in Prince William County provided by private developer.</td>
<td></td>
</tr>
<tr>
<td><strong>Quantico Station Improvements</strong></td>
<td>Extend existing platform, construct new second platform with pedestrian overpass.</td>
<td></td>
</tr>
<tr>
<td><strong>Brooke Station Improvements</strong></td>
<td>Extend existing platform, construct new second platform with pedestrian overpass.</td>
<td></td>
</tr>
<tr>
<td><strong>Leeland Road Station Improvements</strong></td>
<td>Extend existing platform, construct new second platform with pedestrian overpass.</td>
<td></td>
</tr>
<tr>
<td><strong>Manassas Park Parking Expansion</strong></td>
<td>Parking garage to increase parking capacity to 1,100 spaces.</td>
<td></td>
</tr>
<tr>
<td><strong>Rolling Road Station Improvements</strong></td>
<td>Extend existing platform.</td>
<td></td>
</tr>
<tr>
<td><strong>Crystal City Station Improvements</strong></td>
<td>Replace existing side platform with new, longer island platform.</td>
<td></td>
</tr>
<tr>
<td><strong>L’Enfant Track and Station Improvements</strong></td>
<td>Replace existing platform with wider, longer island platform. Add fourth track (VA-LE)</td>
<td></td>
</tr>
</tbody>
</table>

**PHASE:**
- CD - Conceptual Design
- PD - Preliminary Design
- EC - Environment Clearance
- RW - Right of Way Acquisition
- FD - Final Design
- CN - Construction

**STATUS:**
- Completed
- Underway
- On Hold
- part of the "Penta-Platform" program

1 Total project cost estimate in adopted FY2018 CIP Budget
2 Does not include minor (< $50,000) operating expenditures
* $2,181,630 authorization divided across five "Penta-Platform" program stations
<table>
<thead>
<tr>
<th>Total</th>
<th>Funded</th>
<th>Unfunded</th>
<th>Authorized</th>
<th>Expended</th>
<th>Percent</th>
<th>Date</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,021,865</td>
<td>10,021,865</td>
<td>-</td>
<td>1,814,559</td>
<td>1,534,387</td>
<td>70%</td>
<td>3rd QTR 2020</td>
<td>60% design complete. Investigating alternative construction strategies.</td>
</tr>
<tr>
<td>7,000,000</td>
<td>7,000,000</td>
<td>-</td>
<td>467,500</td>
<td>90,749</td>
<td>30%</td>
<td>3rd QTR 2018</td>
<td>Construction is anticipated to start as part of CSXT work program.</td>
</tr>
<tr>
<td>2,400,000</td>
<td>400,000</td>
<td>2,000,000</td>
<td>-</td>
<td>-</td>
<td>5%</td>
<td>3rd QTR 2020</td>
<td>Design work on East Platform only. West Platform elevation funded.</td>
</tr>
<tr>
<td>13,000,000</td>
<td>13,000,000</td>
<td>-</td>
<td>*</td>
<td>313,129</td>
<td>20%</td>
<td>2nd QTR 2020</td>
<td>Preliminary engineering is anticipated to be complete in 2nd QTR 2018.</td>
</tr>
<tr>
<td>16,150,000</td>
<td>16,150,000</td>
<td>-</td>
<td>*</td>
<td>336,243</td>
<td>20%</td>
<td>2nd QTR 2020</td>
<td>Preliminary engineering is anticipated to be complete in 2nd QTR 2018.</td>
</tr>
<tr>
<td>16,632,716</td>
<td>16,632,716</td>
<td>-</td>
<td>*</td>
<td>231,125</td>
<td>20%</td>
<td>4th QTR 2021</td>
<td>Preliminary engineering is anticipated to be complete in 3rd QTR 2018.</td>
</tr>
</tbody>
</table>

*No costs for VRE. Private developer providing station.*

| 9,500,000  | 9,500,000 | 574,706  | -          | -        | 30%     | TBD        | Completion of PD & EC pending execution of IPROC grant by DRPT.            |
| 21,334,506 | 21,334,506 | -        | *          | 220,914  | 20%     | 4th QTR 2021 | Completion of PD & EC pending execution of REF grant by DRPT.            |
| 14,336,156 | 14,336,156 | -        | *          | 179,310  | 20%     | 4th QTR 2021 | Completion of PD & EC pending execution of REF grant by DRPT.            |
| 19,600,000 | 2,500,000 | 17,100,000 | 665,785   | 601,176  | 25%     | 2nd QTR 2018 | 30% design plans received and under review.                             |
| 2,000,000  | 2,000,000  | -        | 442,900    | 224,030  | 20%     | 3rd QTR 2020 | 60% design plans under review by NS.                                    |
| 21,160,000 | 400,000    | 20,760,000 | 370,285   | 360,747  | 10%     | 2nd QTR 2023 | Completion of PD & EC pending execution of REF grant by DRPT.            |
| 68,600,000 | 2,980,000 | 65,620,000 | -          | 45,139   | 10%     | 2nd QTR 2023 | Completion of planning, PD & EC pending execution of REF grant by DRPT. |
## TRACK AND INFRASTRUCTURE

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DESCRIPTION</th>
<th>PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton-to-Crossroads Third Track</td>
<td>2¼-miles of new third track with CSXT design and construction of signal and track tie-ins.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## MAINTENANCE AND STORAGE FACILITIES

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DESCRIPTION</th>
<th>PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>L'Enfant North Storage Track and Wayside Power</td>
<td>Conversion of existing siding into a midday train storage track.</td>
<td>N/A</td>
</tr>
<tr>
<td>L'Enfant South Storage Track and Wayside Power</td>
<td>Conversion of CSXT Temporary Track to VRE Storage Track (1,350 feet) and Associated Signal Work</td>
<td>N/A</td>
</tr>
<tr>
<td>Lifecycle Overhaul and Upgrade Facility</td>
<td>New LOU facility to be added to the Crossroads MSF.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## CROSSROADS MAINTENANCE AND STORAGE FACILITY LAND ACQUISITION

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DESCRIPTION</th>
<th>PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossroads Maintenance and Storage Facility Land Acquisition</td>
<td>Acquisition of 16.5 acres of land, construction of two storage tracks and stormwater retention and new</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## MIDDAY STORAGE

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DESCRIPTION</th>
<th>PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midday Storage</td>
<td>New York Avenue Storage Facility: Planning, environmental and preliminary engineering.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## ROLLING STOCK

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DESCRIPTION</th>
<th>PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Railcar Procurement</td>
<td>Acquisition of 29 new railcars.</td>
<td>N/A</td>
</tr>
<tr>
<td>Positive Train Control</td>
<td>Implement Positive Train Control for all VRE locomotives and control cars.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## PLANNING, COMMUNICATIONS AND IT

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DESCRIPTION</th>
<th>PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Run Expansion (was Gainesville-Haymarket Extension)</td>
<td>NEPA and PE for expanding commuter rail service capacity in Western Prince William County</td>
<td>-</td>
</tr>
<tr>
<td>Mobile Ticketing</td>
<td>Implementation of a new mobile ticketing system.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### PHASE:
- **CD** - Conceptual Design
- **PD** - Preliminary Design
- **EC** - Environment Clearance
- **RW** - Right of Way Acquisition
- **FD** - Final Design
- **CN** - Construction

