



MONTHLY COMMISSION MATERIALS

June 2017

MEETING OVERVIEW – June 1, 2017

Action Items Include:

- Minutes of NVTC's May Meeting
- Regional Fare Collection Program Memorandum of Agreement
- Resolution of Support of WMATA General Manager's Initial Reforms
- One-Year Extension of the Existing Amended and Restated Operating/Access Agreement with CSX Transportation

Other Meeting Highlights:

- Presentation by WMATA General Manager on Keeping Metro Safe, Reliable and Affordable: An Action Plan to Meet Regional Transit Needs
- NVTC's Regional High Capacity Transit Economic Impact Study
- Report of the Chairs of NVTC Committees
- Six-Year Improvement Program (SYIP) Update

TABLE OF CONTENTS

NVTC June 1, 2017 Commission Agenda	3
Agenda Item 1 Opening Remarks	
Agenda Item 2 Minutes.....	5
Agenda Item 3 Consent Agenda	21
Agenda Item 4 Washington Metropolitan Area Transit Authority (WMATA)	35
Agenda Item 5 Virginia Railway Express (VRE)	79
Agenda Item 6 NVTC's Regional High Capacity Transit Economic Impact Study	109
Agenda Item 7 Department of Rail and Public Transportation (DRPT)	123
Agenda Item 8 Report of the Chairs of NVTC Committees	141
Agenda Item 9 Executive Director Report	143



**NVTC COMMISSION MEETING
THURSDAY, JUNE 1, 2017
MAIN FLOOR CONFERENCE ROOM
2300 Wilson Blvd.
Arlington, VA 22201**

7:30 P.M.

**6:00 P.M. Legislative and Policy Committee
6:45 P.M. Executive Committee
(dinner is available at 6:40 P.M.)**

AGENDA

1. Opening Remarks
2. **ACTION ITEM: Approve the Minutes of the May 4, 2017 NVTC Meeting**
3. **ACTION ITEM: Approve the CONSENT AGENDA (subject to approval by the Chairman)**
 - A. Approve the Regional Fare Collection Program Memorandum of Agreement (MOA) and Authorize NVTC's Executive Director to Sign the MOA on Behalf of the Commission
4. Washington Metropolitan Area Transit Authority
 - A. Presentation by WMATA General Manager/CEO Paul Wiedefeld (invited) on Keeping Metro Safe, Reliable and Affordable: An Action Plan to Meet Regional Transit Needs
ACTION ITEM: Resolution #2339: Initial Reforms to the Washington Metropolitan Area Transit Authority
 - B. Board of Directors Report
 - C. Committee Reports
 - D. Virginia Ridership and Parking Facility Utilization
 - E. Schedule of Upcoming Board Decisions
5. Virginia Railway Express
 - A. VRE CEO Report and Minutes
 - B. ACTION ITEM: Resolution #2340:** Authorize the VRE CEO to Execute a One-Year Extension of the Existing Amended and Restated Operating/Access Agreement with CSX Transportation
 - C. VRE System Plan 2040 Update

6. NVTC's Regional High Capacity Transit Economic Impact Study
7. Department of Rail and Public Transportation (DRPT)
 - A. DRPT Report
 - B. Report on the Six-Year Improvement Program (SYIP)
 - C. Metro Safety Commission and Metro Reform Efforts
8. Report of the Chairs of NVTC Committees
 - A. Governance and Personnel Committee
 - B. Legislative and Policy Committee
9. Executive Director Report
 - A. Executive Director Newsletter
 - B. NVTC Financial Items
 - C. DRPT Draft FY2018 SYIP – NVTC and VRE Funding

**MINUTES
NVTC COMMISSION MEETING – MAY 4, 2017
NORTHERN VIRGINIA CHAMBER OF COMMERCE
TYSONS, VIRGINIA**

The meeting of the Northern Virginia Transportation Commission was called to order by Chairman McKay at 7:25 P.M.

Members Present

David Albo
Sharon Bulova
John Cook
Jim Corcoran
Katie Cristol
Christian Dorsey
Adam Ebbin
John Foust
Libby Garvey
Catherine Hudgins
David LaRock
Jeff McKay
Ron A. Meyer
J. Randall Minchew
Jennifer Mitchell (Alternate, Commonwealth of Virginia)
David Snyder
Jennifer Wexton

Members Absent

Jeff Greenfield
James LeMunyon
Matt Letourneau
Tim Lovain
Paul Smedberg

Staff Present

Karen Finucan Clarkson
Andrew D'huyvetter
Nobuhiko Daito
Rhonda Gilchrest
Dan Goldfarb
Patricia Happ
Scott Kalkwarf
Kate Mattice
Zachary McCoy
Aimee Perron Siebert
Steve MacIsaac (Counsel)
Paul Dean (VRE)

Opening Remarks

Chairman McKay stated NVTC is honored to have former U.S. Secretary of Transportation Ray LaHood attend tonight's meeting to brief the Commission on his independent review of WMATA. Last month Governor McAuliffe announced a top-to-bottom review of the Metro system and named Secretary LaHood to spearhead the initiative. Chairman McKay also noted that later in the Agenda, the Commission will hear from those involved in the MWCOC's Technical Panel on its Final Report on Metro.

Chairman McKay stated that the Agenda has been slightly modified so that action items will be considered immediately following Secretary LaHood's comments. There were no objections.

Presentation by Former U.S. Secretary of Transportation Ray LaHood on the Independent Review of WMATA

Chairman McKay noted Secretary LaHood served as U.S. Secretary of Transportation from 2009 to 2013 and prior to that served in the U.S. House of Representatives (R-18th Illinois) from 1995 to 2009. Known as a bipartisan leader and skilled conciliator, Secretary LaHood was instrumental in securing the federal funding for the Silver Line project. He comes with a wealth of experience to led this effort. Chairman McKay stated NVTC is looking forward to working closely and collaboratively with Secretary LaHood on efforts to improve and transform Metro.

Secretary LaHood thanked the Commission for inviting him to speak. He stated that one of the reasons he was asked by Governor McAuliffe to lead this review was because of his involvement with bringing together a large group of stakeholders to reach consensus on the Silver Line project. The Silver Line will impact hundreds of people, including those involved in building it, those running the system, and those that ride it. It is an economic engine in and of itself and he thanked everyone who contributed to its success.

Secretary LaHood stated that as part of the independent review, he will be meeting over the next several months with anyone who has an interest in making Metro a number one system again. He characterized Metro as America's Metro. He explained that he had the privilege as U.S. Secretary of Transportation to sit on the platform as President Obama was sworn into office and look out over the crowd of two million people attending the Inauguration, most of whom were delivered by Metro since it was impossible to drive a car in Washington, DC that day. WMATA not only serves this region, but also serves people from around the world.

Secretary LaHood explained that his efforts will not include any in-depth analysis or study because there are already many existing studies, which will be incorporated into the work being done as part of the review. The goal is to reach consensus among the two governors of Maryland and Virginia and the mayor of the District, as well as the WMATA Board and other stakeholders. There are three or four major issues that this effort will address, including funding, governance, budget, and the WMATA Compact. He plans to report back to the governor in the fall 2017.

He challenged NVTC to reach a consensus over the next few months on what NVTC would recommend to the governor on such things as what WMATA governance should look like, what a new Compact would look like, and what financing would look like. He is considering all options, including a control board style of governance. He cited the examples of successful control boards for Washington, DC and Boston area's transit system.

Ms. Hudgins and Delegate Albo arrived at 7:39 P.M. and 7:40 P.M., respectively.

Secretary LaHood stated he would like to hear from Commissioners on their thoughts and comments regarding WMATA reform. Chairman McKay stated that NVTC is up to the challenge and is happy to play a role in finding solutions to fix Metro. Secretary LaHood stated it is important to look at what other transit systems have done with issues like labor unions or control boards. If the region wants to get some of the real institutional problems solved it may need to consider doing something different than what exists today. Mr. Dorsey observed that WMATA is different in many unique ways including it is a transit service for the federal governments, a significant number of stations sit on federal land, and the region is ground zero/soft target for potential terrorism in its underground Metro system. WMATA seems to be uniquely positioned to be considered a partner with the federal government in operations funding. He asked if the study will look at the federal role in Metro. Secretary LaHood stated that it would and agreed that there is a federal role. Congress recently approved \$150 million for Metro in the Omnibus Bill, which is a good signal from the new administration that they are committed to fund their obligations. He is scheduled to meet with U.S. Secretary of Transportation Chao to discuss the future of transit.

Mr. Corcoran asked how the political will can be changed. Secretary LaHood stated he plans to listen to the elected officials and reach consensus. Unless the political will of the region can be agreed upon, there will be a stalemate for a long time and that would be a disservice to the riders.

Chairman McKay observed that it is obvious that the District, Maryland and Virginia, as well as the federal government, have differing views. He stated that it is important for Virginia to not shy away from making recommendations, including changes to the WMATA Compact. Delegate Minchew reminded the Commission that Virginia MSC legislation includes an enactment clause that calls for the discussion to look at WMATA Compact reforms.

Mr. Snyder stated that he represents one of the smallest Compact jurisdictions. He recounted the city's recent budget process where the city had to increase the property tax rate due to significant increases in WMATA funding needs. He does not see this as sustainable for future years. He stated that this study is fundamental. He is impressed with Secretary LaHood's view that Metro is a system that serves commuters and also literally serves the world through tourists, university students, and high ranking foreign officials. Mr. Snyder stated it is important to convey this message more effectively. He is a daily Metro rider and it's fundamental that we fix Metro now. It is important to realize that the General Assembly provided NVTC with an incredible opportunity to have a seat at the table. It is important to reach consensus, which hopefully can be turned into action.

Ms. Bulova stated there are many different groups working independently on solutions to fix Metro. Secretary LaHood's efforts to bring the region together is helpful and she has great hopes that he will be successful. She observed that one of the challenges is the differences among the jurisdictions and how different Virginia is in the way it contributes financially to WMATA and who has a seat at the table. Washington, DC and Maryland don't pay for Metro out of their local budgets. The Virginia jurisdictions get nervous when there is talk about changing the governance structure, because they want a seat at the table. She suggested creating a list of issues for NVTC to work through so Virginia jurisdictions can reach consensus and speak with a united voice.

Mr. Meyer arrived at 7:53 P.M.

Ms. Cristol asked about recommendations Secretary LaHood may make in his final report and his timeline. Secretary LaHood stated he does not know the outcome; there is no option that is off the table for consideration. For the remainder of the summer, he will be in listening mode. He would like to include in his report a consensus agreement from NVTC. He acknowledged NVTC will probably not reach unanimous agreement, but hopefully a majority can agree about what needs to happen with WMATA reform.

Delegate LaRock stated a regional sales tax would be a "non-starter" for his constituents. He hopes Secretary LaHood will look at the fair and equitable aspect of a regional tax since taxes have benefits as well as negative consequences. Secretary LaHood stated one advantage he brings to the table is that he was elected seven times to Congress. He has never met a politician who wants to raise taxes and he understands the challenges.

Ms. Hudgins stated that it is important to convey the message of what Metro contributes to the region. The starting point needs to clarify that this region would not be where it is today without Metro, followed by what happens if the system continues to deteriorate or shuts down. She stated that the region needs to believe Metro is the most important element to the economic benefit to the region and then determine what compromises the jurisdictions will need to make it successful. She stated that it is important to be succinct in what Metro really means to the region.

Secretary LaHood stated that everyone can agree that Metro is important and that Metro is not going away. It may not be as efficient, but our job is to figure out how to make it the best system in the world. He has not heard criticism about the General Manager/CEO. Mr. Wiedefeld is doing the very best he can with a bad situation. Metro has great potential. The leadership at the top is good, which is a good place to start to build consensus.

Mr. Meyer stated that from Loudoun County's perspective, a regional sales tax is detrimental for two reasons: 1) it is not fair and equitable since approximately 50 percent would come from Northern Virginia; and 2) only one-fifth of the county will be served by Metro so it doesn't make sense for the rest of the county, which goes far west, to impose a tax on its rural constituents. Loudoun County staff believe there are ways to create a dedicated funding source without having to impose a regional tax.

Secretary LaHood stated that he will continue to listen to everyone's comments on Metro and he will not be doing a financing study but will use existing studies. He would like to come back to NVTC after Labor Day to hear NVTC's recommendations. Chairman McKay

asked if it is realistic for NVTC to include a recommendation calling for increased federal funding. Secretary LaHood stated that there is a new administration and a new Secretary of Transportation. He encouraged NVTC to talk to its Congressional delegation. Chairman McKay thanked Secretary LaHood for coming and NVTC looks forward to him coming back in the fall.

Minutes of the April 6, 2017 NVTC Commission Meeting

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

Application for a Federal Grant on Behalf of the City of Alexandria

Chairman McKay explained that the Commission is asked to approve Resolution #2336, which would authorize NVTC's Executive Director to apply for a \$2,235,131 grant (including non-federal match) on behalf of the City of Alexandria to fund access facilities related to the King Street-Old Town Metrorail station. As a service to its jurisdictions, NVTC staff applies for and manages federal grants when requested. Alexandria has made this request.

Chairman McKay moved, with a second by Mr. Meyer, to approve Resolution #2336 (copy attached). The vote in favor was cast by Commissioners Albo, Bulova, Cook, Corcoran, Cristol, Dorsey, Ebbin, Foust, Garvey, Hudgins, LaRock, McKay, Meyer, Minchew, Snyder and Wexton.

Virginia Railway Express

Contract for Operating Services for Commuter Rail. Chairman McKay stated Resolution #2337 would authorize the VRE CEO to execute an amendment to the Contract for Operating Services for Commuter Rail with Keolis Rail Services, Virginia, LLC by approving up to \$15,416,000 for the third year of the first option period, for a total contract value not to exceed \$147,406,557 through June 30, 2018.

Ms. Bulova moved, with a second by Ms. Cristol, to approve Resolution #2337 (copy attached). The vote in favor was cast by Commissioners Albo, Bulova, Cook, Corcoran, Cristol, Dorsey, Ebbin, Foust, Garvey, Hudgins, LaRock, McKay, Meyer, Minchew, Snyder and Wexton.

Contract for Maintenance Services for Commuter Rail. Chairman McKay stated Resolution #2338 would authorize the VRE CEO to execute an amendment to the Contract for Maintenance Services for Commuter Rail with Keolis Rail Services Virginia, LLC by increasing the total contract authorization by \$7,092,267, for a total amount not to exceed \$14,344,638 through June 30, 2018.

Ms. Bulova moved, with a second by Ms. Cristol, to approve Resolution #2338 (copy attached). The vote in favor was cast by Commissioners Albo, Bulova, Cook, Corcoran, Cristol, Dorsey, Ebbin, Foust, Garvey, Hudgins, LaRock, McKay, Meyer, Minchew, Snyder and Wexton.

Washington Metropolitan Area Transit Authority

There was no report given by Virginia WMATA Board members. The Commission was directed to review the written report.

Department of Rail and Public Transportation

DRPT Director Mitchell directed Commissioners to her written report. There were no questions.

Report of the Governance and Personnel Committee

Mr. Cook, chair of the Governance and Personnel Committee, gave a brief update on recent committee activities. He reported that the committee has held two meetings and is trying to organize the meetings in a framework of hearing presentations on different Metro reform plans, discussing issues one at a time, and identifying a plan of how to reach consensus on Virginia issues. At the last meeting, there was a difficult discussion about governance issues, which shows the challenges of that issue. The committee will set this issue aside for now and shift to some of the other issues that don't necessarily require Compact changes. He stated it is important to reach agreement on issues to be able to bring them to the Commission for discussion.

Mr. Cook observed that five years ago, NVTC was facing potential legislation disbanding the Commission. Now there is a statute that makes NVTC an equal partner with the Commonwealth on these negotiations. In his opinion, this says a lot about the credibility of NVTC as an organization. To justify that participation, NVTC must address all the issues set forth in the statute, including governance and Compact issues.

Chairman McKay noted that the next Governance and Personnel Committee meeting is scheduled for May 18th at NVTC at 7:30 P.M. WMATA's General Manager/CEO has been invited to present his reform plan at NVTC's June 1st meeting. Chairman McKay stated that he has directed staff to prepare a resolution of support for the General Manager's plan for Commission discussion at that next meeting.

Ms. Hudgins stated it would be helpful to provide all the Metro studies to Commissioners. Ms. Mattice stated these documents have been provided to the Governance and Personnel Committee members and are also available on NVTC's website.

Mr. Corcoran noted that conflict can be good. He thought the Governance and Personnel Committee's discussion on governance structure was a good discussion. Ms. Garvey agreed. Mr. Corcoran stated that Delegate LeMunyon suggestion at that meeting to make

a list of potential Metro reforms and how they could be implemented (by legislation, Compact changes, WMATA Board policy changes, etc.). Ms. Mitchell stated that DRPT is working on a companion piece to provide benchmarking data to help with the discussion. Since the goal of the Governance and Personnel Committee is to reach consensus on these issues and to bring them to the Commission to discuss a Virginia position, she encouraged Commissioners with strong opinions on these issues to participate in the committee meetings.

Chairman McKay noted that NVTC has a task to do. The process is to have the committee vet these issues and make recommendations to the Commission. It is a tight timeline. Mr. Cook stated that the intent is for the committee to present an issue for discussion and action at each Commission meeting and not to wait and present one large package of recommendations.

Mr. Snyder stated that NVTC has already done analysis on the impact of Metro on specific jurisdictions, the region and then the revenue impact to the Commonwealth. If every jurisdiction is paying for the Metro system, then they need to feel they are receiving value. For those not riding Metro, they are still receiving a benefit. NVTC needs to demonstrate the true value to all players—local, regional, state and federal.

NVTC FY2017 3rd Quarter Ridership Report

Chairman McKay stated this item is provided as an information item.

Executive Director Report

Ms. Mattice encouraged Commissioners to read the Executive Director Newsletter. She gave a brief update on Route 7 Bus Rapid Transit, as requested by Mr. Snyder at the last meeting. NVTC continues to do ongoing work with the jurisdictions and is waiting to hear back from DRPT if NVTC has received a grant to conduct conceptual engineering. She also noted the Upcoming Events handout lists several important events, including NVTC's 2nd WMATA public forum on June 15th in Alexandria.

The Financial Report for March 2017 was provided to Commissioners and there were no comments.

Presentation on the Metropolitan Washington Council of Governments Technical Panel Final Report on Metro

Chairman McKay asked Sharon Bulova to make introductory remarks since she is the Chair of the Council of Government's Metro Strategy Group. Ms. Bulova first acknowledged several elected officials in the audience: Senator George Barker, Senator David Marsden, Delegate Kathleen Murphy, Delegate Jennifer Boysko, Delegate Mark Keam, and Fairfax County Supervisor Pat Herrity. Chairman McKay also thanked Mr. Corcoran and his staff for hosting NVTC's meeting at the Northern Virginia Chamber of Commerce.

Ms. Bulova stated that about a year ago, the COG Board of Directors created a Technical Panel comprised of Chief Administrative Officers of the WMATA Compact jurisdictions, the District's Chief Financial Officer, and WMATA staff, to identify WMATA's 10-year funding gap and examine potential revenue options through a dedicated source of funding. At its December meeting, NVTC heard the results of MWCOG's Interim Report. Tonight, NVTC will hear the results of the Final Report, which were presented to the COG Board of Directors last week. She stated that this foundational analysis will serve as a starting point for the Metro Strategy Group to review and consider all possible solutions that will work for the District, Maryland and Virginia.

Ms. Bulova named the other members serving with her on the COG Metro Strategy Group:

Kenyan McDuffie, COG Chairman and DC Council
 Phil Mendelson, Chairman, DC Council
 Robert Berlinger President, Montgomery County Council
 Derrick Davis, Chairman, Prince George's County Council
 Bridget Newton, Mayor, City of Rockville
 Jay Fisette, TPB Vice-Chairman and Arlington County Board
 Matt Letourneau, COG Vice-Chairman and Loudoun County Board
 Marty Nohe, NVTA Chairman and Prince William County Board

Ms. Bulova explained that the Metro Strategy Group will move forward to identify a viable and equitable funding option (or options) for all Compact members. There are big differences between the three jurisdictions which creates unique challenges. She stated that failure and inaction are not options.

Ms. Bulova introduced Barbara Donnellan, Castle Gray Consulting; Jeff DeWitt, D.C. Chief Financial Officer; and Edward Long, Fairfax County Chief Executive, to present the results of the COG Chief Administrative Officers Technical Panel Final Report.

Ms. Donnellan stated that Metro is a regional asset that requires a regional solution. Metro is essential to the region and the regional economy and must be brought to a safe and reliable state. Since the Interim Report was released, the Technical Panel updated analysis of WMATA's capital, operating and maintenance funding needs for the next 10 years to reflect WMATA Capital Needs Inventory and the adopted FY2018 Budget. \$15.6 billion in capital funding is required to address safety and get to a State of Good Repair, with a funding gap of \$6.1 billion. \$21.1 billion is needed for operations and maintenance, with \$1.3 billion maintenance funding gap. Additional capital funding for critical capital projects is also required, with a funding gap of at least \$7 billion over the next 10 years.

Ms. Donnellan stated the Technical Panel narrowed the revenue options and focused on revenue that will meet Metro's capital/maintenance needs over 10 years and then weighed the pros and cons of each option. Failure to invest in Metro could result in regional tax revenue loss of \$1-2 billion annually, as well as over \$50 billion in planned and proposed development near Metro stations. She stated this is a regional problem and local governments cannot continue to afford the funding increases. The Technical Panel weighed the pros and cons of options to generate revenue to meet Metro's funding needs.

Mr. DeWitt reviewed the findings and assumptions of the analysis. Some of the assumptions include the continuation of federal PRIIA contributions at present levels through FY2026 and a three percent escalation in jurisdictional contributions for the remainder of the 10-year period (above FY2017 base). He reviewed the 10-year total funding gap summary. He stated that it really is a capital problem. It is recommended that annual capital funding gaps be debt-financed, which requires a stable, predictable and dedicated regional funding source. The criteria for a dedicated funding source include ease of implementation, predictable and sustainable, revenue yield, and fair and equitable. Mr. DeWitt stated the Technical Panel looked at different options for a dedicated funding source, such as a sales tax, property tax, (all property or property one-half mile from Metro), gas tax, value added tax, commuter tax, and income tax. A one percent regional sales tax would yield \$650 million annually. He then reviewed the benefits of a uniform regional sales tax. A one percent dedicated regional tax could fund all of WMATA's State of Good Repair (SGR) capital needs in a 10-year period. Remaining tax revenues could be used to fund additional critical capital needs beyond SGR.

Mr. DeWitt then reviewed the impact of no additional funding. Estimated cost of rush hour trips delays are estimated between \$153-\$235 million annually. Traffic congestion will continue to worsen and economic growth in the region will likely slow. Reducing the economic forecast by 0.25 percent to 0.50 percent would result in annual losses to Compact area taxes, collectively, ranging from \$1 billion to \$2.3 billion, respectively, after ten years.

Mr. Long observed that capping jurisdictional contributions to three percent annually will be helpful as local jurisdictions prepare their budgets. Without a dedicated funding source in place by January 2019, jurisdictions will not be able to fund WMATA's capital needs. He stated that if Northern Virginia is going to continue to be the economic engine that grows the Commonwealth, there needs to be a new source of funding for Metro. No action is not an option.

Ms. Donnellan stated that the Technical Panel will work with the Metro Strategy Group to grapple with all these issues, but there will be hard decisions that will need to be made.

Chairman McKay stated that a regional sales tax proposal does not mirror the current formula commitments at WMATA. Mr. DeWitt agreed that this issue needs to be addressed. For a one-percent regional sales tax approximately 50 percent would come from Virginia and 25 percent from both Maryland and the District of Columbia.

Delegate Albo observed that if WMATA cut personnel by eight percent, it would solve the operating funding gap. Mr. DeWitt agreed that would be one way to fill the gap. Mr. Corcoran stated that would be a good question to ask Mr. Wiedefeld at the June 1st meeting to discuss how much further can he go with budget cuts. Mr. DeWitt stated that WMATA has already cut personnel and the General Manager has previously stated he cannot cut WMATA's way out in future budgets. The approved FY2018 budget includes one-time cuts that can't be supported in future years.

Delegate Minchew asked how much of the projections/data/analysis were available in May 2012 when Loudoun County joined the WMATA Compact. He expressed his opinion

that if Loudoun County knew these data points in 2012, they probably would have declined to join.

Mr. Foust questioned a regional tax for three jurisdictions that are dramatically different in many ways. He asked if each jurisdiction's funding source could be different. Mr. DeWitt stated it is easier to have it the same, but it doesn't have to be. Whatever source of funding combination needs to be reliable and predictable and sustainable for at least 30 years. Ms. Bulova observed that one scenario could be that the amount needed to cover operating and capital needs and what is fair and equitable for each jurisdiction to pay is agreed upon and then the jurisdictions could individually decide how it is paid. Whatever funding source is chosen needs to be bondable.

Ms. Garvey suggested that it is important to include an option of doing nothing and the costs associated with that. It needs to be clear that there will be a cost to everyone, including those who don't use the system. Mr. Corcoran suggested including a data point noting that a one percent sales tax could have a slight impact on the economy. Mr. Cook suggested focusing on a dedicated revenue source for capital only. This would mean that there would need to be another way to close the operating gap.

Mr. Meyer stated that it should be obvious that Virginia will never agree to paying 50 percent of WMATA's funding obligations. He stated that from Loudoun County's perspective, rural areas need to be excluded from a regional sale tax. The question is how to make it equitable. He stated that two possible solutions would be to return part of the revenues funds of a regional tax to Virginia or for Virginia to come up with its own funding solution. Delegate LaRock stated that the proposition of a one percent sales tax is very inequitable for Virginia. He asked how is this not the District of Columbia passing off its financial responsibilities to Virginia. Mr. DeWitt stated that the equity issue does need to be addressed. It is important to start a dialogue on how to fix Metro. He does not wish to see the District benefit over Maryland or Virginia. Delegate LaRock stated it is also important to look at the downsides of a regional sales tax.

Ms. Cristol observed that the region would reach success if each jurisdiction were to identify a funding source that was dedicated, reliable and predictable to meet their individual funding obligations for WMATA, so that the District or Maryland would not make an assumption that Virginia will carry more of the funding burden. Mr. DeWitt agreed and stated that the challenge is that all three jurisdictions have a different problem with equity.

Senator Ebbin left the meeting at 9:32 P.M. and did not return.

Mr. Foust stated that it is a huge inequity to Virginia and asked if a half-cent tax in Virginia with a higher rate in the other two jurisdictions may be a solution. Mr. DeWitt reiterated that this recommendation is to get the dialogue started. He offered to meet with individuals and/or their jurisdictions to discuss the issues and provide further technical assistance.

Mr. Snyder stated that from the perspective of smaller jurisdictions, neither operating nor capital funds are sustainable for their future budgets. WMATA funding is already competing with funding for schools and police. With all due respect to the rural residents in Loudoun County, Mr. Snyder stated that the inner jurisdiction's economies are supporting the schools in those rural areas. There will be a cost of inaction to not just the

Compact jurisdictions but also to those that don't ride Metro. There is also a national impact. He asked what is the cost to millions of people not being able to exercise their first amendment rights at events such as Presidential Inaugurations or protests? What is the cost to the United States, with a third world Metro system, when it claims to be the world's leader? Mr. Snyder stated that it is important to change the terms of the debate and discussion.

Ms. Hudgins expressed her appreciation for the report. She stated it is important to look at what is best for each jurisdiction.

Mr. Meyer stated that when Loudoun County starts paying its Compact contribution it will be paying four percent for two stations. In many ways, it is already inequitable because the County joined WMATA at a time when it had problems 30 years in the making.

Mr. Dorsey stated he has his own concerns about the regressive nature of a regional sales tax but observed that the inequities can be addressed. He stated that Mr. Foust's suggestion to rebalance the tax rate could be a solution. The Technical Panel's recommendation is a regional solution and the spirit of the Compact is to act regionally. He stated that it is important to rise above parochial concerns. It is important to protect Virginia's interests, but he cautioned to not be so myopic and lose sight of what we are trying to do—fix Metro. Mr. Foust stated that over the years, this region has built a Metro system that is irreplaceable. He stated Loudoun County still received benefits from the system during this time.

Ms. Bulova stated that the Metro Strategy Group will continue to look at these issues as it prepares a recommendation to present to the COG Board of Directors.

Adjournment

Mr. Corcoran noted Ed Long has announced his retirement as Fairfax County Chief Executive, and thanked him for his decades of service to the county and the region. Mr. Corcoran also noted that Delegate Albo has announced his retirement and thanked him for his service to Fairfax County, the region and the entire Commonwealth.

Ms. Bulova moved, with a second by Ms. Cristol, to adjourn the meeting. Without objection, Chairman McKay adjourned the meeting at 9:45 P.M.

Approved this 1st day of June 2017.

Jeffrey C. McKay
Chairman

Matthew F. Letourneau
Secretary-Treasurer



RESOLUTION #2336

SUBJECT: Authorize the Executive Director to Apply for a Federal Grant on Behalf of the City of Alexandria

WHEREAS: The Northern Virginia Transportation Commission is eligible to apply for, receive and manage federal transit grants;

WHEREAS: NVTC, as a service to its member jurisdictions, can also apply for, receive and manage federal transit grants on behalf of those members;

WHEREAS: The Federal Transit Administration (FTA) requires grant recipients to comply with all grant requirements, including a certification from the Department of Labor regarding labor protection (49 U.S.C. Section 5333(b)); and

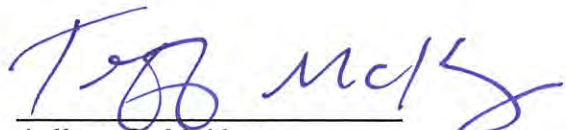
WHEREAS: Staff of Alexandria has asked NVTC to apply for federal transit funds on their behalf and indicated that Alexandria is willing to protect NVTC against any and all federal labor protection claims and related expenses using state transit assistance funds held in trust by NVTC.

NOW, THEREFORE, BE IT RESOLVED that the Northern Virginia Transportation Commission authorizes its executive director to apply to FTA for transit funding and complete all required certifications on behalf of Alexandria for \$2,235,131 of flexed Surface Transportation Program (STP) funds (including non-federal match) for rebuilding access facilities adjacent to the King Street - Old Town Metrorail Station.

BE IT FURTHER RESOLVED that NVTC authorizes its executive director as trustee of state transit assistance received by Alexandria at NVTC, to use funds from Alexandria's accounts at NVTC and/or from future receipts of such funds, to pay any and all expenses arising from federal labor protection claims and related costs (including legal fees) associated with these federal grants, after first informing Alexandria and providing appropriate documentation of the expenses.

BE IT FURTHER RESOLVED that NVTC requires its executive director to obtain from Alexandria a signed standard sub-recipient agreement before execution of this FTA grant.

Approved this 4th day of May 2017.



Jeffrey C. McKay
Chairman

Matthew F. Letourneau
Secretary-Treasurer



RESOLUTION #2337

SUBJECT: Authorize the VRE CEO to Execute an Amendment for the Third 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; and

WHEREAS: The VRE Operations Board recommends the following action.

NOW, THEREFORE, BE IT RESOLVED THAT, the Northern Virginia Transportation authorized the VRE CEO to amend the Contract with Keolis Rail Services Virginia, LLC for Operating Services for Commuter Rail by approving up to \$15,416,000 for the third year of the first option period, for a total Contract value not to exceed \$147,406,557 through June 30, 2018.

Approved this 4th day of May 2017.



Jeffrey C. McKay
Chairman

Matthew F. Letourneau
Secretary-Treasurer



RESOLUTION #2338

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

WHEREAS: The VRE Operations Board previously 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 last amended in May of 2016;


WHEREAS: The current Contract authorization runs through June 30, 2017;

WHEREAS: The increase in Contract authorization will allow for continued maintenance services and life cycle maintenance work scheduled for FY 2018; and

WHEREAS: The VRE Operations Board recommends the following action.

NOW, THEREFORE, BE IT RESOLVED that the Northern Virginia Transportation 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 \$7,092,267, for a total amount not to exceed \$14,344,638 through June 30, 2018.

Approved this 4th day of May 2017.



Jeffrey C. McKay
Chairman

Matthew F. Letourneau
Secretary-Treasurer

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TO: Chairman McKay and NVTC Commissioners

FROM: Kate Mattice and Patricia Happ

DATE: May 25, 2017

SUBJECT: Consent Agenda (Subject to Chairman Approval)

ACTION ITEM: Approve the Consent Agenda

A. Approve the Regional Fare Collection Program Memorandum of Agreement (MOA) and Authorize NVTC's Executive Director to Sign the MOA on Behalf of the Commission

The Commission is asked to approve the [Regional Fare Collection Program Memorandum of Agreement \(MOA\)](#) and to authorize NVTC's Executive Director to sign the MOA on behalf of the Commission. The MOA formalizes regional coordination of technical analysis, testing, funding and administration for the Regional Fare Collection Program, and will allow for formal coordination between NVTC jurisdictional transit operators (DASH, ART, CUE, Fairfax Connector, and Loudoun County Transit), City of Alexandria, PRTC, and VRE. Under this new agreement, NVTC will coordinate regional upgrades to extend the useful life of the existing regional fare collection system and identify future regional fare collection needs and options.

NVTC staff briefed the Commission on the Regional Fare Collection Program and MOA timeline at the April 6th Commission Meeting. An [updated Regional Fare Collection Program overview, including a project timeline](#), is attached. The MOA was reviewed and approved by the Regional Fare Collection Group consisting of representatives from each of the NVTC jurisdictional transit operators.

Background

The regional transit fare payment system is rapidly approaching the end of its useful life. In 2014, NVTC and participating jurisdictions and transportation agencies made a joint commitment to the development, testing, funding, and implementation of WMATA's fare payment initiative called NEPP. The program was cancelled in April 2016, leaving the region with an aging fare payment system with obsolete and unsupported hardware and software, as well as a dwindling supply of spare parts.

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. In December 2016, WMATA entered into a contract with CUBIC for hardware and software design, testing, and equipment procurement to maintain an operational fare payment system for

bus operators in the region. NVTC is also working with regional partners to coordinate regional off-board payment activities and collaborate on an optimal approach for envisioning a future fare collection system. NVTC's coordination and engagement of regional partners is critical to ensure that the upgrades address the unique requirements of each entity.

MEMORANDUM OF AGREEMENT

REGARDING COORDINATION OF TECHNICAL ANALYSIS, TESTING, FUNDING AND
ADMINISTRATION FOR THE REGIONAL FARE COLLECTION PROGRAM

This Memorandum of Agreement (MOA) is entered into between and among the Northern Virginia Transportation Commission (NVTC) and the below identified participating jurisdictions and transportation agencies (collectively, the Entities and individually, an Entity) as a means of demonstrating their joint commitment to the development, testing, funding and implementation of the Washington Metropolitan Area Transit Authority's (WMATA or Metro) Farebox/Driver Control Unit (DCU) Support project, NVTC's Off-Board Fare Payment project, and WMATA and NVTC's Next Generation Fare Collection project, (collectively, the Regional Fare Collection Program or Program) as is fully described below.

WITNESSETH:

WHEREAS, this MOA replaces the MEMORANDUM OF AGREEMENT REGARDING COORDINATION OF TECHNICAL ANALYSIS, TESTING, FUNDING AND ADMINISTRATION FOR NEW ELECTRONIC PAYMENTS PROGRAM (NEPP) SYSTEM dated May 14, 2014 and the FIRST AMENDMENT TO THE MEMORANDUM OF AGREEMENT dated January 30, 2015 (collectively, the NEPP MOA), both of which are hereby terminated; and

WHEREAS, the NEPP MOA provided support for NEPP, a new fare payment system being procured at the time by WMATA, which WMATA canceled in April 2016; and

WHEREAS, this MOA addresses an immediate need to coordinate regionally integrated upgrades to extend the useful life of the existing regional fare collection system and identify future regional fare collection needs and options for ultimate integration with the regional fare collection system implemented by WMATA;

WHEREAS, this MOA sets forth the principles agreed upon by NVTC and the Entities which will be used in continuing the regional fare collection upgrade program and the principles for Entity participation.

NOW, THEREFORE, in consideration of the foregoing recitals, each of which are incorporated in this MOA, and other good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, NVTC and the Entities agree as follows:

1.0 PURPOSE

NVTC and the Entities mutually desire, in coordination with WMATA, and with the assistance of grant funding agencies including the Virginia Department of Rail and Public Transportation (DRPT), to provide transit customers an effective fare collection system. Accordingly, in accordance with the terms of this MOA, NVTC is authorized to act on behalf of the following Entities as the contracting and coordinating agent for technical analysis, testing, funding and administration of the Regional Fare Collection Program:

- City of Alexandria
- Alexandria DASH
- Arlington County (Arlington ART)
- City of Fairfax (Fairfax CUE)
- Fairfax County (Fairfax Connector)
- Potomac and Rappahannock Transportation Commission (PRTC OmniRide and Omni Link)
- Loudoun County (LC Transit)
- NVTC and PRTC jointly as owners and operators of Virginia Railway Express (VRE)

2.0 BACKGROUND AND GOALS

The current regional fare collection system is rapidly approaching the end of its useful life. After the cancellation of NEPP, WMATA, in consultation with the Entities, decided to invest in extending the life of the existing regional fare collection system until a long-term Regional Fare Collection Program is in place.

With the cancellation of NEPP, there is a need to immediately coordinate upgrades, develop solutions to existing needs, and identify potential enhancements and options for the future Regional Fare Collection Program. The existing, aging regional fare collection system is experiencing a declining supply of spare parts and is based on hardware and technology that is no longer manufactured or supported. The activities needed to support the Regional Fare Collection Program efforts of the Entities following NEPP cancellation include farebox upgrade support and coordination with WMATA; off-board payment programs for selected transit corridors; and long-term regional fare collection strategy planning.