### STATUS:
- ◆ Completed
- ● Underway
- □ On Hold

1. Total project cost estimate in adopted FY2018 CIP Budget

2. Does not include minor (< $50,000) operating expenditures
<table>
<thead>
<tr>
<th>ESTIMATED COSTS ($)</th>
<th>COMPLETION</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>Funded</td>
<td>Unfunded</td>
</tr>
<tr>
<td>32,500,000</td>
<td>32,500,000</td>
<td>-</td>
</tr>
<tr>
<td>4,398,996</td>
<td>4,398,996</td>
<td>-</td>
</tr>
<tr>
<td>3,965,000</td>
<td>3,965,000</td>
<td>-</td>
</tr>
<tr>
<td>38,146,323</td>
<td>38,146,323</td>
<td>-</td>
</tr>
<tr>
<td>2,950,000</td>
<td>2,950,000</td>
<td>-</td>
</tr>
<tr>
<td>88,800,000</td>
<td>88,800,000</td>
<td>-</td>
</tr>
<tr>
<td>75,264,693</td>
<td>75,264,693</td>
<td>-</td>
</tr>
<tr>
<td>10,553,000</td>
<td>10,553,000</td>
<td>-</td>
</tr>
<tr>
<td>617,791,163</td>
<td>5,885,163</td>
<td>611,906,000</td>
</tr>
<tr>
<td>3,510,307</td>
<td>3,510,307</td>
<td>-</td>
</tr>
</tbody>
</table>
MAY 2018

IN THIS ISSUE:

LETTER FROM THE CEO: ASK THE PROJECTS TEAM (p1)

FBI K-9 TRAINING (p3)

BRING YOUR FULL-SIZE BIKE (p4)
There’s plenty to love at Potomac Shores. Like award-winning homes. A new elementary school. Sports fields, parks and trails. And a close-knit community of residents enjoying events and experiences that make it feel like you belong to one great, big happy family.

Share the love on Facebook or Twitter #PSILoveYouVA
Like last year, our Projects Team will be available for questions at the 2018 Meet the Management events. Also like last year, the team will display presentation boards with planned development information relevant to the station.

With several large-scale projects intended to improve overall system capacity and operations, our planners and engineers are equipped to discuss phases and estimated timelines for projects like the Alexandria tunnel, the Crystal City station relocation, Long Bridge, the Broad Run expansion, and system-wide third tracking.

A key component of the Meet the Management event series is the opportunity for our team to hear directly from our riders. Rider input is highly valued and an important part of the system design process. We want to hear from you as well as to inform you of the capital projects to further improve your commute.

With this said, please do not only stop to chat with the Projects Team during this year’s Meet the Management series – I would also appreciate time to speak with you personally. Hope to see you soon.

Sincerely,

DOUG ALLEN
Chief Executive Officer
Virginia Railway Express

Access RIDE online at VRE.org/RIDE
Occoquan introduces Discover Occoquan, a free family-friendly event in Downtown Historic Occoquan, on May 19, 2018

The Town of Occoquan and the Occoquan Merchants Guild will host Discover Occoquan Day on Saturday, May 19, 2018 from 10 a.m. to 8 p.m. in downtown Historic Occoquan. This brand new event features a full day of free activities for everyone, including a boat parade, interactive classes and free demonstrations hosted by Occoquan businesses, historic tours, live entertainment, a photo booth, children’s activities, and more!

The day kicks off with the Blessing of the Fleet Parade along the Occoquan River beginning at 10 a.m. and viewable from the Town Dock at Mamie Davis Park, 205 Mill Street. Then, from 11 a.m. to 4 p.m., visitors are invited to browse the town's unique shops, boutiques, galleries, restaurants, and cafes and experience all that Occoquan has to offer. Throughout the day, businesses will be hosting a variety of free drop-in classes and demonstrations including yoga in the park, painting for adults and kids, pen and ink drawings, massages, candle pouring, fiber art, jewelry making, puzzle making, SCUBA, pet CPR, and more!

In addition to these free activities, there will be a special flash sale from 5 p.m. to 6 p.m. Participating Occoquan businesses will have blue balloons. Finally, this fun-filled day will culminate with a free outdoor concert at River Mill Park, 458 Mill Street from 6 p.m. to 8 p.m., featuring rock and soul music by The Sidleys. Bring a lawn chair or blanket to sit on to watch the show!

Admission is free. Free on-street and public lot parking is available in-town. In addition, off-site parking with shuttle bus service sponsored by Patriot Scuba is available from the Route 123 Commuter lot at the intersection of Old Bridge Road and Gordon Boulevard and drops off at 305 Mill Street. The shuttle service, provided by Earnie Porta’s Occoquan Tourism Company, will collect patrons from the lot on the half hour beginning at 11 a.m. through 5 p.m., with a final pick up in town at 8 p.m. The shuttle is free, but donations to the non-profit Patriots for Disabled Divers are appreciated. Stay the day and check your strollers, lawn chairs and blankets at Patriot Scuba, 305 Mill Street, for the concert at River Mill Park.

For more information, visit occoquanva.gov/discover-occoquan or Facebook.com/OccoquanCraftShow

"The Awesome Eighties" Spring Concert, Manassas Chorale
Friday Jun 1, 2018 @ 7:30 pm
Hylton Performing Arts Center, 10960 George Mason Circle, Manassas

From Broadway to the airwaves, flash back to the 1980s as the Manassas Chorale and the Greater Manassas Children’s Choir present all your favorite hits! Concert with a Cause: Help support the Haymarket Regional Food Pantry by donating non-perishable food items at the concert.

For more information visit: manassaschorale.org
VRE TRAINS WITH FBI K-9s

VRE hosts multiple law enforcement K-9 trainings throughout the year to practice successful detection of illegal items in various scenarios onboard as well as at our Maintenance and Storage Facilities (MSF). Last month we held a joint event with the Manassas Airport at our Broad Run MSF where we welcomed a total of 92 units representing various federal and local agencies.

Sponsored by the FBI Laboratory Explosives Unit, agencies and their explosive divisions K-9s in attendance were:

- Federal Bureau of Investigation
- US Secret Service
- Metropolitan Washington Airports Authority Police
- National Institute of Health Police
- US Marines – Quantico
- US Army – Fort Lee
- Department of Homeland Security
- Transportation Security Administration
- Defense Intelligence Agency
- Stafford County Sheriff
- Alexandria Police
- Prince William County Police
- Town of Leesburg Police
- Arlington County Police
- Falls Church Police Department
- Maryland Park Police
- Prince George’s County Police
- Montgomery County Police

Each animal was prompted to locate explosives in six different locations throughout the Broad Run MSF and on a railcar.
VRE UPDATE

BRING YOUR FULL-SIZE BIKE ONBOARD
MAY 18TH IS BIKE TO WORK DAY

While you may not be able to ride your bike door to door from home to the office, you can most likely ride to work from the station closest to your office and back again. Celebrate May as National Bike Month, and utilize select trains to carry along your full-size bike.

A few VRE policies to be aware of:

- Bicycles must board at the northern-most car on the train and utilize the southern half of the car.
- No more than two (2) bicycles are allowed on a car.
- Bicycles must be tethered to the bench seats using a bungee cord attached to the eyelet on the seat frame. The south-end bench is distinguishable by only having four (4) folding seats.
- The bench seating on the north end of the car is priority seating for passengers with disabilities, and cannot be used for bicycles.
- Bicycles will be boarded and removed last – after all other passengers have boarded or detrained.
- Bicycles must be clean and free of grease.
- Passengers are not permitted to ride bicycles on the platforms or trains.

THE FRIENDLIEST TRAINS FOR TWO-WHEELS:
Please note full-size bikes are only allowed on select VRE trains.