The Entities concur in the following goals for the Regional Fare Collection Program:

- Maximize passenger convenience in purchasing and using existing devices, such as secure ID badges, smartphones, existing SmarTrip cards and debit and credit cards, all of which are integral to allowing ease of access for transit customers to pay fares in the regional system;
- Continue to maximize transit integration by allowing passengers to travel seamlessly between and among different transit service providers and transportation modes using existing devices paired with an individual account;
- Capitalize on operational effectiveness and work to develop a simpler system focused on operational ease;

- Utilize the Regional Fare Collection Program to the benefit of customers, participating agencies and jurisdictions, and create an environment which is conducive to the continued growth and expansion of the transit ridership base;
- Support broad access to transit through Regional Fare Collection Program policies and programs;
- Ensure commonality of passenger fare collection practices leveraging existing, accessible technology and the ability for customers to still pay for fares using cash onboard buses if desired;
- Maintain a regional approach that takes advantage of pricing opportunities and regional opportunities to maximize available funding;
- Develop policies and programs regarding the Regional Fare Collection Program in an open and cooperative environment; and
- Maintain local decision making authority and coordinate policies and procedures regionally to support continued seamless operation of the Regional Fare Collection Program.

To achieve the goal of a coordinated approach to the Regional Fare Collection Program, regional administration is required. Among the areas requiring coordination to ensure as seamless a fare collection system as intended are: fare policy coordination (but not necessarily pricing), fare technology, and operating/administrative procedures. There may also be procedural issues that will require a coordinated response, which can best be addressed by NVTC coordination with the Entities as a whole or with a standing committee of the Entities, as may be agreed.

3.0 TECHNICAL SUPPORT

Each Entity authorizes NVTC to procure on their behalf, subject to availability of funds, technical support during WMATA's development, testing and implementation of the Regional Fare Collection Program throughout the WMATA transit zone, and to work with the Entities in identifying sources of funding to achieve the goals set forth in this MOA. NVTC will provide management and technical support on behalf of the Entities. Support work in this task will include but not be limited to:

- Reviewing and responding to requests for technical information or resources;
- Attending meetings of all transit providers participating in implementation of the Regional Fare Collection Program;
- Supporting regional subcommittees that represent the Entities' interests; and
- Attending design review meetings.

The scope of the Regional Fare Collection Program consists of WMATA's Farebox/DCU projects, NVTC's Off-Board Fare Collection, and Next Generation Fare Collection. The task list involved in this effort includes but is not limited to the following:

1. **Farebox/DCU Upgrade Support:** NVTC is coordinating with WMATA and Entities on design, testing, and procurement to deliver hardware and software upgrades for buses and bus garages. This effort includes:

- a. gathering functional and technical requirements;
 - b. reviewing plans and submittals;
 - c. overseeing testing and evaluation;
 - d. supporting coordination with WMATA and Entities through regular updates on activities, progress and analysis and actively seeking input on the Entities' needs;
 - e. working with the Entities to identify integration capabilities and to review the preferred integration approach from technical and contractual perspectives;
 - f. identifying and negotiating integration capabilities of existing fareboxes to the new Regional Fare Collection Program;
 - g. reviewing integration conceptual designs and contractual change documents related to this integration;
 - h. reviewing pilot and testing activities, plans and results.
2. **Off-Board Fare Collection:** NVTC is working with Entities to coordinate regional off-board payment activities through:
- a. providing regular updates on analysis including vendor and technology evaluation;
 - b. assisting in evaluation and selection of a strategy considering issues such as networking requirements, Payment Card Industry Data Security Standard compliance, and backend integration with the Regional Fare Collection Program; and
 - c. supporting procurement of selected technologies to include vendor oversight and coordination, design reviews, backend integration, testing and installation.
3. **Next Generation Regional Fare Collection:** NVTC is collaborating with Entities to envision and plan a future fare collection system. Activities to achieve this include:
- a. working with Entities to understand future fare collection needs and timelines;
 - b. communicating with Entities on emerging fare collection technology;
 - c. leading discussions of long-term fare collection strategy to include fare collection as a service, mobile payments, payment convergence with other services (including bike share, carpool, and transportation network companies) and other account-based approaches;
 - d. examining the capabilities to leverage existing fare collection capabilities within the region including mobile ticketing applications; and
 - e. coordinating discussions with WMATA on moving forward on future regionally coordinated fare collection procurements.

4.0 FUNDING AND FINANCING

On behalf of the Entities, NVTC was awarded a FY 2015 DRPT grant in the amount of \$800,000 (\$400,000 grant amount/State share and \$400,000 local share of the project cost) for the NEPP implementation. A portion of this grant was utilized for technical assistance leading up to the cancellation of NEPP. The allocation of the local share of these project costs matched the allocation structure of the 2014 mid-cycle technical assistance grant awarded under the NEPP

MOA. The scope of technical assistance needed by the Entities has changed since the NEPP MOA. As a consequence, effective July 1, 2016, an updated allocation structure will be used for the remainder of the technical assistance cost.

The technical assistance cost is broken down for tasks applicable only to Entities with bus operations and the Next Generation Regional Fare Collection task applicable to all Entities (Entities with bus operations and VRE), or 70% and 30%, respectively. The percentage share for each of these two areas of scope are determined in a similar manner as the NEPP MOA using historical SmarTrip customer use transactions. The percentage share for work applicable only to Entities with bus operations proportionally distributes VRE's original share from the NEPP MOA among the other Entities. The effective share is then a weighted average of the shares for the two scope areas. All shares shall be subject to appropriation of funds by each Entity.

The allocation structure for the Entities is as follows:

Entity Breakdown for \$400,000 Local Match							
Entity	Through June 2016		After June 2016				Total Share ⁵
	Share ¹ (Through June 2016)		Bus Operator Technical Assistance ² (70%)	Next Gen. Regional Fare Collection ³ (30%)	Share ⁴ (After June 2016)		
NVTC	65.13%	\$33,540.15	78.72%	65.13%	74.61%	\$260,010.66	\$293,550.81
WMATA	5.76%	\$2,968.79	6.97%	5.76%	6.60%	\$23,014.75	\$25,983.54
Jurisdictions	11.84%	\$6,098.19	14.31%	11.84%	13.57%	\$47,274.54	\$53,372.73
Loudoun County	17.27%	\$8,892.86	0.00%	17.27%	5.22%	\$18,200.05	\$27,092.91
PRTC	100.00%	\$51,500.00	100.00%	100.00%	100.00%	\$348,500.00	\$400,000.00
VRE							
\$400,000 DRPT funds, \$400,000 required local match							

¹Based on FY2014 SmarTrip Customer Use Transactions

²Shares through June 2016 proportionally updated after excluding VRE

³Same shares as through June 2016

⁴Weighted average using 70%/30% split for costs applicable to only bus operating Entities or all Entities

⁵Estimated maximum Entity share if entire technical assistance grant is used

In the same manner as provided in the NEPP MOA, each Entity that is a NVTC WMATA jurisdiction at the time of entering into this MOA, authorizes NVTC to use future state transit assistance reimbursement receipts before allocation to the jurisdictions ("off the top") to pay the Entity's above listed respective share of the local match. The allocation to these NVTC WMATA jurisdictions is based on the NVTC Subsidy Allocation Model (SAM) in effect at the time of expenditure. Each Entity that is not a NVTC WMATA jurisdiction shall be responsible for providing its respective share of the local match from other eligible sources. The local match for other than NVTC WMATA jurisdictions are due thirty (30) days after an invoice is received from NVTC.

NVTC and the Entities will work together to develop a plan for funding the acquisition of equipment and implementation of the Regional Fare Collection Program. This plan may include but will not be limited to NVTC seeking grant assistance on behalf of the Entities from DRPT and the Commonwealth, as well as looking at financing options.

5.0 COORDINATION AND ADMINISTRATION

NVTC will coordinate and administer the Entities' participation in development and implementation of the Regional Fare Collection Program. NVTC will convene regular meetings among the Entities and other regional stakeholders to discuss and seek agreement on all aspects of system testing, funding and implementation.

6.0 PARTICIPANT ROLES AND RESPONSIBILITIES

Entities executing this MOA agree to:

- Actively participate in the technical review and implementation of the Regional Fare Collection Program;
- Work to consensus insofar as possible in resolution of all matters;
- Designate a lead and appropriate additional representatives to participate in technical teams for the concept design review and the pilot phase, and in the funding work group for both technical resources and acquisition and implementation of the new hardware and system;
- Make personnel available to analyze a variety of functions related to the Regional Fare Collection Program and the purposes of this MOA, including: operations, customer service, technology, marketing and finance;
- Participate in work sessions, routine progress checks, and milestone reviews; and
- Identify appropriate funding sources of local match

7.0 AMENDMENTS

Any signatory to this MOA may propose an amendment at any time. Any such amendment shall become effective upon the approval of the amendment by all participating Entities and execution of a written amendment by each.

8.0 DURATION OF MEMORANDUM OF AGREEMENT

This MOA shall be effective upon the signature of the NVTC and each of the Entities, and shall have an initial duration of five (5) years from its initial effective date and shall automatically be renewed for an additional five (5) year period unless a majority of the participating Entities give written notice that they do not wish to renew their participation not less than ninety (90) calendar days prior to the expiration date. If this MOA is not renewed, the participating Entities shall use the ninety (90) calendar day period prior to the expiration of the MOA for the orderly termination of their further participation in the development, testing, and implementation of the Regional Fare Collection Program.

9.0 ASSIGNMENTS

No Entity shall have the power to assign either their rights or obligations under this MOA, provided however, that any reorganization of an Entity shall automatically transfer the former Entity's rights and obligations to its successor.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Agreement by their duly authorized representative;

AGENCY: City of Alexandria

By: _____
Name: Mark B. Jinks (Date) _____
Title: City Manager

AGENCY: Alexandria DASH

By: _____
Name: Josh Baker (Date) _____
Title: CEO/General Manager, Alexandria
DASH

AGENCY: Arlington County / Arlington Transit (ART)

By: _____
Name: Mark Schwartz (Date) _____
Title: County Manager

AGENCY: City of Fairfax /CUE

By: _____
Name: Robert Sisson (Date) _____
Title: City Manager

AGENCY: Fairfax County / Fairfax Connector

By: _____
Name: Tom Biesiadny (Date) _____
Title: Director of Transportation

AGENCY: Potomac and Rappahannock Transportation Commission (PRTC)

By: _____
Name: Dr. Robert (Bob) Schneider (Date)
Title: Executive Director

AGENCY: Loudoun County / Loudoun County Transit (LC Transit)

By: _____
Name: Tim Hemstreet (Date)
Title: County Administrator

AGENCY: NVTC and PRTC, jointly as the Virginia Railway Express (VRE)

By: _____
Name: Doug Allen (Date)
Title: Chief Executive Officer

AGENCY: Northern Virginia Transportation Commission (NVTC)

By: _____
Name: Katherine Mattice (Date)
Title: Executive Director, NVTC

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Regional Fare Collection Program Update

May 2017

NVTC'S ROLE

NVTC is coordinating regional upgrades to extend the useful life of the regional fare collection program and analyzing future regional fare collection needs and options.



FAREBOX/DCU UPGRADE

- Coordinate with WMATA and regional partners on design, testing, and procurement to deliver hardware and software upgrades for buses and bus garages
- Gather functional and technical requirements, review plans, submittals, and oversee testing and evaluation
- Support coordination with WMATA and regional partners through regular updates on activities, progress
- Provide analysis and actively seek input from entities



OFF-BOARD FARE COLLECTION

- Work with regional partners to coordinate regional off-board payment activities by providing regular updates on activities, progress, and analysis including vendor and technology evaluation
- Assist in evaluation and selection of a strategy considering issues such as networking requirements, PCI compliance, and backend integration with the regional fare collection system
- Support procurement of selected technologies to include vendor oversight and coordination, design reviews, backend integration, testing and installation



NEXT GENERATION REGIONAL FARE COLLECTION

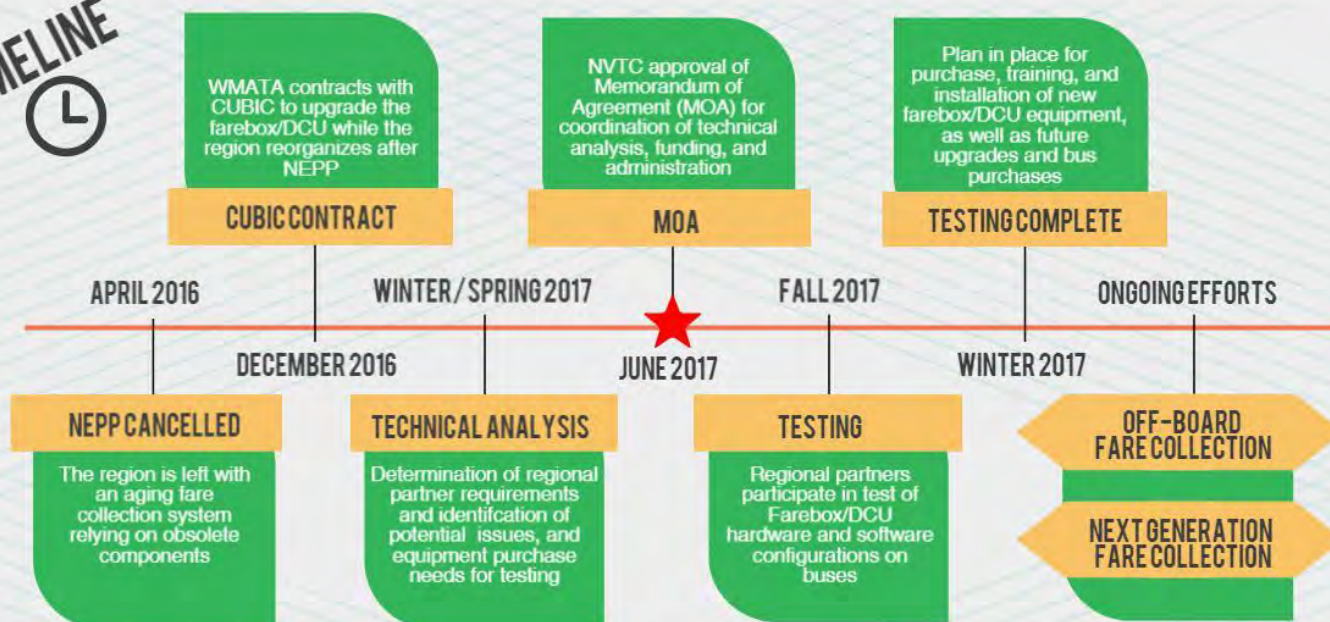
- Collaborate with regional partners on an optimal approach for envisioning a future fare collection system.
- Work with entities to understand future fare collection needs and timelines.
- Communicate with entities on emerging fare collection technology and lead discussions of long-term fare collection strategy to include fare collection as a service, mobile payments, payment convergence with other services (bike share, carpool, TNCs, etc.) and other account based approaches
- Examine capabilities to leverage existing fare collection capabilities within the region including mobile ticketing applications
- Coordinate discussions with WMATA on moving forward on future regionally coordinated fare collection procurements



FUNDING & ADMINISTRATION

- NVTC has applied for a scope modification of an existing NEPP DRPT capital assistance grant
- WMATA's DCU contracts will include a rider providing regional partners the same pricing, terms, and conditions as WMATA

TIMELINE



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TO: Chairman McKay and NVTC Commissioners

FROM: Kate Mattice and Andrew D'huyvetter

DATE: May 25, 2017

SUBJECT: Washington Metropolitan Area Transit Authority (WMATA)

A. Presentation by WMATA General Manager/CEO Paul Wiedefeld on Keeping Metro Safe, Reliable and Affordable: An Action Plan to Meet Regional Transit Needs

WMATA General Manager/CEO Paul Wiedefeld will discuss his recently-released action plan, [Keeping Metro Safe, Reliable and Affordable: An Action Plan to Meet Regional Transit Needs](#). A [six-page summary](#) and the [General Manager's presentation](#) are attached. This plan acknowledges that WMATA's business model must change as operating expenses are growing at nearly the twice the rate of revenues. It also includes a comprehensive funding analysis to inform stakeholder discussions around WMATA's financial needs.

WMATA's analysis found that \$15.5 billion in capital funds are required over the next 10 years. The General Manager's plan proposes capping jurisdictional contributions at three percent annual growth, reauthorizing the commitment of the federal government through maintaining the Federal PRIIA funding and establishing a dedicated capital trust fund of an additional \$500 million per year to be raised by new revenue.

As for cost containment, the plan proposes achieving the jurisdictional subsidy caps through aggressive cost containment, providing 401k retirement plans going forward for all new hires, and opening to competition those functions that WMATA can outsource where efficiencies can be gained. The plan proposes leaving binding arbitration intact, but identifies the needs to amend the National Capital Area Interest Arbitration Standards Act to mandate that arbitrators render awards consistent with WMATA's financial condition. The plan also includes the creation of a rainy-day fund, which WMATA lacks.

ACTION ITEM: Resolution #2339: Initial Reforms to the Washington Metropolitan Transit Authority (WMATA)

The Commission is asked to approve [Resolution #2339 supporting the initial reform actions proposed by WMATA's General Manager/CEO Paul Wiedefeld](#). While NVTC is engaged with the Commonwealth on more extensive discussions that relate to the WMATA Compact and other reforms, the action plan documents opportunities to address immediate operational and fiscal challenges without changes to the WMATA Compact.

This resolution articulates the importance of WMATA to Northern Virginia and the Commonwealth, states NVTC's interest in the fiscal and operational health of WMATA, and expresses support for the direction and spirit of the General Manager's proposal.

B. Board of Directors Report

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

- *Capital Improvement Program (CIP) Amendment*

Following the Finance Committee's recommendation on May 11th, the WMATA Board is anticipated to [approve a FY17 CIP Amendment](#) to accommodate continued accelerated capital program delivery in FY2017. The amendment to the FY2017-2022 Capital Improvement Program increases the approved FY2017 capital budget by \$75 million to support the SafeTrack program, the accelerated delivery of the 7000 series railcars, the construction of new bus maintenance facilities and the purchase of railcar parts. The additional budget authority will be funded with proceeds from property sales and using WMATA's existing lines of credit, with no anticipated additional jurisdictional contribution required in FY2017.

- *Consent Items*

On May 25th, the WMATA Board is anticipated to approve three consent items. These items include an [indemnification of Fairfax County for a maintenance agreement](#) at the District II Police Substation, an [indemnification of the Washington Convention and Sports Authority](#) for use of Convention Center facilities, and a [change in span of service hours to align the rail operating hours with the implementation date for the fare and service changes](#) currently scheduled to be effective June 25, 2017.

- *Art in Transit – Reston Town Center Station*

On May 25, the WMATA Board is anticipated to [approve authorization for the General Manager to finalize and sign a contract with an artist for public artwork](#) at the Phase II Silver Line Reston Town Center Station. The Customer Service, Operations, and Security Committee recommended approval at its May 11th meeting.

C. Committee Reports

1. Audits and Investigations Committee

On May 25th, the Audits and Investigations Committee is anticipated to [accept three Office of the Inspector General \(OIG\) Reports](#).

The first report, an "Audit of Trapeze Scheduling and Dispatch System," makes recommendations to WMATA management to improve the Department of Access Services controls in monitoring the contractor, and ensure the Contract Officer Technical Representative is accountable for monitoring the contractor's performance requirements.

The second report, “Degaussing/Wiping of Electronic and Magnetic Media,” found that hard drives were available for public auction that had not been erased and recommended steps to ensure that hard drives are properly erased before being surplus.

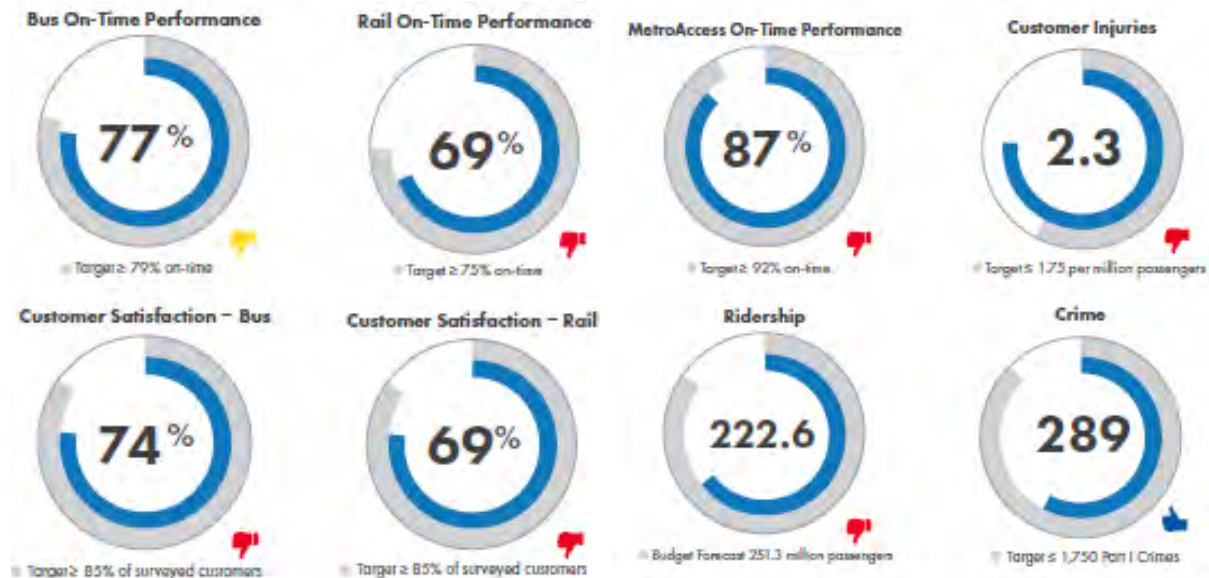
The third report, an “Audit Report of WMATA’s Workers’ Compensation Program,” makes recommendations to develop an effective fraud detection program and to improve the controls over the Third-Party Administrator.

2. Customer Service, Operations, and Security Committee

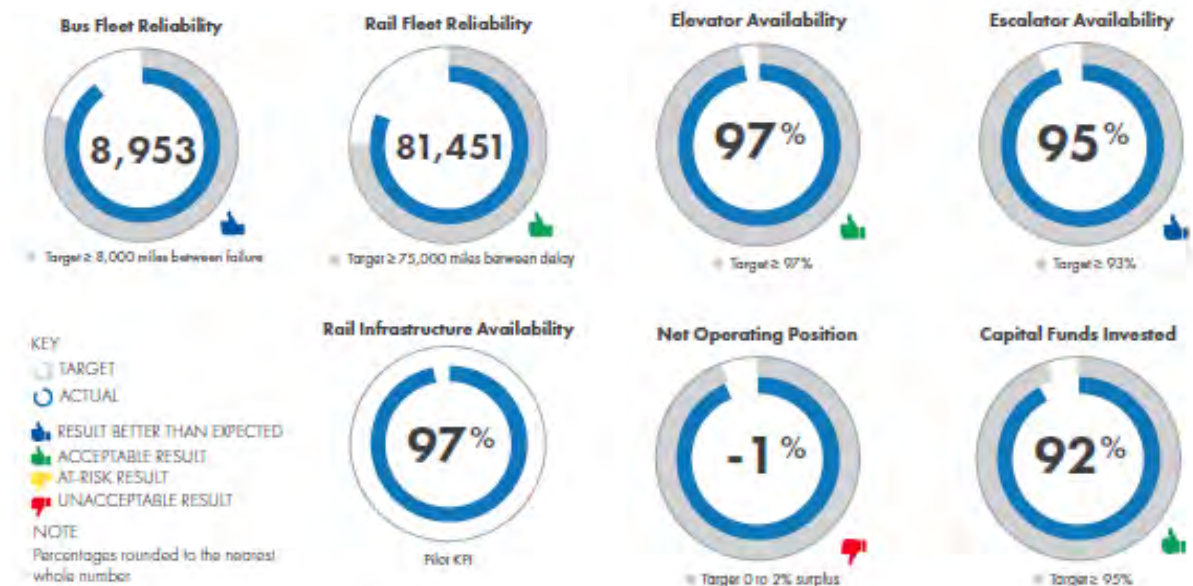
On May 11th, the Customer Service, Operations, and Security Committee received an update from the [Vital Signs Quarterly Report](#) for the first quarter of 2017 (Jan-March). Several indicators were below target including: Metrorail and MetroAccess on-time performance, bus and rail customer satisfaction, and ridership. While Metrorail on-time performance was below target for the quarter, there were several positive trends (Figure 1). There were 70 percent fewer rail-car delays compared to Q1 2016, which led to the best customer on-time performance since June 2016. Several indicators met targets including: bus and rail fleet reliability and escalator and elevator availability. Bus and rail fleet reliability are performing above target because of aggressive railcar and bus maintenance efforts, the retirement of the 1000 and 4000 series, and purchases of new buses and new 7000 series railcars.

Figure 1: Vital Signs Quarterly Report Performance Measures

Key Performance Indicators



Key Drivers



Source: WMATA Customer Service, Operations, and Security Committee [presentation on Quarterly Vital Signs Report](#)

3. Finance Committee

▪ FY2017 Third Quarter Financial Update and CIP Amendment

On May 11th, the Finance Committee received a briefing on the [FY2017 Third Quarter Financial Update and CIP Amendment](#). WMATA finished the third quarter of 2017 with negative net operating position of \$11.1 million. Due to decreased ridership and fare revenue, revenues are below budget by \$87 million year to date (Figure 2). Management cost reduction actions have offset most of the revenue losses, but aggressive efforts must continue to balance the budget. As of the end of the third quarter, 653 vacant and filled positions no longer critical to WMATA's core business requirements have been eliminated, with the balanced anticipated to be completed by the end of June. The year-end deficit forecast has improved, but the use of prior year reserves may be necessary (and would require Board approval).

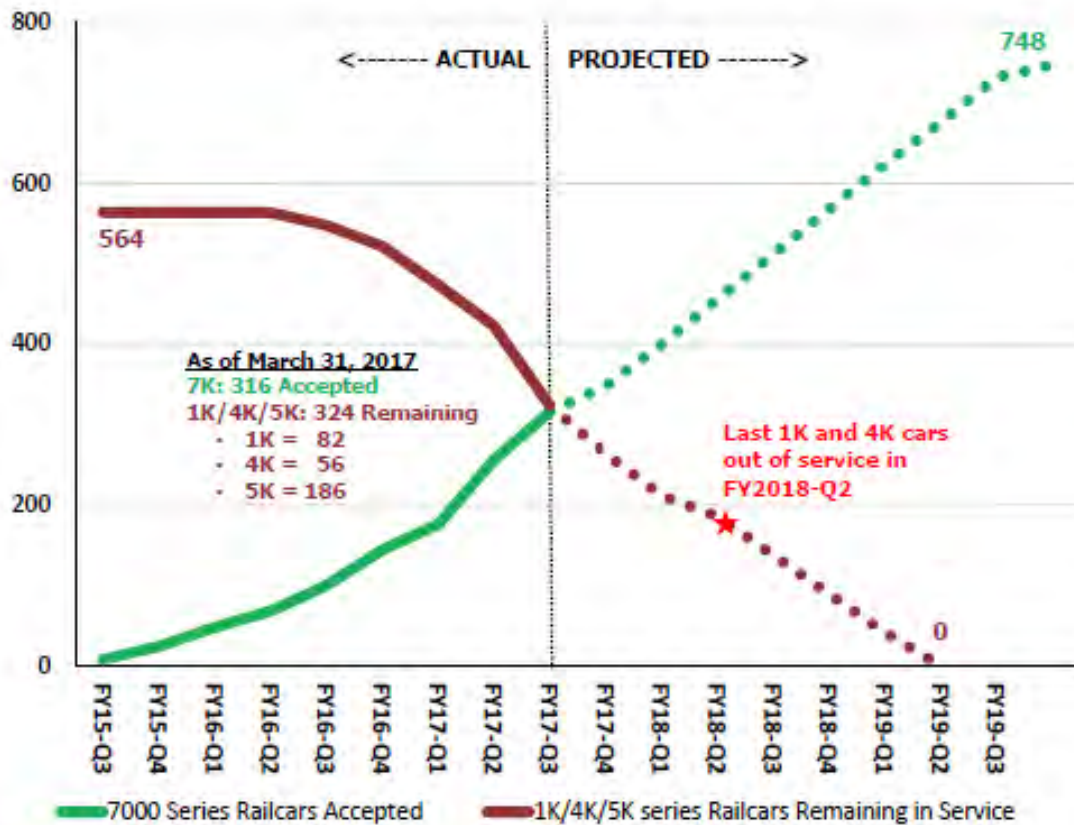
Figure 2: WMATA Net Operating Position for FY17 Third Quarter

(millions) Year to Date	FY2017-Q3		Variance	
	Budget	Actual	\$	Percent
Revenue	\$ 662	\$ 575	\$(87)	-13%
Expense	\$ 1,308	\$ 1,232	\$(76)	-6%
Net Subsidy	\$ 646	\$ 657	\$ 11	2%
Cost Recovery	51%	47%		

Source: WMATA Finance Committee [presentation on Third Quarter 2017 Financial Update and CIP Amendment](#)

Total capital investment through the third quarter of 2017 was \$874 million, and it is projected to continue at an accelerated pace to close out the year at close to \$1.2 billion. Capital performance in the third quarter has included \$260.9 million on Railcar Acquisition, \$84.6 million in Railcar Maintenance and Overhaul, and \$24.6 million in improvements to railcar maintenance facilities. This has resulted in the conditional acceptance of 60 new 7000 series railcars (20 each month). As of March 31, 2017, a total of 316 new 7000 series railcars are in service (Figure 3). Through the third quarter, a total of 198 of the 1000 series railcars and 46 of the 4000 series railcars were removed from service.

Figure 3: 7000 Series Railcar Acquisition Program



Source: WMATA Finance Committee [presentation on Third Quarter 2017 Financial Update and CIP Amendment](#)

4. Governance Committee

The Governance Committee received [ethics training](#) on identifying and resolving actual and apparent conflicts, making disclosures and acknowledgements, and rules regarding the acceptance of gifts.

5. Safety Committee and SafeTrack

▪ Safety Committee

On May 25th, the Safety Committee is anticipated to recommend that the WMATA Board [affirm the Safety Management System Policy Statement](#). The policy reflects the



recommendations made by the FTA as part of implementing a Safety Management System (SMS). An SMS is a comprehensive, collaborative approach that brings management and labor together to build on the transit industry's existing safety foundation to control risk better, detect and correct safety problems earlier, share and analyze safety data more effectively, and measure safety performance more carefully. The Safety Committee [received a briefing from the FTA in January 2017](#) on a SMS.

On May 25th, the Safety Committee [will receive a presentation on initial results of the Occupational Therapist Working Group](#) initiative to prevent customer injuries on MetroAccess that occur during boarding and alighting MetroAccess vehicles. Most MetroAccess injuries occur during boarding and alighting. A comprehensive analysis by the Occupational Therapist Working Group concentrated on root causes and evaluated how operators assist customers. This yielded recommended improvements to operator training to prevent these kinds of injuries; recommended training and procedures will be implemented in CY2017.

- [SafeTrack](#)

WMATA released schedule information for the [remainder of the SafeTrack surges](#) between April and June 2017. The SafeTrack program will conclude on June 25th, at which time WMATA will shift to a regimen of preventive maintenance. The surges are summarized below:

Surge Projects and Alternate Travel Options (Click on individual surges for more details)

Date	Duration	Lines	Impact	Area Affected
May 16 - June 15	31 days	 OR	Line Segment Shutdown	New Carrollton to Stadium-Armory
June 17 - 25	9 days	 RD	Line Segment Shutdown	Shady Grove to Twinbrook

[Surge #14](#), a shutdown of the Green Line in Maryland, recently completed on May 14th. [Surge #15](#), a shutdown of the Orange Line in Maryland and DC, is currently ongoing and is scheduled to end on June 15th. During this surge, the Orange Line will operate near normal service between Vienna and Largo Town Center, and the Silver Line will operate between Wiehle-Reston East and Stadium-Armory every 12 minutes. WMATA also released progress reports for [Surge #13](#) and [Surge #14](#).

WMATA has also scheduled additional [planned Metrorail track work](#) that includes additional single tracking and weekend shutdowns. NVTC continues to host weekly SafeTrack calls to coordinate the Northern Virginia stakeholders.

D. Virginia Ridership and Parking Facility Utilization

WMATA Virginia Ridership (Unlinked Passenger Trips) April 2016 – 2017			
	April 2016	April 2017	Percent Change
Metrorail			
Total	8,617,642	7,416,334	-13.9%
Weekday Average	317,254	283,709	-10.6%
Metrobus			
Total	1,672,551	1,561,309	-6.6%
Weekday Average	68,687	65,577	-4.5%
MetroAccess			
Total	27,675	26,955	-2.6%

WMATA Virginia Parking Facility Usage April 2016 – 2017				
Station/Lot	April 2016	Y-T-D FY16	April 2017	Y-T-D FY17
Huntington	82%	72%	59%	64%
West Falls Church	59%	55%	50%	49%
Dunn Loring	83%	77%	75%	59%
Vienna	84%	80%	74%	63%
Franconia	72%	68%	51%	53%
Van Dorn	113%	107%	90%	95%
East Falls Church	122%	116%	121%	113%
Wiehle-Reston East	94%	89%	91%	82%
Northern Virginia Total	80%	75%	67%	63%

E. Schedule of Upcoming Board Decisions

Key Issues	Meeting	Date
SafeTrack Report/Preventative Maintenance Program (I) Fair Share Pilot (I) Rail Operations Control Center Improvements (I)	Customer Service, Operations and Security Committee	June 8, 2017
2009 Bonds Refunding (A)	Finance Committee	June 8, 2017

<i>Anticipated Information (I) and Action (A) Items</i>	<i>WMATA Board Date Target</i>
<i>Railcar Program Update, 2017 Bus Service Change Update, and MetroAccess Service Initiative Update (I)</i>	<i>July 2017</i>



RESOLUTION #2339

SUBJECT: Initial Reforms to the Washington Metropolitan Area Transit Authority (WMATA)

WHEREAS: The Washington Metropolitan Area Transit Authority (WMATA) is critical to Northern Virginia and the Commonwealth's transportation network and economic growth;

WHEREAS: WMATA faces significant operational and fiscal challenges;

WHEREAS: The Northern Virginia Transportation Commission (NVTC) was founded in 1964 in part to represent the interests of the Commonwealth during the establishment of WMATA;

WHEREAS: NVTC has an ongoing role in managing Northern Virginia's funding of WMATA and appointing Virginia's representatives to the WMATA Board of Directors;

WHEREAS: NVTC is involved in strategic decision-making to find solutions to the challenges facing WMATA;

WHEREAS: NVTC is engaged with the Commonwealth of Virginia on longer-term reform discussions for purposes of revising the Washington Metropolitan Area Transit Authority Compact of 1966 (WMATA Compact) and implementing other reforms necessary to ensure the near-term and long-term viability of WMATA;

WHEREAS: On April 19, 2017 Paul Wiedefeld, WMATA's General Manager and CEO, announced an action plan to significantly reform operations at WMATA without changes to the WMATA Compact;

WHEREAS: The General Manager's plan recognizes that WMATA's capital funding agreement and the Federal Passenger Rail Investment and Improvement Act authorization will expire next year and that operating costs are growing at nearly twice the rate of revenue;

WHEREAS: The General Manager's plan proposes a change in WMATA's business model to address operating and capital costs; and

WHEREAS: His plan provides an excellent foundation for the continued discussion of solutions to WMATA's challenges.

NOW, THEREFORE, BE IT RESOLVED that, as a first step in the effort to reform WMATA, NVTC endorses the direction and spirit of Mr. Wiedefeld's proposal and encourages him to immediately begin implementation.

BE IT FURTHER RESOLVED that NVTC supports WMATA's approach to operate both within fiscal parameters and under policies and practices that assure high levels of safety and efficiency.

Approved this 1st day of June 2017.

Jeffrey C. McKay
Chairman

Matthew F. Letourneau
Secretary-Treasurer

Keeping Metro Safe, Reliable and Affordable

By WMATA GM/CEO Paul J. Wiedefeld, April 19, 2017

Introduction

Metro represents a \$40 billion asset and enterprise that has generated returns on regional and national investments through mobility, traffic congestion relief, improved air quality, and economic development. Now more than 40 years old, customers are feeling the effects of an aging system that is jeopardized by decades of deferred maintenance. Today, the system has a total of \$25 billion in unfunded capital needs. **With only one more year of committed capital funding, Metro needs \$15.5 billion over the next 10 years to remain safe and reliable.** Significantly, Metro is still one of the only major American transit systems without funding dedicated to preserve its assets, and to invest in safety and reliability.

Metro also has a unique business model for operating bus and rail services that flows from WMATA's charter and governance structure, which has become financially unsustainable with cost growth that far exceeds revenue. While rider fares and commercial sources, such as advertising, fund more than 45 percent of Metro's operating costs – one of the highest cost recovery rates in the country – Metro's operating expense is rising at nearly twice the rate of Metro's (fare and commercial) revenues.

Left unchecked, Metro's public subsidy requirement for day-to-day operations would grow from \$980 million to \$1.6 billion annually in 10 years – driven primarily by wage and benefit costs. Even if Metro were to regain tomorrow the 100,000 average daily riders lost over the last decade, its public subsidy need for day-to-day operations would still grow to \$1.5 billion in 10 years.

Without a change to this business model, the funding jurisdictions will have to continue to choose every year between substantially reducing service or finding \$12 billion more in public money for Metro's operations over the next 10 years.

Failure to act, and/or continued reliance on insufficient capital and unchecked operating expense growth, could result in cannibalization of capital funding to the detriment of system safety and reliability, erasing the gains Metro has made through SafeTrack and perpetuating the unreliable service riders have endured for too long. New railcar delivery would slow or end, necessary transfer station safety and passenger flow improvements would linger on the drawing board, the bus fleet would age in place, the nation's largest escalator fleet would fall back into disrepair, and customer satisfaction would remain in the 65-70 percent range or decline. Further, because Metro is a key component of the Capital's national security cordon, providing WMATA with the necessary resources to discharge this duty is imperative.

Not only would Metro safety and service be compromised, but inaction would worsen Metro's financial condition, as it becomes more unsustainable each year.

WMATA's unfunded liabilities would grow, and its deteriorating financial condition would impact the agency's credit rating, increase its debt profile and costs to borrow money, which is necessary to ensure proper cash flow. The \$1.0 billion unfunded pension liability would not be addressed and could grow, and the active employee health care costs and \$1.8 billion retiree and other post-employment benefits (OPEB) liability would continue to climb.

Rather than continue a yearly process of lurching from one funding exercise to another to keep Metro afloat, the region would be better served by establishing a new approach to funding that preserves Metro's value, delivers safe and reliable transit service, supports a world-class transit experience for residents and visitors to the nation's capital, and provides stability for Metro's valued customers and employees.

To that end, WMATA has completed a detailed analysis of the financial challenges it faces and practical requirements necessary to keep Metro safe, reliable and affordable. The analysis is focused on two priorities: dedicated capital funding to provide safe and reliable service, and changes to WMATA's business model to keep service affordable for riders and taxpayers.

This framework for WMATA seeks to inform the public and the urgent discussions underway among stakeholders about how to meet Metro's needs next year and beyond. While respecting that WMATA wages and benefits are established through collective bargaining, this analysis also sets forth certain principles intended to enable Metro to provide fair compensation to its current employees, while identifying management tools and other opportunities to achieve efficiencies.

Several significant requirements are contained here that address both capital and operating expenses, as well as financial management best practices, including:

- Grow Metro's capital program to \$1.5 billion average annual investment to fund safety and reliability with a dedicated revenue stream
- Reauthorize and fund federal capital investment (PRIIA) in safety and reliability at least at current level (\$1.5 billion over 10 years)
- Commit to a regional multi-year, stable revenue source to generate \$500 million per year for a Capital Trust Fund
- Provide a lock box feature to ensure the Fund is dedicated to capital investment
- Maintain the current level of jurisdictional capital funding with three percent annual growth cap
- Preserve pensions for active employees and retirees, but provide 401K-like plans for new hires
- Provide flexibility to reduce costs of day-to-day operations with tools including competitive contracting of targeted functions, where permitted (e.g. new services, operations and facilities, such as Silver Line Phase II)
- Amend the National Capital Area Interest Arbitration Standards Act (aka Wolf Act) to require arbitration process consideration of financial realities

- Create a Rainy Day Fund of to incrementally provide 10% of the operating budget over 10 years
- Cap jurisdictional contributions for operating at three percent annual growth

Metro's Capital Requirement

Capital investment is the lifeblood of transit systems, particularly (capital-intensive) rail properties, and is absolutely vital to maintaining the current system and new Silver Line extension in safe and reliable condition. For Metro, capital is necessary to pay for new and rebuilt railcars and buses, tracks, infrastructure, the power system required for 8-car trains, and much needed safety and passenger flow improvements in transfer and other high ridership stations.

While Metro has \$25 billion in total unfunded capital needs, WMATA will require \$15.5 billion of this amount over the next ten years for critical capital projects.

WMATA's Capital Funding Agreement and PRIIA authorization both expire next year, imperiling the current (annually appropriated) stream of capital for safety and reliability projects. WMATA's annual capital program is currently funded by:

- *Federal Formula Grants: \$300M*
- *Federal PRIIA: \$150M*
- *Regional match for PRIIA: \$150M*
- *Jurisdictions' commitment: \$210M*

To supplement the \$810 million in federal and jurisdictional capital funding, the Board and jurisdictions authorized borrowing \$291 million to be repaid by future jurisdictional annual contributions.

Even if this level of effort continues, the capital funding shortfall for Metro's safety and reliability requirements will be at least \$7 billion over 10 years. To maintain a safe and reliable bus and rail network, WMATA must ramp up to a \$1.5 billion average annual capital investment program.

To address this substantial need, levels of investment must be committed by both federal and regional stakeholders. To adequately fund Metro safety and reliability requirements, **PRIIA should be reauthorized and funded at least at the current level of effort (\$1.5 billion over 10 years).** And the region needs to establish a **new dedicated revenue stream and Capital Trust Fund to provide \$500 million annually, exclusively for capital projects.** This new revenue source would demonstrate sustained regional support for the Metro system and create a foundation for planning, contracting, and delivering critical safety and reliability projects. This commitment will differ significantly from the current Capital Funding Agreement that governs jurisdictional capital contributions to WMATA only through FY2018.

The annual nature of year-to-year capital allocations from the funding jurisdictions limits the region's ability to efficiently and effectively leverage those dollars in the capital markets through bonding. The new Capital Trust Fund must be well-defined – it needs to be funded by a multi-year revenue source that contains a specific, dedicated revenue stream for WMATA. For Metro, “dedicated” refers to capital funding that is predictable, multi-year, has no expiration, and is not subject to annual appropriations.

This structure would separate WMATA's Capital Trust Fund for safety and reliability from the annual competition within governments for funding other state and municipal priorities. It also reduces borrowing costs, which benefits both WMATA and its funding partners, and enables the capital markets to provide WMATA with the best available ratings.

Additionally, the new Capital Trust Fund should be shielded from day-to-day operations to ensure this new funding goes to capital investments. Historically, WMATA has offset certain shortfalls in operating funding by shifting federal grant funding to pay for eligible maintenance costs, a practice the WMATA Board of Directors took a step towards reducing this year.

The new Capital Trust Fund must be permanently and structurally precluded from use as a de facto reserve for day-to-day operations of bus, rail, and paratransit.

Changing the Business Model

Today, operations are funded by fare-paying riders, commercial revenues, and support from taxpayers who benefit from transit service through traffic mitigation, development, jobs, and economic growth.

Operating expenses are rising at twice the rate of Metro fares and commercial revenues. **Left unchecked, operating cost growth will generate invoices to funding jurisdictions totaling \$1.1 billion next fiscal year.**

Operating costs include materials and energy, but by far the most significant cost drivers are wages and benefits for the people who operate and maintain rail and bus services – comprising more than 70 percent of total operating expenses. To curb operating cost growth, WMATA and its stakeholders need to take action in several areas, including:

Improving Efficiency

- Continue to eliminate inefficient business practices and outdated functions to drive accountability
- Improve productivity through strengthening management of absenteeism, overtime, and workers' compensation
- Increase ridership by providing more reliable service

- Open to competition those functions that Metro has the ability to outsource where efficiencies can be gained (e.g. new functions, operations and facilities, such as Silver Line Phase II)
- Develop new technologies (e.g. track inspection, fare collection, online customer care) and automation to improve productivity
- Timely right-size service to demand

Changing Policy

- Amend the National Capital Area Interest Arbitration Standards (aka Wolf) Act to mandate that arbitrators who preside over interest arbitrations render awards that are consistent with WMATA's financial condition and do not exceed the ability or willingness of the funding jurisdictions to pay, as Congress originally intended
- Cap annual increases in jurisdictional portion of operating and capital subsidies for the system (after including new bus facilities, Potomac Yard station and Silver Line Phase II) at three percent
- Avoid unfunded service expansion beyond currently approved levels
- Create and contribute to a "Rainy Day Fund" that incrementally provides 10% of the operating budget over 10 years

Stabilizing Workforce Costs

- Continue to fund OPEB Trust through efficiency savings
- Provide all new employees defined contribution (i.e. 401K) benefit plans
- Continue providing defined benefit pension plans to eligible active employees and protect legacy pensions to eligible current retirees
- Reduce reliance on overtime and prevent fatigue by staffing up key operating positions
- Invite WMATA Labor Unions to compete for new work, such as Silver Line Phase II

These tools and policy changes borrow from best practices nationally in capital investment and transit cost controls, including the practice of opening various functions and services to competitive bidding, where permitted. Such a process could invite proposals from both private companies and WMATA Labor Unions when possible. Further, these changes are responsive to the needs of funding jurisdictions to curb annual cost growth, and enable Metro to maintain a policy of fare increases not more frequently than every other year. Metro also needs to generate revenue from increased ridership, advertising, real estate and concessions by an annual average of 1.5 percent.

It is encouraging that the Metropolitan Washington Council of Governments (MWCOC) and others are considering funding and governance changes to WMATA's structure. Those bodies are in a position to assess practices among funding jurisdictions for

lessons learned by municipal and state governments with respect to managing public sector employees to determine if there are other policies that might benefit WMATA.

WMATA has and will continue to reach out to share cost and revenue assumptions in further detail with funding partners, WMATA's Board of Directors, former Department of Transportation Secretary Ray LaHood, MWCOC and the Jurisdiction CAOs/CFOs, and the region's business and community leaders, as well as employees and riders in the National Capital Region, to reach solutions that keep Metro safe, reliable and affordable.



Washington Metropolitan Area Transit Authority

Keeping Metro Safe, Reliable & Affordable

An Action Plan to Meet
Regional Transit Needs





Summary

- **Metro is an essential driver of the region's economic growth;** however, it is at a critical juncture as the organization faces structural operating and capital investment challenges, putting these benefits at great risk
- **Metro has begun to respond to these challenges,** focusing on safety, service reliability, and financial responsibility over three horizons: righting the ship in 2016-17, Back2Good in 2017-18, transform Metro in FY2019 and beyond
- **Metro, however, cannot deliver on this transformation alone:** Metro has \$15.5 billion in critical capital needs over the next 10 years, and operating costs are rising at nearly twice the rate of non-subsidy revenues
- **Metro requires stable capital investment and flexibility to operate efficiently and maintain a safe and reliable system:**
 - **Capital**
 - Metro's Capital Program to fund safety and reliability should grow to a \$1.5 billion average annual investment
 - Congress should reauthorize **PRIIA** at least at current levels (\$1.5 billion over 10 years)
 - Region should commit to multi-year, stable revenue source that will provide \$500M/year for a new Capital Trust Fund
 - Capital Trust Fund should have a lockbox feature to dedicate for capital investment
 - Region should maintain current levels of jurisdictional capital funding with 3% annual growth cap
 - **Operating**
 - WMATA should preserve its pension commitment to active employees and current retirees, but reduce costs by providing 401K-like retirement plans for all new employees (similar to the step taken for health benefits for new hires).
 - Region should provide flexibility to reduce costs with innovative approaches including **competitive contracting** of targeted functions, where permitted (e.g. new services, operations and facilities, such as Silver Line Phase II)
 - Congress should amend the National Capital Area Interest Arbitration Standards Act to require arbitration process that **more meaningfully** considers Metro's financial realities
 - Region should create a Rainy Day Fund of 10% of total operating budget to manage against unexpected events
 - **The jurisdictions will save \$1B** over 10 years by capping Metro's annual operating subsidy growth at 3% per year, establishing a rainy day contingency fund, and supporting transformative efforts to operate more efficiently
- These actions **do not require changes to the WMATA Compact**



Metro is critical to the region

Drives economic growth in the region



Provides easy access to jobs (54% of jobs are within 0.5 miles of a Metro station) and increases property value near Metro stations by 7-9%

Improves quality of life and mobility of residents



Allows ~30% of riders to live a car-free lifestyle and supports over 1 million trips every single day, composing ~20% of mode share in the region

Promotes environmental sustainability



Improves air quality by avoiding emission of 260 tons of volatile organic compounds, 22 tons of particulate matter, and 500K tons of CO2 from reduced auto use

Attracts new residents by making region affordable



Saves households a combined \$705 million in yearly time savings, irrespective of their Metro usage



Without Metro, the region's economy would suffer

Congestion would further worsen gridlock on roads



- Congestion would increase **by 25%**, costing over \$1.5B in wasted fuel and time
- **1 million** more auto trips would be made per day
- **8% increase** in vehicle miles

The regional economy would decline



- **\$235 billion of property value** is within a half-mile of Metrorail stations
- Lack of reinvestment could depress regional tax revenues **by \$1-2 billion annually**

Significant new construction would be needed to support the high influx of auto traffic

- **1,000 lane-miles of new pavement** would be needed, the equivalent of two new Beltways
- **200K new parking spaces** in the downtown core would be needed, the equivalent of 166 blocks of 5-story garages

Additional lanes required



1970s plan for an interstate through DC core



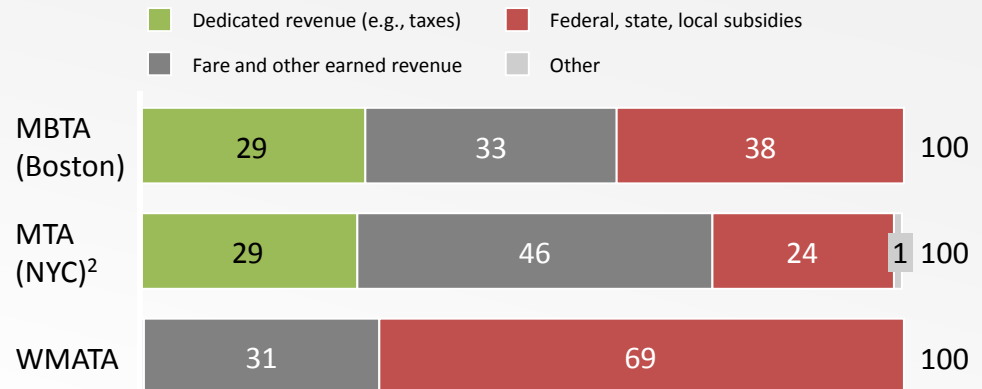


Metro has structural capital and operating funding challenges

Chronic capital underinvestment

- Substantial deferred capital backlog
- Historic focus on system expansion, rather than maintaining existing assets
- Large maintenance costs associated with a 40-year old transit system
- Limited maintenance and rehabilitation opportunity due to “2-track” design and constrained work hours
- One of the only major US transit systems without a dedicated funding source
- Reliant on unpredictable annual local, state and federal investments

Major transit system total revenue sources¹

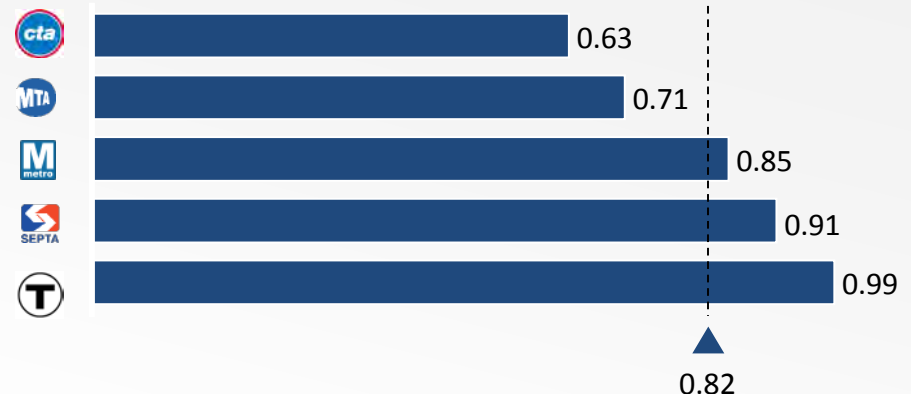


Unsustainable operating model

- Structural operating funding deficit (\$290 million in FY2018)
- Labor-intensive operation – over 70% of operating budget funds personnel
- Substantial legacy commitments on wages, pension and health benefits
- Somewhat higher operating costs compared to industry benchmarks
- No “Rainy Day” or contingency fund

Operating expenses

\$ per passenger mile (heavy rail, bus, and paratransit combined)

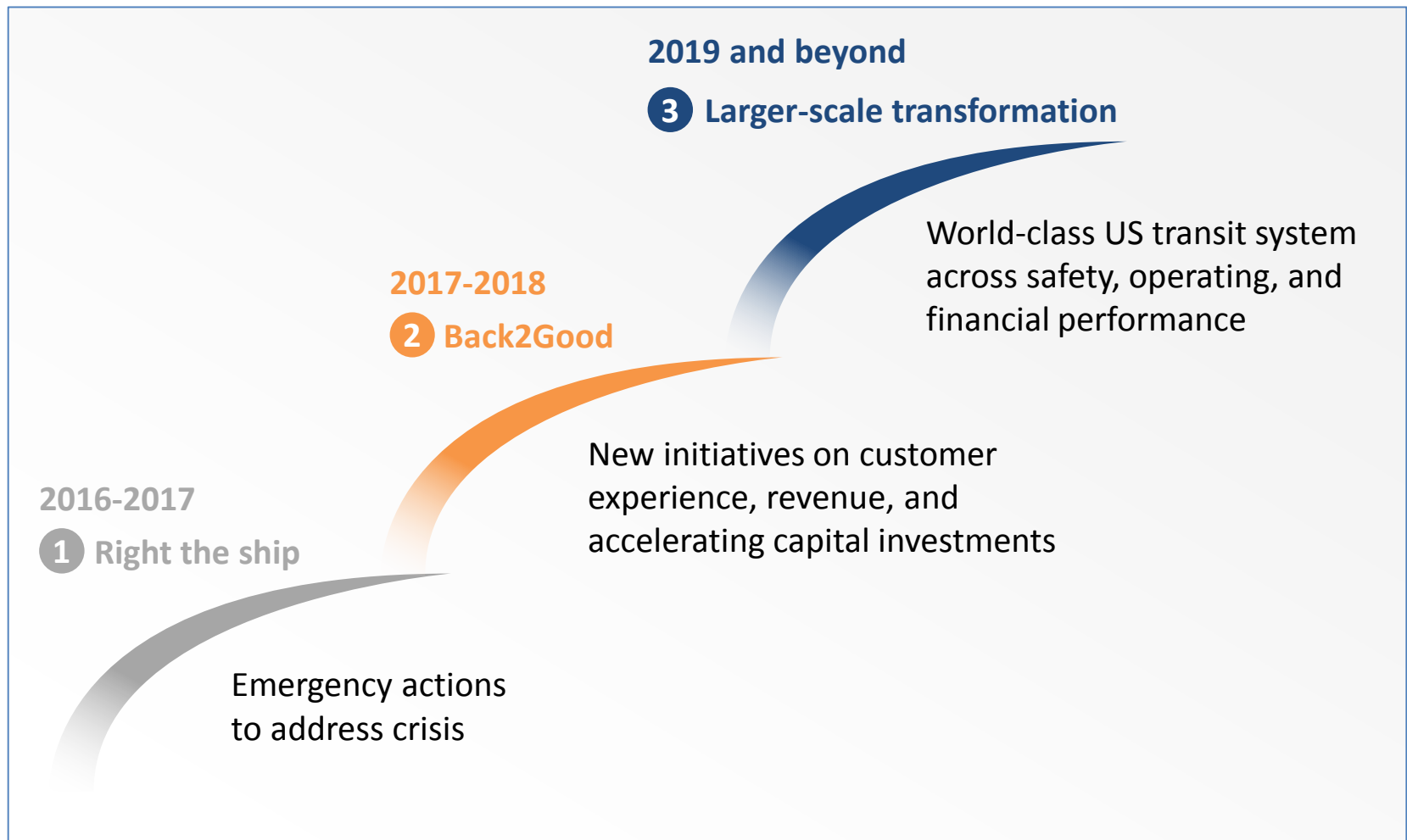


¹ May not exactly match agency budgets because National Transit Database numbers were used for consistency

² Excludes Long Island Railroad, Metro-North Railroad, and MTA Bridges and Tunnels because WMATA does not have comparable modes

SOURCE: National Transit Database 2015; Capital Needs Inventory: Inventory and Prioritization (November 2016)

The region must address challenges in three horizons





1

Metro is focused on safety, reliability, and fiscal responsibility

Safety



- **Recruited high-caliber safety, operations and capital program executives** and established independent quality assurance and internal audit function
- **Launched SafeTrack**, an emergency repair program designed to do three years' worth of work in one year, immediately address the worst track conditions, and prevent further incidents through careful inspections and quality control measures
- **Worked with federal partners to close 50 safety-related corrective actions**
- **Communicated and implemented new value statement, "Safety Trumps Service,"** to entire Authority and enacted accountability reforms

Service reliability



- **Accelerated delivery of new 7000 Series railcars to 20 cars per month** to improve service reliability
- **Expanded the maintenance window** by ~25% to increase preventive inspection and maintenance
- **Placed a greater emphasis on customer service** by:
 - Introducing a 15-minute grace period, where customers receive a refund if they enter and exit the same rail station in 15 minutes or less.
 - Creating a social media customer support initiative that responds to ~ 70% of @wmata mentions
- **Launched MyTripTime that allows customers to measure their daily commute experience based on when they tap in and out of the system**

Financial responsibility



- **Ended FY2016 on budget and completed audit on time**, with no new findings for the first time in 3 years
- **Reduced short-term debt by \$150M** by the end of FY2016
- **Capital program reinvested \$1B** into the system in FY2016 – highest annual level ever
- **Recovered over \$1.3B** of grant expenses and **restored federal ECHO privileges** for future grant reimbursements
- **Saving more than \$500M over ten years** through efficiencies:
 - **Workforce reduced by 700+ positions** and brought non-represented healthcare benefits in line with region

Metro is focused on the issues customers say are most critical:
Safety and Reliability

FY2018 “Reality Check” budget to get Back2Good

Safety



- **Add more than 200 new railcars** with advanced safety features
- **Upgrade public radio signals and cellular service** throughout system
- **Install new software onboard trains** to help prevent operators from running through red signals, and **new LED red signals** for improved visibility
- **Develop new technologies to protect workers** in hazardous areas
- **Install new lighting on platforms** to increase visibility

Service reliability



- **Refocus efforts from SafeTrack to preventive and best-in-class maintenance practices**, including reliability-centered maintenance, to mitigate the risk of future emergency conditions and reduce train delays by 50%
- **Execute railcar “Get Well” program**, including initiatives to retire the oldest railcars and refurbish legacy fleets with new propulsion and braking systems to reduce passenger offloads and railcar delays by 25%
- **Solicit feedback in the form of peer reviews** in order to streamline responsibilities, clarify duties, improve incident response, and better manage station operations
- **Leverage GIS technology** to integrate real-time traffic data for bus operations
- **Install Wi-Fi connectivity** in half of all stations

Financial responsibility



- **Further reduce costs by eliminating 100 more positions**, for a total position reduction of 800 since 2016
- **Competitively contract functions**, including quality assurance programs
- **Deploy 95% of capital program budget**, up from 65% baseline
- **Launch AbilitiesRide pilot program** for Maryland MetroAccess customers to reduce operating costs for Metro
- **Transform capital program prioritization process**, including an improved Capital Needs Inventory
- Launched agency-wide initiative to control **Absenteeism, Workers' Compensation and Overtime**

Transforming Metro requires capital investment and flexibility

Metro's challenge

Metro's needs

Metro's commitments

3A

Capital

- **\$15.5B in capital reinvestment required** over ten years, of which only \$1.25B is currently funded
- **Backlog of safety and reliability needs** must be addressed
- **One of the only top transit systems without dedicated funding**

- **Stable capital funding**
 - Reauthorization of federal PRIIA funding
 - Maintenance of jurisdiction funding, with 3% growth cap
 - Additional \$500M stable funding dedicated to capital

- Prioritize safety and reliability projects
- Deploy 95% of annual capital budget
- Deliver projects on time and on budget
- Implement a development and evaluation program to prioritize and prepare for future major capital projects
 - Red Line Core Capacity
 - Red Line Water Remediation
 - Rosslyn Tunnel
 - Gallery Place, Union Station, etc.
 - Bladensburg Bus Garage

3B

Operating

- **Operating costs are rising at nearly twice the rate of non-subsidy revenues** - annual revenue would have had to grow 2.5 times faster in FY2011-15 to keep pace with costs
- **Personnel cost (wages and benefits)** is largest and fastest growing expense category

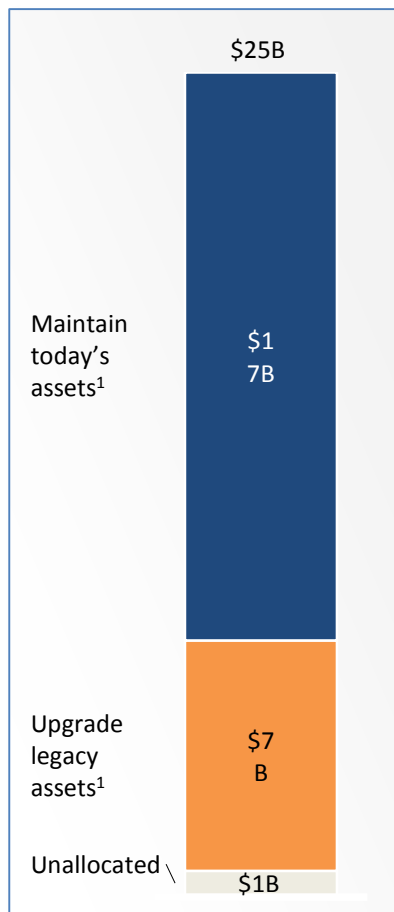
- Support on major **policy and service level decisions, including clarification of binding arbitration process**
- Create a **Rainy Day fund** to manage unexpected disruptive events

- Use the **most efficient and effective means to provide service**
 - Competitive contracting of targeted functions, where permitted (e.g. new services, operations and facilities, such as Silver Line Phase II)
- Optimize service to demand
- Address rapid growth in largest cost categories
 - Labor, Benefits, Pension, and OPEB
 - MetroAccess

Well-funded capital investment supports safe, reliable service

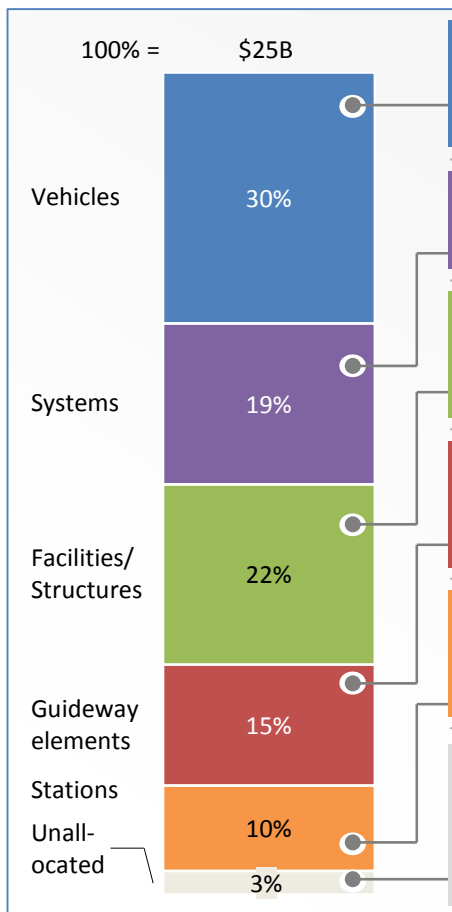
Ten-year capital needs focus on maintaining today's assets

Needs by category, \$B



Critical projects are unfunded

Needs by asset class, percent, \$B



Example projects requiring funding

New railcar fleet



- 748 new 7000 series cars
- Accelerated replacement of 2000 and 3000 legacy cars
- Enables all 8-car trains

Radio and wireless



Complete upgrades to radio system and underground wireless infrastructure

Andrews Bus Garage



New bus operations and maintenance facility, fuel and wash buildings, heavy repair & overhaul, and other structures

Track Rehab



Annual program to replace components (crossties, fasteners, switches, insulators), based on condition

Fare gates



Replace and modernize existing fare collection assets

Development & Evaluation (D&E)

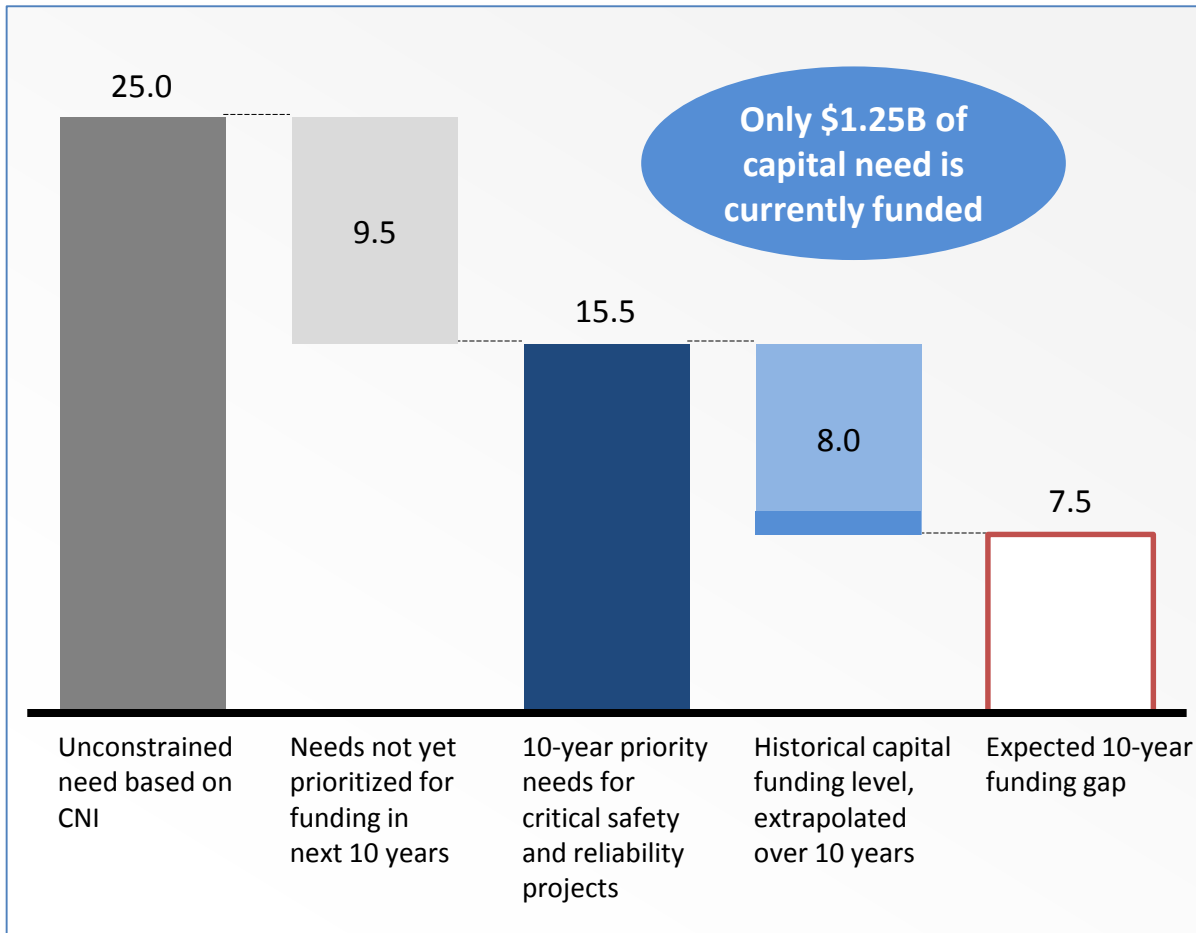
Planning, development, and evaluation for next generation transformational projects

- Red Line Core Capacity
- Red Line Water Remediation
- Rosslyn Tunnel
- Gallery Place, Union Station, etc
- Bladensburg Bus Garage

¹ In Metro's Capital Needs Inventory, "maintain today's assets" needs are labeled "State of Good Repair needs" and "upgrade legacy assets" are labeled "new needs"

\$15.5B of capital investment is required over next 10 years for safety and reliability

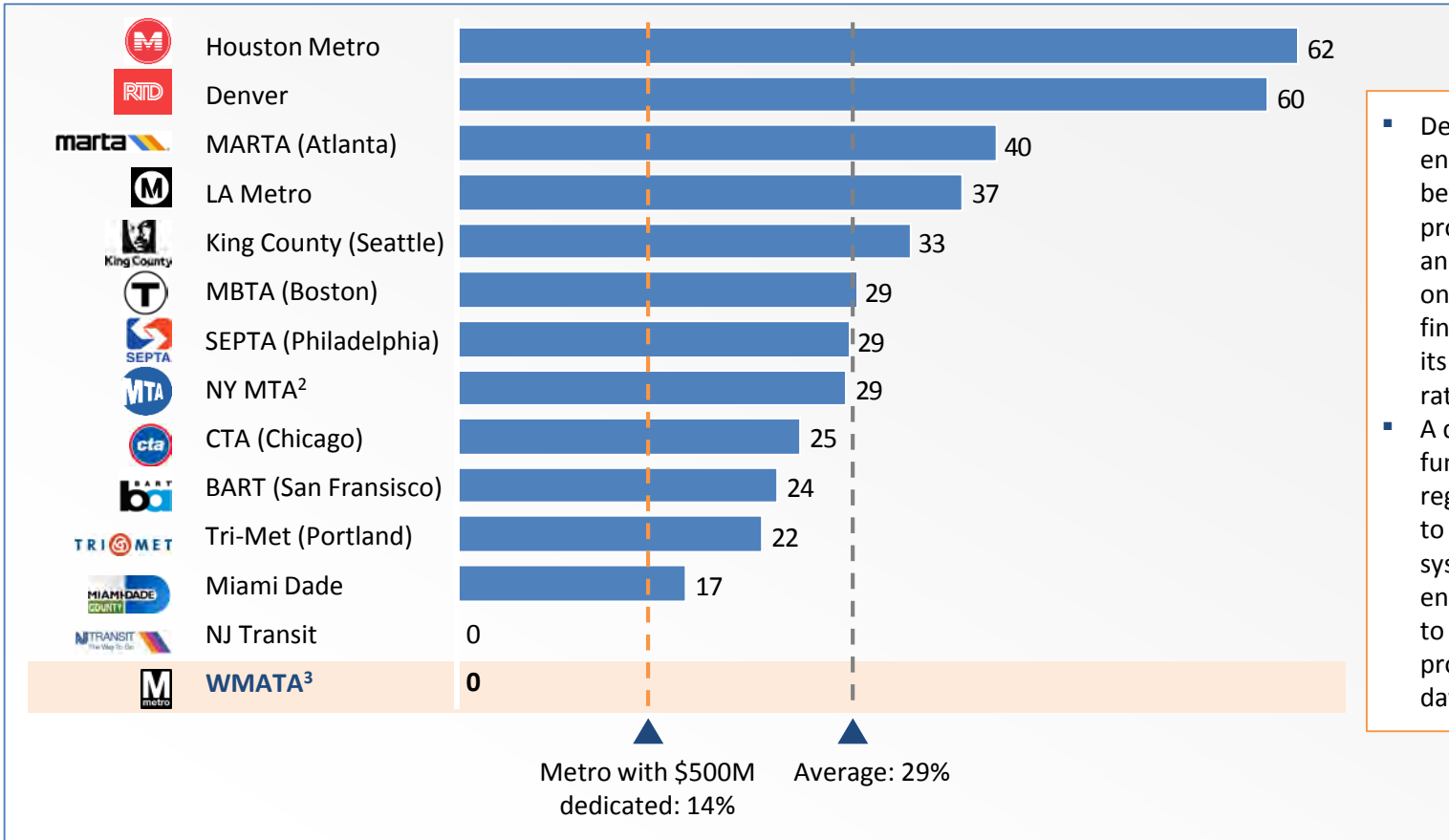
Ten year capital needs, by funding and priority status, \$B



- Metro has \$25B in capital needs over the next ten years. Capital needs were identified through a CNI process
- \$15.5B is required for **critical safety and reliability projects**
- Currently, only the first year of the FY2018-23 capital program is funded, at \$1.25B
- Maintaining historic capital funding levels would leave an unfunded gap over 10 years that would:
 - Keep Metro's assets in a state of disrepair
 - Inhibit completion of safety, reliability, and compliance projects
 - Continue service disruptions and delays in the system

Most other transit systems receive dedicated funding

Share of 2015 revenue from dedicated funding, Percent¹



- Dedicated funding enables Metro to better plan large-scale projects, reduce time and resources spent on negotiating annual financing, and increase its capital deployment ratio
- A dedicated capital fund represents a regional commitment to the future of the system, and will ensure these funds go to safety and reliability projects, rather than day-to-day operations

¹ The Federal Transit Administration defines dedicating funding as funds that must be spent on the provision of transit service, including dedicated taxes, tolls, Community Development Credits (Toll Revenue Credits), and other funds (e.g., lottery proceeds, fees on utility bills, etc.)