FREDERICKSBURG AM: VRE 312 & 314

<table>
<thead>
<tr>
<th>TRAIN #</th>
<th>312</th>
<th>314</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPOTSYLVANIA</td>
<td>7:05a</td>
<td>7:33a</td>
</tr>
<tr>
<td>FREDERICKSBURG</td>
<td>7:16</td>
<td>7:44</td>
</tr>
<tr>
<td>LEELAND ROAD</td>
<td>7:23</td>
<td>7:51</td>
</tr>
<tr>
<td>BROOKE</td>
<td>7:29</td>
<td>7:57</td>
</tr>
<tr>
<td>QUANTICO</td>
<td>7:41</td>
<td>8:09</td>
</tr>
<tr>
<td>RIPPON</td>
<td>7:50</td>
<td>8:18</td>
</tr>
<tr>
<td>WOODBRIDGE</td>
<td>7:57</td>
<td>8:25</td>
</tr>
<tr>
<td>LORTON</td>
<td>8:04</td>
<td>8:32</td>
</tr>
<tr>
<td>FRANCOLN/SPRINGFIELD (L)</td>
<td>8:12</td>
<td>8:40</td>
</tr>
<tr>
<td>ALEXANDRIA (L)</td>
<td>8:24</td>
<td>8:52</td>
</tr>
<tr>
<td>CRYSTAL CITY (L)</td>
<td>8:33</td>
<td>9:01</td>
</tr>
<tr>
<td>L’ENFANT (L)</td>
<td>8:41</td>
<td>9:09</td>
</tr>
<tr>
<td>UNION STATION</td>
<td>8:49a</td>
<td>9:17a</td>
</tr>
</tbody>
</table>

FREDERICKSBURG PM: VRE 313 & 315

<table>
<thead>
<tr>
<th>TRAIN #</th>
<th>313</th>
<th>315</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNION STATION</td>
<td>6:00p</td>
<td>6:40p</td>
</tr>
<tr>
<td>L’ENFANT</td>
<td>6:08</td>
<td>6:48</td>
</tr>
<tr>
<td>CRYSTAL CITY</td>
<td>6:15</td>
<td>6:55</td>
</tr>
<tr>
<td>ALEXANDRIA</td>
<td>6:23</td>
<td>7:03</td>
</tr>
<tr>
<td>FRANCONIA/SPRINGFIELD</td>
<td>6:34</td>
<td>7:14</td>
</tr>
<tr>
<td>LORTON</td>
<td>6:41</td>
<td>7:21</td>
</tr>
<tr>
<td>WOODBRIDGE</td>
<td>6:49</td>
<td>7:29</td>
</tr>
<tr>
<td>RIPPON</td>
<td>6:55</td>
<td>7:35</td>
</tr>
<tr>
<td>QUANTICO</td>
<td>7:05</td>
<td>7:45</td>
</tr>
<tr>
<td>BROOKE (L)</td>
<td>7:19</td>
<td>7:59</td>
</tr>
<tr>
<td>LEELAND ROAD (L)</td>
<td>7:28</td>
<td>8:08</td>
</tr>
<tr>
<td>FREDERICKSBURG (L)</td>
<td>7:36</td>
<td>8:16</td>
</tr>
<tr>
<td>SPOTSYLVANIA</td>
<td>7:47p</td>
<td>8:27p</td>
</tr>
</tbody>
</table>

MANASSAS AM: VRE 330 & 332

<table>
<thead>
<tr>
<th>TRAIN #</th>
<th>330</th>
<th>332</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROAD RUN</td>
<td>7:20a</td>
<td>7:48a</td>
</tr>
<tr>
<td>MANASSAS</td>
<td>7:28</td>
<td>7:56</td>
</tr>
<tr>
<td>MANASSAS PARK</td>
<td>7:34</td>
<td>8:02</td>
</tr>
<tr>
<td>BURKE CENTRE</td>
<td>7:48</td>
<td>8:16</td>
</tr>
<tr>
<td>ROLLING ROAD</td>
<td>7:53</td>
<td>8:21</td>
</tr>
<tr>
<td>BACKLICK ROAD</td>
<td>8:01</td>
<td>8:29</td>
</tr>
<tr>
<td>ALEXANDRIA</td>
<td>8:14</td>
<td>8:42</td>
</tr>
<tr>
<td>CRYSTAL CITY</td>
<td>8:23</td>
<td>8:51</td>
</tr>
<tr>
<td>L’ENFANT</td>
<td>8:31</td>
<td>8:59</td>
</tr>
<tr>
<td>UNION STATION</td>
<td>8:39a</td>
<td>9:07a</td>
</tr>
</tbody>
</table>

MANASSAS PM: VRE 335 & 337

<table>
<thead>
<tr>
<th>TRAIN #</th>
<th>335</th>
<th>337</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNION STATION</td>
<td>6:10p</td>
<td>6:50p</td>
</tr>
<tr>
<td>L’ENFANT</td>
<td>6:18</td>
<td>6:58</td>
</tr>
<tr>
<td>CRYSTAL CITY</td>
<td>6:25</td>
<td>7:05</td>
</tr>
<tr>
<td>ALEXANDRIA</td>
<td>6:33</td>
<td>7:13</td>
</tr>
<tr>
<td>BACKLICK ROAD</td>
<td>6:44</td>
<td>7:24</td>
</tr>
<tr>
<td>ROLLING ROAD</td>
<td>6:52</td>
<td>7:32</td>
</tr>
<tr>
<td>BURKE CENTRE</td>
<td>6:58</td>
<td>7:38</td>
</tr>
<tr>
<td>MANASSAS PARK</td>
<td>7:12</td>
<td>7:52</td>
</tr>
<tr>
<td>MANASSAS</td>
<td>7:19</td>
<td>7:59</td>
</tr>
<tr>
<td>BROAD RUN</td>
<td>7:29p</td>
<td>8:09p</td>
</tr>
</tbody>
</table>

Don’t Have a Bike but Still Want to Ride?

Capital Bike Share has many locations near VRE stations. Visit capitalbikeshare.com to see if the program is a good fit, and to view their system map.
NEAR THE OFFICE

“Hirshhorn in the City” Debuts
1980s-Inspired Posters by Washington Artists on Streets of DC


The Hirshhorn Museum and Sculpture Garden partnered with the Southwest Business Improvement District to present “Brand New SW,” a public art project of graphic posters exploring the connection between art and 1980s marketing. The project highlights the connection between the art world today and the ‘80s art scene that radiated from New York City’s East Village, where a pioneering generation of artists used elements of advertising to blur the line between art and commerce.

The Hirshhorn identifies No Kings Collective, NoMüNoMü and SUPERWAXX as a new generation of artists that push the limits of art, brand and community engagement. “It’s thrilling to see the ideas and aesthetics of the exhibition ‘Brand New’ resonate decades later in the vision and practice of these exceptional DC artists,” said Hirshhorn Director Melissa Chiu. “More and more, contemporary art is a vital part of the everyday life of Washington, a creative force that is driving city-wide conversations about the importance of culture in the 21st century.”

About the Hirshhorn:
The Hirshhorn Museum and Sculpture Garden is the national museum of modern and contemporary art and a leading voice for 21st-century art and culture. Part of the Smithsonian, the Hirshhorn is located prominently on the National Mall in Washington, D.C. Free to all, 364 days a year.

About the SWBID:
The Southwest Business Improvement District spans 483 acres in Southwest Washington and works to enhance its connectivity, improve the state of infrastructure and strengthen the area’s identity as a lab for arts, culture and transformative urban technologies within the nation’s capital.

SUPERWAXX (artist of above poster) is a native of Richmond, Virginia, currently creating and residing in Washington, D.C. Her work is heavily influenced by animated cartoons, comic books, popular culture and street art.
MAX Corporation and Regal Entertainment Group announced in January an expansion of the companies’ existing joint revenue sharing agreement to include the installation of 11 additional IMAX® theatres in the U.S – including the Fredericksburg Regal location. The installation in Fredericksburg is now complete and open.

“We believe in the strategic value IMAX delivers to our business, which is why we’re increasing our IMAX footprint and extending the length of our agreements for all of our IMAX sites,” stated Amy Miles, CEO of Regal Entertainment Group. “Regal is focused on delivering the best customer experience and we believe that IMAX both delights our guests and drives incremental revenue for our business.”

COMMUNITY UPDATE

NEIGHBORHOOD NEWS: CITY OF MANASSAS
SINISTRAL BREWING COMPANY OPEN IN HISTORIC DOWNTOWN MANASSAS

Sinistral Brewing Company recently opened a new brewery in Historic Downtown Manassas. The 3,500 square foot brewery, located at 9423 Main Street, adjacent to the Philly Tavern, consists of a 7-barrel brewhouse, taproom and beer garden.

“The City of Manassas is excited to welcome Sinistral Brewing to our Historic Downtown,” said City Manager W. Patrick Pate. “The City of Manassas has quickly become the location of choice for craft brewers and distilleries because of our unique, vibrant and business friendly environment.”

Direct from owner and head brewer Blane Perry’s passion for the art and craft of brewing, Sinistral Brewing Company offers a selection of flagship beers, rotating seasonal specialties and experimental beers using locally sourced ingredients. Flight tastings, pints and crowler fills are all available.

For more information, visit: facebook.com/sinistralbrewingcompany

NEIGHBORHOOD NEWS: FREDERICKSBURG
IMAX NOW OPEN AT FREDERICKSBURG REGAL CINEMAS

MAX Corporation and Regal Entertainment Group announced in January an expansion of the companies’ existing joint revenue sharing agreement to include the installation of 11 additional IMAX® theatres in the U.S – including the Fredericksburg Regal location. The installation in Fredericksburg is now complete and open.

“We believe in the strategic value IMAX delivers to our business, which is why we’re increasing our IMAX footprint and extending the length of our agreements for all of our IMAX sites,” stated Amy Miles, CEO of Regal Entertainment Group. “Regal is focused on delivering the best customer experience and we believe that IMAX both delights our guests and drives incremental revenue for our business.”
Metro announced on April 10th that it is working with its fare payment vendor to become “mobile ready” by next year, enabling customers to pay for their Metro trip using a mobile device rather than a SmarTrip card. The new mobile fare payment platform will work with Metro’s existing infrastructure, eventually allowing customers to tap their mobile device to the white target at the faregate. The payment process is designed to be seamless and will have a similar experience to tapping a SmarTrip card today. Using the app, customers will be able to check fares, get real-time service information, and add money to their SmarTrip account instantly through Auto-Reload when the value is low.

Metro expects to complete the mobile fare payment upgrades in 2019, creating a platform that supports multiple mobile payment providers. Because payment in the transit environment must meet certain technical requirements to ensure quick transaction speeds, each mobile provider will announce the ability for customers to pay for Metro trips using their service on their own timetable.

Mobile payments will be supported on Metrorail, Metrobus, and regional bus services that accept SmarTrip today. The modernization project will be done in three phases. During the first phase, which is already underway, Metro will upgrade existing fareboxes, faregates and fare vending machines to support mobile payments and extend their useful life until they can be replaced. During the second phase of the project to be completed by 2020, Metro will install new faregates at more than 900 entry/exit lanes at all 91 stations. The current faregates are more than 25 years old, using original power and communications systems. The new faregate design will be selected based on a number of factors, including customer input, speed, reliability, and ability to prevent fare evasion. In addition, new fareboxes will be installed on buses to replace the existing 15-year old equipment. The final phase of the fare modernization will include new fare vending machines that will be more user friendly with large touchscreens, better accessibility for customers with disabilities, multi-language support, and a smaller physical footprint.

VRE is communicating with WMATA on the project. VRE hopes for interconnectivity in the longterm, and will support WMATA in compatibility efforts.
Reach our passengers with advertising opportunities on our platforms, in our trains and through our award-winning RIDE Magazine. 70 percent of passengers have an annual household income of more than $100,000.

For more information, visit: vre.org/advertising

Contact: advertising@vre.org
(703) 838-5417

Get Noticed With VRE Advertising

urge your boss to consider Fredericksburg!
visit fredericksburgva.com/considerfxbg to learn how.

Jamie Scully enjoys a daily walk to work, accompanied by his family.
RAIL TIME PUZZLES

ACROSS
1 Boxing match signal
5 Category
10 Earth Day month
15 Blog entry
19 Operatic selection
20 Avail of again
21 Feudal lord
22 Fjord city
23 Distorting
25 Footwear for Federer
27 Things done
28 "Same here!"
29 Qualifying races
30 Invite for
31 Retentive ability
34 Hwy’s. with numbers
36 Tour guides, for instance
38 Zodiac feline
39 Sharp knock
42 Amusement center of yore
47 Nebulous nature
50 In a cooler, perhaps
51 Numerical prefix
52 CD-
53 Teheran natives
54 Final figures
56 Be plotting
58 Charged
59 Closes tightly
62 Highly skilled
64 Glimpse
65 Sleight-of-hand expert
66 Campus club
73 Moral principle
74 Pithy saying
79 Christie detective
81 Floating freely
84 Board game equipment
86 Plunder
87 Young socialite
88 Sub __ (secretly)

91 Some corporate jets
92 Sculpture medium
94 Big name in hot-air balloon history
96 High fashion monogram
97 Jack-in-the-box part
98 Hiker’s water holder
99 Actor Penn
101 Convertible, slantingly
102 Goal
107 Do the driving
110 Short drives
112 "Operators are standing by!"
114 Thing in common
116 Small, sweet sandwich
119 Surrounded by
120 Inferno author
121 Court figure
122 Safari attire
123 Part of wine lists
124 Lock of hair
125 Rattler, for one
126 Scrutinizes

DOWN
1 Tuscaloosa team, familiarly
2 Novelist Jong
3 Certain written reminders
4 Vision correction acronym
5 Hiker’s snack
6 Sales staff
7 "Certainment!" "SEALS’ service: Abbr.
9 Violin pin
10 Transforms
11 Deep devotion
12 City near Lake Tahoe
13 Pays no mind to
14 Floral gel sand
15 Masquerades (as)

53 64 75

46 67 2

1 7 4

9 6 7

"I’m sorry, we’ve got parent teacher conferences tonight, and that always takes forever.”
Ever notice how many pop songs reference trains?

**VRE ASKS:** What's your favorite "train song"?

*Friendly Reminder: Remember to wear your headphones. While we're sure you have great taste in music, audio books, and video – we ask that you do not use the speaker on your device onboard.*
This page intentionally left blank.
RESOLUTION #2361

SUBJECT: Authorize the VRE CEO to Execute a One-Year Extension of the Existing Amended and Restated Operating/Access Agreement with CSX Transportation

WHEREAS: The Commissions currently have an Amended and Restated Operating/Access Agreement with CSX Transportation (CSXT) relating to VRE operations in the Fredericksburg to Washington corridor, with the agreement ending on June 30, 2018;

WHEREAS: VRE staff is currently engaged in ongoing discussions with CSXT concerning a new agreement and does not anticipate conclusion of these discussions prior to the expiration of the Amended and Restated Operating/Access Agreement on June 30, 2018;

WHEREAS: The purpose of this extension is to allow time to identify and negotiate additional capacity improvement projects in the corridor;

WHEREAS: Necessary funding has been incorporated into the FY2019 VRE budget to allow VRE to continue its operations over CSXT tracks via this extension; and

WHEREAS: The VRE Operations Board recommends the following action.

NOW, THEREFORE, BE IT RESOLVED that the Northern Virginia Transportation Commission hereby authorizes the VRE Chief Executive Officer to execute a one-year extension of the existing Amended and Restated Operating/Access Agreement with CSX Transportation through June 30, 2019.

Approved this 7th day of June 2018.