² Excludes Long Island Railroad, Metro-North Railroad, and MTA Bridges and Tunnels because WMATA does not have comparable modes

³ WMATA receives ~\$30M each year from a tax that is dedicated towards a subsidy to WMATA, which is distinct from a dedicated fund for WMATA itself

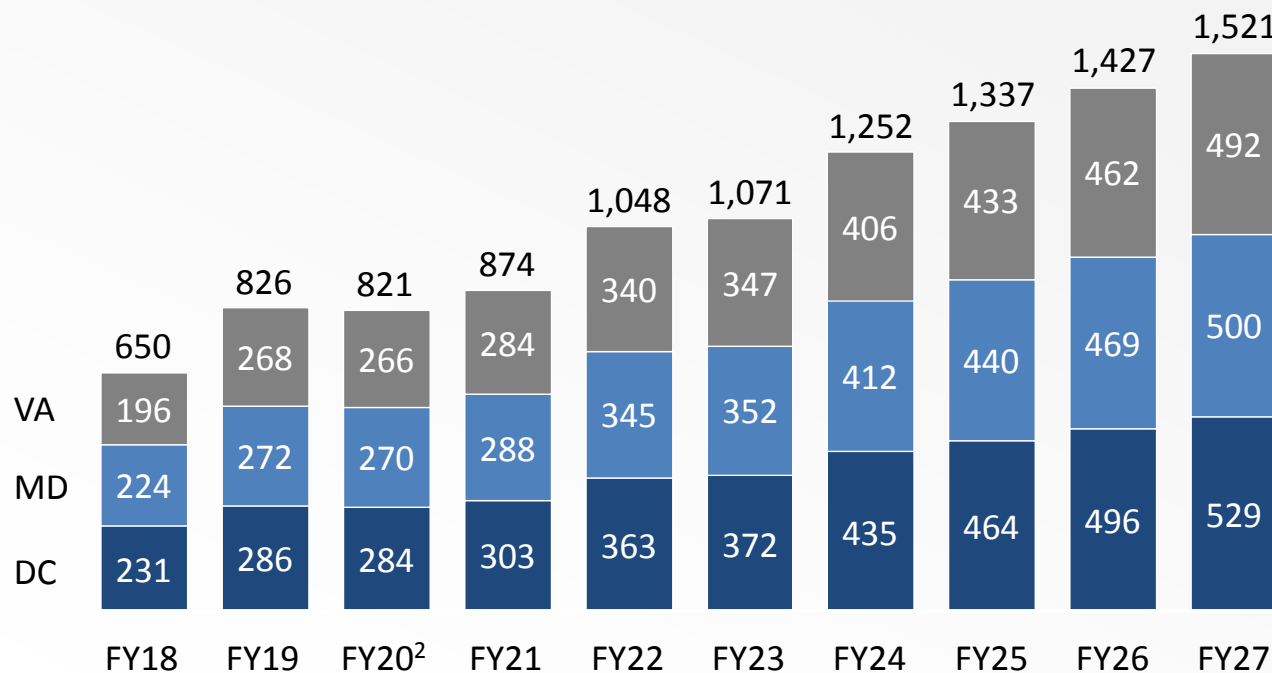


3A

Without dedicated funding, limited regional resources will be consumed by growing capital needs

Yearly needed capital contribution by jurisdiction – estimate, \$M

Total 10-year contribution, \$M¹



\$3,493

\$3,571

\$3,762

- Today, Metro's capital needs compete with a jurisdiction's other annual needs
- Dedicated capital gives Metro ability to leverage capital markets, reducing the annual cost impact on the region

¹ Total does not sum to \$15.5B because federal funding is omitted

Stable capital investment needed from federal and regional partners

- **Congress should reauthorize PRIIA at least at current level of effort** (\$1.5 billion over 10 years) to ensure funding for critical safety and reliability projects
- **Region should maintain current levels of capital funding with a 3% annual growth cap** (to adjust for construction cost inflation)
- **Region should commit to an additional multi-year, stable revenue source not subject to annual appropriation and that does not expire, which will provide \$500M/year to a “lockbox”** dedicated exclusively to a Capital Trust Fund for safety and reliability investment, and prohibited from use for day-to-day operations

Metro and region will ensure a safe, reliable and effective system

Asset class

Impact of investments

Vehicles

- 748 new 7000 series railcars in service
- 2000-3000 series railcars replaced with 8000 Series
- 85% of railcar fleet will be new vehicles
- Modern & well maintained Metrobus & MetroAccess fleets



Systems

- New radio and wireless system for customers, first responders & operations
- New wayside-worker protection, fire life safety, and train control signal systems
- Power system upgrades for safety, reliability and more 8-car trains
- Modernized fare collection and information technology infrastructure and applications



Facilities/ Structures

- Complete Cinder Bed and Andrews Federal bus garages
- Complete rehabilitation of railcar maintenance facilities
- Complete rehabilitation of rail bridges and structures



Track

- Address the remaining 80% of track not yet replaced in SafeTrack to ensure safety and reliability



Stations

- Replace or rehabilitate escalators and elevators
- Rehabilitate station platforms and improve lighting
- New stations at Potomac Yard and Silver Line Phase 2



D&E

- Develop the next generation of capital projects to improve safety, reliability, and capacity, such as Red Line water remediation, replacement bus garages, railcar overhaul facility, Rosslyn tunnel, and projects to resolve safety and circulation challenges in core stations including Gallery Place, Metro Center, & Union Station



Metro will follow best practice in delivering the capital program

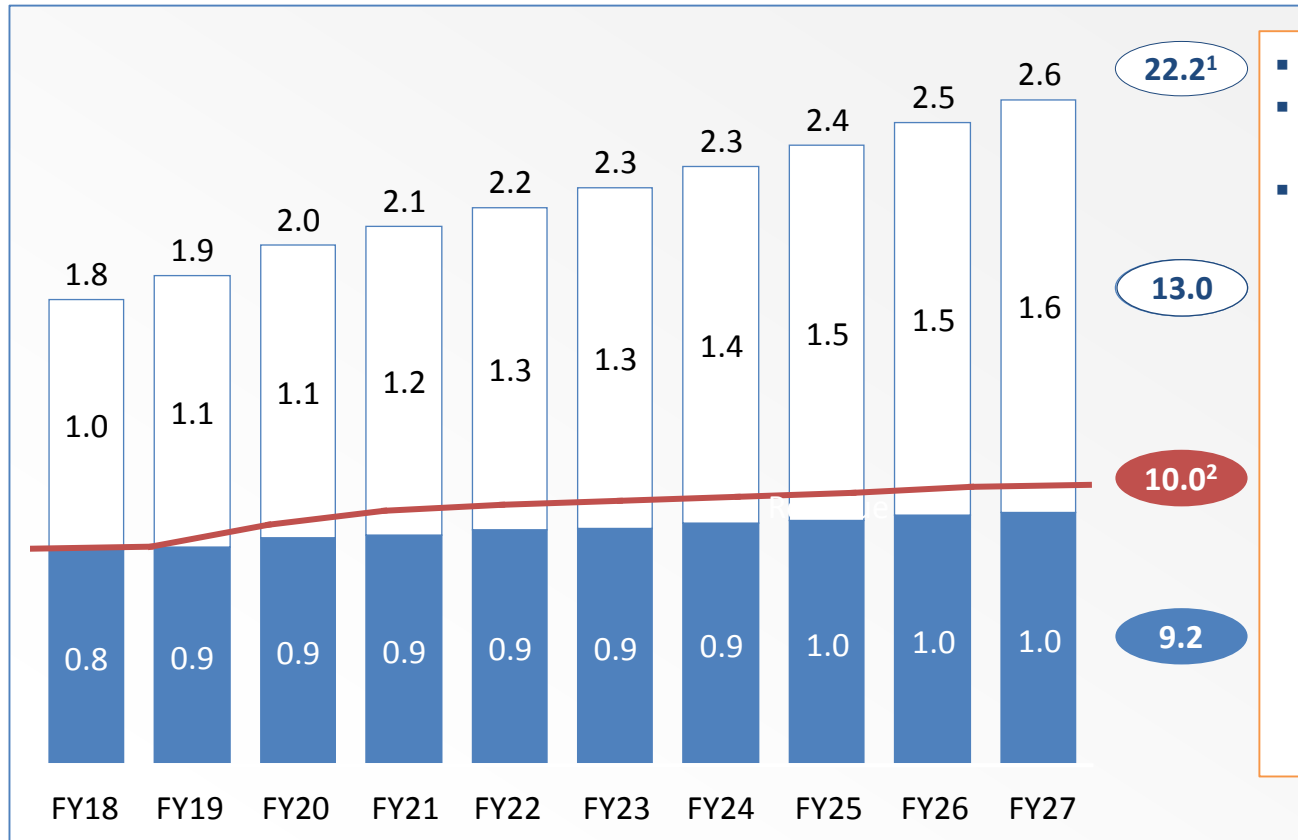
- Prioritize safety and reliability projects
- Deploy 95% of annual capital budget
- Implement cost-effective design and construction approaches
- Deliver projects on time and on budget
- Revamp capital process and implement D&E program
- Expand reliability-centered maintenance program, including asset-specific, data-driven maintenance

3B Projected operating cost growth is unsustainable

■ Revenue □ Operating subsidy — Revenue from 100,000 additional riders beginning in FY2019 (return to peak ridership level experienced in 2009)

Operating funding, \$B

10-year
value, \$B



- Operating subsidies are set annually
- Operating subsidy is \$13B over next 10 years, if no further action is taken
- Increasing revenues alone cannot avoid operating subsidy increases
 - Assumes biennial fare increases
 - Returning to peak 2009 ridership (an additional 100K riders) would still leave a \$12.2B subsidy need over 10 years
 - Revenue currently covers less than half of expenses and has historically grown at a slower rate than expenses; even if the revenue growth rate matches cost growth, operating subsidy would still increase

1 Includes Silver Line Phase 2 and Potomac Yard Station

2 Includes base revenue and impact of an additional 100,000 riders beginning in FY2019

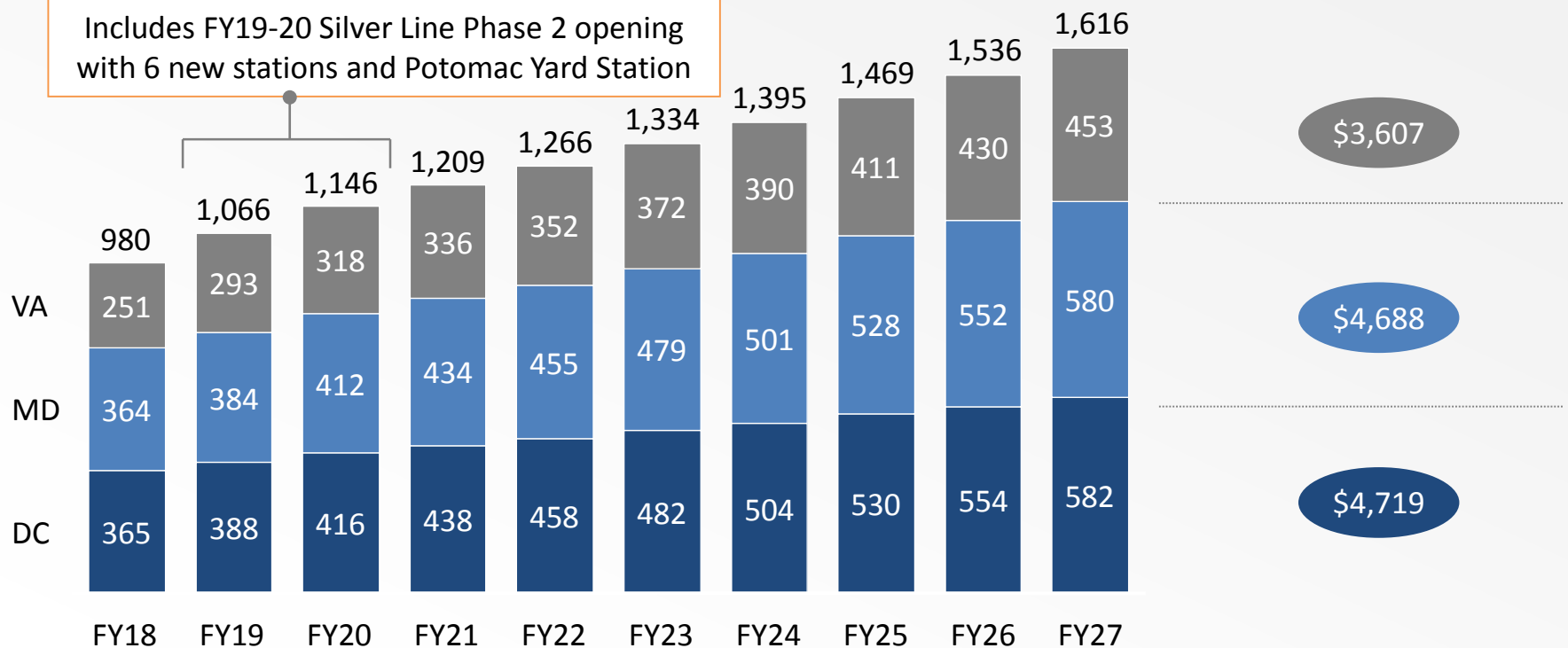


3B

Without action, operating subsidy need from jurisdictions increases significantly

Yearly operational contribution by jurisdiction – estimate¹, \$M

Total 10-year contribution, \$M



Regional support to address major drivers of cost increase will help limit growth in operating subsidy needs

Operating expense growth is primarily driven by personnel-related expenses

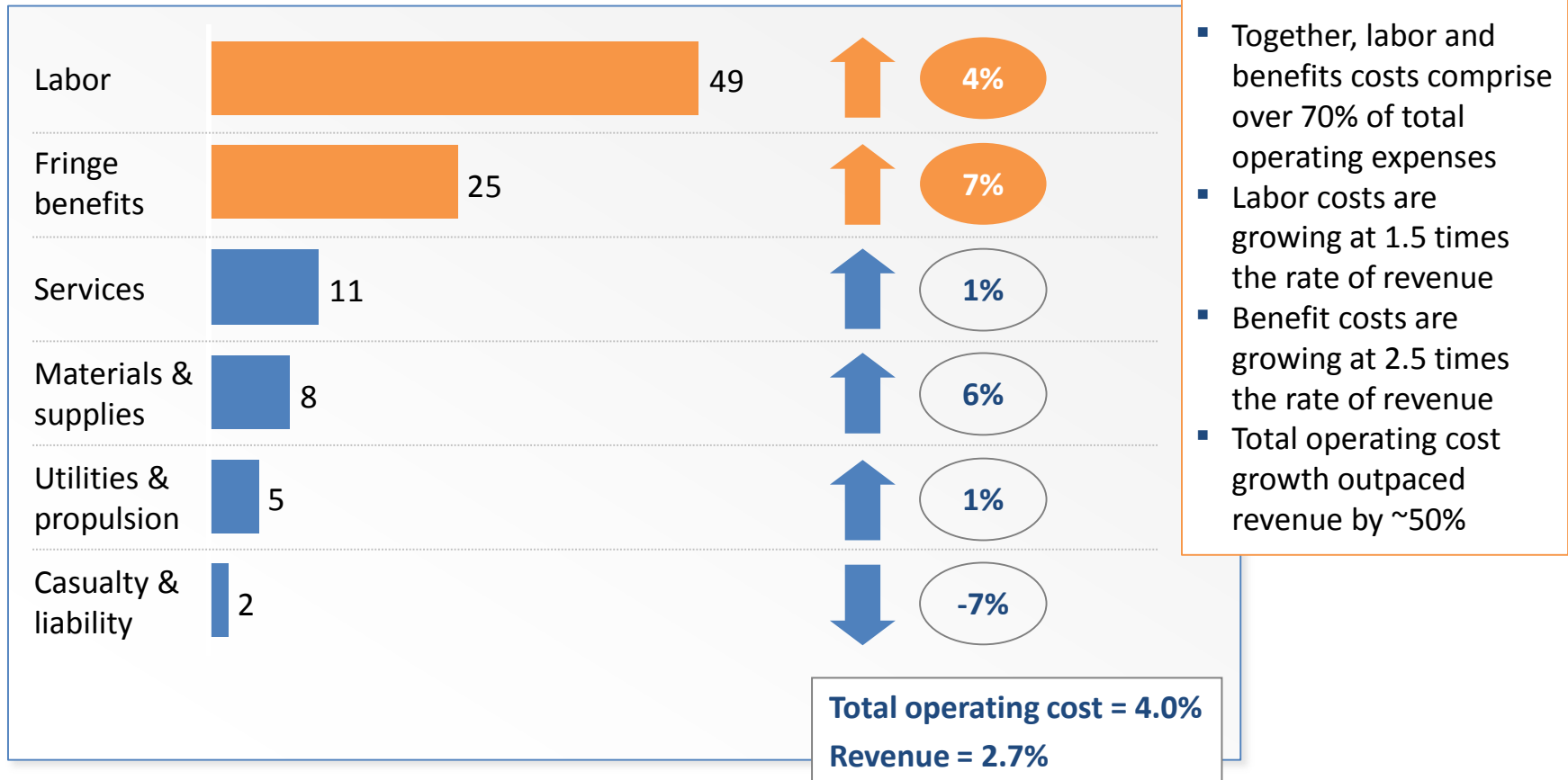
Share of operating expense by source

FY2015 actual, percent¹

Growth rate

FY2011-15 CAGR²

Primary drivers

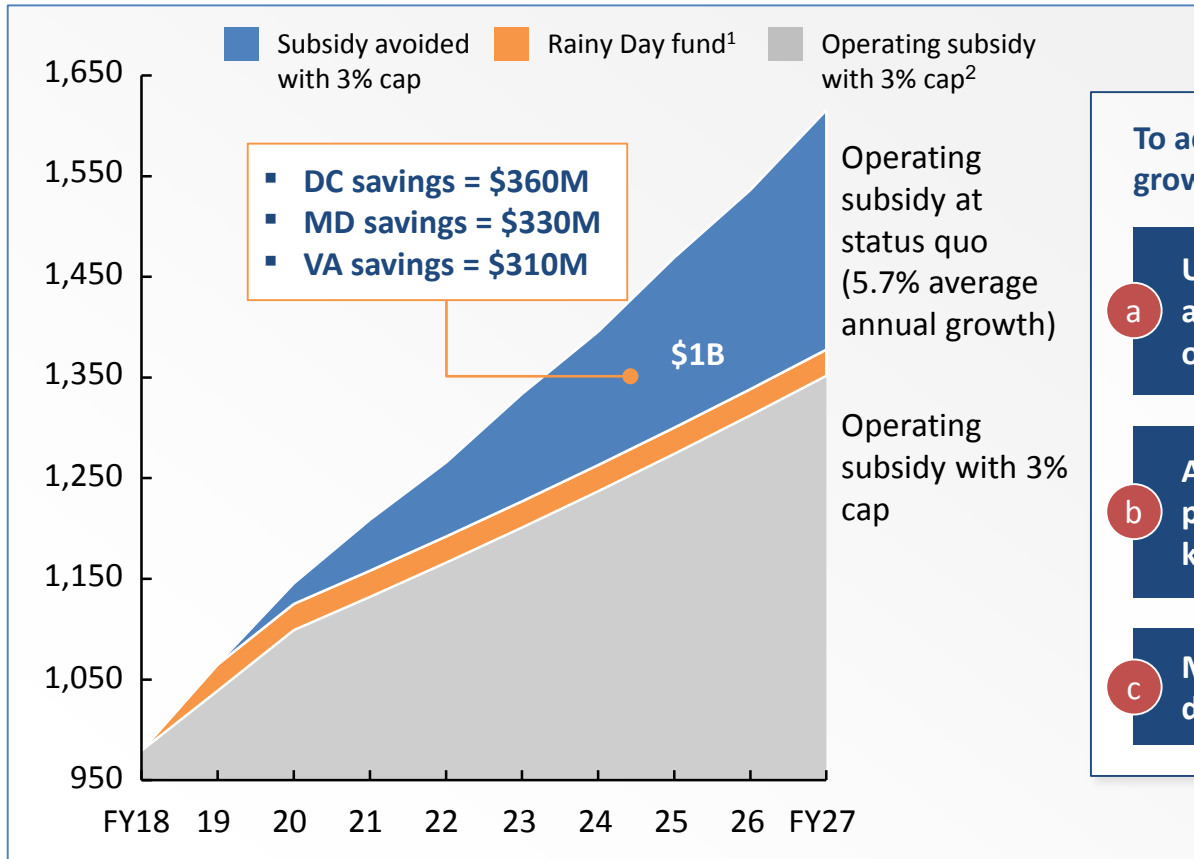


¹ Does not include "other" categories (e.g., leases & rentals, taxes, reimbursement, and miscellaneous), which have a combined relative share of <1%

² Compound annual growth rate (CAGR)

3B The region will save \$1B by capping Metro's annual operating subsidy growth at 3%

Operating subsidy avoided with a 3% cap on subsidy growth, \$M



To achieve a 3% cap in operating subsidy growth, Metro will use three strategies

- a Use most efficient and effective means of providing service
 - Competitive contracting
 - Optimizing service to demand
- b Address Metro's personnel and other key cost categories
 - Labor costs
 - Pension and OPEB liabilities
 - MetroAccess costs
- c Manage unexpected disruptive events
 - Rainy Day Fund

¹ Based on 10% of FY2027 operating budget, shown as \$234M spread evenly across FY2019-27 (9 years)

² Includes additional subsidy for Silver Line Phase 2 and Potomac Yard Station; excludes Rainy Day fund

Competitive contracting will improve efficiency

Competitive contracting can generate revenue, reduce costs, and/or improve efficiency and effectiveness of service

Competitive contracting is a useful tool in certain situations, including where some of the following are true:

- Potential for efficiency or effectiveness gains
- Minimum service levels can be cost-effectively managed (e.g., through performance-based contracts)
- Private demand and competition drive down cost of service provision
- Metro lacks expertise or scale
- Function does not implicate security interests

Examples of how other systems have deployed similar approaches



Los Angeles Metro outsourced ~10% of its bus service; contracted service is 43% less expensive per mile and has 6 points higher on-time performance



Ohio State University gave a 50-year lease on parking facilities for \$483M to a private firm and used returns from investing the upfront payment for core services (e.g., faculty, financial aid)



Outsourced railcar overhauls and heavy maintenance of major components (e.g., traction motors, trucks, HVAC, etc.)



Outsourcing warehouse operations and cash counting, saving >\$70M over 5 years, and is considering outsourcing bus maintenance for savings of ~\$40M per year – relying on attrition and no layoffs

Current binding arbitration process contributes to labor cost growth

Metro's current bargaining process

- Bargaining impasse is resolved before a 3-member panel
- Arbitrator's award is binding
- Federal legislation requires arbitrators to consider factors including "funding ability" and "public welfare," but arbitrators have not given due weight to these factors
- Requiring arbitrators to give proper consideration to these factors will require clarifying federal legislation



Amend the National Capital Area Interest Arbitration Standards Act to:

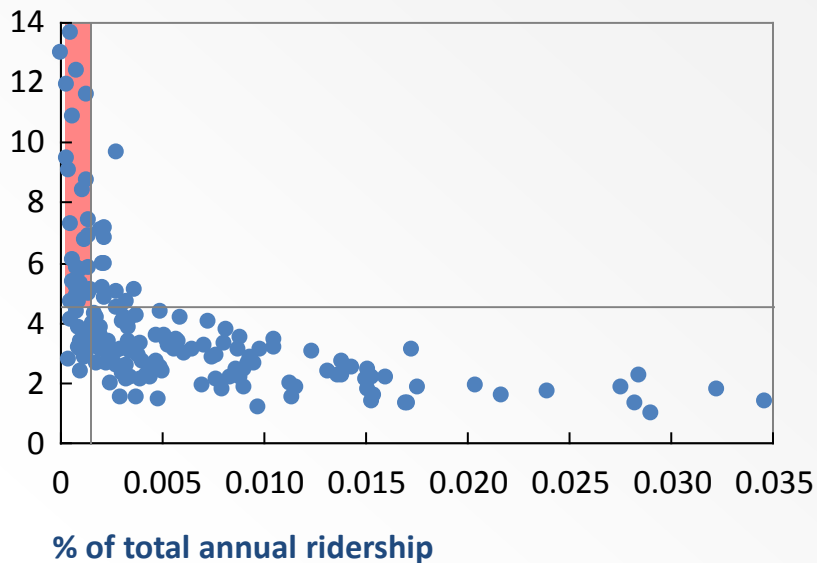
- Require Arbitrators to consider only specific enumerated factors
- Issue awards consistent with WMATA's financial condition
- Issue awards that will not exacerbate WMATA's financial and operating challenges
- Issue awards that do not exceed the ability or willingness of the funding jurisdictions to pay

The region must align on Metro's mission, including service levels

Metro's service is not all evenly utilized




Bus routes with low ridership, high operating deficit

Operating deficit per rider, \$



Routes with very high subsidy make up a small proportion of annual ridership

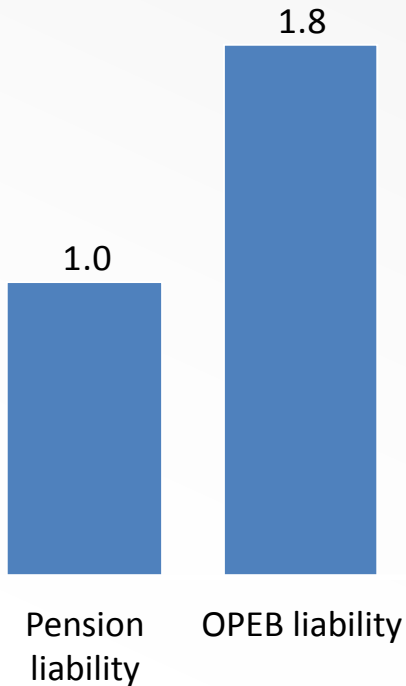
Other systems have had success with fundamental rethinks of their service levels and approach

What they did	Impact
 <p>Chicago rebuilt its service map from the bottom-up, adjusting service to meet demand</p>	<p>Reduced bus service miles by 18% and rail by 9%, but only reduced ridership by 0.9%</p>
 <p>Austin, TX</p> <p>Changed from a hub-and-spoke structure to a grid, eliminated low-ridership routes, and dramatically increased bus frequency</p>	<p>6.8% increase in bus and light rail ridership one year after introduction of new service structure, with no increase in cost</p>
 <p>Seattle, WA</p> <p>Replaced low-ridership bus routes with access to Dial-A-Ride</p>	<p>Enabled investment in increased service on crowded lines while maintaining transit access</p>

Legacy pension & OPEB liabilities require regional support

Metro's unfunded pension & OPEB liabilities

\$B, FY2018



Potential principles to address these deficits

- Setup an OPEB trust, to be funded through efficiencies (e.g., reduced absenteeism)
- Cap overtime pay in pension calculations
- Require new employees to enroll in defined contribution plan; **continue defined benefit plan for existing eligible employees and retirees**
- Similar to other new employees, limit new police employee eligibility for OPEB

How other public agencies addressed similar challenges



Comprehensive pension and retiree health reform helped the CTA pension go from ~30% funded in 2007 to >60% today – and on a path to full funding



California banned practices such as “pension spiking,” and made changes to benefit and contribution levels for new employees only



Atlanta reduced pension liability by \$500M+ and avoided layoffs with union-supported reforms: enrolling new staff in a defined contribution plan and increasing current employee cash contributions

Metro will protect retirees and those employees close to retirement, as initiatives focus on new employees



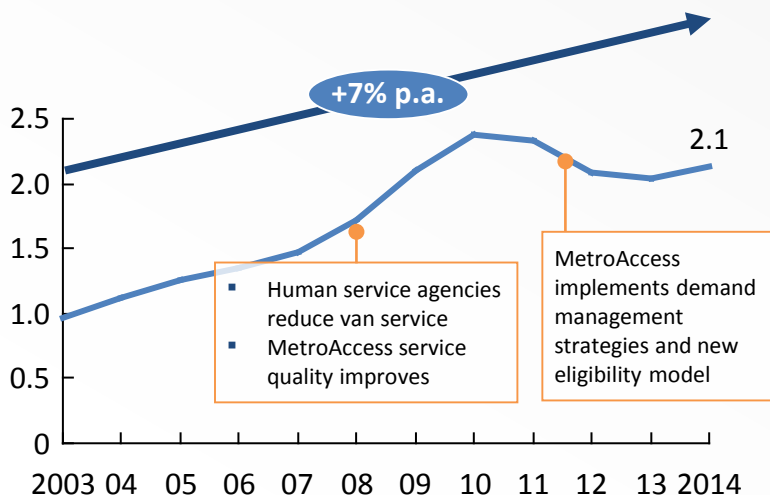
3B.b

MetroAccess will continue innovation to lower costs

MetroAccess costs have grown rapidly, with limited ability to control cost

- MetroAccess is a critical part of WMATA's operations, providing >2M trips annually to customers with disabilities in the WMATA transit zone
- Ability to control cost is limited
 - Service level is mandated
 - Fares are capped by law
- Historically, demand and cost have increased at rates well beyond targeted 3% subsidy growth cap rate

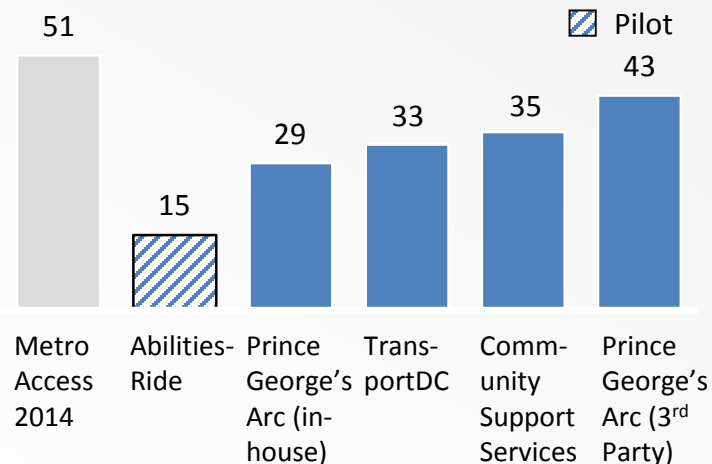
MetroAccess trips, Millions of trips, by FY



Metro has experimented with innovative models to reduce costs

- Metro's cost per trip is below peer average
- Metro has conducted several pilots, including using taxis, that have delivered lower costs per trip
- Metro is launching the AbilitiesRide pilot in 2017 with Maryland customers, which is projected to reduce costs per trip by 66%

Per trip operating cost, \$



- Metro will continue to seek ways to reduce costs
- If cost growth cannot be slowed from its historic rate, jurisdictions may need to assume responsibility for paratransit to keep Metro within the 3% subsidy cap

Lack of a “Rainy Day” fund forces costly emergency actions

Event type

Example impact

Snow storm

Jonas blizzard in January 2016 led to full closure for two days, costing about \$14.0 million, including lost fares and parking fees, overtime, supplies, and snow removal services



Special events

Pope Francis’s visit in September 2015 was not budgeted for, and led to overtime expense in excess of budget and 20% lower ridership during the visit



Federal government shut-down

Federal government shut down that lasted 16 days in October 2013 cost Metro an estimated \$5.5 million with 1.7 million fewer trips and a 13% reduction in ridership overall



Benefits of a Rainy Day fund:

- Financial benefit of decreased reliance on line of credit and saving on interest payments
- Key enabler for broader transformation commitments; for example, enables contingent expense management against 3% cap on operating subsidy growth
- Insulates capital program funds from operational emergencies/events that require one-time funding

Other major U.S. transit systems have reserve funds for emergency situations, including the MTA (New York), BART (San Francisco), and Regional Transportation Authority (Illinois)

- **Flexibility to reduce costs** with innovative approaches and to competitively contract where effective
- **Amend National Capital Area Interest Arbitration Standards Act** to require arbitrators to give due consideration to specific enumerated factors, including WMATA's financial condition
- **Create a Rainy Day Fund** of 10% of total operating budget over 10 years, funded by the jurisdictions to help Metro manage against unexpected events

Broader success in safety, reliability, and financial responsibility depends on regional support for Metro's action items

Potential actions to achieve commitments

Safety



- Create a **culture of safety and accountability**
- **Prioritize safety and reliability projects in capital program**

Service reliability



- Replace the oldest railcars so that about 85% of the fleet is made up of new cars
- Implement Development and Evaluation (D&E) program and revamp capital project delivery methods
- **Use data, analysis, and technology** to expand reliability-centered maintenance for railcars and track

Financial responsibility



Revenue

- **Monetize assets**, including parking
- **Increase advertising** while maintaining the character of the system
- **Offer world-class concessions for customers**, increase revenue by attracting riders

Cost

- Continue to **right-size** service, operations, and resources, focused on performance outcomes
- **Embrace innovative delivery methods**, including competitive contracting, private investment, creative technology partnerships, and modern procurement strategies
- Address **legacy pension and OPEB costs**
- **Competitive contracting** of targeted functions, where permitted (e.g. new services, operations and facilities, such as Silver Line Phase II)
- **Optimize office space** including headquarters building

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TO: Chairman McKay and NVTC Commissioners

FROM: Kate Mattice and Rhonda Gilchrest

DATE: May 25, 2017

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 [VRE CEO May 2017 Report](#) is attached. The Minutes of the May 19, 2017 Operations Board Meeting will be provided at the meeting.

B. ACTION ITEM: [Resolution #2340](#): 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 Commission authorize the VRE CEO to execute a one-year extension of the existing Amended and Restated Operating/Access Agreement with CSX Transportation (CSXT) through June 30, 2018.

Throughout the extension period, VRE, CSXT and DRPT will meet to discuss capacity enhancement projects, including establishing methodologies to identify how the capacity enhancements will result in additional service for VRE. At the request of CSXT, the discussions will also include identifying a mutually agreed upon cost sharing methodology for the implementation and ongoing operations of Positive Train Control (PTC) and update the Master Facilities Lease Agreement. The [attached VRE memorandum provides more background information](#).

C. VRE System Plan 2040 Update

VRE staff briefed the Operations Board at its May 19th meeting on current staff efforts to evaluate possible updates to the System Plan 2040 operating plan. VRE staff is currently evaluating revisions to the System Plan 2040, which was originally adopted in January 2014 by the Operations Board and Commissions. Now three years later, VRE staff better understands the System Plan by translating service standards into actual schedules, looking at ridership more closely, and interacting with other corridor projects, such as DC2RVA, Long Bridge expansion, and Union Station expansion. A comparison between current service, the original System Plan 2040 levels of service, and the preliminary revisions is outlined in the following table:

	Current Service	System Plan 2040	Preliminary Update
Peak Service	Every 25-30 minutes	Every 15 minutes	Every 20 minutes
Reverse Peak	1 am/2 pm (MSS only)	Every 30 minutes	Every 60 minutes
Off-Peak (Base)	1 MSS/1 FBG	Every 60 minutes	Every 120 minutes
Number of Trips	34 train trips*	92 train trips	66 train trips
Mid-Day Storage	12 consists*	11 consists	14 consists

*Will change to 32 trains/13 consists when the L'Enfant storage tracks open later in 2017

VRE staff will continue to develop a revision to the System Plan 2040 and determine its potential impact on financial and capital plans. VRE staff will return to the VRE Operations Board later this year with recommended revised service levels for discussion and approval. Any revision to the System Plan 2040 will be brought to the Commissions for approval.

CEO REPORT

MAY 2017



OUR MISSION

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 2017

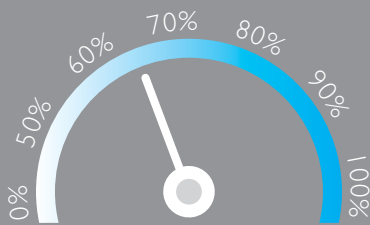
- 2 Success at a Glance
- 3 On-Time Performance
- 5 Ridership
- 6 Summonses
- 7 Train Utilization
- 8 Parking Utilization
- 9 Financial Report
- 10 FY 2017 Year End Financial Projection
- 12 Capital Projects Updates
 - Lorton Platform Extension
 - Arkendale to Powell's Creek Third Track Project
 - Quantico Station
 - Alexandria Pedestrian Tunnel Project
 - Lifecycle Overhaul and Upgrade Facility
 - L'Enfant (North) Storage Track Wayside Power Construction
 - L'Enfant (South) Storage Track Wayside Power
 - Franconia-Springfield Station Improvements (Penta-Platform Program)
 - Lorton Second Platform (Penta-Platform Program)
 - Rippon Station Improvements (Penta-Platform Program)
 - Brooke Station Improvements (Penta-Platform Program)
 - Leeland Road Station Improvements (Penta-Platform Program)
 - Midday Storage Replacement Facility
 - Rolling Road Platform Extension
 - Crossroads Real Estate Acquisition
 - Manassas Line Expansion/Gainesville-Haymarket Extension Study
- 16 Facilities Update
- 17 Upcoming Procurements
- 18 Projects Progress Report
- 22 Notes



VIRGINIA RAILWAY EXPRESS
A better way. A better life.

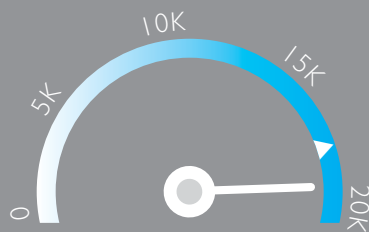


SUCCESS AT A GLANCE



PARKING UTILIZATION

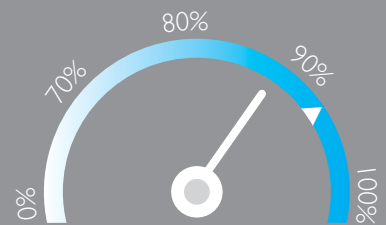
The total number of parking spaces used in the VRE system during the month, divided by the total number of parking spaces available.



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

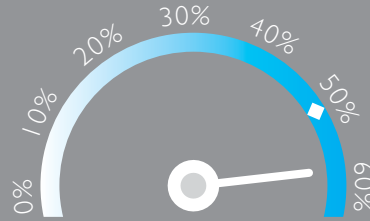
Percentage of trains that arrive at their destination within five minutes of the schedule.

▲ 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 riders.

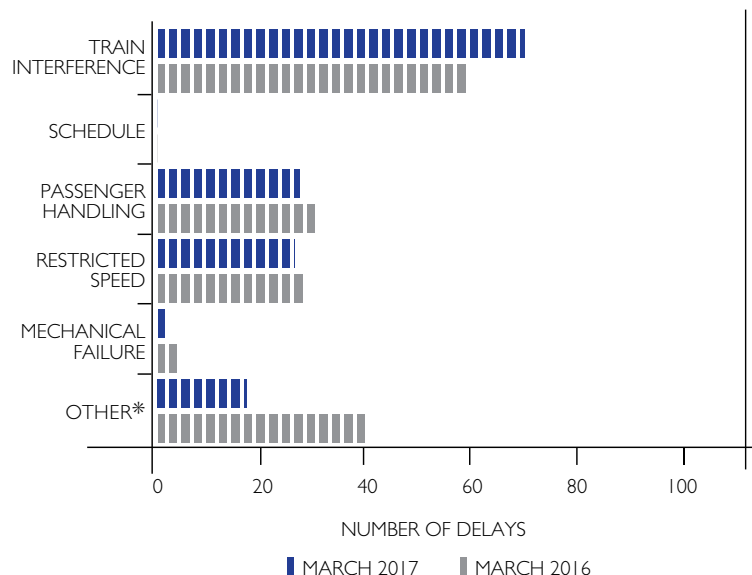
◆ Board-established goal.

ON-TIME PERFORMANCE

OUR RECORD

	March 2017	February 2017	March 2016
Manassas Line	93%	94%	95%
Fredericksburg Line	84%	85%	89%
System Wide	89%	89%	92%

REASONS FOR DELAYS



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

VRE operated 720 trains in March. Our on-time rate for March was 89%. Eighty of the 720 trains arrived over five minutes late to their final destinations. The Manassas Line accounted for twenty-four late trains, and the Fredericksburg Line accounted for fifty-six.

March is the second consecutive month we were just shy of our 90% on-time performance goal. There were several service disruptions on the Fredericksburg Line in the beginning of March: power-related issues, signal issues, fallen trees across the tracks, a brush fire, and a multi-deer strike. These delays are compounded by infrastructure improvement work. Rail congestion is an underlying issue as a saturated system will compound the simplest delays and may cascade to later trains. Heavy freight traffic and temporary speed restrictions will likely continue to cause delays in the short-term. However, the infrastructure improvement work will reduce congestion and increase operational flexibility in the long-term.

On March 6, we implemented a system-wide schedule change. The schedule change reduces dwell times along the Manassas Line as well as accounts for the extra time it takes to travel between the Fredericksburg and Spotsylvania stations. The Fredericksburg line change should help improve OTP with three additional minutes between Spotsylvania and Fredericksburg.