________________________________________
Paul C. Smedberg
Chairman

Katie Cristol
Secretary-Treasurer
RESOLUTION #2362

SUBJECT: Authorize the VRE CEO to Submit VRE Projects to USDOT for FY2018 BUILD Grant Funding Consideration

WHEREAS: The VRE Crystal City Station Improvements and L'Enfant Station and Virginia Avenue to L'Enfant Fourth Track projects are high-priority projects that are partially funded through the completion of Preliminary Engineering and Environmental Review;

WHEREAS: Additional funding is needed to complete the Final Design for the Crystal City and L'Enfant projects;

WHEREAS: The U.S. Department of Transportation issued a Notice of Funding Opportunity for Better Utilizing Investments to Leverage Development Transportation Discretionary (BUILD) Grants program on April 25, 2018, to solicit applications for grants to be awarded on a competitive basis for projects that will have a significant local or regional impact; and

WHEREAS: The non-federal match for the BUILD Grants is expected to be up to $5,270,000 and, in the event the grants are approved, authorization for grant match funds will be presented to the Operations Board and the Commissions for approval; and

WHEREAS: The VRE Operations Board recommends the Commissions authorize the requested action.

NOW, THEREFORE, BE IT RESOLVED that the Northern Virginia Transportation Commission hereby authorizes the VRE Chief Executive Officer to submit, on behalf of the Commissions, application(s) for VRE station improvements under the U.S. Department of Transportation Better Utilizing Investments to Leverage Development Transportation Discretionary (BUILD) Grants program, to make any necessary corrections to project amounts or descriptions in the application(s), and to execute all project funding agreements that may be required upon approval of grants for the projects.

Approved this 7th day of June 2018.

__________________________________________
Paul C. Smedberg
Chairman

Katie Cristol
Secretary-Treasurer
To: Chairman Nohe and the VRE Operations Board  
From: Doug Allen  
Date: May 18, 2018  
Re: Recommend Authorization to Submit VRE Projects to USDOT for FY 2018 BUILD Funding Consideration and Authorization of VRE Funds for Required Match

Recommendation:

The VRE Operations Board is asked to recommend the Commissions authorize the VRE Chief Executive Officer to submit, on behalf of the Commissions, application(s) for VRE station improvements under the U.S. Department of Transportation (USDOT) Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program, to make any necessary corrections to project amounts or descriptions in the application, and execute all project funding agreements that may result from consideration of the projects.

The Operations Board is also asked to authorize the commitment of VRE funds up to $5,270,000, as the match for the BUILD Transportation Discretionary Grants program application(s).

Summary:

The Crystal City Station Improvements project and the L’Enfant Station Improvements / VA to LE Fourth Track project are identified in the VRE Capital Improvement Program and System Plan 2040. Funding has already been identified to complete the initial Preliminary Engineering Design and Environmental Review phases for each project using Virginia Rail...
Enhancement Fund (REF) grants, VRE Capital Reserve funds, and Northern Virginia Transportation Authority funds. The BUILD grant application(s), if selected, would provide funding to complete the engineering design for the projects.

**Background:**

On April 25, 2018 the USDOT issued a Notice of Funding Opportunity (NOFO) to solicit applications for the BUILD program, previously known as the Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants program. Funds for the FY 2018 BUILD program will be awarded on a competitive basis for projects that will have a significant local or regional impact. Applications are due on July 19, 2018.

The BUILD program allows up to $15 million of the total program funding for the planning, preparation, or design of surface transportation projects, referred to as BUILD Transportation Planning grants. In order to keep pace with the associated Alexandria Fourth Track Project and the Long Bridge Project, the following VRE projects are recommended for submission for consideration under the BUILD Transportation Planning grant program, for Final Design.

1. Crystal City Station Improvements: relocated and expanded station with longer platform for full-length trains and service on two tracks.
2. L’Enfant Station / VA to LE Fourth Track Improvements: relocated and expanded station with longer platform for full-length trains from two tracks and addition of related fourth through the station from Virginia (VA) interlocking to L’Enfant (LE) interlocking.

Federal BUILD grant funds may be used for up to 80% of the project cost. The balance of the project cost must be from non-Federal sources including State funds originating from programs funded by State revenue, local funds originating from State or local revenue-sources, or private funds.

Staff, along with our consultants, will develop the required Benefit/Cost Analysis (BCA) and analyze the results prior to submission. To be more competitive, a Non-Federal overmatch (a match greater than the 20% minimum) may be required. Therefore, the authorization request for VRE funds is for up to 50% of the total cost, but may be as little as 20%. If the application is successful, a formal amendment to the FY 2019 Operating and Capital Budget for the use of VRE funds for the grant match would be presented to the Operations Board for approval and referral to the Commissions.

<table>
<thead>
<tr>
<th></th>
<th>Total Final Design Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystal City Station Improvements</td>
<td>$4,285,000</td>
</tr>
<tr>
<td>L’Enfant Station Improvements / VA to LE Fourth Track Improvements</td>
<td>$6,253,000</td>
</tr>
<tr>
<td>Total</td>
<td>$10,538,000</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Federal Match (20%)</td>
<td>$2,108,000</td>
</tr>
<tr>
<td>BUILD Grant Request (80%)</td>
<td>$8,430,000</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Non-Federal Match (50%)</td>
<td>$5,270,000</td>
</tr>
<tr>
<td>BUILD Grant Request (50%)</td>
<td>$5,270,000</td>
</tr>
</tbody>
</table>

**Fiscal Impact:**

The submission of a project funding request has no fiscal impact. If selected for BUILD grant funding, a formal amendment to the FY 2019 Operating and Capital Budget to reflect the receipt of the BUILD grant funds and use of VRE funds for the grant match would be presented to the Operations Board in December 2018 for approval and referral to the Commissions.
A. DRPT Report

DRPT Director Jennifer Mitchell will provide an update on DRPT activities at the June meeting. The monthly Department of Rail and Public Transportation (DRPT) Report is attached.

B. Long Bridge Project Update

DRPT Director Mitchell will also give an update on the Long Bridge project, which is a multi-agency coordinated study with the District Department of Transportation (DDOT), Federal Railroad Administration (FRA), Virginia Railway Express (VRE), Department of Rail and Public Transportation (DRPT), Amtrak and CSX Transportation (CSXT), the bridge owner. The purpose of the project is to provide additional railroad capacity across the Potomac River. Currently an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA), is being prepared to document and disclose potential impacts and benefits of expanding and/or replacing the Long Bridge.
This page intentionally left blank.
TO: Chairman Smedberg and NVTC Commissioners

FROM: Jennifer Mitchell, Director

DATE: May 30, 2018

SUBJECT: Virginia Department of Rail and Public Transportation (DRPT) Update

**General Update**

The Commonwealth Transportation Board’s (CTB) is scheduled to approve the Six-Year Improvement Program (SYIP) for FY 19-24 at its meeting on June 20 in Richmond. DRPT’s draft SYIP for FY 19-24 is available on the DRPT web site at: [www.drpt.virginia.gov](http://www.drpt.virginia.gov). The CTB is also scheduled to approve NVTC’s 2018 I-66 Commuter Choice Program at its June meeting after being briefed on the program in May.

The July 2018 CTB Workshop and Meeting are scheduled to be held in Northern Virginia, likely in Alexandria.

The next meeting of the Transit Service Delivery and Advisory Committee (TSDAC) is scheduled for 10:00 a.m. on Thursday, June 7, 2018 at the Department of Motor Vehicles (DMV) Central Customer Care Center, located at 2300 West Broad Street in Richmond. The meeting will be livestreamed for anyone who cannot attend in person. TSDAC members continue work on the development of a capital prioritization process and revision of the operating allocation formula to service development factors, both due to be fully implemented by the CTB by July 1, 2019 per SB 856/HB 1539. The TSDAC is also supporting the development of guidance for development of Transit Strategic Plans by urban transit agencies. This guidance will be promulgated by December 1, 2018.