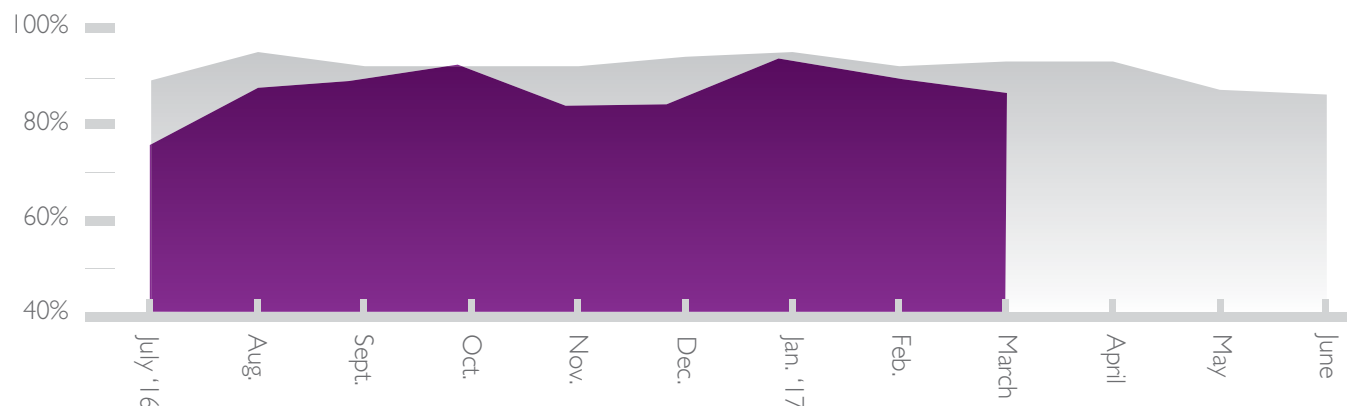
LATE TRAINS

	System Wide			Fredericksburg Line			Manassas Line		
	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.
Total late trains	35	64	80	20	45	56	15	19	24
Average minutes late	22	12	22	15	14	26	31	7	11
Number over 30 minutes	6	3	11	2	3	11	4	0	0
Heat restriction days / total days	0/20	0/19	0/23	—	—	—	—	—	—

ON-TIME PERFORMANCE

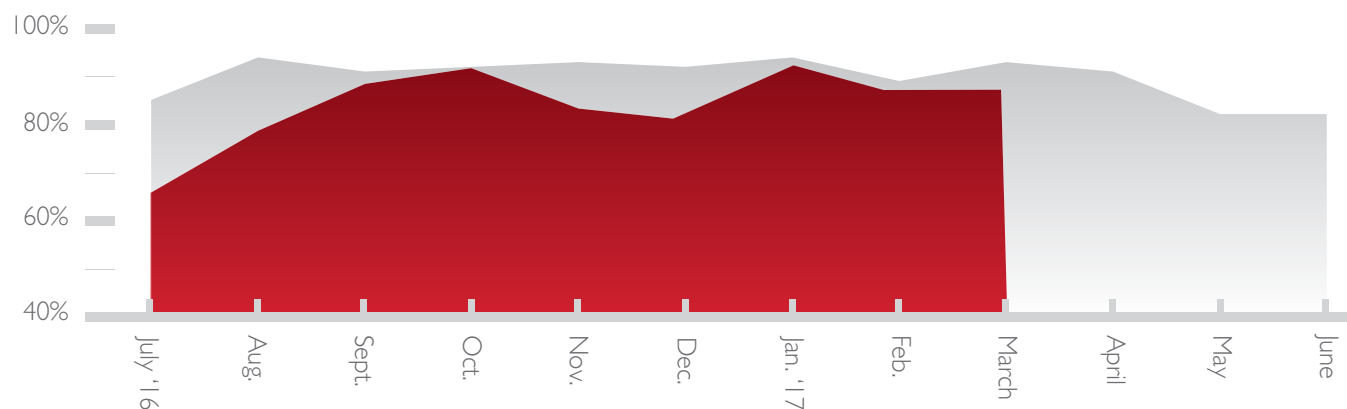
VRE SYSTEM

BOTH LINES ■ Current Stats ■ 3-Year Rolling Average

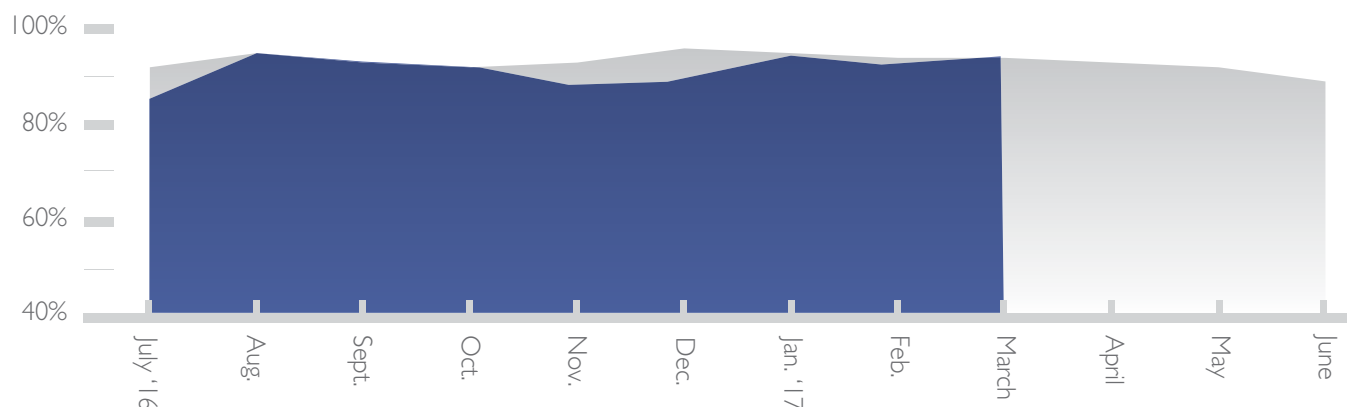


ON-TIME PERFORMANCE BY LINE

FREDERICKSBURG LINE ■ Current Stats ■ 3-Year Rolling Average



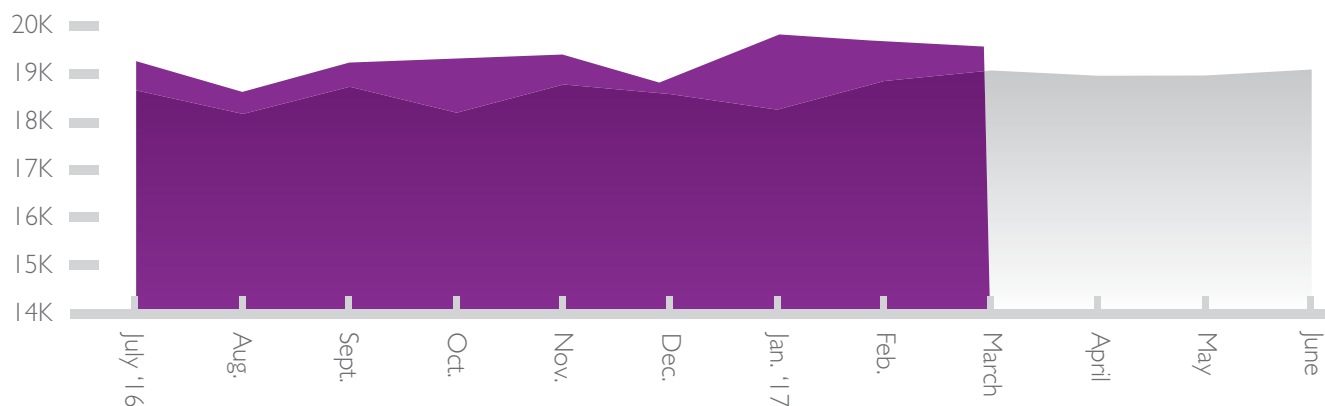
MANASSAS LINE ■ Current Stats ■ 3-Year Rolling Average



AVERAGE DAILY RIDERSHIP

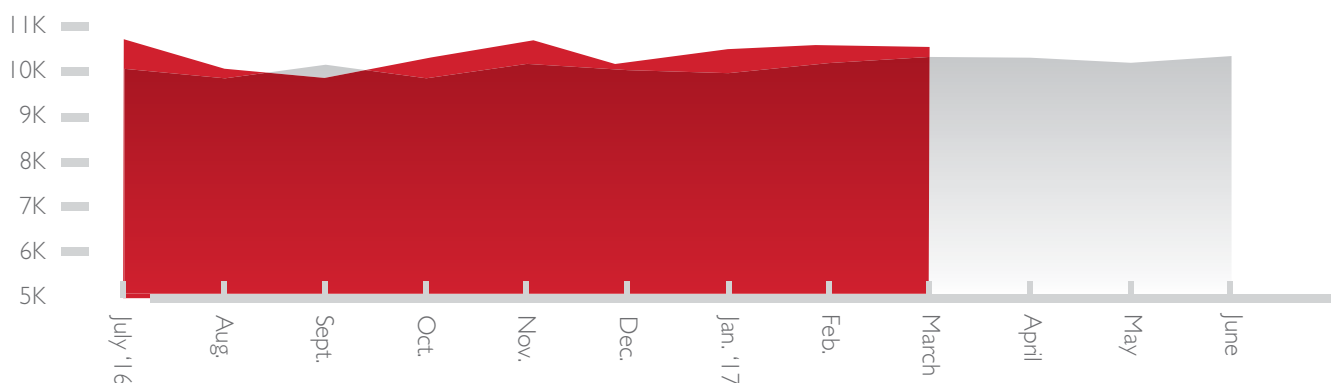
VRE SYSTEM

BOTH LINES ■ Current Stats ■ 3-Year Rolling Average

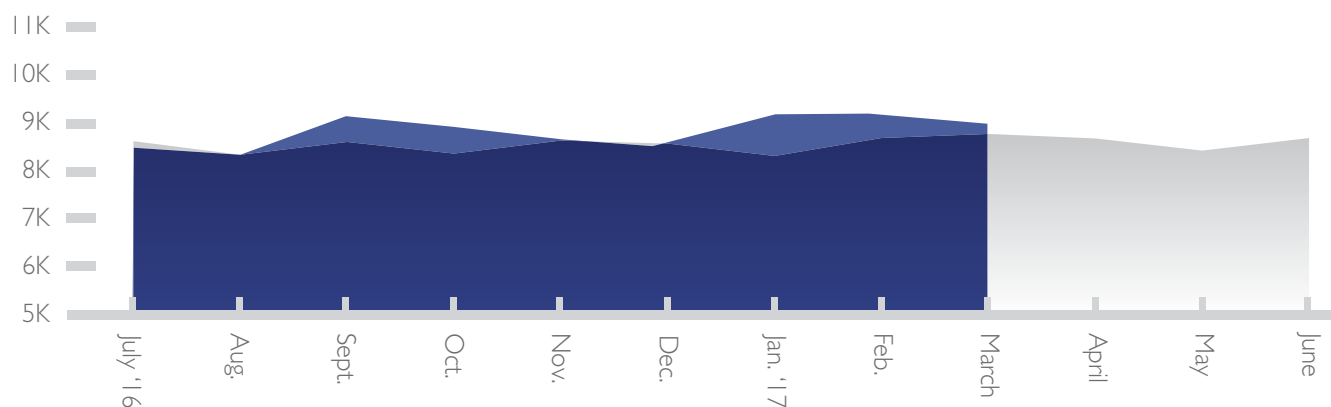


AVERAGE DAILY RIDERSHIP BY LINE

FREDERICKSBURG LINE ■ Current Stats ■ 3-Year Rolling Average



MANASSAS LINE ■ Current Stats ■ 3-Year Rolling Average



RIDERSHIP UPDATES

Average daily ridership in March was approximately 19,800. This ridership average represents a slight drop from February (20,000) but a significant increase over last March, which was 18,100.

Though our ridership total dropped slightly from the previous month, WMATA SafeTrack Surges were still in effect in March and we believe some regular Metro riders tried VRE as an alternative.

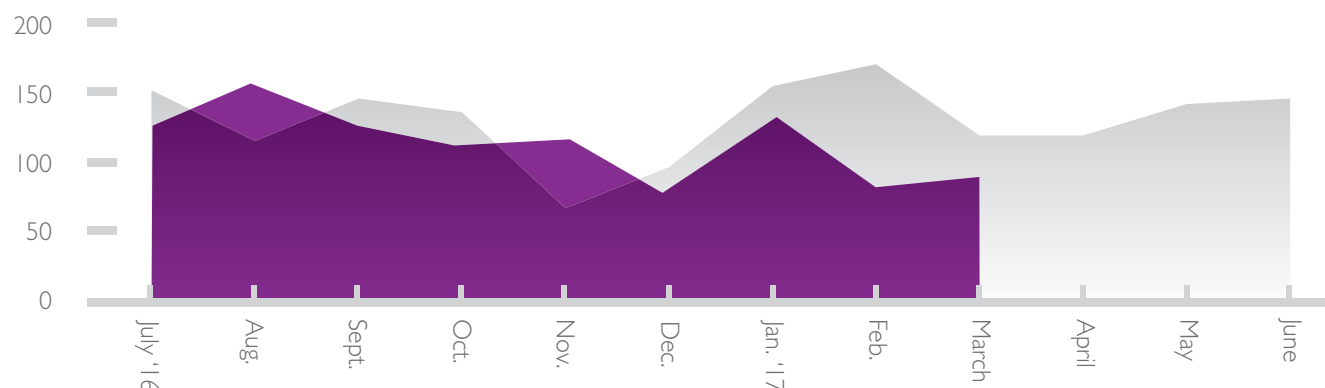
March 2017

March 2016

Monthly Ridership	439,661	417,454
Average Daily Ridership	19,794	18,150
Full Service Days	22	23
"S" Service Days	1	0

SUMMONSES ISSUED

BOTH LINES ■ Current Stats ■ FY 2016



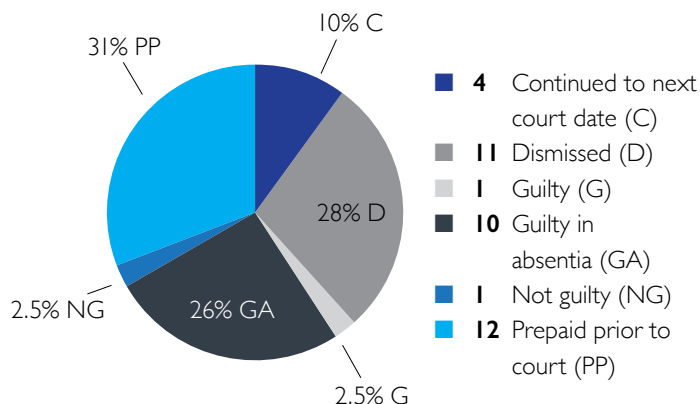
SUMMONSES WAIVED OUTSIDE OF COURT

Reason for Dismissal **Occurrences**

Passenger showed proof of a monthly ticket	36
One-time courtesy	13
Per the request of the conductor	1
Defective ticket	0
Per Ops Manager	0
Unique circumstances	0
Insufficient processing time	1
Insufficient information	0
Lost and found ticket	0
Other	0

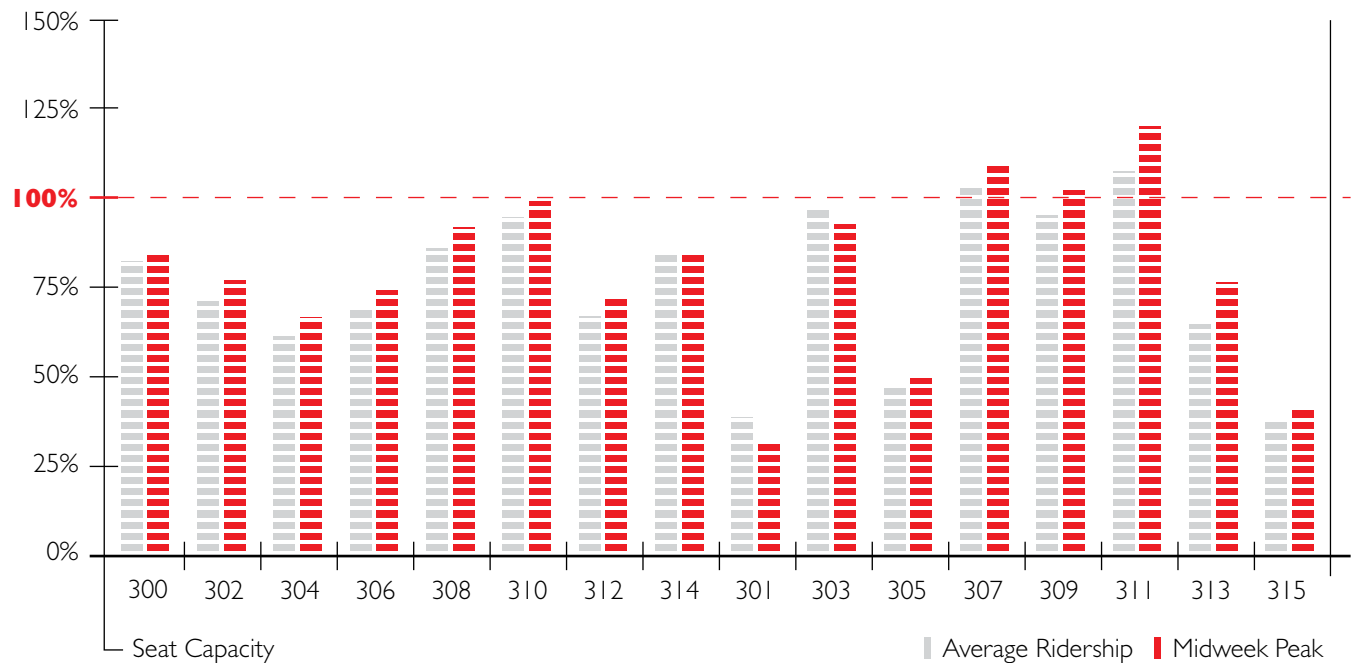
Total Waived 51

MONTHLY SUMMONSES COURT ACTION

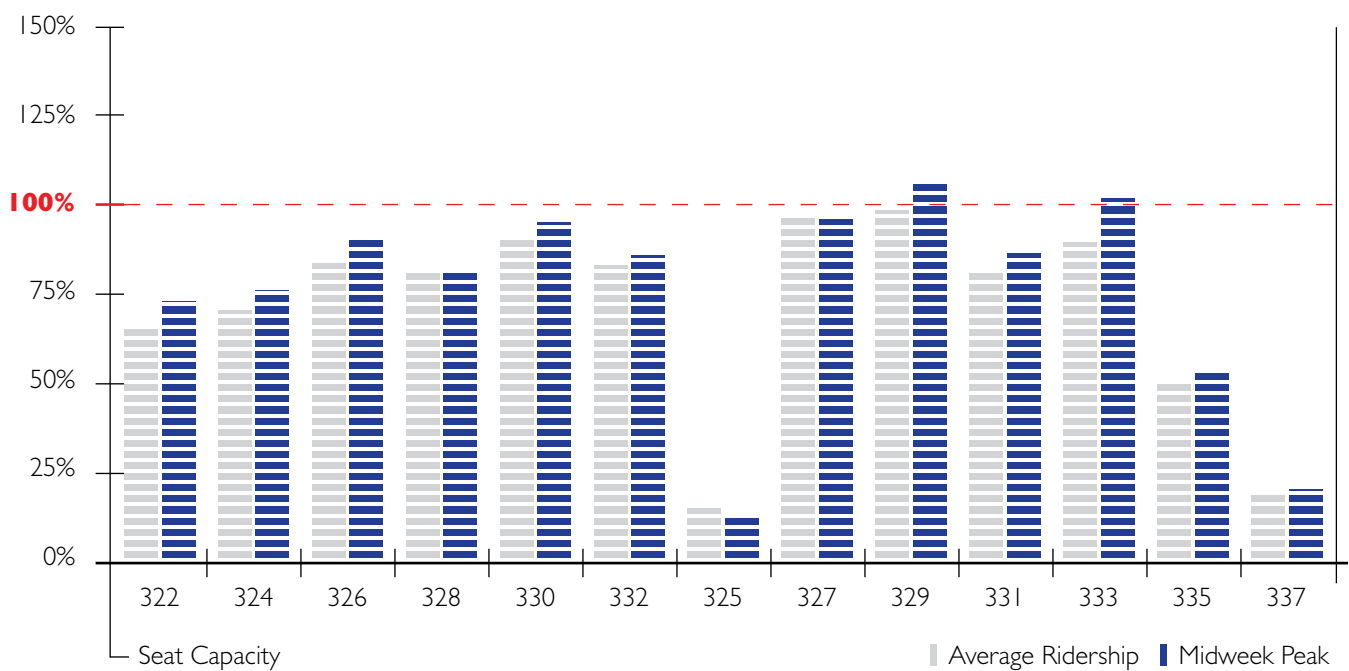


TRAIN UTILIZATION

FREDERICKSBURG LINE

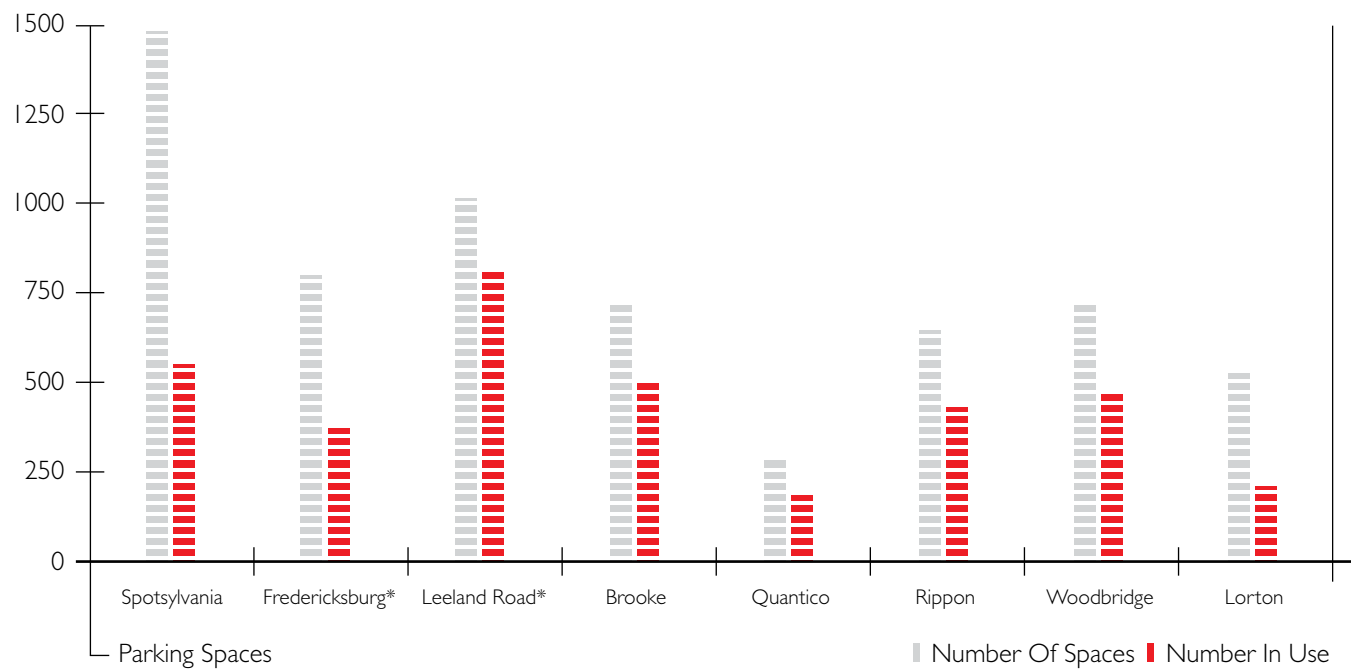


MANASSAS LINE



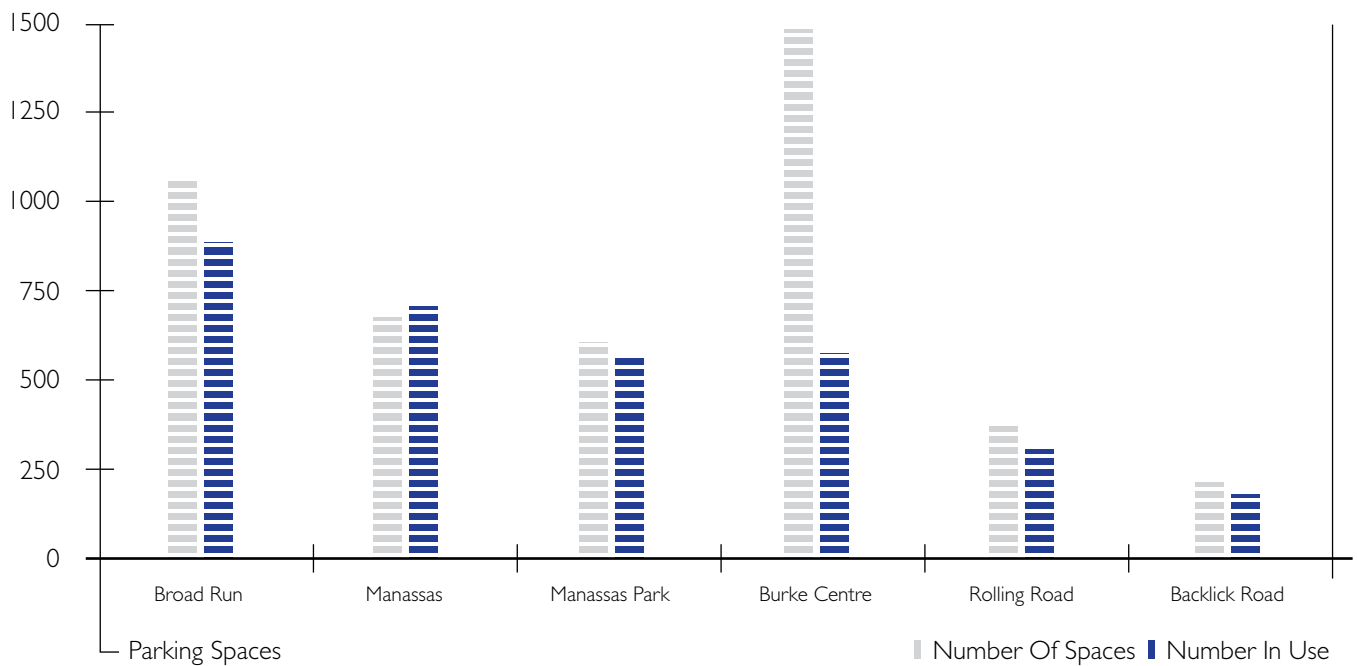
PARKING UTILIZATION

FREDERICKSBURG LINE



*Denotes stations with overflow parking available that is now being included in final counts

MANASSAS LINE



MARCH 2017 FINANCIAL REPORT

The March 2017 Financial Report reflects the first nine months of FY 2017. The summary below of the financial results (unaudited) includes information on the major revenue and expense categories.

Fare income to-date for FY 2017 is \$2,580,202 above the budget – a favorable variance of 8.9%. Revenue is up 13.9% compared to the same period in FY 2016. Our budgeted goal ratio for FY 2017 is 50%, however our current YTD operating ratio is 59%. We suspect increased ridership related to WMATA SafeTrack activities positively impacted revenue for the period.

	CURR. MO. ACTUAL	CURR. MO. BUDGET	YTD ACTUAL	YTD BUDGET	YTD \$ VARIANCE	YTD % VARIANCE	TOTAL FY17 BUDGET
OPERATING REVENUE (\$)							
Passenger Ticket Revenue	3,628,935	3,569,124	31,598,728	29,018,526	2,580,202	8.9%	38,950,000
Other Operating Revenue	1,600	18,327	208,941	149,004	59,937	40.2%	200,000
Subtotal Operating Revenue	3,630,535	3,587,450	31,807,669	29,167,530	2,640,139	9.1%	39,150,000
Jurisdictional Subsidy (1)	-	-	17,250,240	17,250,240	-	0.0%	12,847,417
Federal/State/Other	2,682,567	2,663,594	23,337,186	23,676,624	(339,438)	-1.4%	31,479,730
Jurisdictional Subsidy Appn. from Res.	-	-	-	-	-	0.0%	377,000
Interest Income	35,031	2,291	167,416	18,626	148,790	798.8%	25,000
Total Operating Revenue	6,348,133	6,253,335	72,562,511	70,113,019	2,449,492	3.5%	83,879,147
OPERATING EXPENSES (\$)							
Deptml. Operating Expenses	6,318,496	6,550,490	53,574,818	57,343,075	3,768,257	6.6%	77,152,278
Debt Service	559,886	559,573	5,039,352	5,036,153	(3,199)		6,714,870
Other Non-Deptml. Expenses	-	-	-	-	-		12,000
Total Operating Expenses	6,878,382	7,110,062	58,614,670	62,379,228	3,765,058	6%	83,879,147
NET INC. (LOSS) FROM OPS (\$)	(530,248)	(856,727)	13,948,342	7,733,791	6,214,550	-	-
CALCULATED OPERATING RATIO	-	-	59%	51%	-	Goal	50%

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

FY 2017 YEAR END FINANCIAL PROJECTION

The VRE Operations Board receives financial information in summary form each month which shows year-to-date actual to budgeted fare revenue, grant revenue, and operating expenses. Each December, a revised budget for the year is prepared based on the most current information as of that date. The year-end projection is based on this amended budget presented to the Board in December 2016.

The information below is a projection of year-end revenue and expenses for FY 2017. Major points are as follows:

- The overall surplus for FY 2017 is projected at \$8.9M. Approximately \$317K of this surplus is associated with unspent project expenses that may need to be carried forward into the next year, as described below.
- Fare Revenue is projected to be \$3.5M over budget, or \$42.4M for the year. This represents an 8.2% increase over budget.
- Federal and State Revenue is under budget by \$431K, primarily due to a decrease in access fee grants associated with historic billing corrections to Norfolk Southern from previous fiscal years.
- Operating expenses are \$4.7M less than budget.
 - The major cost variance is Diesel Fuel, budgeted at \$4.8M and projected to be under budget by \$1.9M.
- All other operating expenses are projected to be under budget by \$2.8M, or 4.3% of budgeted operating expenditures:
 - Track access costs are projected to be \$436K under budget, as noted above in Federal and State Revenue.
 - Mechanical Operations rail car maintenance costs are projected to be under budget by \$457K, primarily related to the delayed start of the positive train control back office system. Cost savings related to performance of our new railcars was also a factor.
 - Total projected savings for salary and fringe benefits in the Chief of Staff, Marketing and Project Implementation divisions is \$376K, due to staff turnover and periods of unfilled positions.
 - Information Technology costs are projected to be \$669K under budget. This includes unspent amounts for Other Professional Services of \$317K related to a revised schedule for the SharePoint project. The unspent funds may be carried forward into FY 2018. Total projected savings for Hardware/Software Maintenance is \$314K, also related to the delayed timeline of SharePoint, and other IT projects.
 - Other departmental savings are projected at \$900k, chiefly in Marketing, Facilities Maintenance, and Safety and Security.
- Non-Operating expenses are \$1.0M less than budget reflecting the unspent contingency of \$1.0M.

A recommendation on the use of the projected surplus will be presented as part of the Proposed FY 2019 and Amended FY 2018 Budgets in December 2017. Preliminary uses for the projected surplus are to carry forward \$317K into the FY 2018 budget for uncompleted projects, to fund one-time items in FY 2019 and to increase the Capital Reserve.

The chart below summarizes actual to budget data by major category:

	REVISED BUDGET	CURRENT ESTIMATE	VARIANCE	%
Fare Revenue	39.0	42.4	3.5	8.2%
Local Subsidy*	12.8	12.8	0.0	0.0%
Federal/State Revenue	31.5	31.0	-0.4	-1.4%
Other Revenue	0.6	0.9	0.3	29.7%
Total Revenue	83.9	87.2	3.3	3.8%
Operating Expenses	72.2	67.5	4.7	6.9%
Non-Operating Expenses	5.0	4.0	0.9	23.2%
Debt Service	6.7	6.7	0.0	0.0%
Contribution to Reserve	0.0	0.0	0.0	0.0%
Total Expenses	83.9	78.3	5.6	6.7%
Net Income (Loss)	0.0	8.9	8.9	

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

FY 17 YEAR END OPERATING
BUDGET PROJECTIONS (IN MILLIONS)

CAPITAL PROJECTS UPDATES

**AS OF APRIL 3, 2017*

LORTON PLATFORM EXTENSION

- Proceeded with construction entrance re-design and addressing Plantation Pipeline concerns regarding protection of their pipeline during construction activities
- Prime contractor changed earthwork subcontractors to price-revised construction entrance
- Onsite and regular communication and coordination with CSXT, Fairfax County, Utilities, and other stakeholders, including regularly scheduled project meetings with Hammerhead Construction (prime contractor), STV (CM consultant), and VRE

ARKENDALE TO POWELL'S CREEK THIRD TRACK PROJECT

- Waiting on Funding Agreement Amendment between FRA and DRPT finalizing Option 2. North Possum Point to Powell's Creek to be designated as "future" effort
- Corresponding CSXT / DRPT Contract Amendment 2 for Arkendale to Powell's Creek waiting for above noted to be executed

QUANTICO STATION

- Stakeholders reviewing and commenting on 60% design for station and 90% design for site, civil, drainage, track, and retaining wall in vicinity of station
- IPROC Funding Agreement waiting for Commonwealth legal review and approval (in conjunction with Arkendale to Powell's Creek Third Track Project agreements)
- Utility location and potential conflicts being coordinated onsite through CSXT

ALEXANDRIA PEDESTRIAN TUNNEL PROJECT

- 60% design for station platforms and tunnel being reviewed and commented on by stakeholders
- Reviewing alternative methods for project delivery to complete final design and construction

LIFECYCLE OVERHAUL AND UPGRADE FACILITY

- Project design complete and ready for construction
- Continuing to coordinate with Spotsylvania County regarding our application for a site permit
- Procurement for construction awaiting completion of property acquisition

L'ENFANT (NORTH) STORAGE TRACK WAYSIDE POWER CONSTRUCTION

- Acceptance of wayside power appliances awaiting DDOT final inspections and sign off

L'ENFANT (SOUTH) STORAGE TRACK WAYSIDE POWER

- Plans for wayside power appliances submitted to Pepco for review and approval

FRANCONIA-SPRINGFIELD STATION IMPROVEMENTS (PENTA-PLATFORM PROGRAM)

- Survey, geotechnical, and environmental fieldwork completed
- Preliminary engineering plans continue to be developed on an accelerated schedule
- Atlantic Gateway meeting held with VDRPT
- Internal meetings held with Office of Development, Operations, Procurement, and Finance
- External meetings and calls held with General Engineering Consultant
- Continued developing internal cost tool spreadsheet
- Monthly project status update sent to NVTA

LORTON SECOND PLATFORM (PENTA-PLATFORM PROGRAM)

- Survey, geotechnical, and environmental fieldwork completed
- Preliminary engineering plans continue to be developed on an accelerated schedule
- Atlantic Gateway meeting held with VDRPT
- Internal meetings held with Office of Development, Operations, Procurement, and Finance
- External meetings and calls held with General Engineering Consultant
- Continued developing internal cost tool spreadsheet
- Monthly project status update sent to NVTA

RIPPON STATION IMPROVEMENTS (PENTA-PLATFORM PROGRAM)

- Survey, geotechnical, and environmental fieldwork completed
- Engineering concepts continue to be developed and refined on a normal schedule
- DC2RVA meeting and bi-weekly teleconference held with VDRPT and their consultants
- Internal meetings held with Office of Development, Operations, Procurement, and Finance
- External meetings and calls held with General Engineering Consultant
- Continued developing internal cost tool spreadsheet
- Monthly project status update sent to NVT

BROOKE STATION IMPROVEMENTS (PENTA-PLATFORM PROGRAM)

- Survey, geotechnical, and environmental fieldwork completed
- Engineering concepts continue to be developed and refined on a normal schedule
- DC2RVA meeting and bi-weekly teleconference held with VDRPT and their consultants
- Internal meetings held with Office of Development, Operations, Procurement, and Finance
- External meetings and calls held with General Engineering Consultant
- Continued developing internal cost tool spreadsheet

LEELAND ROAD STATION IMPROVEMENTS (PENTA-PLATFORM PROGRAM)

- Survey, geotechnical, and environmental fieldwork completed
- Engineering concepts continue to be developed and refined on a normal schedule
- DC2RVA meeting and bi-weekly teleconference held with VDRPT and their consultants
- Internal meetings held with Office of Development, Operations, Procurement, and Finance
- External meetings and calls held with General Engineering Consultant
- Continued developing internal cost tool spreadsheet

MIDDAY STORAGE REPLACEMENT FACILITY

- Continued to develop design options and coordination efforts with DDOT and Amtrak
- Completing environmental analysis related work to support environmental clearance by FTA

ROLLING ROAD PLATFORM EXTENSION

- Completed compilation of field survey to produce base mapping
- Exploring emergency access/egress options
- Developing preliminary design (60%) documents

CROSSROADS REAL ESTATE ACQUISITION

- Documentation necessary for environmental clearance by FTA has been prepared and submitted to FTA
- Real estate acquisition activities are on hold pending resolution of property zoning issue which the owner of the property needs to initiate with the county

MANASSAS LINE EXPANSION/GAINESVILLE-HAYMARKET EXTENSION STUDY

- At its March meeting, the VRE Operations Board recommended continued study of the Broad Run station and maintenance/storage facility as the preferred means of expanding Manassas Line service.
- NEPA and Preliminary Engineering (PE) design will be initiated for adding train storage tracks and increasing station parking capacity to support longer trains in the near term and more trains in the future.
- An amendment of the consultant contract for NEPA/PE under development to reflect the revised scope of the study

FACILITIES UPDATE

The following is a status update of VRE facilities projects:

Completed projects:

- Removal and replacement of pedestrian grade crossing at Crystal City Station to accommodate CSX track surfacing work
- Relocation of ADA-accessible parking spaces onsite to accommodate platform expansion project at Lorton Station
- Repairs to vandalized fire standpipe at Woodbridge Station
- Development of scopes of work for platform concrete repairs, steel railing repairs, parking lot pavement repairs and restriping, and painting of various stations
- Replacement of name and address Braille signage at all stations

Projects scheduled to be completed this quarter:

- Replacement of platform lighting at L'Enfant Station
- Replacement of canopy roof at Leeland Road Station (pending CSX flagman availability)
- Installation of pathfinder signs for Spotsylvania Station
- Replacement of conduits at Rolling Road, Burke Centre and Manassas Park Stations
- Repairs to under-platform fencing at Burke Centre and Manassas Park Stations
- Striping of parking lot at Alexandria Headquarters
- Installation of monitoring wells on two outfall drainage pipes at Broad Run Yard to allow for accurate discharge sampling for VPDES General Permit compliance (pending DEQ approval)

Projects scheduled to be initiated this quarter:

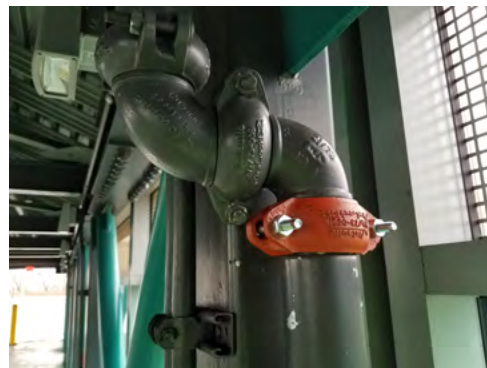
- Repairs to platform concrete at Alexandria Station
- Repairs to fascia and soffit at Woodbridge Station east building
- Installation of pathfinder signs for Spotsylvania Station
- Replacement of conduits at Rolling Road, Burke Centre and Manassas Park Stations
- Repairs to under-platform fencing at Burke Centre and Manassas Park Stations
- Striping of parking lot at Alexandria Headquarters
- Installation of monitoring wells on two outfall drainage pipes at Broad Run Yard to allow for accurate discharge sampling for VPDES General Permit compliance (pending DEQ approval)

Ongoing projects:

- Modernization of west elevator at Franconia-Springfield Station
- Design of emergency generator at Woodbridge Station west elevator and stair tower
- Development of specifications for modernization of Woodbridge Station east elevator
- Development of design of platform concrete rehabilitation at Fredericksburg Station
- Installation of utility power status remote monitoring at various stations



Woodbridge Station Vandalized Fire Standpipe



Woodbridge Station Fire Standpipe After Repairs



Brooke Station Signage to be Replaced with New Standard Signage

UPCOMING PROCUREMENTS

Scope of Work Received

- Rehabilitation of Wheelsets and Traction Motor Assemblies
- Shuttle Service at VRE Franconia-Springfield Station
- Installation and Integration of Security Camera and Access Control Systems

Scope of Work Pending

- Replacement of Tactile Warning Strips at Station Platforms
- Automated Passenger Count System
- Purchase of Passenger Elevators
- Construction of the Lifecycle Overhaul and Upgrade Facility
- Construction Management Services for the Lifecycle Overhaul and Upgrade Facility
- Information Technology Services
- 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

PROJECTS PROGRESS REPORT

AS OF APRIL 3, 2017

PASSENGER FACILITIES

PROJECT	DESCRIPTION	PHASE					
		CD	PD	EC	RW	FD	CN
Union Station Improvements (Amtrak/VRE Joint Recapitalization Projects)	Station and coach yard improvements of mutual benefit to VRE and Amtrak.	◆	◆	◆	N/A	◆	●
Alexandria Station Improvements	Pedestrian tunnel to METRO and eliminate at-grade track crossing.	◆	◆	◆	N/A	●	—
	Modify Slaters Lane Interlocking and East Platform for passenger trains on Track #1.	◆	◆	◆	N/A	●	—
	Extend East Platform and elevate West Platform.	◆	◆	◆	N/A	●	—
Franconia-Springfield Station Improvements	◆ Extend both platforms and widen East Platform for future third track.	◆	●	●	N/A	—	—
Lorton Station Improvements	Extend existing platform.	◆	◆	◆	N/A	◆	●
	◆ Construct new second platform with pedestrian overpass.	◆	●	●	N/A	—	—
Rippon Station Improvements	◆ Extend existing platform, construct new second platform with pedestrian overpass.	◆	●	●	N/A	—	—
Potomac Shores Station Improvements	New VRE station in Prince William County provided by private developer.	◆	◆	◆	N/A	■	—
Quantico Station Improvements	Extend existing platform, construct new second platform with pedestrian overpass.	◆	◆	◆	N/A	■	—
Brooke Station Improvements	◆ Extend existing platform, construct new second platform with pedestrian overpass.	◆	●	●	N/A	—	—
Leeland Road Station Improvements	◆ Extend existing platform, construct new second platform with pedestrian overpass.	◆	●	●	N/A	—	—
Spotsylvania Station Improvements	New VRE station in Spotsylvania County near the Crossroads MSF.	◆	◆	◆	N/A	◆	◆
Manassas Park Parking Expansion	Parking garage to increase parking capacity by 1,100 spaces.	●	—	—	N/A	—	—
Rolling Road Station Improvements	Extend existing platform.	◆	◆	●	N/A	●	—
Crystal City Station Improvements	Replace existing side platform with new, longer island platform.	●	—	—	N/A	—	—
Broad Run Station Improvements	Parking garage to increase parking capacity by 900 spaces.	◆	◆	■	N/A	—	—

PHASE: CD – Conceptual Design PD – Preliminary Design EC – Environment Clearance RW – Right of Way Acquisition

1 Total project cost estimate in adopted FY2017 CIP Budget

2 Does not include minor (< \$50,000) operating expenditures

* \$2,181,630 authorization divided across five “Penta-Platform” program stations

Total	ESTIMATED COSTS (\$)				COMPLETION			STATUS
	Funded	Unfunded	Authorized	Expended ²	Percent	Date		
3,201,176	3,201,176	–	1,451,176	574,706	75%	2nd QTR 2017	●	Work resumed in April 2016 and is anticipated to be completed in the second quarter of 2017.
10,021,865	10,021,865	–	2,450,624	1,931,995	51%	3rd QTR 2020	●	60% Comments under review.
7,000,000	7,000,000	–	467,500	4,574	5%	4th QTR 2017	●	Design work has begun and anticipated for completion in January 2017.
2,400,000	400,000	2,000,000	–	–	5%	3rd QTR 2020	●	Design work on East Platform only. West Platform elevation funded.
13,000,000	13,000,000	–	–	25,463	5%	2nd QTR 2020	●	Preliminary engineering is anticipated to be complete in May 2017.
2,500,000	2,500,000	–	–	410,351	16%	3rd QTR 2018	●	Fiber Optic relocation completed week of October 14, 2016. Proceeding with Pre-construction.
16,150,000	16,150,000	–	*	38,544	5%	2nd QTR 2020	●	Preliminary engineering is anticipated to be complete in May 2017.
16,633,535	16,633,535	–	*	23,169	5%	4th QTR 2021	●	Preliminary engineering is anticipated to be completed by August 2018.
No costs for VRE. Station being developed by private developer					25%	4th QTR 2017	■	On hold pending resolution of Arkendale to Powell's Creek Third Track Project issues.
9,500,000	9,500,000	–	–	–	10%	4th QTR 2019	■	On hold pending resolution of Arkendale to Powell's Creek Third Track Project issues.
21,334,506	21,334,506	–	*	19,238	5%	4th QTR 2021	●	Preliminary engineering is anticipated to be completed by August 2018.
14,336,156	14,336,156	–	*	19,846	5%	4th QTR 2021	●	Preliminary engineering is anticipated to be completed by August 2018.
3,422,500	3,422,500	–	3,901,886	3,620,313	99%	1st QTR 2017	●	Project complete. Proceeding with close-out.
19,600,000	2,500,000	17,100,000	182,142	139,619	10%	2nd QTR 2018	●	NTP issued in July 2016. Alternatives Analysis report is being finalized.
2,000,000	2,000,000	–	442,900	27,551	8%	3rd QTR 2020	●	60% design plans under review. Force account agreement pending.
21,160,000	400,000	20,760,000	278,767		5%	2nd QTR 2023	●	NTP or Alternatives Analysis and conceptual design issued December 2016.
24,420,000	12,998,282	11,421,718	2,031,263	393,120	30%	TBD	■	NEPA documents submitted to FTA for review.

FD – Final Design

CN – Construction

STATUS:



Completed



Underway



On Hold

Part of the "Penta-Platform" program

TRACK AND INFRASTRUCTURE

PROJECT	DESCRIPTION	PHASE					
		CD	PD	EC	RW	FD	CN
Hamilton-to-Crossroads Third Track	2¼ miles of new third track with CSXT design and construction of signal and track tie-ins.	◆	◆	◆	N/A	◆	◆

MAINTENANCE AND STORAGE FACILITIES

Broad Run Yard Train Wash	New train wash facility to be added to the Broad Run MSF.	◆	◆	◆	N/A	■	■
L'Enfant North Storage Track and Wayside Power	Conversion of existing siding into a midday train storage track.	◆	◆	◆	N/A	◆	●
L'Enfant South Storage Track and Wayside Power	Conversion of CSXT Temporary Track to VRE Storage Track (1,350 feet) and Associated Signal Work and Wayside	◆	◆	◆	N/A	●	●
Lifecycle Overhaul and Upgrade Facility	New LOU facility to be added to the Crossroads MSF.	◆	◆	◆	N/A	◆	■
Crossroads Maintenance and Storage Facility Land Acquisition	Acquisition of 16.5 acres of land, construction of two storage tracks and stormwater retention and new access road.	◆	N/A	N/A	●	N/A	N/A
Midday Storage	New York Avenue Storage Facility: Planning, environmental and preliminary engineering.	◆	●	●	●		

ROLLING STOCK

Passenger Railcar Procurement	Acquisition of 29 new railcars (15 received • 14 being built).	◆	N/A	N/A	N/A	◆	●
Positive Train Control	Implement Positive Train Control for all VRE locomotives and control cars.	◆	N/A	N/A	N/A	◆	●

PLANNING, COMMUNICATIONS AND IT

Gainesville-Haymarket Extension	NEPA and PE for an 11-mile extension of VRE service over the NS B-Line to I-66 near Haymarket.	◆	●	●	—	—	—
Mobile Ticketing	Implementation of a new mobile ticketing system.	◆	N/A	N/A	N/A	◆	●

PHASE: CD – Conceptual Design PD – Preliminary Design EC – Environment Clearance RW – Right of Way Acquisition

1 Total project cost estimate in adopted FY2017 CIP Budget

2 Does not include minor (< \$50,000) operating expenditures

ESTIMATED COSTS (\$)					COMPLETION		STATUS	
Total	Funded	Unfunded	Authorize	Expended ²	Percent	Date		
32,500,000	32,500,000	—	32,823,227	29,205,342	98%	4th QTR 2016	●	Project complete. Close-out pending.
2,494,711	307,513	2,187,198	307,513	174,875	55%	TBD	■	Design 90% complete; on hold pending FTA review.
4,283,618	4,283,618	—	4,207,057	1,706,560	80%	2nd QTR 2017	●	Power construction 90% complete. CSXT track and signal installation underway.
3,965,000	3,965,000	—	2,937,000	1,386,438	10%	3rd QTR 2017	●	Power design under review by CSXT & Pepco. CSXT track and signal installation underway.
35,100,000	22,500,000	—	3,146,000	2,060,026	60%	1st QTR 2018	■	Design 100% complete. On hold pending county zoning action.
2,950,000	2,950,000	—	2,950,000	76,767	75%	2nd QTR 2017	●	Completed cultural resources report. Submission of CE to FTA and county zoning action pending.
88,800,000	88,800,000	—	2,883,272	68,482	10%	4th QTR 2017	●	Developing design options and PE. Identifying real estate requirements and acquisition strategy.
75,264,693	75,264,693	—	72,296,772	36,994,353	49%	4th QTR 2018	●	8 cars received in FY 2015, 7 cars have been received in FY 2016, and 5 cars scheduled to be received in FY 2017.
10,553,000	10,553,000	—	7,980,877	7,273,633	80%	4th QTR 2018	●	Onboard installations ongoing.
617,791,163	5,885,163	611,906,000	4,865,112	2,108,091	15%	3rd QTR 2022	■	On hold pending board review and direction regarding Phase 2 work program.
3,510,307	3,510,307	—	3,510,627	1,575,307	50%	1st QTR 2017	●	Integration with S&B system complete. Mobile now accounts for about 12% of monthly revenue and more than 25% of all tickets sold.

FD – Final Design CN – Construction ◆ Completed ● Underway ■ On Hold



VIRGINIA RAILWAY EXPRESS

1500 KING STREET, SUITE 202 • ALEXANDRIA, VA 22314 • 703.684.1001

VRE.ORG





RESOLUTION #2340

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, 2017;

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, 2017;

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 FY2018 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, 2018.

Approved this 1st day of June 2017.

Jeffrey C. McKay
Chairman

Matthew F. Letourneau
Secretary-Treasurer

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VIRGINIA RAILWAY EXPRESS
OPERATIONS BOARD

Agenda Item 8-D
Action Item

To: Chairman Smedberg and the VRE Operations Board

From: Doug Allen

Date: May 19, 2017

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

Recommendation:

The VRE Operations Board is being asked to recommend the Commissions authorize the Chief Executive Officer to execute a one year extension of the existing Amended and Restated Operating/Access Agreement with CSX Transportation (CSXT) through June 30, 2018.

Background:

The VRE has an Operating/Access Agreement with CSXT related to VRE operations in the Fredericksburg to Washington corridor. That agreement, entered in 1994, has been amended and extended several times. In June 2011, a new amended and restated agreement was executed with a five-year term ending on June 30, 2016.

In May of 2016, the VRE Operations Board recommended, and the Commissions subsequently authorized, the VRE CEO to execute an Amendment to extend the current Agreement through June 30, 2017. As part of VRE's commitment to the third main line construction, VRE and CSXT worked to identify additional capacity enhancement projects in the corridor including constructing a third main track. Currently, VRE and CSXT are in



Northern Virginia
Transportation Commission
2300 Wilson Blvd. #620
Arlington, VA 22201
703.524.3322



Virginia Railway Express
1500 King Street, Suite 202
Alexandria, VA 22314
703.684.1001
VRE.org



Potomac and Rappahannock
Transportation Commission
14700 Potomac Mills Road
Woodbridge, VA 22192
703.580.6121

discussions to further identify potential capacity improvement projects, funding sources and funding mechanisms for capital improvement projects in the corridor.

Throughout the one-year extension period, VRE, CSXT and DRPT will meet 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 staff anticipates these elements will be integrated into the new Amended and Restated Agreement. Furthermore, CSXT has requested during the one-year extension period VRE and CSXT work to identify a mutually agreed upon cost sharing methodology for the implementation and ongoing operations of Positive Train Control(PTC) and update the Master Facilities Lease Agreement.

Fiscal Impact:

Funding for the CSXT track access fee has been included in the approved FY 2018 budget for track access fees.

Agenda Item #6: NVTC's Regional High Capacity Transit Economic Impact Study



TO: Chairman McKay and NVTC Commissioners

FROM: Kate Mattice, Dan Goldfarb P.E., and Andrew D'huyvetter AICP

DATE: May 25, 2017

SUBJECT: NVTC's Regional High Capacity Transit Economic Impact Study

The Commission will be presented with preliminary findings of NVTC's Regional High Capacity Transit Economic Impact Study. The objective of NVTC's study is to quantify the value and worth that high capacity transit modes (Metrorail and VRE) operating in Northern Virginia bring to the Commonwealth. The effort focuses on quantifying the contribution of the state income tax and state retail sales and use tax to the state General Fund, as these two sources represent the vast majority of General Fund revenues. This study differs from previous and current work as it evaluates the level of land use and development that the transportation system can support. It also looks beyond property tax revenues to local governments and focuses on those types of revenue that would be assessed at the state level and impact the Commonwealth's General Fund.

Based on preliminary analysis, NVTC has found that the General Fund of the Commonwealth receives over \$600 million per year in revenue from the households and jobs supported by the high capacity rail network in Northern Virginia. This represents nearly four percent of the General Fund revenues generated by the income tax and retail sales and use sales tax in Virginia.

NVTC's analysis is being done in coordination with the Washington Metropolitan Area Transit Authority (WMATA) and the Metropolitan Washington Council of Governments (MWCOC) Transportation Planning Board (TPB). This preliminary analysis was conducted using the MWCOC/TPB transportation model, MWCOC travel demand forecast model forecast, and revenue and tax data obtained from the Virginia Department of Taxation and United States Internal Revenue Service. This effort also included a technical review team comprised of experts from Federal Transit Administration, George Mason University, TPB, WMATA, and nationally recognized transit consultants.

A final report with technical appendices will be provided to the Commission in September.

Methodology

NVTC used the regional travel demand forecast model to determine the amount of land use and development that is supported by high capacity transit. To calculate this, Metrorail and VRE were removed from the model and [the existing level of highway congestion was used as a base](#), the MWCOC/TPB travel demand model was used to assess the likely level of congestion and deterioration in travel times were these

facilities not available. Through an iterative process, land use was removed, both residential and commercial, until the same level of congestion was reached that exists on today's highway network in Northern Virginia. Congestion was measured in terms of congested lane miles during the peak period as well as in distribution of the commuter (i.e., home base work) trip length distance.

WMATA did a similar study in 2011, but focused on how much additional highway infrastructure would be needed to handle demand if transit did not exist in the Washington metropolitan area. This study complements that effort by evaluating the reductions that would be required in land activity and intensity of development. Given the dynamics of the modeling process, the regional land use totals were held constant. For the purposes of this exercise, the jobs and households that were removed from Northern Virginia were distributed to other jurisdictions in DC and Maryland.

With the land use supported by high capacity transit calculated, NVTC analyzed the economic value generated by the corresponding households and jobs and analyzed the value of these households on state specific revenues. This study focuses on state income and sales tax revenues to the state General Fund. The demographic and revenue assumptions used to estimate state General Fund revenues are outlined in a draft technical memorandum. Since, the largest sources of General Fund revenue are the personal income tax (69%) followed by the sales and use tax (18%), these were the focus for the monetary calculation used to determine the value of regional high capacity transit for Northern Virginia.

TO: Chairman McKay and NVTC Commissioners

FROM: Andrew D'huyvetter, AICP, Dan Goldfarb, PE, and Kate Mattice

DATE: May 25, 2017

SUBJECT: Technical Memorandum for Demographic and Revenue Component of Economic Value of Transit Study

This technical memorandum provides a detailed background on the demographic and revenue components of the Economic Value of Transit Study currently being performed by the Northern Virginia Transportation Commission (NVTC).

A. Purpose and Scope

NVTC's Chairman asked staff to evaluate the economic value of high capacity transit (Metrorail and VRE) in Northern Virginia to the Commonwealth of Virginia. The study's objective is to quantify the value and worth that these commuter and heavy rail systems bring to the Commonwealth. This study differs from previous and current work on the value of Metrorail in two ways: 1) it looks beyond local property tax revenue to those revenues that are raised at the state level, and 2) it utilizes the regional land use and transportation network and associated levels of congestion to quantify the benefits of heavy and commuter rail. To better understand how high capacity transit benefits the Commonwealth, this study calculates how rail impacts land use and development and quantifies the resulting tax revenues that go to the General Fund of the Commonwealth.

B. Summary

In FY2016, General Fund revenues totaled \$18.2 billion. The largest sources of General Fund revenues are the personal income tax at \$12.6 billion (69%) followed by the sales and use tax at \$3.3 billion (18%). Given the magnitude of the revenue that these sources provide and because the General Fund supports a variety of state programs, this study calculates the number of households and jobs supported by high capacity transit and estimates their contributions to these two revenue sources.

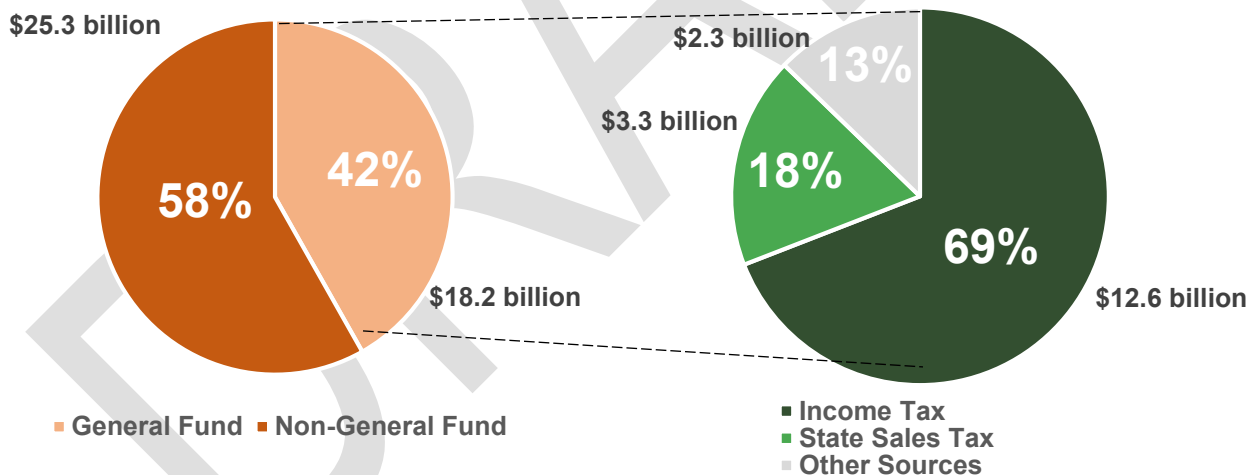
For the income tax, this study uses data from the United States Census Bureau, Internal Revenue Service, and the Virginia Department of Taxation to develop estimates of income tax revenue received by the state from households supported by high capacity transit in Northern Virginia. Income tax revenue estimates are based on income levels as reported in the regional travel demand forecast model developed by the Metropolitan Washington Council of Governments (MWCOC).

For the sales tax, this study uses the number of retail jobs supported by high capacity transit as a proxy for retail activity. Retail jobs, which are included in the MWCOG employment forecast, are calculated by local jurisdictions and are considered as proxies for retail land use. The percentage reduction in retail jobs is applied to the latest available sales tax data for each jurisdiction to calculate the sales tax value to the Commonwealth. Because this is a study of statewide revenues, this study evaluates only the portion of the sales tax that is directed to the state General Fund.

C. State Revenue Overview

In FY2016, the Commonwealth of Virginia collected \$43.4 billion in net revenue. This total represents revenue received by all departments and for all fund types. State revenues can be divided into General Fund revenues and non-General Fund revenues. In FY2016, General Fund revenues totaled \$18.2 billion (42%) and non-General Fund revenues totaled \$25.3 billion (58%) (Figure 1). The vast majority (95.5%) of General Fund revenues are collected through the Department of Taxation. Other agencies that collect General Fund revenue include the Department of Alcoholic Beverage Control, General District and Circuit courts, and the State Corporation Commission. Non-General Fund revenues include user fees, fees for service, federal grants, and taxes that are dedicated to certain funds like the Motor Vehicle Sales Tax.

Figure 1: Total Revenue and General Fund Revenue Collected by the Commonwealth of Virginia



Source: [Virginia Department of Taxation FY2016 Annual Report](#)

The individual income and state sales taxes represent over 87 percent of all General Fund revenue received by the Commonwealth. The income tax is by far the largest contributor to the General Fund, generating \$12.6 billion (69.1%) in revenues in FY2016. The General Fund portion of the state sales tax is the second largest contributor, with \$3.3 billion (18.1%) in revenues in FY2016. The next highest contributor is the corporation income tax, with \$765 million (4.2%) in revenues in FY2016. Additional General Fund sources include the tax on recordation and deeds of conveyance and the insurance premiums license tax.

D. Income Tax

1. Background

The income tax is the largest revenue source (69.1%) for the Commonwealth's General Fund. In FY2016, statewide income tax revenue totaled \$12.5 billion. Virginia's income tax has marginal rates that tax higher incomes at slightly higher levels than lower incomes (Table 1).

Table 1: Virginia Income Tax Rates

Virginia Taxable Income	Tax Calculation
0 - \$3,000	2%
\$3,001 - \$5,000	\$60 + 3% of excess over \$3,000
\$5,001 - \$17,000	\$120 + 5% of excess over \$5,000
Greater than \$17,001	\$720 + 5.75% of excess over \$17,000

Source: [Virginia Department of Taxation](#)

In its FY2016 annual report, the Department of Taxation provides income tax liability by locality for taxable year 2014 (the latest year available). Income tax liability is the amount estimated to be owed before any tax credits but after the spouse tax adjustment. While income tax liability is slightly different from net income tax revenue collections, the income tax liability provides a reasonable representation of the percentage of income tax revenues generated by jurisdiction.

In tax year 2014, the income tax liability for the entire state was \$11.6 billion. NVTC jurisdictions contributed nearly \$4.7 billion, or 40.4 percent, of this total (Table 2). When the 40.4 percent share is applied to FY2016 net income tax revenues, the income tax contribution from NVTC jurisdictions total an estimated \$5.0 billion.

Table 2: Income Tax Liability by Jurisdiction (Tax Year 2014)

Jurisdiction	Income Tax Liability (Tax Year 2014)	Percent
Arlington County	\$649,591,342	5.6%
Fairfax County	\$2,758,475,854	23.7%
Loudoun County	\$815,692,975	7.0%
City of Alexandria	\$373,709,032	3.2%
City of Falls Church	\$43,475,620	0.4%
City of Fairfax	\$50,994,815	0.4%
NVTC Jurisdiction Total	\$4,691,939,638	40.4%
State Total	\$11,623,977,320	100%

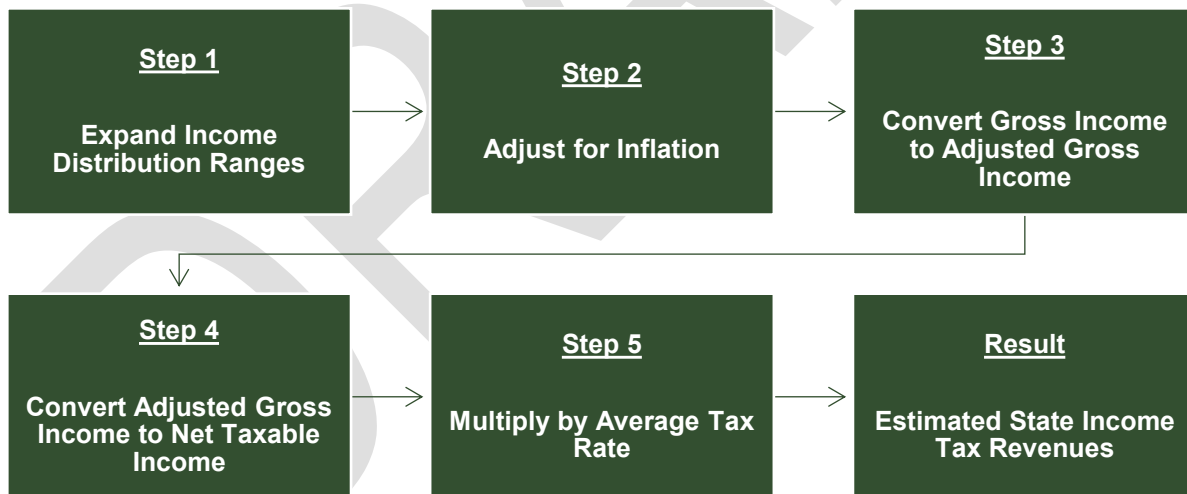
Source: [Virginia Department of Taxation FY2016 Annual Report](#)

2. Income Tax Methodology

A unique component of this study is that it uses the land use and transportation network as an integral input in calculating congestion and the value of high capacity transit in Northern Virginia. Steps in this study calculate the existing level of congestion on today's highway network and the level of congestion that would exist with high capacity transit removed from the model (MWCOT/TPB Model Version 2.3.6). Through an iterative process, land use (households and jobs) are removed from Northern Virginia until the same level of congestion is reached that exists on today's highway network. The land use that the model moves out of Northern Virginia represents the amount of land use supported by high capacity transit.

A major land use and transportation input in the model is the number and location of households by income strata. This is important because households generate travel that is incorporated into the model, and the type and volume of this travel is influenced by household income. Given the number of households by income stratum, this study uses several assumptions to derive the estimated income tax revenue received by the Commonwealth. This study assumes that each household in the model represents a tax filing individual. Available state and federal data sources allow for these calculations to be performed for each jurisdiction with metrics that vary per income stratum where available. The overall objective of the methodology is to convert household income strata in the model to state income tax revenues (Figure 2).

Figure 2: Income Tax Revenue Methodology



- Step 1: Expand the Income Distribution Ranges from the Model

The MWCOT/TPB regional travel model contains households by income by traffic analysis zone (TAZ). A TAZ is a geographic unit used in transportation planning models. Household income is included as a series of ranges (Table 3) and is derived from the [TPB 2007-2008 Regional Household Travel Survey](#), where respondents indicated their household income. The household travel survey is a valuable component of the regional transportation model because it collects demographic and travel information from a sample of households in the region and is the primary source of observed data used to estimate, calibrate, and validate the regional travel demand model.

Table 3: Household Income Ranges in the Regional Travel Model

Household Income Range
< \$50,000
\$50,000 - \$99,999
\$100,000 - \$149,000
> \$150,000

Source: Regional travel demand forecast model (MWCOT/TPB Version 2.3.66 model)

The model's household income ranges make estimating income tax revenues somewhat challenging, as they do not provide any certainty about where household incomes fall within that range. For example, for households with less than \$50,000 in income, the difference in income taxes between a household income of \$10,000 and \$49,999 is significant. Even larger is the income tax difference between households with incomes between \$150,001 and \$400,000. Using American Community Survey data, income ranges are shown in greater detail for all NVTC jurisdictions (Table 4).

Table 4: Household Income (2009 Five-Year American Community Survey)

Model Income Ranges (\$2008)	ACS Income Ranges (\$2009)	Arlington County	Fairfax County	Loudoun County	City of Alexandria	City of Fairfax	City of Falls Church
< \$50,000	Less than \$10,000	4.3%	2.5%	1.9%	4.1%	1.9%	2.4%
	\$10,000 to \$14,999	2.1%	1.4%	1.0%	3.0%	2.3%	2.4%
	\$15,000 to \$24,999	3.7%	3.5%	2.4%	4.8%	3.0%	2.6%
	\$25,000 to \$34,999	4.8%	4.1%	3.4%	5.9%	3.5%	4.8%
	\$35,000 to \$49,999	7.8%	8.1%	6.9%	10.9%	9.1%	9.9%
\$50,000 - \$99,999	\$50,000 to \$74,999	15.9%	14.5%	13.4%	18.6%	15.3%	12.9%
	\$75,000 to \$99,999	15.0%	13.6%	14.0%	13.7%	17.7%	8.9%
\$100,000 - \$149,000	\$100,000 to \$149,999	20.7%	22.2%	25.5%	19.7%	24.4%	23.2%
> \$150,000	\$150,000 to \$199,999	11.4%	13.3%	15.8%	8.4%	11.8%	14.7%
	\$200,000 or more	14.3%	16.7%	15.6%	11.0%	11.0%	18.1%

Source: 2005-2009 American Community Survey, Table S1901, U.S. Census Bureau

The regional household travel survey that informs household incomes in the regional travel model is from 2007-2008 and represents household incomes in 2008 dollars. The 2009 Five-Year American Community Survey (ACS) household income data that is used to expand the income distribution is in 2009 dollars. This survey represents an estimate of household income and is collected over the entire five-year period. The five-year ACS data has the most reliability, is available for all NVTC jurisdictions, and is the closest survey year to that of the regional household travel survey.

The additional income ranges provided by the ACS allow further division of household income categories in the travel model. For the purposes of calculating income tax, a dollar

amount is derived for each income range. The midpoint of the income ranges is shown in the table below (Table 5). These midpoints will be used to calculate estimated income taxes yields.

Table 5: Household Income (2009 Five-Year American Community Survey)

Model Income Ranges	ACS Income Ranges	Midpoint
< \$50,000	Less than \$10,000	\$5,000
	\$10,000 to \$14,999	\$12,500
	\$15,000 to \$24,999	\$20,000
	\$25,000 to \$34,999	\$30,000
	\$35,000 to \$49,999	\$42,500
\$50,000 - \$99,999	\$50,000 to \$74,999	\$62,500
	\$75,000 to \$99,999	\$87,500
\$100,000 - \$149,000	\$100,000 to \$149,999	\$125,000
> \$150,000	\$150,000 to \$199,999	\$175,000
	\$200,000 or more	\$400,000

For incomes above \$200,000, the lack of an upper limit makes it difficult to establish a midpoint like in other income ranges. However, IRS tax return data for the NVTC jurisdictions supports a “midpoint” of \$400,000 for this income strata. The IRS provides tax return data for selected income and tax items by county by year (Table 6). The earliest year this is available at the jurisdictional level is tax year 2011. These data are provided by income strata including a category of “\$200,000 or more.” While this information is shown in AGI, it is comparable to gross income and is the best available data at a jurisdictional level to examine incomes greater than \$200,000. For this income stratum, the average AGI per return was \$422,116 (in 2011) across NVTC jurisdictions. Adjusting this by CPI to 2008 provides a figure of \$410,984. This figure is adjusted from 2011 to 2008 to avoid over-inflating the figure in a later step that adjusts 2008 dollars to 2015 dollars. To be conservative, the midpoint of the “\$200,000” or more range was selected to be \$400,000.

Table 6: Income Tax Returns for Adjusted Gross Incomes Greater than \$200,000 for NVTC Jurisdictions (Tax Year 2011)

	Number of Returns	Adjusted Gross Income	Average AGI per Return
Arlington County	12,590	\$5,261,248,000	\$417,891
Fairfax County	60,278	\$27,015,054,000	\$448,174
Loudoun County	18,834	\$6,595,442,000	\$350,188
City of Alexandria	6,797	\$2,789,711,000	\$410,433
City of Fairfax	923	\$306,257,000	\$331,806
City of Falls Church	990	\$417,818,000	\$422,038
NVTC Jurisdiction Total	100,412	\$42,385,530,000	\$422,116

Source: Internal Revenue Service [Statistics of Income – County Data](#), Virginia – Individual Income Tax Returns: Selected Income and Tax Items by State, County, and Size of Adjusted gross income, Tax Year 2011.

- Step 2: Adjust for Inflation

At this point, the income distribution is expanded using ACS data and multiplied by a midpoint to yield gross incomes by income strata. These incomes are adjusted from 2008 dollars to 2015 dollars (the model base year) using the [Bureau of Labor Statistics Consumer Price Index inflation calculator](#). The rate of inflation between 2008 and 2015 is +8.5 percent.

- Step 3: Converting Gross Income to Adjusted Gross Income (AGI)

Collectively, the regional household travel survey, census data, and inflation adjustment provide gross household income. To calculate an estimated income tax received by the state, gross income must be converted into Adjusted Gross Income (AGI). The [Internal Revenue Service \(IRS\) defines AGI](#) as the gross income minus adjustments to income. Using national data provided by the IRS, conversion ratios are established to estimate adjusted gross income from gross income. These are displayed by income strata in Table 7. While these strata are shown in AGI, they are close to gross income and applicable given the wide income strata provided by the American Community Survey. Since income strata are not identical, several categories are collapsed to allow comparison. Tax year 2014 is the latest data available from the IRS and the closest available data to the model base year.

Table 7: Gross Income Compared to Adjusted Gross Income

By Size of Adjusted Gross Income	Total Income (Tax Year 2014, in thousands)	Adjusted Gross Income (less deficit) (Tax Year 2014, in Thousands)	Ratio of AGI to Gross Income
Less than \$10,000	\$120,067,326	\$116,098,218	0.967
\$10,000 to \$14,999	\$157,142,081	\$153,830,822	0.979
\$15,000 to \$24,999	\$430,138,129	\$423,817,017	0.985
\$25,000 to \$49,999	\$1,280,103,744	\$1,263,215,346	0.987
\$50,000 to \$74,999	\$1,207,240,353	\$1,191,956,661	0.987
\$75,000 to \$99,999	\$1,124,785,053	\$1,111,626,170	0.988
> \$100,000	\$5,792,198,421	\$5,708,181,972	0.985

Source: Internal Revenue Service [Statistics of Income](#), Table 1.4 – All Returns: Sources of Income, Adjustments, and Tax Items, by Size of Adjusted Gross Income, Tax Year 2014 (Filing Year 2015).

As shown in Table 7, dividing the AGI by the total income provides a ratio that allows conversion from gross income to AGI by income band.

- Steps 4-6: Converting Adjusted Gross Income into Estimated Tax Revenues

AGI, minus deductions and exemptions, yields the total taxable income. The total taxable income multiplied by a tax rate yields total estimated tax revenue. The Virginia Department of Taxation's FY2016 [annual report](#) provides state level totals for AGI, total taxable income, and the average tax rate by adjusted gross income strata. This information, for tax year 2014, is the latest available and closest to the model base year. After collapsing income strata so they are comparable, a series of ratios and rates by

income stratum to convert between AGI, taxable income, and estimated tax revenue are derived (Table 8).

Table 8: Adjusted Gross Income, Taxable Income, and Total Tax Liability by Income Class

Income Strata	Total AGI	Total Taxable Income	Taxable Income to AGI	Total Tax Liability/Estimated Tax Revenue	Average Tax Rate
Less than \$10,000	\$2,819,540,907	\$183,441,132	0.065	\$4,764,993	2.60%
\$10,000 to \$14,999	\$3,446,741,716	\$1,201,853,799	0.349	\$42,913,771	3.57%
\$15,000 to \$24,999	\$9,774,258,485	\$5,406,150,553	0.553	\$224,274,310	4.15%
\$25,000 to \$34,999	\$12,122,612,074	\$8,063,225,397	0.665	\$368,936,298	4.58%
\$35,000 to \$49,999	\$19,246,895,769	\$13,651,658,301	0.709	\$665,954,865	4.88%
\$50,000 to \$74,999	\$30,316,794,512	\$23,134,325,480	0.763	\$1,174,418,065	5.08%
\$75,000 to \$99,999	\$28,177,667,227	\$22,743,989,203	0.807	\$1,188,418,789	5.23%
\$100,000 and more	\$163,819,993,856	\$143,659,226,733	0.877	\$7,954,296,230	5.54%

Source: Virginia Department of Taxation, [FY2016 Annual Report](#), Table 1.2: Virginia Adjusted Gross Income, Total Exemptions, Total Deductions, Total Taxable Income, Total Tax Liability, and Average Tax Rates.

For each income class, the ratios in the table allow conversion from AGI to taxable income and from taxable income to total tax liability. The ratios for AGI to taxable income include assumptions for deductions and exemptions taken directly from state data. The average tax rate includes assumptions for Virginia's income tax scales. The total tax liability, as defined by the Department of Taxation, is the amount of income tax the state is owed before any tax credits and after the spouse tax adjustment. This study assumes that total tax liability is the same as estimated tax revenue, as assumptions regarding state tax credits are too granular to include in the revenue model.

E. Sales Tax

1. Sales Tax Background

The sales tax is the second largest revenue source (18.1%) for the Commonwealth's General Fund. In FY2016, statewide sales tax revenue contributed \$3.3 billion to the state General Fund. Virginia's sales tax is directed to several state-wide, regional, and local funds for a wide variety of purposes. This study focuses on the sales tax rate that goes to the state General Fund, which is 2.015 percent.