The submission deadline for Pre-Applications for SMART SCALE Round 3 funding was 5:00 p.m. on June 1, 2018. Applicants must have submitted a Pre-Application for a project by this date in order to submit a Full Application for funding (this is a change from previous cycles). The deadline for the submission of Full Applications is 5:00 p.m. on August 1. The Virginia Office of Intermodal Planning and Investment (OIPI) has hosted several SMART SCALE training sessions for applicants and continues to do so. DRPT staff is available to provide technical assistance and pre-screening.

**DRPT.Virginia.gov**

*Improving the mobility of people and goods while expanding transportation choices.*
services to interested transit project applicants before applications are due on August 1. Todd Horsley is DRPT’s Smart Scale application contact in Northern Virginia. He can be contacted at todd.horsley@drpt.virginia.gov or 703-259-2117.

The United States Department of Transportation (USDOT) and the Federal Transit Administration (FTA) have announced the following active funding opportunities that may be of interest to local jurisdictions and/or transit agencies:

1. On May 24 FTA announced the availability of $25.8 million in grant funds to support comprehensive planning associated with new fixed guideway and core capacity improvement projects. The grant funds are provided through FTA’s Pilot Program for Transit-Oriented Development (TOD) Planning; see a summary of the funding opportunity with links to the Federal Register application materials. Applications are due July 23, 2018.
2. On May 17 USDOT announced the availability of $1.5 billion for National Infrastructure Investments in its new Better Utilizing Investments to Leverage Development (BUILD) grant program (formerly the TIGER grant program). Applications are due July 19, 2018.
3. On April 23 FTA announced the availability of $84.45 million in grant funds to support the purchase or lease of low or no emission vehicles as well as related equipment and facilities. The grant funds are provided through FTA’s Low or No Emission Vehicle Program – 5339(c). Applications are due on June 18, 2018.

Requests for letters of support from DRPT for applications for any of the above programs should be submitted to Todd Horsley at todd.horsley@drpt.virginia.gov at least two weeks before the application deadline.

DRPT continues to work on moving various planning and pre-construction elements of the Atlantic Gateway Program forward, which will improve freight and passenger rail service in Northern Virginia, DC, and points south. This includes a third track project from Occoquan to Franconia, a fourth track in Alexandria and Arlington, and improvements to the Long Bridge, which will double train capacity over the Potomac. DRPT Director Jennifer Mitchell will update the NVTC Board on these efforts at its meeting on June 7.

DRPT continues to support the establishment of the Metro Safety Commission (MSC). The MSC is now meeting bi-weekly at the MWCOG offices in Washington, DC. The MSC is working to submit all required certification documentation to the FTA by September 30, 2018 to allow for certification by the April 15, 2019 deadline.

On March 19, FTA sent a letter to DRPT, DDOT and MDOT informing the parties that FTA is immediately withholding five percent of FY 2018 Section 5307 Urbanized Area Formula Funds to transit systems in Maryland, Virginia, and the District of Columbia until the MSC is certified as a State Safety Oversight organization.
A. Executive Director Newsletter

NVTC’s Executive Director Newsletter provides updates on specific NVTC projects and programs and highlights items of interest at the federal and state levels and among partners such as the Transportation Planning Board and the Northern Virginia Transportation Authority.

This month’s newsletter provides the latest information on pending CTB action on I-66 Commuter Choice projects and withholding policies for WMATA, federal funding for WMATA, as well as highlights from the VTA conference.

B. NVTC Financial Report

The Financial Report for April 2018 is provided for your information.
This page intentionally left blank.
In my travels throughout the Commonwealth this month – from Marion to Richmond to Tysons – I have been warmed by the energy and engagement of those in the public transportation sector. The dedication and determination of agency, jurisdictional and association staff and support of our elected and appointed officials, reminds me of how fortunate we are to be working in a state that understands the value of transit to our economy and quality of life.

As the transit industry embraces a new level of transparency and accountability, my work with the Transit Service Delivery Advisory Committee (TSDAC) has taken on added importance. The requirements and methodologies that TSDAC ultimately recommends will govern the allocation of capital and operating funds, as well as strategic and transit planning. I have been working closely with Northern Virginia’s transit agencies to ensure that any new state mandates or processes meet both the spirit and intent of recently passed legislation without being onerous or unfair.

My presentation to the Commonwealth Transportation Board (CTB) earlier this month on projects the Commission approved for funding through the I-66 Commuter Choice program was well received. The CTB will vote to endorse the projects on June 20.

The recent Virginia Transit Association (VTA) conference in Richmond was the most well-attended in the organization’s history. That success was due in part to the leadership of NVTC Commissioner Dave Snyder, who has served as VTA president these past two years. His dedication to public transportation in the Commonwealth is to be lauded. He, as immediate past president, and I will continue to serve on the VTA board.

Several of our transit agencies were recognized at the VTA awards luncheon. DASH's "Stuff the Bus" campaign won for Outstanding Community Program. Loudoun County Transit’s "Next Stop Silver Line" took an honorable mention in the Outstanding Public Transportation Marketing category. Top honors in that category went to WMATA’s Back2Good campaign. Steve Yaffe, a former transit services manager in Arlington, received the Helen Poore Transit Professional Distinguished Service Award. For their work on transit funding legislation, Senator George Barker, Senator Richard Saslaw and Delegate Richard C. "Rip" Sullivan were honored with VTA’s Distinguished Legislative Leadership Award.

I am proud of the outstanding work being done by public transportation professionals in Northern Virginia and appreciative of the support provided by our elected and appointed officials. It makes my work and that of NVTC staff all the more important.

Executive Director

Inside this Issue

VTA Conference Highlights ...................... 2
CTB to Vote on I-66 Projects .................. 3
CTB to Consider Policies on Withholding of Funds for WMATA .................. 3
Prospect for Full Federal Funding of WMATA under PRIIA Seems Bright ............. 3
WMATA Issues New Back2Good Report .......... 4
Metro Seeks Accessibility Advisory Committee Members .................. 4
NVTC Out in the Community .................. 5
Manassas Railway Festival ..................... 5
WMATA Metrobus Staff Take Top Honors .. 6
VRE Meet the Management Wraps Up .......... 6
DASHing Words in Motion ..................... 6
Art on the ART Bus .................. 6

Key Dates

June 5 I-66 Inside the Beltway Eastbound Widening Meeting
June 7 NVTC Monthly Meeting
June 14 WMATA Board Meeting
June 14 NVTA Monthly Meeting
June 19-20 CTB Monthly Meeting
June 15 VRE Operations Board Meeting
June 20 TPB Monthly Meeting
June 28 WMATA Board Meeting
July 5 NVTC Monthly Meeting
Virginia Transit Association Annual Conference Highlights

VTA Executive Director Lisa Guthrie presents Dave Snyder, VTA’s outgoing president with a plague of appreciation at the pre-conference board meeting.

Lisa Guthrie presents Steve Yaffe, former ART transit services manager, with the Helen Poore Transit Professional Distinguished Service Award.

A team from DASH accepts the award for Outstanding Community Program for its “Stuff the Bus” campaign.

A team from WMATA accepts the award for Outstanding Public Transportation Marketing for “Back2Good.”

Loudoun County Transit’s Steven Angulo accepts an honorable mention for Outstanding Public Transportation Marketing for “Next Stop Silver Line.”

NVTC’s Patricia Happ, right, shares the success of projects funded through the I-66 Commuter Choice program as part of a panel discussion.
Prospect for Full Federal Funding of WMATA under PRIIA Seems Bright

The House Appropriations Committee on May 15 released its FY 2019 Transportation Housing and Urban Development (THUD) appropriations bill that, in addition to fully funding the Federal Transit and Federal Highway programs at FAST Act levels, also included a full $150 million in funding for WMATA under the 2008 Passenger Rail Improvement and Investment Act. It was marked up in subcommittee the next day.