The total state sales tax rate is 5.3 percent. The 5.3 percent rate is broken down into several categories (Table 9). Because this is a study of statewide revenues and because the General Fund serves a variety of statewide purposes, this study evaluates only the portion of the sales tax that is directed to the state General Fund. (Note: In Northern Virginia and Hampton Roads, there is an additional 0.7 percent sales tax rate that brings the total rate to 6.0 percent. In jurisdictions that are part of the Northern Virginia Transportation Authority (NVTa), which includes all NVTC jurisdictions, the added 0.7 percent sales tax rate is dedicated to the NVTa.)

**Table 9: Allocation of the Virginia Sales Tax
(For Jurisdictions Within Planning District 8)**

General Fund	2.015%
Local Option	1.000%
Education based on School-Age Population	0.990%
Transportation Trust Fund	0.500%
Public Edu. Standards of Quality/Local Real Estate Property Tax Relief Fund	0.375%
Highway Maintenance Operating Fund	0.275%
Intercity Passenger Rail Fund	0.050%
Commonwealth Mass Transit Fund	0.075%
Northern Virginia Transportation Authority	0.700%
Total	6.000%*

*Education based on school-age population and General Fund portions of the sales tax have a dealer discount of 0.01% each. Including the dealer discount brings the total to 6.0%. Source: Virginia Department of Taxation

The sales tax does not apply to all purchases in Virginia. It applies to the sale, lease or rental of tangible personal property or the use or consumption of tangible personal property in Virginia. The seller is responsible for collecting the tax from the customer on each taxable sale. Eligible items include most consumer goods. Utilities, healthcare, communications, and motor vehicle sales are examples of purchases that are generally not covered by the sales tax but may be covered by other state taxes. Virginia does apply a [sales tax to food](#) but at a reduced rate. Food purchased for home consumption, including most staple grocery food items and cold prepared foods packaged for home consumption, is taxed at a reduced sales tax rate of 2.5 percent, of which one percent is allocated to the local option, one percent (or 0.99 percent minus the dealer discount) to education based on school-aged population, and 0.5 percent to the Transportation Trust fund.

2. Sales Tax Methodology

As noted above, this study focuses on the land use and transportation network as an integral input in calculating congestion and the value of high capacity transit in Northern Virginia. One of the major land use and transportation inputs in the model is the number and location of households and employment. After calculating congestion, this study calculated the number of households and employment that high capacity transit supports by moving them across the region in the model until congestion reached the baseline established earlier.

Cooperative forecast data, which supplies the households and jobs in the model, is generally submitted to MWCOCG by each local jurisdiction, and contains several primary inputs: population, households, housing units, and employment. Employment is split into four categories: office, industrial, retail, and other. The model step that removes households and employment moves them outside of Northern Virginia. This study considers retail employment to be a proxy for physical retail activity and thereby sales tax activity. Retail employment includes all types of retail land uses from shopping malls to restaurants. By comparing the number of retail jobs with recent sales tax information for the region, a ratio of retail jobs to sales tax yield can be established.

This method accounts for the variability in who buys eligible goods that result in sales tax revenue. Sales taxes in any jurisdiction may be generated by resident households, households from a neighboring or distant jurisdictions, employees who are also residents, employees from across the region, and tourists or business travelers. Given the volatility regarding who is generating taxable sales, the sales tax requires a different methodology from the income tax, which relies on assumptions regarding households and household income. This study assumes that the percent loss of retail jobs in the region will have a proportional percent loss in sales activity in the region (Figure 4).

Figure 4: Sales Tax Revenue Methodology



▪ Step 1: Calculate Retail Jobs by Jurisdiction

Cooperative forecast data, which is utilized in the transportation model, contains employment estimates that are split into four categories: office, industrial, retail, and other. The model step that removes households and employment moves them outside of Northern Virginia. This study considers retail employment to be a proxy for physical retail activity and thereby sales tax activity. Using COG data, retail jobs are summarized by NVTC jurisdiction for the base year (Table 10).

**Table 10: Retail Jobs in the MWCOG Forecast
(By NVTC Jurisdiction, 2016)**

Jurisdiction	Retail Jobs
Arlington County	33,150
Fairfax County	93,023
Loudoun County	39,426
City of Alexandria	22,822
City of Fairfax	4,440
City of Falls Church	4,056
NVTC Total	196,917

Source: MWCOG Forecast 9.0

▪ Step 2: Estimate Sales Tax Yield by Jurisdiction

The Department of Taxation collects the distributes the local option one percent sales and use tax. This is one percent of the total sales tax rate and it is returned to the locality where it is collected. The Department provides information on the [actual distributions of the local option one percent sales tax](#) (FY2016) for all Virginia jurisdictions. These distributions are based on where the tax is collected and are shown in Table 11.

Table 11: Local One Percent Option Sales Tax Distribution by NVTC Jurisdiction

	Actual FY2016 Local 1% Option Distribution Sales and Use Tax		Estimated Sales Tax Yield to the General Fund
Jurisdiction	Amount (\$)	% of state	
Arlington County	\$39,702,349	3.3%	\$67,200,196
Fairfax County	\$182,857,172	15.4%	\$309,504,049
Loudoun County	\$74,949,695	6.3%	\$126,859,854
City Alexandria	\$26,504,982	2.2%	\$44,862,333
City of Fairfax	\$11,395,367	1.0%	\$19,287,798
City of Falls Church	\$4,282,942	0.4%	\$7,249,308
NVTC Total	\$339,692,507	28.6%	\$574,963,537

Source: Virginia Department of Taxation [FY2018 Local Estimates](#) and NVTC Calculations

In consultation with Department of Taxation, the sales tax yield to the General Fund for NVTC jurisdictions can be estimated using the local one percent sales tax distribution and enlarging it per its relevant share of the overall sales and food tax rate. The one percent distribution includes both food and non-food sales. The department estimates that roughly 16 percent of the local one percent sales tax distribution is collected from food sales.

With this information, the non-food and food portions of the one percent distribution can be broken out and used to estimate the overall jurisdictional sales tax contribution to the General Fund. To estimate the sales tax contribution to the General Fund for non-food sales, the one percent distribution is multiplied by 0.84 and then 2.015 (the share of the sales tax that goes to the General Fund divided by the share of the sales tax that goes to the local option). Since none of the sales tax on food goes to the General Fund, there is no need to estimate the food tax contribution. The resulting value is the total estimate sales tax yield to the General Fund for each jurisdiction.

- Step 3: Establish Ratios of Retail Jobs to Sales Tax Yield

The total estimated General Fund sales tax yield for NVTC jurisdictions (\$575 million) divided by the number of retail jobs in the NVTC jurisdictions (196,917) yields a ratio of one retail job for \$2,920 in sales tax revenue to the General Fund.

- Step 4: Estimate State Sales Tax (General Fund) Revenues

Earlier model steps moved jobs, including retail jobs, across the region. The number of retail jobs removed from NVTC jurisdictions multiplied by the above ratio yields the estimated state sales tax revenue to the General Fund from the households supported by high capacity transit in Northern Virginia.

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Agenda Item #7: Department of Rail and Public Transportation



TO: Chairman McKay and NVTC Commissioners

FROM: Kate Mattice

DATE: May 25, 2017

SUBJECT: Department of Rail and Public Transportation (DRPT)

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. Report of the Draft FY2018 Six-Year Improvement Program (SYIP)

The [Draft FY2018 DRPT SYIP](#) was presented to the Commonwealth Transportation Board (CTB) on May 16th. A copy of [DRPT's presentation to the CTB is attached](#). The Final SYIP is expected to be adopted at the June CTB meeting.

C. Metro Safety Commission and Metro Reform Efforts

Director Mitchell will provide an update on the implementation of the Metro Safety Commission and the Commonwealth's Metro reform efforts at the June meeting.

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COMMONWEALTH of VIRGINIA

Jennifer L. Mitchell
Director

Virginia Department of Rail and Public Transportation
600 E. Main Street, Suite 2102
Richmond, VA 23219

Ph: 804-786-4440
Fax: 804-225-3752
Virginia Relay Center
800-828-1120 (TDD)

TO: Chairman McKay and NVTC Commissioners

FROM: Jennifer Mitchell, Director

DATE: May 23, 2017

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

General Update

The draft FY18 DRPT Six Year Improvement Program (SYIP) was presented to the Commonwealth Transportation Board (CTB) at its May 16 workshop. It is available for viewing on DRPT's website at <http://www.drpt.virginia.gov/media/2106/fy18-draft-syip-may.pdf>. The draft SYIP totals \$3.4 billion over FY18-23 with \$2.6 billion for public transit and \$817 million for rail programs. For FY18 total state operating assistance for transit is \$193.5 million and for the Northern Virginia (NOVA) District is \$147.5 million. DRPT is proposing using \$5.7 million of reserve funds to cover a shortfall in available operating funding for FY18. Total state capital funding is \$172.7 million and for the NOVA District is \$154.8 million. Detail by transit operator and/or local jurisdiction is available in the draft SYIP. For FY18, DRPT was able to match Tier 1 capital at 68%, Tier 2 at 34%, and Tier 3 at 17%.

Total state operating assistance to the Washington Metropolitan Area Transit Authority (WMATA) is \$105.4 million and total state capital to WMATA is \$92.7 million, which includes the \$50 million Virginia match for federal Passenger Rail Investment and Improvement Act (PRIIA) funding. PRIIA match is funded at that level through FY20 in the draft SYIP. Detail of WMATA funding by each NVTC jurisdiction is available in the Northern Virginia District section of the draft SYIP.

DRPT's FY18 budget was also presented to the CTB at its May 16 workshop. The FY 18 agency budget totals \$689 million, with \$650 million in SYIP allocations. The agency operating budget is \$13.9 million. \$429 million (62.3%) of budgeted expenditures are for Public Transit Programs, \$216.7 million (31.5%) are for Rail Programs, \$16.4 million (2.4%) are for Human Services Transportation, \$8.7 million (1.2%) are for Commuter Assistance Programs, and \$4.3 million (0.6%) are for Planning, Regulation, and Safety Programs. The draft DRPT FY18 budget is available at <http://www.drpt.virginia.gov/media/2107/fy18-ctb-annual-budget-draft.pdf>.

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A total of 94 people attended the public hearing for the draft SYIP and proposed Smart Scale Round 2 projects on May 3 at the Virginia Department of Transportation (VDOT) NOVA District Office in Fairfax. There were 29 verbal comments at the hearing and seven people or organizations submitted written comments. The staff recommended funding scenario is available at this location http://smartscale.org/documents/2018documents/fy_2018_staff_recommended_funding_scenario.xlsx along with all submitted and screened out applications, revised project scores, project scoring calculations, and scorecards by district.

Metrorail Safety Commission (MSC)

On May 15, the United States Senate unanimously approved SJR 22 (Kaine) recognizing the MSC as an Interstate Compact, a necessary step towards Federal Transit Administration (FTA) certification and the release of \$8.9 million in FY17 apportioned urbanized area formula funds for Virginia, Maryland, and the District of Columbia. HJR 76 (Hoyer) must now be approved by the U.S. House of Representatives and signed by President Trump for the MSC to be certified. Virginia and Maryland approved the MSC in their 2018 legislative sessions. The District of Columbia City Council needs to approve minor technical corrections to the final version of the legislation for Mayor Bowser's signature.

Washington Metropolitan Area Transit Authority (WMATA) Independent Review

In addition to his presentation at the May 3 NVTC meeting, former U.S. Secretary of Transportation Ray LaHood spoke and answered questions at the Metropolitan Washington Council of Governments (MWCOC) board meeting on May 10 and the Northern Virginia Transportation Authority (NVTAA) board meeting on May 12. An audio recording of the MWCOC meeting is available at <https://soundcloud.com/user-541717793>.

The legislation that directs the Virginia Secretary of Transportation to conduct an Independent Review of WMATA, in coordination with NVTC, requires quarterly reports to the Chairs of the Virginia House and Senate Transportation Committees beginning June 30, 2017. An interim report is due to the General Assembly on November 15, 2017 and final report is due by June 30, 2018.

Transit Capital Project Revenue Advisory Board

The next meeting of the Revenue Advisory Board (RAB) will be Friday, May 26 at the VDOT Fredericksburg District office located at 86 Deacon Road in Fredericksburg. The agenda is available at <http://www.drpt.virginia.gov/transit/major-transit-initiatives/transit-capital-project-revenue-advisory-board-hb-1359/> and the meeting will also be live streamed from the DRPT web site. The final meeting of the RAB is scheduled for June 16 in Fredericksburg.

An interim report for the RAB was submitted to the General Assembly on January 1, 2017 and is available at <http://www.drpt.virginia.gov/media/1994/2017-rab-report.pdf>. The final report is due by August 1, 2017 for consideration during the 2018 legislative session.

Transit Service Delivery Advisory Committee (TSDAC)

The next TSDAC meeting is May 31. The meeting will be held in a webinar format and advance registration is available at <https://attendee.gotowebinar.com/register/9100532781458997507>. Materials from the March 31 TSDAC meeting, including the illustrative capital prioritization methodology and sample scoring for State of Good Repair/minor expansion and major expansion,

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are available at <http://www.drpt.virginia.gov/transit/major-transit-initiatives/transit-service-delivery-advisory-committee/meetings-and-agendas-2017/>.

I-66 Corridor Improvements

On May 18, Stakeholder Technical Advisory Group (STAG) meetings were held at the VDOT NOVA District Office for the Transform 66: Inside and Outside the Beltway projects. The meetings were attended by staff from Arlington County, the City of Alexandria, the City of Fairfax, DRPT, Fairfax County, the Federal Highway Administration (FHWA), the Northern Virginia Regional Parks Authority (Nova Parks), Loudoun County, NVTC, VDOT, and WMATA. Staff from DRPT, Loudoun County, the Potomac and Rappahannock Transportation Commission (PRTC), the Virginia Railway Express (VRE), VDOT and WMATA participated by teleconference.

On May 17, the Transportation Planning Board (TPB) approved a modified alignment for the Transform 66: Outside the Beltway project for the air quality conformity analysis. The TPB is anticipated to vote on including the revised project in the Constrained Long Range Plan (CLRP) at its October 18 meeting. The updated alignment eliminates west facing ramps from the Nutley Street interchange, removes a flyover that would have avoided the need to relocate a WMATA Traction Power Sub Station (TPSS) at the Dunn Loring Metro station, and prohibits multi axle trucks with trailers from using the Vaden Drive ramp. Transit buses will still be allowed to use the Vaden Drive ramp. The alignment was approved by the Fairfax County Board of Supervisors on May 16.

The FHWA issued a Finding of No Significant Impact (FONSI) for the Transform 66: Inside the Beltway Eastbound Widening project on April 3. FHWA considered comments that were received on the Environmental Assessment (EA) that was completed in November 2016. The FONSI and revised EA are located on the project website at http://inside.transform66.org/learn_more/documents.asp.

The next round of VDOT Public Information Meetings (PIMs) on the Transform 66 project is scheduled for June 12, 14, and 15. Financial close is anticipated July 6 or sooner. The design public hearing is tentatively scheduled for September 2017.

I-95/395 Express Lanes

At its May 18 meeting, the CTB authorized the VDOT Commissioner to enter into a Memorandum of Agreement (MOA) with the United States Department of Defense (DoD) regarding \$10 million in multimodal improvements near the Pentagon. The I-395 project is proposing to construct a dedicated bus loop, install new traffic signals on the Pentagon reservation, and provide tour bus parking at an existing lot at South Hayes Street and Army Navy Drive. The improvements are consistent with the Pentagon Master Plan and are funded in the existing project budget.

The Finding of No Significant Impact (FONSI) and revised Final Environmental Impact Statement (FEIS) for the I-395 Express Lanes Northern Extension project can be found at http://www.virginiadot.org/projects/northernvirginia/395_express.asp. Commercial close is anticipated later this spring and financial close in June 2017. Construction is expected to begin in July 2017 and last three years.

A 2.2 mile reversible extension of both the southbound and northbound ramps at the southern terminus of the existing I-95 Express Lanes is scheduled to open in summer 2018. A ten mile

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extension of the I-95 Express Lanes to Fredericksburg (Fred Ex), funded by the Atlantic Gateway FAST LANE grant, is anticipated to open in 2022.

Smart Scale

Recommended projects were discussed at the spring SYIP hearings described above, and a revised funding scenario was presented at the May 17 CTB workshop. There were no changes to the Northern Virginia District Grant Program (DGP) in the staff recommended scenario. Scores for Round 2 projects are available at http://smartscale.org/documents/2018_smart_scale_project_scores.pdf.

DC2RVA

DRPT is addressing Federal Railroad Administration (FRA) comments on the modeling process to allow the Draft Environmental Impact Statement (DEIS) to be released, which is anticipated later this summer. Many of the proposed DC2RVA recommendations in Northern Virginia are also part of Virginia's Atlantic Gateway initiative and will improve VRE operations. In Northern Virginia, the project will include additional track on railroad segments between Occoquan and Franconia, from Franconia to Alexandria through Fairfax County, and in Arlington County on the approach to the Long Bridge over the Potomac River. A high level summary of the recommendations is available on the project website located at <http://dc2rvarail.com/about/recommendations/>.



Virginia Department of Rail and Public Transportation

Draft Six-Year Improvement Program FY 2018 - 2023

Jen DeBruhl
Chief of Transit

Pete Burrus
Chief of Rail

Steve Pittard
CFO

Rail and Public Transportation Systems



- 41 Transit Systems
- 76 Human Service Operators
- 1 Commuter Rail Operator (VRE)
- 18 Transportation Demand Management Agencies
- 15 Metropolitan Planning Organizations
- 9 Shortline Railroads
- 2 Class I Freight Railroads (CSX, NS)
- 1 Intercity Passenger Rail Operator (Amtrak)



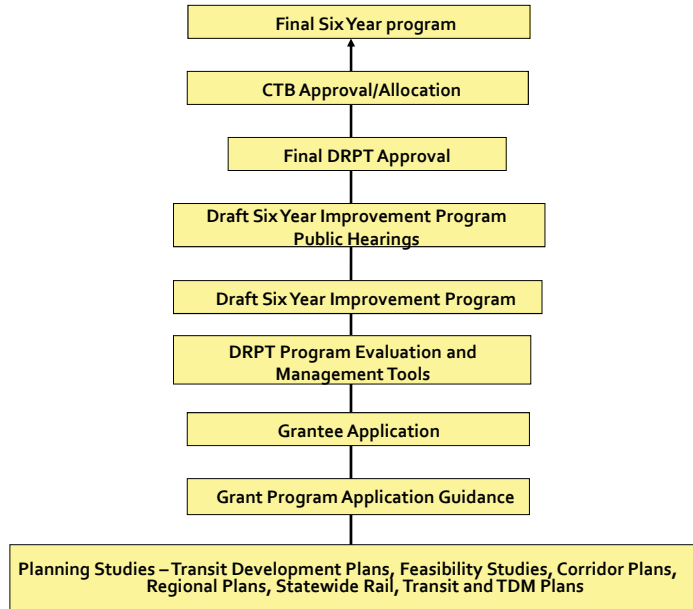
Six Year Improvement Program Process



5/16/2017

CTB Workshop: May 2017 - Salem District

3



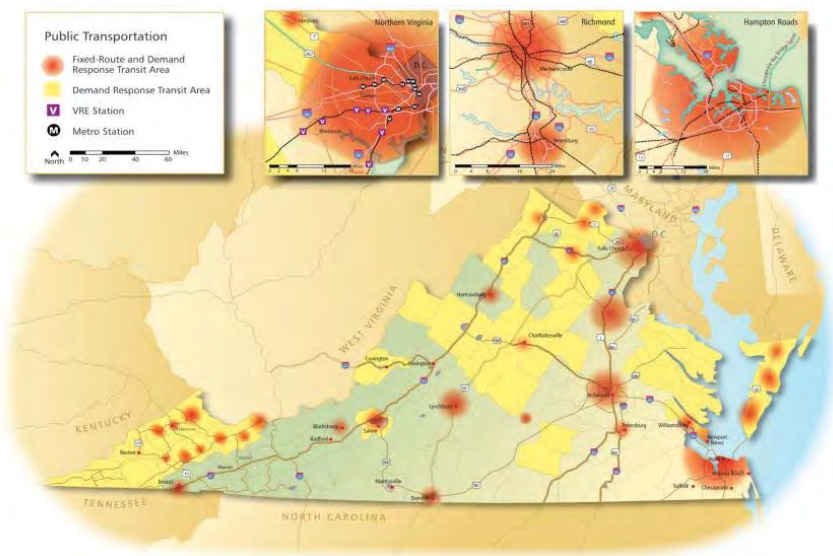
Virginia Transit Systems



5/16/2017

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4



Transit Programming Highlights



5/16/2017

Focus on State of Good Repair

- 467 Replacement Revenue Vehicles
- 163 Buses to be Rehabbed/Rebuilt
- 132 Replacement Metro Railcars
- 360 Railcars to be Rehabbed
- WMATA PRIIA Match: \$50M/year through 2020



Limited Capacity Expansion

- 61 Service Expansion Buses
- 28 Service Expansion Metro Railcars
- Bus Bay Expansion at East Falls Church Metro Station
- Engineering for Extension of Transitway (Crystal City/Potomac Yard) to Pentagon City



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5

Transit Programming Highlights



5/16/2017

Safety Enhancements

- Light Rail Advance Warning Intersection Control System (HRT)

Facility/Fleet Improvements

- Washington Union Station Improvements (NVTC - VRE)
- Bus Stop ADA Accessibility Improvements (NVTC – Arlington County)
- Engineering/Design for Transfer Facility (WATA)

Demonstration/Travel Demand Management

- Driver Assistance Systems/Pedestrian Collision Avoidance Technology
- SchoolPool
- Town of Blacksburg Bikeshare Pilot



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6

Transit Allocation Assumptions



- Reviewed existing grants (federal & state), project progress, and state of good repair in making recommendations for capital funding
- Continues application of the TSDAC operating assistance and capital program methodology
- Operating - Set a \$115.2 M threshold for traditional allocation, balance is allocated based on performance
 - ✓ Net Cost per Rider – 50%
 - ✓ Riders per Revenue Mile – 25%
 - ✓ Riders per Revenue Hour – 25%



5/16/2017

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7

Transit Capital Program Highlights



- Capital program uses a tiered prioritization process; projected state match ratios obtained
 - Tier 1 at 68% State Share
 - Rolling stock for replacement or expansion and related items
 - Tier 2 at 34% State Share
 - Infrastructure and facilities
 - Tier 3 at 17% State Share
 - Support vehicles, shop equipment, spare parts, etc.

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8

DRPT Passenger and Freight Rail Projects

Passenger and Freight Projects in Virginia



5/16/2017

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9

FY 18-23
Rail
SYIP
\$816M



- IPROC/REF – \$790.6M
 - BCA analysis and evaluation criteria
 - Supporting VA passenger and freight needs
- RPF (Railway Preservation Fund) - \$25.9M
 - Partnering with VA short lines by identifying prioritized needs
 - Supporting regional economies and local businesses
- CTB Rail Sub-Committee continuing analysis of rail programs



5/16/2017

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10

Priority and Selection Criteria



5/16/2017

- Rigorous BCA Analysis in REF Applications
 - Truck Congestion and pavement savings
 - Safety improvements through accident avoidance
 - Increased passenger ridership
 - Environmental contribution
 - These factors creates a NPV and IRR for project payback
- IPROC Evaluation
 - Network benefit
 - Regional economic, social, and environmental benefits
 - Independent utility
- RPF Selection criteria
 - Preserving economic vitality of VA's short lines
 - Improving market access through infrastructure upgrades
 - Truckloads removed from highway

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11

Rail Program Highlights 2018-2023



5/16/2017

- Focus on joint freight/passenger rail corridors, including I-95 corridor, I-64, and Rt. 29 service
- Major rail projects
 - Atlantic Gateway - \$535M
 - VRE Platform and Track Improvements - \$39.1M
 - Acca Bypass Mainline - \$117M
 - 2 new Norfolk passenger trains
 - Resolving 100+ year old congestion issue
 - Newport News Station – \$20M
 - Port Projects – \$45.4M
 - NS Plate F West Point – \$2.5M, taking trucks off highway



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12



5/16/2017

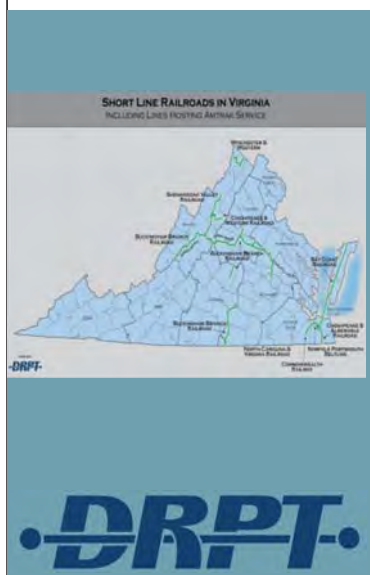
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13

Atlantic Gateway - \$535M

- Segment A – \$52.6M of total \$230M Total in 2018
 - Design and Construction Agreements with CSX
 - Master Corridor Agreement
 - Segment A Design and Signals – 30% done
 - Start Construction before 2019
 - Collaborative approach to bridges with VDOT and Fairfax County
- Long Bridge Phase 1
 - Finish 30% Design by Spring 2018 (DC2RVA)
 - Begin Design efforts
 - Under construction by 2021
 - DDOT/FRA NEPA (LBP2) Efforts ETA 2019

Rail SYIP *Railway Preservation Fund* - \$96.3M



5/16/2017

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14

- Buckingham Branch Railroad – Mainline and Charlottesville yard ties, rail, surfacing, switch heater, Afton tunnel, and 286k bridge upgrades
- Norfolk Portsmouth Beltline – Elizabeth River bridge improvements, Port Norfolk yard expansion
- Commonwealth Railway – Yard track rehab project, tie/rail replacement, bridge repairs at CSX/NS interchange, new siding capacity
- Shenandoah Valley Railroad – Mainline ties and rail, 6-year Bridge repairs, NS interchange connection, Mt. Crawford Siding rail upgrade, Verona Siding Capacity
- Winchester & Western – Staunton siding and yard capacity, Bridge deck/rail renewal, Mainline ties and rail
- NC & VA Railroad – 6-year mainline track improvements
- Bay Coast Railroad – Mainline ties and rail

Five Year Comparison of SYIP Allocations

(\$ in millions)

	Revised				Draft
	FY 14 - 19	FY 15 - 20	FY 16 - 21	FY 17 - 22	FY 18 - 23
Public Transit	\$2,532	\$2,730	\$2,816	\$2,928	\$2,592
Rail	448	502	558	799	817
Total	\$2,980	\$3,232	\$3,374	\$3,727	\$3,409

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15

Transit SYIP by Program

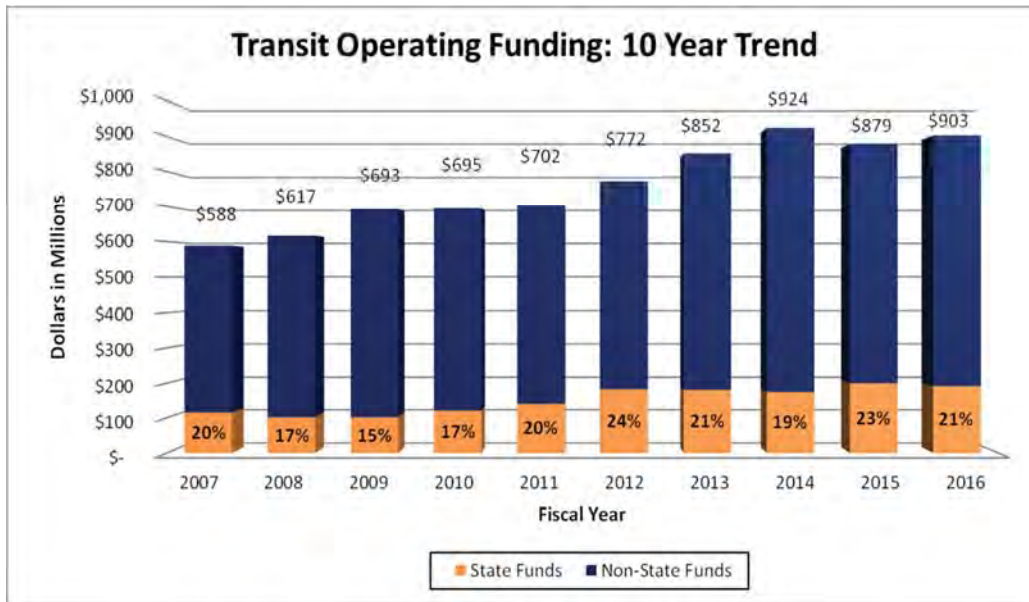
(\$ in millions)

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total	Percentage
Operating	\$223	\$220	\$221	\$224	\$229	\$232	\$1,349	52%
Capital	236	244	215	162	165	158	1,180	46%
Other	8	11	11	11	11	11	63	2%
Total	\$467	\$475	\$447	\$397	\$405	\$401	\$2,592	

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16



5/16/2017

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17

Transit Operating and Capital Reserve

Projected FY 2018 Operating Funding - June, 2017	\$	192.4
Current Available FY 2018 Operating Funding	\$	186.7
Shortfall	\$	<u>5.7</u>

- \$5.7 M of Transit Operating and Capital Reserve used to cover shortfall

5/16/2017

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18

Commonwealth Transit Capital Revenues

	2018	Percentage
1986 Special Session (14.7%)	\$ 36.0	14%
Retail Sales and Use Tax	19.3	8%
Sales Tax on Fuel	27.2	11%
Recordation Tax	15.6	6%
Transportation CPR Bonds	110.0	44%
Federal Transit Administration	41.0	17%
Total	\$ 249.1	

- Loss of bond funds results in a 44% decrease
- In June, presenting recommendations from Transit Capital Revenue Advisory Board

5/16/2017

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19

Rail SYIP Allocations by Program (\$ in millions)

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 18-23 Total	Percentage
Passenger & Freight	\$172	\$144	\$158	\$117	\$110	\$90	\$791	97%
Preservation	11	6	4	3	1	1	26	3%
Total	\$183	\$150	\$162	\$120	\$111	\$91	\$817	

- In later years, allocations decline due to uncertain economic outlook hampering long range planning of our railroad partners
- In FY 2017, REF revenues reduced by 1/3 or approx. \$9 M / year

5/16/2017

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20

Items for Review in Final SYIP



- Finalize Project Management and Administration Budget
 - Limited to 5.0% for IPROC and 3.5% of other program funds
- Complete review of five-year future transit capital needs (FY 19-23)
- Revision of Several Grant Requests based on updated information

5/16/2017

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21



Virginia Department of Rail and Public Transportation

Draft Six-Year Improvement Program FY 2018 - 2023

Jen DeBruhl
Chief of Transit

Pete Burrus
Chief of Rail

Steve Pittard
CFO

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Agenda Item #8: Report of the Chairs of NVTC Committees



TO: Chairman McKay and NVTC Commissioners

FROM: Kate Mattice

DATE: May 25, 2017

SUBJECT: Report of the Chairs of NVTC Committees

The chairs of the Governance and Personnel Committee and the Legislative and Policy Committee will report to the Commission.

A. Governance and Personnel Committee

John Cook, Chairman of the Governance and Personnel Committee, will give an overview of the discussions at the committee's meeting on May 18th. At this meeting, the committee heard an update on the Independent Study on Metro from Virginia Department of Rail and Public Transit Director Jennifer Mitchell and Roy Keinitz, a member of the team supporting former Secretary of Transportation Ray LaHood, and received a briefing from the Washington Metropolitan Area Transit Authority (WMATA) staff on General Manager Paul Wiedefeld's proposed Metro reform approach.

The Governance and Personnel Committee will hold its next meeting on Wednesday, June 21st at 7:30 P.M. in NVTC's offices.

B. Legislative and Policy Committee

Katie Cristol and Jeff Greenfield, Co-Chairs of the Legislative and Policy Committee, will give an overview of the discussion of the committee's meeting held earlier in the evening.

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TO: Chairman McKay and NVTC Commissioners

FROM: Kate Mattice

DATE: May 25, 2017

SUBJECT: Executive Director Report

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 includes a look at the importance of NVTC research, development of a bus service planning tool, bus technology purchases, and provides updates on Transform 66 Multimodal, SafeTrack, and VTA awards.

B. NVTC Financial Items

The [Financial Items for April 2017](#) are provided for your information.

C. DRPT Draft FY2018 SYIP – NVTC and VRE Funding

DRPT presented the [Draft FY2018 Six-Year Improvement Program \(SYIP\)](#) at the May 17th CTB meeting. The final SYIP is scheduled to be approved in June.

NVTC

Included in the draft SYIP is state transit assistance applied for through NVTC totaling \$197.8 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 \$9.3 million (4.9%) from the FY2017 approved program, made up of a \$13.7 million (24.4%) increase in capital assistance offset in part by a \$4.5 million (3.4%) decrease in operating assistance.

The increase in capital assistance is mainly the result of an increase in WMATA capital requirements and local system capital needs, combined with a slight increase in the state effective share. The 3.4 percent drop in operating assistance is due to the 4.1 percent

decrease in the state-wide availability of operating assistance funds, offset slightly by favorable operating formula inputs.

The draft SYIP also includes \$150,000 of state technical assistance funds for Phase III of NVTC's Route 7 project, and \$40,000 from DRPT's intern program to support NVTC's Fellows program.

NVTC will be the grantee for the state assistance supporting a portion of the WMATA capital and operating subsidies, while the NVTC jurisdictions will be the grantees for the local systems funding. However, all funding will flow through NVTC's Special Revenue Fund and held in trust for the jurisdictions' use.

The Draft SYIP also includes the Commonwealth's \$50 million annual commitment to match a 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.

VRE

State transit and rail assistance for VRE is also applied for through NVTC. The draft SYIP includes state transit operating and capital assistance for VRE totaling \$36.7 million of FY2018 funds. This is a decrease of \$3.9 million (9.7%) from the FY2017 approved program, made up of a \$3.0 million (9.9%) decrease in capital assistance combined with a \$0.9 million (9%) decrease in operating assistance.

The decrease in the capital assistance is due to the inclusion of nine expansion railcars and additional facilities improvements in FY2017. However, the FY2018 SYIP includes multi-year capital funding for track lease payments for FY2019 through FY2023, which are not reflected in the numbers above. The decrease in operating assistance is the combined result of the decrease in availability of state-wide funds of a one-time performance data input adjustment.

The SYIP also includes \$2.9 million in funding from DRPT's Rail Program for station platform and track work.

The following table summarizes the FY2018 NVTC and VRE assistance, with a comparison to the FY2017 approved program. [Additional tables](#), providing a greater level of detail, are attached.

			Increase (Decrease)	
	<u>FY 2017</u>	<u>FY 2018</u>	<u>\$</u>	<u>%</u>
NVTC				
Transit Capital Assistance				
WMATA	36.264	42.705		
Local Systems	<u>19.827</u>	<u>27.054</u>		
Total Transit Capital	<u>56.091</u>	<u>69.758</u>	13.668	24.4%
Transit Operating Assistance				
WMATA	108.637	105.183		
Local Systems	<u>23.764</u>	<u>22.676</u>		
Total Transit Operating	<u>132.401</u>	<u>127.859</u>	(4.542)	-3.4%
Other Transit Assistance	-	0.190	0.190	0.0%
Total NVTC Transit Assistance	<u>188.492</u>	<u>197.808</u>	<u>9.316</u>	<u>4.9%</u>
VRE				
Transit Capital Assistance	30.070	27.096	(2.973)	-9.9%
Transit Operating Assistance	<u>10.551</u>	<u>9.600</u>	<u>(0.951)</u>	<u>-9.0%</u>
Total VRE Transit Assistance	<u>40.620</u>	<u>36.696</u>	<u>(3.924)</u>	<u>-9.7%</u>

Notes:

- > The table excludes \$50M PRIIA match provided directly to WMATA.
- > The draft SYIP also includes FY18 allocations to VRE from DRPT's Rail Program totaling \$2.9 million.
- > For multi-year agreements, only current year assistance shown.

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Research has long been a hallmark of NVTC's service to its member jurisdictions and transit agencies, providing information and analysis on everything from transit funding to system performance to new technologies. The knowledge gleaned from these studies over the past five decades has helped transit to grow, becoming an integral part of the economy – not just in Northern Virginia, but in the Commonwealth as a whole. That's why NVTC is studying the **economic impact of rail transit on statewide revenues**. NVTC's analysis will demonstrate how high capacity transit helps provide revenues that support programs that benefit those across the Commonwealth, like education and healthcare to name a few.

Shifts in the transit landscape, a result of new services and technologies, require a better understanding of who rides and why. NVTC's examination of the **characteristics of WMATA ridership** here in Northern Virginia will help shape efforts to rebuild Metro's customer base. Insight into ridership dynamics will also help us determine how new entrants into the transportation scene – such as Uber and Lyft – are influencing riders and their transit choices.

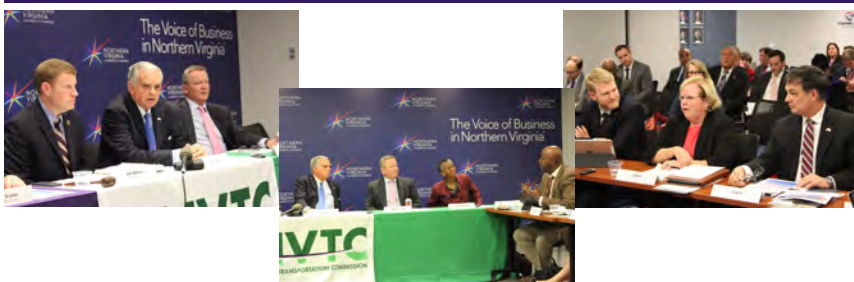
Our **Regional Bus Agenda** is producing a variety of information beneficial to our transit providers and of interest to the media. The bus agenda is aimed at providing an understanding of bus operations in Northern Virginia across jurisdictional boundaries. Its goal is to identify gaps that may exist in our regional bus network and identify opportunities as to how our six bus systems can better serve the region.

NVTC's research is designed inform our discussions about transit service in the region and identify opportunities for growth. We are proud of our contributions and look forward to adding to the transit knowledge base as we tackle novel and challenging research topics now and in the future.