The following week, the chief executives of Virginia, Maryland and the District sent a letter to the chairmen and ranking members of the House and Senate Appropriations Committee urging their support of full funding for WMATA under PRIIA. The letter spells out WMATA’s progress in safety, maintenance and finances.

Prior to sending the letter, Gov. Ralph Northam signed the transit bills, as amended by the General Assembly in mid-April. Included are $154 million in annual dedicated funding for Metro and a number of reforms that expand NVTC’s oversight. The legislation creates a WMATA Capital Fund and a Commuter Rail Operating and Capital (C-ROC) fund, from which VRE will receive $15 million annually from revenues generated by the gas tax floor.
WMATA Issues New Back2Good Report

Metro Seeks Advisors on Issues Affecting Seniors and Disabled

Metro's Accessibility Advisory Committee (AAC) is looking for new members to advise Metro's Board of Directors on transportation issues affecting senior citizens and people with disabilities. Applications are being accepted through June 4. The 20-member committee advises Metro through monthly committee and subcommittee meetings on Metrobus, Metrorail and MetroAccess.

Metro is seeking one member from Alexandria and one at-large member from Virginia (Alexandria, Arlington, Fairfax City/County, or Falls Church) to serve on the AAC. The committee consists of six members each from Maryland, Virginia, and the District of Columbia; and two at-large members.
NVTC Out in the Community

NVTC regularly participates in panels and events throughout Northern Virginia. On June 8-10, staff will man an I-66 Commuter Choice table in the Transportation Station tent, hosted by Fairfax Connector, at Celebrate Fairfax.

NVTC's Andrew D’huyvetter was one of four panelists on the evening of May 16 at the Young Democrats of Arlington #Back2Good Metro Panel, where he shared a variety of information, including Metro ridership and funding. He was joined by NVTC Commissioner and Metro Board Member Christian Dorsey and Virginia Senator Barbara Favola.

Despite the wet weather on May 18, thousands of commuters headed to work via bicycle, including NVTC’s Patricia Happ. Bike to Work Day 2018, administered by Commuter Connections and Washington Area Bicyclist Association, featured 100 pit stops in D.C., MD, and VA.
**WMATA**

Top honors for maintenance team and bus operator at the 2018 International Bus Road-eo went to WMATA. The Grand Champions took the top spot with the best combined score of any transit agency. The roadeo, which took place May 4-8 in Tampa, Florida, is a competition of driving skills and maintenance disciplines.

**Virginia Railway Express**

Virginia Railway Express (VRE) will wrap up its 2018 Meet the Management series at the Franconia/Springfield station on June 6. Armed with refreshments, managers will greet riders, listening to any complaints or comments and responding to questions. Managers will discuss midday train storage, transportation benefits, station improvements, VRE mobile ticketing, and safety, among other things. VRE held similar events in May at D.C.’s Union Station and its L’Enfant, Crystal City, and Alexandria stations.

**Alexandria Transit Company (DASH)**

“DASHing Words in Motion” is a poetry contest sponsored by the Alexandria Transit Company (DASH) and the City of Alexandria Office of the Arts. The competition is open to writers and poets who are at least 16 years old and live, work or study in Alexandria. Seven poems were selected from 40 submissions and were published inside DASH buses and trolleys.

**Arlington Transit**

Now in its eighth year, “Art on the ART Bus” is a mobile gallery on Arlington County’s buses. This dynamic connection between public transit and original art makes the commute as exciting as the destination, cultivating a vibrant arts experience for transit in Arlington County. The bus rotates throughout the different routes available to ART bus passengers. There are currently two ART buses with exhibits installed. One features a parade of playfully costumed dogs. The other shows the words of ART bus drivers transformed into art.
Northern Virginia Transportation Commission

Financial Reports

April, 2018
Percentage of FY 2018 NVTC Administrative Budget Used
April 2018
(Target 83.3% or less)

Note: Refer to pages 2 and 3 for details
### Personnel Costs

<table>
<thead>
<tr>
<th></th>
<th>Current Month</th>
<th>Year To Date</th>
<th>Annual Budget</th>
<th>Balance Available</th>
<th>Balance %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$101,117.05</td>
<td>$990,981.62</td>
<td>$1,390,500.00</td>
<td>$399,518.38</td>
<td>28.7%</td>
</tr>
<tr>
<td>Temporary Employee Services</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Personnel Costs</strong></td>
<td>$101,117.05</td>
<td>$990,981.62</td>
<td>$1,390,500.00</td>
<td>$399,518.38</td>
<td>28.7%</td>
</tr>
</tbody>
</table>

### Benefits

**Employer's Contributions:**

- **FICA:** $6,783.06 (69,026.10 / 93,500.00) = 26.2%
- **Group Health Insurance:** $7,996.06 (77,671.15 / 130,700.00) = 40.6%
- **Retirement:** $10,596.00 (105,960.00 / 123,500.00) = 14.2%
- **Workman's & Unemployment Compensation:** $114.00 (1,691.17 / 4,900.00) = 23.2%
- **Life Insurance:** $317.80 (2,927.22 / 5,100.00) = 62.6%
- **Long Term Disability Insurance:** $521.38 (4,991.40 / 6,500.00) = 80.6%

**Total Benefit Costs:** $26,328.30 (262,267.04 / 364,200.00) = 28.0%

### Administrative Costs

- **Commissioners Per Diem:** $1,300.00 (10,650.00 / 12,800.00) = 16.8%
- **Rents:**
  - Office Rent: $20,697.03 (203,119.28 / 246,000.00) = 8.4%
  - Parking & Transit Benefits: $1,472.25 (14,590.20 / 16,300.00) = 9.1%
- **Insurance:**
  - Public Official Bonds: $100.00 (1,433.00 / 2,000.00) = 5%
  - Liability and Property: $373.00 (4,657.10 / 4,800.00) = 8%
- **Travel:**
  - Conference / Professional Development: $3,430.67 (9,923.17 / 17,000.00) = 20.1%
  - Non-Local Travel: $257.68 (2,980.90 / 2,500.00) = 13.4%
- **Communication:**
  - Postage: $878.07 (9,467.50 / 13,000.00) = 7%
  - Telephone and Data: $879.48 (8,561.21 / 11,300.00) = 7.5%
- **Publications & Supplies:**
  - Office Supplies: $248.95 (2,204.42 / 2,700.00) = 9.2%
  - Duplication and Paper: $1,521.50 (8,063.47 / 9,300.00) = 16.3%
  - Public Information: - (500.00 / 500.00) = 0%

**Total Administrative Costs:** $2,441.90 (26,328.30 / 364,200.00) = 28.0%
## NORTHERN VIRGINIA TRANSPORTATION COMMISSION

### G&A BUDGET VARIANCE REPORT

April 2018

<table>
<thead>
<tr>
<th>Current</th>
<th>Year</th>
<th>Annual</th>
<th>Balance</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>To Date</td>
<td>Budget</td>
<td>Available</td>
<td>%</td>
</tr>
<tr>
<td>Operations:</td>
<td>1,264.05</td>
<td>15,188.63</td>
<td>45,500.00</td>
<td>30,311.37</td>
</tr>
<tr>
<td>Furniture and Equipment (Capital)</td>
<td>-</td>
<td>9,430.34</td>
<td>11,000.00</td>
<td>1,569.66</td>
</tr>
<tr>
<td>Repairs and Maintenance</td>
<td>-</td>
<td>66.00</td>
<td>1,000.00</td>
<td>934.00</td>
</tr>
<tr>
<td>Computer Operations</td>
<td>1,264.05</td>
<td>5,692.29</td>
<td>33,500.00</td>
<td>27,807.71</td>
</tr>
<tr>
<td>Other General and Administrative:</td>
<td>504.97</td>
<td>7,174.20</td>
<td>8,600.00</td>
<td>1,766.80</td>
</tr>
<tr>
<td>Subscriptions</td>
<td>26.00</td>
<td>341.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Memberships</td>
<td>80.75</td>
<td>1,025.25</td>
<td>1,400.00</td>
<td>374.75</td>
</tr>
<tr>
<td>Fees and Miscellaneous</td>
<td>398.22</td>
<td>5,078.51</td>
<td>5,600.00</td>
<td>521.49</td>
</tr>
<tr>
<td>Advertising (Personnel/Procurement)</td>
<td>-</td>
<td>729.44</td>
<td>1,600.00</td>
<td>870.56</td>
</tr>
<tr>
<td>Total Administrative Costs</td>
<td>31,248.38</td>
<td>283,372.02</td>
<td>375,500.00</td>
<td>92,468.98</td>
</tr>
</tbody>
</table>

### Contracting Services

<table>
<thead>
<tr>
<th>Contracting Services</th>
<th>Current</th>
<th>Year</th>
<th>Annual</th>
<th>Balance</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditing</td>
<td>-</td>
<td>16,000.00</td>
<td>22,600.00</td>
<td>6,600.00</td>
<td>29.2%</td>
</tr>
<tr>
<td>Contract Services and Support</td>
<td>11,338.20</td>
<td>49,357.67</td>
<td>150,000.00</td>
<td>100,642.33</td>
<td>67.1%</td>
</tr>
<tr>
<td>Legal</td>
<td>2,916.67</td>
<td>29,166.70</td>
<td>35,000.00</td>
<td>5,833.30</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total Contract Services</td>
<td>14,254.87</td>
<td>94,524.37</td>
<td>207,600.00</td>
<td>113,075.63</td>
<td>54.5%</td>
</tr>
<tr>
<td>Total Gross G&amp;A Expenses</td>
<td>$ 172,948.60</td>
<td>$ 1,631,145.05</td>
<td>$ 2,337,800.00</td>
<td>$ 706,995.95</td>
<td>30.2%</td>
</tr>
</tbody>
</table>
## NVTC
### RECEIPTS and DISBURSEMENTS
#### April 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Payer / Payee</th>
<th>Purpose</th>
<th>Wells Fargo Checking</th>
<th>Wells Fargo Savings</th>
<th>Virginia LGIP G&amp;A / Project</th>
<th>Trusts</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>DMV</td>
<td>Motor Vehicle Fuels Sales tax revenue</td>
<td>2,948,332.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>DRPT</td>
<td>Capital grant receipt - Alexandria</td>
<td>564,506.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>DRPT</td>
<td>Capital grants receipts - Arlington</td>
<td>146,795.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>FTA</td>
<td>Grant receipt - Alexandria</td>
<td>212,276.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Alexandria</td>
<td>G&amp;A contribution</td>
<td>9,594.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>ICMA</td>
<td>Contribution refund</td>
<td>10,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Staff</td>
<td>Expense reimbursement</td>
<td>1.41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>DRPT</td>
<td>Operating assistance - WMATA</td>
<td>8,785,836.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>DRPT</td>
<td>Capital grant receipt - Arlington</td>
<td>56,021.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>DRPT</td>
<td>Grant receipt - Fare collection project</td>
<td>5,379.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>DRPT</td>
<td>Capital grants receipts - Fairfax</td>
<td>160,897.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>DRPT</td>
<td>Capital grants receipts - VRE</td>
<td>2,934,228.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>DMV</td>
<td>Motor Vehicle Fuels Sales tax revenue</td>
<td>1,993,871.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>VRE</td>
<td>Staff support</td>
<td>7,117.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Banks</td>
<td>Investment earnings</td>
<td></td>
<td>26,718.88</td>
<td>16,178.95</td>
<td>14,786,414.27</td>
</tr>
</tbody>
</table>

### DISBURSEMENTS

1-30 Various G&A expenses (148,416.33)
1. WMATA Metrobus operating (24,700,521.00)
2. WMATA Metroaccess operating (3,174,322.00)
3. WMATA Metrorail operating (19,156,954.00)
4. WMATA CIP contribution (5,405,222.00)
5. WMATA Program development (77,427.00)
6. WMATA Debt service - Metro Matters program (26,472.00)
10. Arlington I-66 Commuter Choice program (34,579.73)
12. Alexandria Grant revenue (212,276.00)
18. Kimley-Horn Consulting - Fare Collection project (10,758.15)
27. VRE Grant revenue (2,934,228.00)
27. Stantec Consulting - Bus Data Collection project (2,598.71)
30. Banks Service fees (59.56)

### TRANSFERS

1. Transfer From savings to checking 150,000.00 (150,000.00)
17. Transfer From LGIP to LGIP - LGIP correction 5,379.00 (5,379.00)
24. Transfer From LGIP to LGIP - Bus Data Collection 2,598.71 (2,598.71)
27. Transfer From savings to checking 150,000.00 (150,000.00)

### NET INCREASE (DECREASE) FOR MONTH

$138,167.25 $26,713.24 $(310,423.07) $(37,762,481.44)
# NVTC INVESTMENT REPORT
## April 2018

### Cash Deposits

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate</th>
<th>Balance 3/31/2018</th>
<th>Increase (Decrease)</th>
<th>Balance 4/30/2018</th>
<th>NVTC G&amp;A/Project</th>
<th>Jurisdictions Trust Fund</th>
<th>Loudoun Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wells Fargo: NVTC Checking</td>
<td>N/A</td>
<td>$24,362.74</td>
<td>$138,167.25</td>
<td>$162,529.99</td>
<td>$162,529.99</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wells Fargo: NVTC Savings</td>
<td>0.100%</td>
<td>$45,731.07</td>
<td>$26,713.24</td>
<td>$72,444.31</td>
<td>$72,444.31</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Investments

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate</th>
<th>Balance 3/31/2018</th>
<th>Increase (Decrease)</th>
<th>Balance 4/30/2018</th>
<th>NVTC G&amp;A/Project</th>
<th>Jurisdictions Trust Fund</th>
<th>Loudoun Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank of America: Virginia Local Government Investment Pool (LGIP)</td>
<td>1.874%</td>
<td>$135,212,182.16</td>
<td>$(38,072,904.51)</td>
<td>$97,139,277.65</td>
<td>$10,449,910.84</td>
<td>$66,561,971.61</td>
<td>$20,127,395.20</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>$135,282,275.97</th>
<th>$(37,817,599.79)</th>
<th>$97,374,251.95</th>
<th>$10,684,885.14</th>
<th>$66,561,971.61</th>
<th>$20,127,395.20</th>
</tr>
</thead>
</table>
NVTC MONTHLY GAS TAX REVENUE
ALL JURISDICTIONS
FISCAL YEARS 2015-2018

Note: Taxes shown as received by NVTC in a particular month are generated from sales two months earlier.
NVTC MONTHLY GAS TAX REVENUE
FAIRFAX COUNTY
FISCAL YEARS 2015-2018

Note: Taxes shown as received by NVTC in a particular month are generated from sales two months earlier.
Note: Taxes shown as received by NVTC in a particular month are generated from sales two months earlier.
NVTC MONTHLY GAS TAX REVENUE
ARLINGTON COUNTY
FISCAL YEARS 2015-2018

Note: Taxes shown as received by NVTC in a particular month are generated from sales two months earlier.
Note: Taxes shown as received by NVTC in a particular month are generated from sales two months earlier.
Note: Taxes shown as received by NVTC in a particular month are generated from sales two months earlier.
NVTC MONTHLY GAS TAX REVENUE
LOUDOUN COUNTY
FISCAL YEARS 2015-2018

Note: Taxes shown as received by NVTC in a particular month are generated from sales two months earlier.