Executive Director

Scenes from NVTC's May Meeting



Inside this Issue

SafeTrack & Fare Increase Update	2
Getting Metro Back on Track Forum	2
VTA Awards	3
NVTC Coordinates Bus Tech Purchases	3
NVTC Creates Bus Service Planning Tool	3
Transform 66 Multimodal Update	4
Join VTA's Transit Action Network	4
Transform 66 with Transit Roundtable	5
Innovative Financing for Public Transit	5
Headlines from NVTC Jurisdictions	5
Crystal City Multimodal Center Opens	6
TPB to Fund Tech Assistance in NoVa	6
VRE Holds Train Naming Ceremony	6
Art for Reston Town Center Station	6



Northern Virginia Transportation Commission
2300 Wilson Blvd., Ste. 620
Arlington, VA 22201
www.novatransit.org



Key Dates

May 26	Transit Capital Project Revenue Advisory Board Webinar
May 31	Transit Service Delivery Advisory Committee
June 1	NVTC Monthly Meeting
June 8	NVTA Monthly Meeting
June 15	Getting Metro Back on Track
June 16	VRE Operations Board
June 16	Transit Capital Project Revenue Advisory Board Meeting
June 20-21	CTB Monthly Meeting
June 21	Transportation Planning Board
June 21	NVTC Governance/Personnel Committee Meeting

As SafeTrack Wraps Up, WMATA Readies for Service Changes, Fare Hikes

SafeTrack is winding down. During Surge 15, which ends June 15, Metro has closed five Orange Line stations in Maryland and the District of Columbia and reduced the frequency of trains on the Silver Line. Silver and Blue line trains operate every 12 minutes, while Orange Line trains run every 6-8 minutes. The final surge, which shuts down the Red Line between Shady Grove and Twinbrook, occurs between June 17 and 25. General Manager Paul Wiedefeld has indicated that track repair work will continue for the foreseeable future. Work zones for future construction projects would come with significant planning and advance warning, he said.

Changes to Metro's fares, schedules, and rail system hours will take effect June 25. The changes, approved by the Board of Directors earlier this year, are part of the transit agency's effort to right-size service, close a budget gap and provide needed time for preventive maintenance.

Most Metrobus and Metrorail fares will increase between 10 and 25 cents. Some low-ridership bus routes will be discontinued. Trains will arrive slightly less frequently during rush hour. And, Metrorail hours will

be adjusted to provide an additional eight hours of track access weekly to improve safety and service reliability.

Metro plans to conduct extensive customer outreach leading up to the implementation of the June 25 changes. Its outreach efforts will include signage aboard vehicles and at rail stations and key bus stops; email and text messages; social media; and handouts to be distributed to riders at high-traffic locations.



New Hours

Nuevas horas



New Fares

Nuevas tarifas



Metrorail Service Changes

Cambios en el servicio de Metrorail



Metrobus Service Changes

Cambios en el servicio de Metrobus

Join Virginia's WMATA Board Members for a Discussion of the Challenges & Opportunities in Getting Metro Back on Track

Forum is open to the public and accessible via Metrorail

Thursday, June 15, 2017 at 7 p.m.
Durant Arts Center
1605 Cameron Street
Alexandria, Virginia

This forum, which includes a presentation and question/answer session, is sponsored by the Northern Virginia Transportation Commission. Learn more about NVTC and the upcoming forum at www.novatransit.org.



Former VRE Ops Board Chair, ART Marketing Effort Receive VTA Awards

Northern Virginia is home to the recipients of two 2017 awards from the Virginia Transit Association (VTA). Virginia Railway Express (VRE) 2016 Operations Board Chair Gary Skinner and an Arlington Transit marketing campaign to grow weekend ridership were honored at a May 24 awards luncheon in Crystal City.

Skinner, recipient of the award for an outstanding contribution by an individual, was recognized for spearheading the effort to bring VRE to Spotsylvania County. The Spotsylvania station project endured nearly a decade of delay, but Skinner remained a stalwart advocate, eventually bringing the project to fruition. The station opened in November 2015.

“Let ART be your Weekend Ride!” received an honorable mention for marketing program. While designed to boost overall weekend ridership, the initiative focused primarily on four bus routes. ART targeted riders along those routes through social media, a blog series, e-

newsletters and a direct-mail postcard. The postcard included two, free, one-way weekend trip coupons for riders to redeem on the 42, 45, 55 or 87 bus. Weekend ridership on those routes grew by 11 percent, which held for months following the campaign.



NVTC Coordinates Bus Technology Purchases

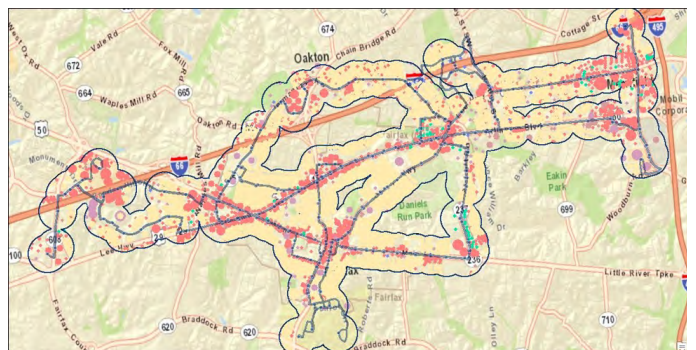
NVTC is coordinating efforts to prolong the life of existing bus fareboxes for Northern Virginia transit agencies, including equipment purchases to upgrade the farebox/driver control unit. This equipment will be used by participating jurisdictions in the late 2017 project testing phase, with full roll-out of the upgrade on the

bus fleets beginning in early 2018. Recognizing that this project is only an intermediary measure, NVTC continues to monitor regional activity related to the off-board fare collection and next generation fare collection components of the program.

NVTC Develops Bus Service Evaluation/Planning Tool

NVTC is developing a tool to assist member jurisdictions in evaluating and planning local bus service. The tool provides planning support for short- and mid-term bus operations. The initiative uses an analytical package known as Transit Boardings Estimation and Simulation Tool (TBEST), developed by the Florida Department of Transportation (FDOT). Based on data from the U.S. Census, MWCOG employment projections, land use information from jurisdictions, and transit network and ridership data from transit agencies, TBEST estimates transit demand at bus stops and projects the information into a geographic information system. Among NVTC's pilot TBEST implementation projects is one modeling transit systems serving the City of Fairfax, including WMATA Metrobus, City of Fairfax CUE, and George Mason University shuttles. TBEST will allow

NVTC to help Northern Virginia's transit operators evaluate policy scenarios and service changes. NVTC continues to adapt the planning tool for use throughout the region.



TBEST socio-economic market analysis image: transit systems serving the City of Fairfax

Transform 66 Multimodal Update

Two of 10 projects receiving funding under Transform 66 Multimodal will come online in the next few weeks, joining PRTC's Gainesville to Pentagon commuter bus service, which began operating in December.

Service on Metrobus' Route 2A (Washington Blvd.-Dunn Loring) will be expanded during morning and evening rush beginning June 25. By increasing bus frequency and decreasing route run times, this project will serve 150 new weekday riders, increasing daily ridership to 2,700. NVTC is contributing \$1,000,000 to this project.

Loudoun County is planning a mid-July ribbon cutting ceremony for its Stone Ridge park-and-ride lot. This new 300-space lot will anchor commuter bus service between Aldie and the McPherson Square Metrorail station. Bus service is scheduled to begin this summer. NVTC is providing \$1,940,939 to this project.

VDOT, meanwhile, continues to prepare I-66 for tolling. As of late May, all toll gantries, 12 of 22 overhead signs, 10 percent of ground-mounted signs and four of seven toll shelters have been installed. Tolling is expected to begin in late fall/early winter of 2017.



Key Milestones

Activities	Dates
Public Meeting regarding W&OD Trail Bridge	June 13, 2017
Implement Initial Multimodal Projects	2017
Toll Day One	Late 2017
Award Design-Build Contract for Eastbound Widening Project	Late 2017
Eastbound Widening Construction	Mid 2018 – Mid 2020

LEND YOUR VOICE! MAKE IT COUNT! JOIN THE TRANSIT ACTION NETWORK

★ **WHAT** Transit supporters can't always be at the Capitol when bills are considered, but elected officials want to hear their views. By joining the Transit Action Network, you will receive timely alerts when important decisions affecting public transportation are about to be made. Whether it's the U.S. Congress, the Governor, the Virginia General Assembly, or your local governing body – you can contact them with one click to make your voice heard.

★ **WHO** All transit riders and supporters

★ **WHEN** It matters most

★ **WHERE** Your email inbox or mobile device

★ **WHY** To make it easy to communicate with your elected representatives and make a difference. So the next time funding for transit is under attack or a vote on a rail extension is near, your voice will matter!



The Transit Action Network is a free and zero-obligation e-advocacy program that works!
Join today at vatransit.com and tell a friend so their voice can count too!

NVTC Hosts Transforming 66 with Transit at VTA Conference

Dozens of transit professionals from throughout Virginia attended NVTC's roundtable at the Virginia Transit Association conference, curious as to how transit will be used to transform the commute on I-66. The interactive discussion featured an overview by NVTC Executive Director Kate Mattice and a brief presentation by NVTC Transit Programs and Planning Manager Patricia Happ on the process used to select projects for the initial round of funding. Kathleen Leidich from Loudoun and Cristin Tolen from Arlington spoke to the benefits commuters will experience when their projects — which includes new and enhanced bus service, a park-and-ride lot, transportation demand management programs, and transit screens — come online in the late summer and fall.



NVTC Executive Director Kate Mattice (second from left) provides an overview of Transform 66 Multimodal at the Virginia Transit Association Conference. NVTC's Patricia Happ (left) and Arlington County's Cristin Tolen (second from right) also participated in the roundtable discussion.

Innovative Financing for Public Transportation

Value capture and small- and medium-sized public private partnerships are the subjects of a free June 7 webinar hosted by the Transportation Research Board. Value capture, the public recovery of a portion of increased property value created from public infrastructure investment, has been successful in some U.S. cities. Presenters will review these case studies. Public-private partnerships can also be used by transit agencies to improve

existing services as well as deliver new services and facilities. Presenters will demonstrate an interactive tool for identifying, evaluating, and screening opportunities for small- and medium-sized P3 initiatives.



Around Town: Headlines from/about NVTC Jurisdictions and Partners



[Take the Capital Bikeshare Expansion Survey!](#)

[DASH Offers Students A Summer Pass](#)

[Charting Arlington's Growth of Capital Bikeshare](#)

[When is it cheaper to choose carsharing over car ownership?](#)

[Tax Reform is Jeopardizing the Future of Commuter Benefits](#)

[Virginia House, Senate to stream some meetings](#)



[County Named Bronze Level Bicycle Friendly Community](#)

[Test Track for the Future of Connected and Driverless Cars](#)

[Fairfax Connector launches bus tracker site, text service](#)

[Metro GM calls for more funding. But is Loudoun ready to take on the costs?](#)

[County officials say nearly 50 percent of Loudoun's Metrorail construction complete](#)

[VDOT scraps plan for flyover ramp at Dunn Loring Metro station](#)



Northern Virginia Transportation Authority



Transit advocates and local government officials celebrated the completion of the Crystal City Multimodal Center on May 18. The ribbon-cutting ceremony highlighted improvements that expand bus capacity around the Crystal City Metrorail Station. The project creates a safer, more efficient area for the 20,000 people who use the station each day, with new curb space designated for shuttles and kiss-n-ride, new bus shelters, improved sidewalks and crosswalks, and new lighting. NVTA provided \$1.5 million to the project.



Virginia Railway Express



VRE honored three current and former Operations Board members for their contributions to the commuter railroad's establishment and long-term success by naming a locomotive for them during a May 13 ceremony at the Broad Run Station. The honorees were Maureen Caddigan, Prince William County supervisor; Joe Alexander, a founding member of the Operations Board, former board chair and Fairfax County supervisor; and David Brickley, founding member of the Operations Board and former member of the Virginia House of Delegates. VRE also dedicated a bench, to be placed permanently near the Manassas Station, in honor of the late Richard Peacock, long term VRE rider and passenger rail advocate.



Transportation Planning Board



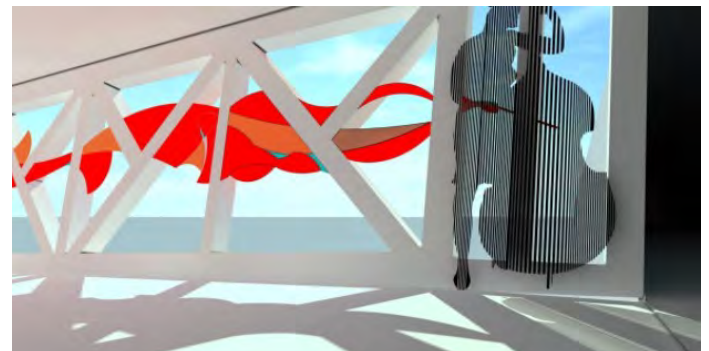
Of eight planning studies and design projects approved for technical assistance from the TPB, three are in Northern Virginia. Development of travel monitoring program in Tysons will allow for timely programming and funding decisions. A review and analysis of bicycle and pedestrian infrastructure along Columbia Pike will result in a plan for progressive improvements. An engineering analysis will help improve bicycle and pedestrian connections to future Metrorail stations in Loudoun County. The value of the technical assistance is \$45,000 for each of the two Fairfax County projects and \$25,000 for the Loudoun County project.

TPB's Transportation Land Use Connections (TLC) Program, established in 2006, supports local jurisdictions dealing with the challenges of integrating land-use and transportation planning at the community level. To date over 100 technical assistance projects have been funded through the program.

WMATA



Artwork featuring a musical motif may decorate the walkways of the Reston Town Center station when it opens in 2020. Designed by artist Joshua Wiener, the powder-coated aluminum sculptures include an oversized drummer, bassist, and horn player, along with long red and teal ribbons. Station artwork is part of Metro's Art in Transit program. WMATA's staff chose Wiener's design after an initial call for proposals and a final round that considered work by three artists. The Metropolitan Washington Airports Authority, which is overseeing Phase 2 of the Silver Line, will fund the \$250,000 art acquisition. WMATA's Board still must approve the artwork.

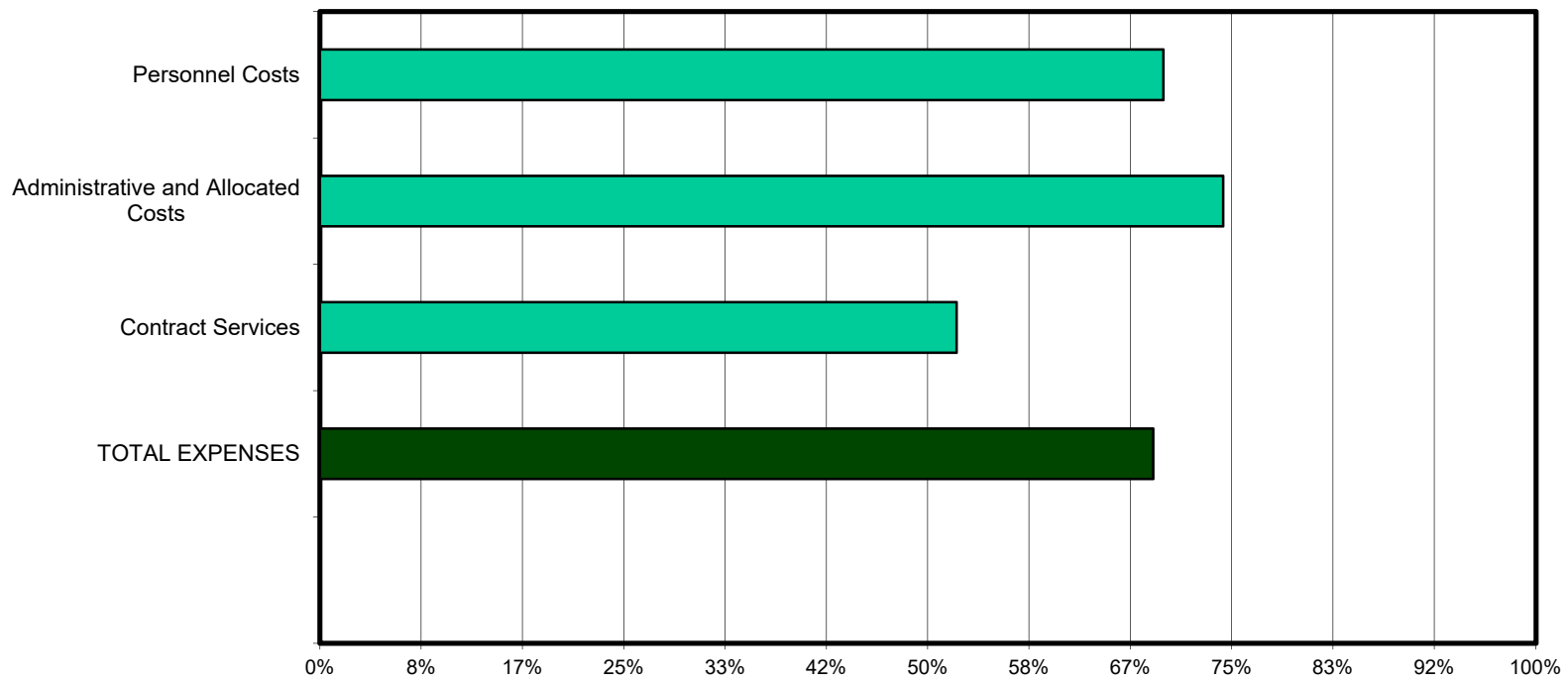


Northern Virginia Transportation Commission

Financial Reports

April, 2017

Percentage of FY 2017 NVTC Administrative Budget Used
April 2017
(Target 83.3% or less)



Note: Refer to pages 2 and 3 for details

NORTHERN VIRGINIA TRANSPORTATION COMMISSION
G&A BUDGET VARIANCE REPORT
April, 2017

	<u>Current Month</u>	<u>Year To Date</u>	<u>Annual Budget</u>	<u>Balance Available</u>	<u>Balance %</u>
<u>Personnel Costs</u>					
Salaries and Contract Wages	\$ 79,323.38	\$ 976,831.16	\$ 1,352,000.00	\$ 375,168.84	27.7%
Temporary Employee Services	-	-	-	-	
Total Personnel Costs	<u>79,323.38</u>	<u>976,831.16</u>	<u>1,352,000.00</u>	<u>375,168.84</u>	<u>27.7%</u>
<u>Benefits</u>					
Employer's Contributions:					
FICA	9,457.32	65,820.70	90,300.00	24,479.30	27.1%
Group Health Insurance	6,469.46	66,427.94	139,500.00	73,072.06	52.4%
Retirement	9,893.15	90,115.15	145,000.00	54,884.85	37.9%
Workmans & Unemployment Compensation	75.11	1,910.98	4,900.00	2,989.02	61.0%
Life Insurance	317.80	3,202.03	5,300.00	2,097.97	39.6%
Long Term Disability Insurance	465.78	4,959.90	6,400.00	1,440.10	22.5%
Total Benefit Costs	<u>26,678.62</u>	<u>232,436.70</u>	<u>391,400.00</u>	<u>158,963.30</u>	<u>40.6%</u>
<u>Administrative Costs</u>					
Commissioners Per Diem	1,350.00	10,900.00	9,800.00	(1,100.00)	-11.2%
<i>Rents:</i>	<i>19,484.82</i>	<i>189,303.93</i>	<i>239,600.00</i>	<i>50,296.07</i>	<i>21.0%</i>
Office Rent	18,339.82	178,276.12	223,400.00	45,123.88	20.2%
Parking & Transit Benefits	1,145.00	11,027.81	16,200.00	5,172.19	31.9%
<i>Insurance:</i>	<i>144.10</i>	<i>5,673.50</i>	<i>5,800.00</i>	<i>126.50</i>	<i>2.2%</i>
Public Official Bonds	-	1,900.00	2,000.00	100.00	5.0%
Liability and Property	144.10	3,773.50	3,800.00	26.50	0.7%
<i>Travel:</i>	<i>3,982.98</i>	<i>21,061.59</i>	<i>29,300.00</i>	<i>8,238.41</i>	<i>28.1%</i>
Conference / Professional Development	1,573.00	10,012.34	17,000.00	6,987.66	41.1%
Non-Local Travel	1,552.51	3,981.76	2,300.00	(1,681.76)	-73.1%
Local Travel, Meetings and Related Expenses	857.47	7,067.49	10,000.00	2,932.51	29.3%
<i>Communication:</i>	<i>1,103.72</i>	<i>8,615.08</i>	<i>15,700.00</i>	<i>7,084.92</i>	<i>45.1%</i>
Postage	(16.70)	973.18	2,000.00	1,026.82	51.3%
Telephone and Data	1,120.42	7,641.90	13,700.00	6,058.10	44.2%
<i>Publications & Supplies</i>	<i>1,048.16</i>	<i>9,009.81</i>	<i>11,600.00</i>	<i>2,590.19</i>	<i>22.3%</i>
Office Supplies	149.54	1,728.85	2,500.00	771.15	30.8%
Duplication and Paper	898.62	6,534.16	8,600.00	2,065.84	24.0%
Public Information	-	746.80	500.00	(246.80)	-49.4%

NORTHERN VIRGINIA TRANSPORTATION COMMISSION
G&A BUDGET VARIANCE REPORT
April, 2017

	<u>Current Month</u>	<u>Year To Date</u>	<u>Annual Budget</u>	<u>Balance Available</u>	<u>Balance %</u>
<i>Operations:</i>	1,312.96	5,010.31	22,900.00	17,889.69	78.1%
Furniture and Equipment (Capital)	-	40.00	11,500.00	11,460.00	99.7%
Repairs and Maintenance	(1.00)	66.00	1,000.00	934.00	93.4%
Computer Operations	1,313.96	4,904.31	10,400.00	5,495.69	52.8%
<i>Other General and Administrative:</i>	470.27	5,716.42	9,000.00	3,396.58	37.7%
Subscriptions	-	113.00	-	-	0.0%
Memberships	79.67	796.70	1,800.00	1,003.30	55.7%
Fees and Miscellaneous	390.60	4,806.72	5,600.00	793.28	14.2%
Advertising (Personnel/Procurement)	-	-	1,600.00	1,600.00	100.0%
Total Administrative Costs	<u>28,897.01</u>	<u>255,290.64</u>	<u>343,700.00</u>	<u>88,522.36</u>	<u>25.8%</u>
<u>Contracting Services</u>					
Auditing	-	21,525.00	22,000.00	475.00	2.2%
Contract Services and Support	6,600.00	60,316.10	155,000.00	94,683.90	61.1%
Legal	2,916.67	29,166.70	35,000.00	5,833.30	0.0%
Total Contract Services	<u>9,516.67</u>	<u>111,007.80</u>	<u>212,000.00</u>	<u>100,992.20</u>	<u>47.6%</u>
 Total Gross G&A Expenses	<u><u>\$ 144,415.68</u></u>	<u><u>\$ 1,575,566.30</u></u>	<u><u>\$ 2,299,100.00</u></u>	<u><u>\$ 723,646.70</u></u>	<u><u>31.5%</u></u>

NVTC
RECEIPTS and DISBURSEMENTS
April, 2017

Payer/			Wells Fargo	Wells Fargo	VA LGIP	
Date	Payee	Purpose	(Checking)	(Savings)	G&A / Project	Trusts
RECEIPTS						
5	DRPT	Capital grant receipt - Arlington				\$ 1,245,660.00
5	Alexandria	G&A contribution		9,461.50		
5	DRPT	Capital grant receipt - Alexandria				15,373.00
13	DRPT	Operating assistance - WMATA				9,053,095.00
17	DRPT	Capital grant receipt			1,423.00	
17	DRPT	Capital grant receipt - VRE			36,871.00	
17	DRPT	Capital grant receipt - Alexandria				914,705.00
18	VRE	Staff support		7,142.54		
18	CNA Surety	Bond refund		100.00		
20	FTA	Grant receipt - Alexandria			5,691.00	
20	DRPT	Capital grant receipt - Falls Church				13,267.00
21	DRPT	Capital grants receipts - Arlington				127,382.00
21	DRPT	Technical assistance - Fare collection			9,200.00	
21	DRPT	Intern grant receipt			13,271.00	
27	DMV	Motor Vehicle Fuels Sales tax receipts				5,772.25
28	DRPT	Capital grant receipt - Alexandria			399,928.00	
30	Banks	Investment earnings		11.38	8,484.15	119,564.73
			-	16,715.42	474,868.15	11,494,818.98
DISBURSEMENTS						
1-30	Various	G&A expenses	(170,099.08)			
3	WMATA	Metrobus operating				(23,253,389.00)
3	WMATA	Metroaccess operating				(3,095,857.00)
3	WMATA	Metrorail operating				(14,176,826.00)
3	WMATA	CIP commitment				(4,781,294.00)
3	WMATA	Project development				(102,000.00)
3	WMATA	Metro matters debt service				(26,472.00)
17	VRE	Grant revenue			(36,871.00)	
20	Loudoun	Other capital				(1,701,792.00)
20	Loudoun	Other operating				(3,109,969.32)
20	Falls Church	Other capital				(13,267.00)
20	Alexandria	Costs incurred			(7,114.00)	
20	Kimley-Horn	Consulting - Fare collection project	(18,400.00)			
25	Stantec	Consulting - NTD project	(37,678.27)			
30	Banks	Service fees	(55.80)	(13.62)		
			(226,233.15)	(13.62)	(43,985.00)	(50,260,866.32)
TRANSFERS						
13	Transfer	From LGIP to checking	150,000.00		(150,000.00)	
25	Transfer	From LGIP to LGIP (NTD project)			37,678.27	(37,678.27)
25	Transfer	From LGIP to checking	150,000.00		(150,000.00)	
			300,000.00	-	(300,000.00)	-
NET INCREASE (DECREASE) FOR MONTH			\$ 73,766.85	\$ 16,701.80	\$ 130,883.15	\$ (38,766,047.34)

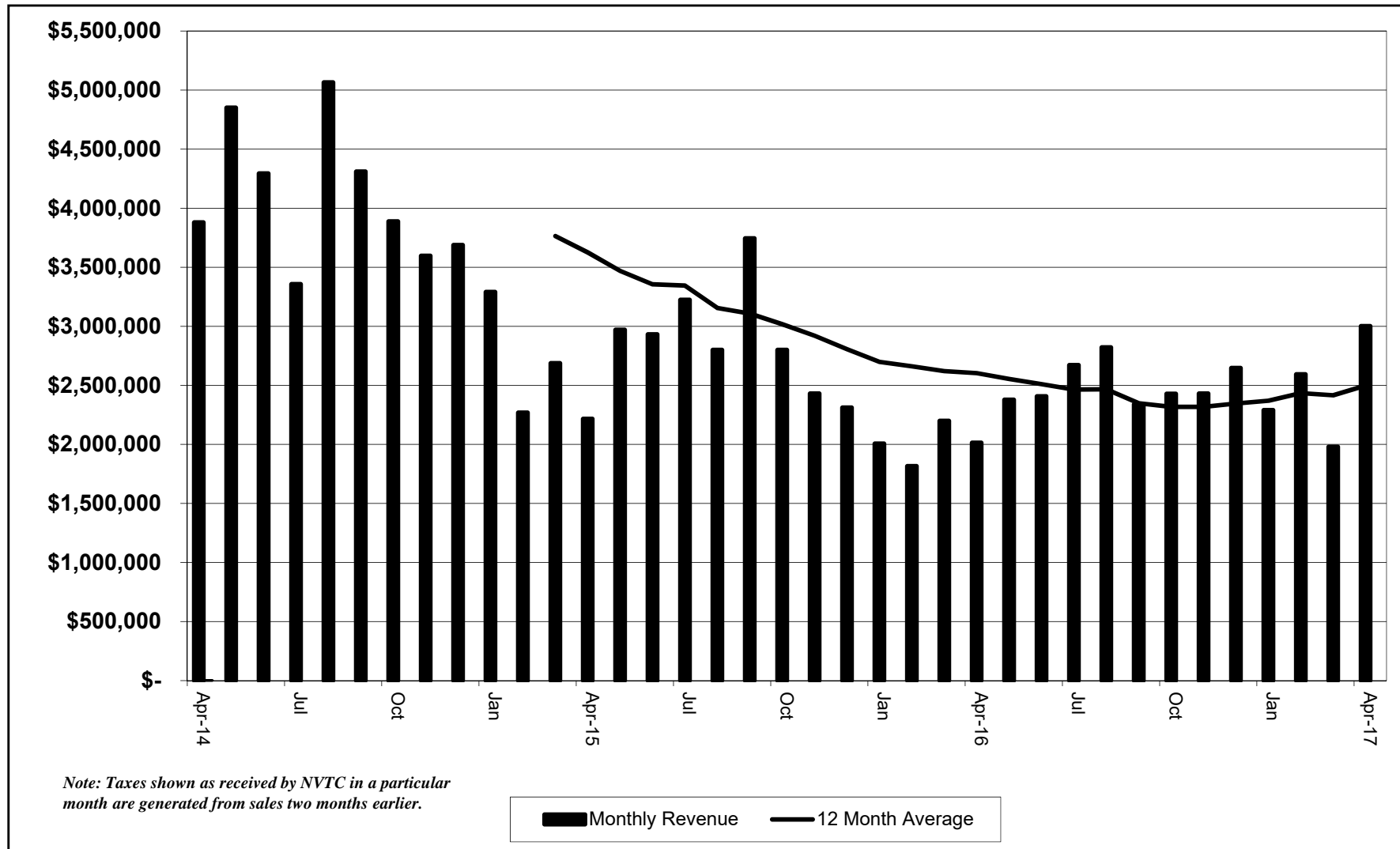
**NVTC
INVESTMENT REPORT
April, 2017**

Type	Rate	Balance 3/31/2017	Increase (Decrease)	Balance 4/30/2017	NVTC G&A/Project	Jurisdictions Trust Fund	Loudoun Trust Fund
<u>Cash Deposits</u>							
Wells Fargo: NVTC Checking	N/A	\$ 73,234.52	\$ 73,766.85	\$ 147,001.37	\$ 147,001.37	\$ -	\$ -
Wells Fargo: NVTC Savings	0.100%	126,844.19	16,701.80	143,545.99	143,545.99	-	-
<u>Investments - State Pool</u>							
Bank of America - LGIP	0.983%	196,327,861.34	(38,635,164.19)	157,692,697.15	10,759,328.70	129,901,776.54	17,031,591.91
		<u>\$ 196,527,940.05</u>	<u>\$ (38,454,271.31)</u>	<u>\$ 157,983,244.51</u>	<u>\$ 11,049,876.06</u>	<u>\$ 129,901,776.54</u>	<u>\$ 17,031,591.91</u>

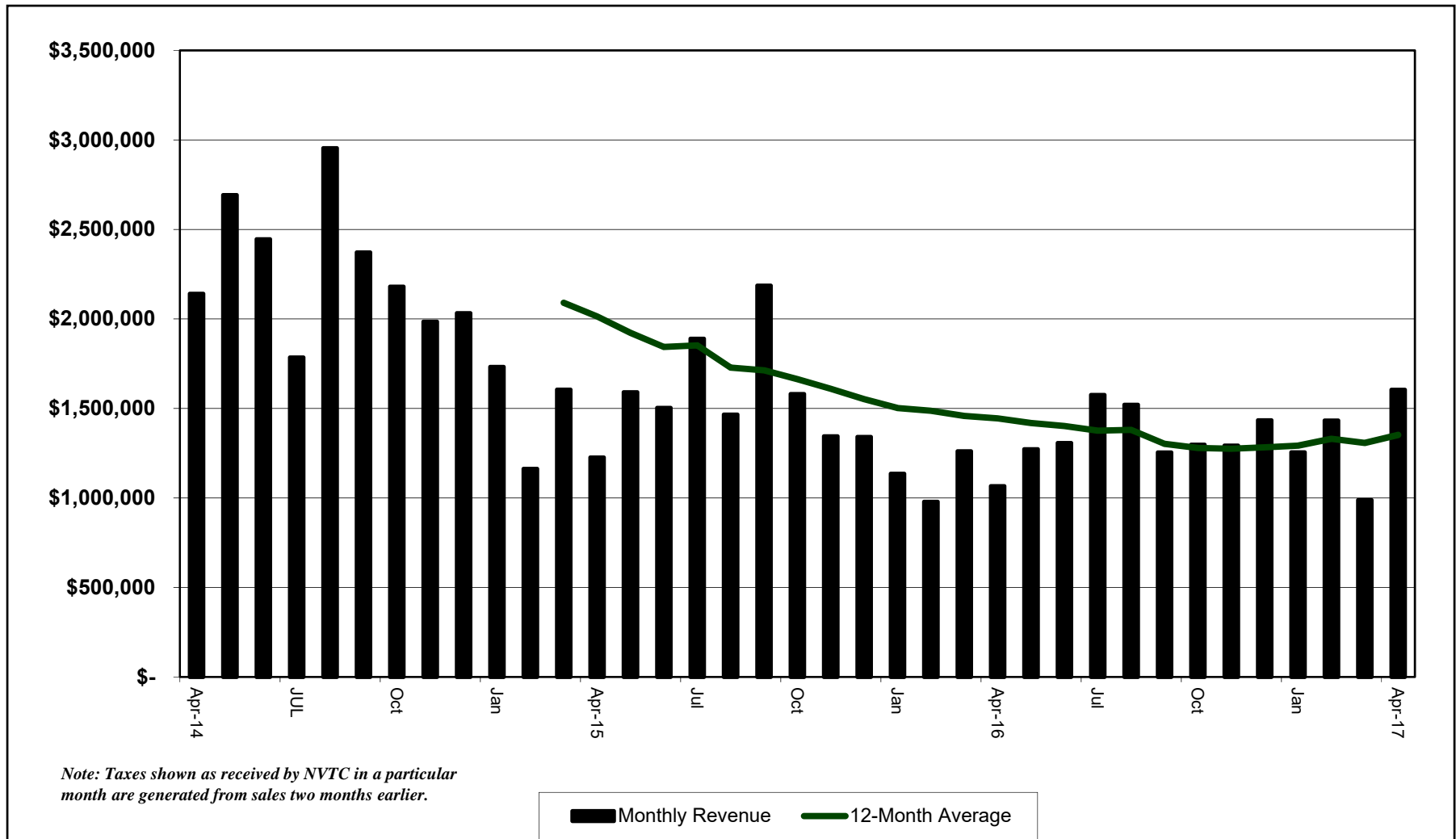
NVTC MONTHLY GAS TAX REVENUE

ALL JURISDICTIONS

FISCAL YEARS 2014-2017



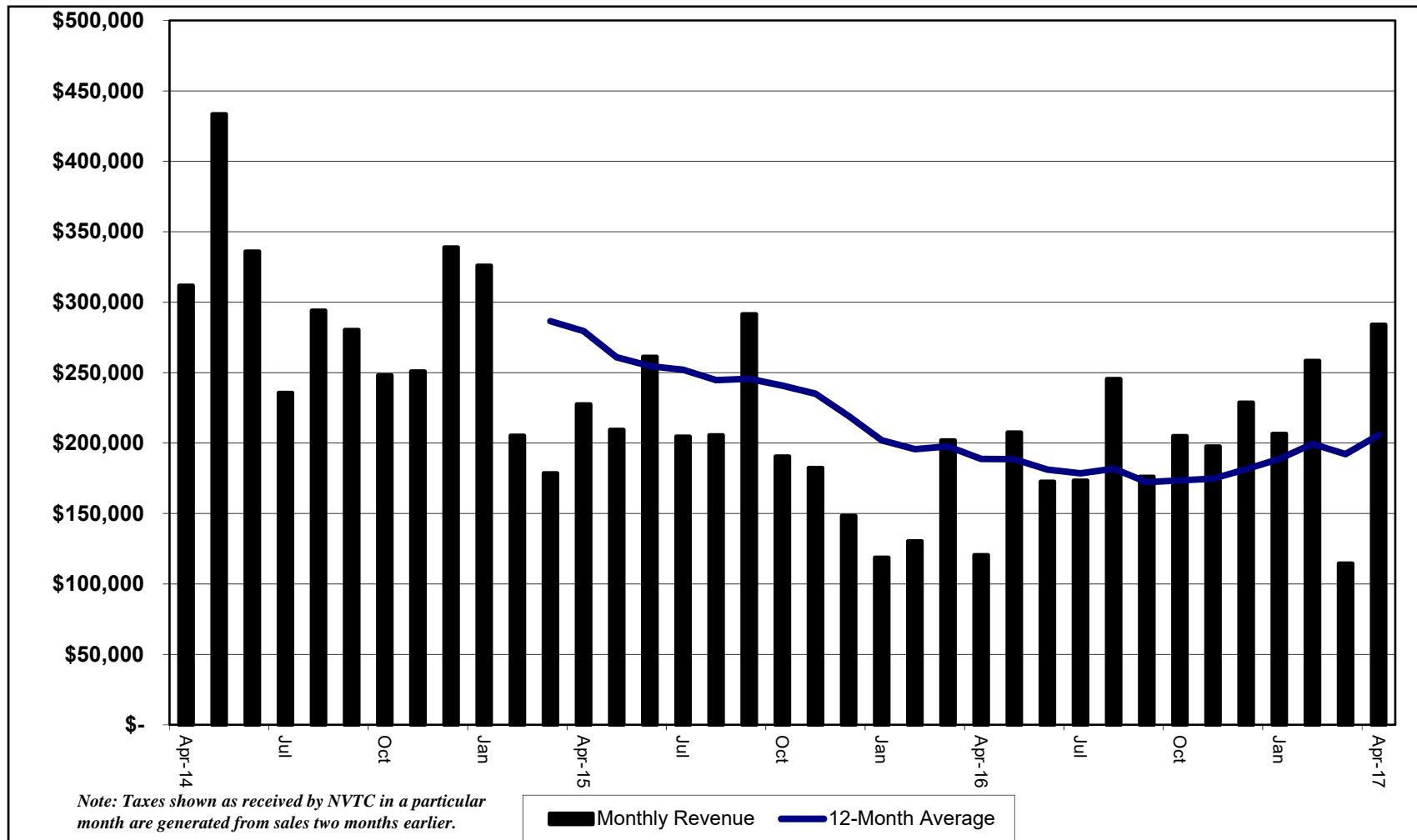
NVTC MONTHLY GAS TAX REVENUE FAIRFAX COUNTY FISCAL YEARS 2014-2017



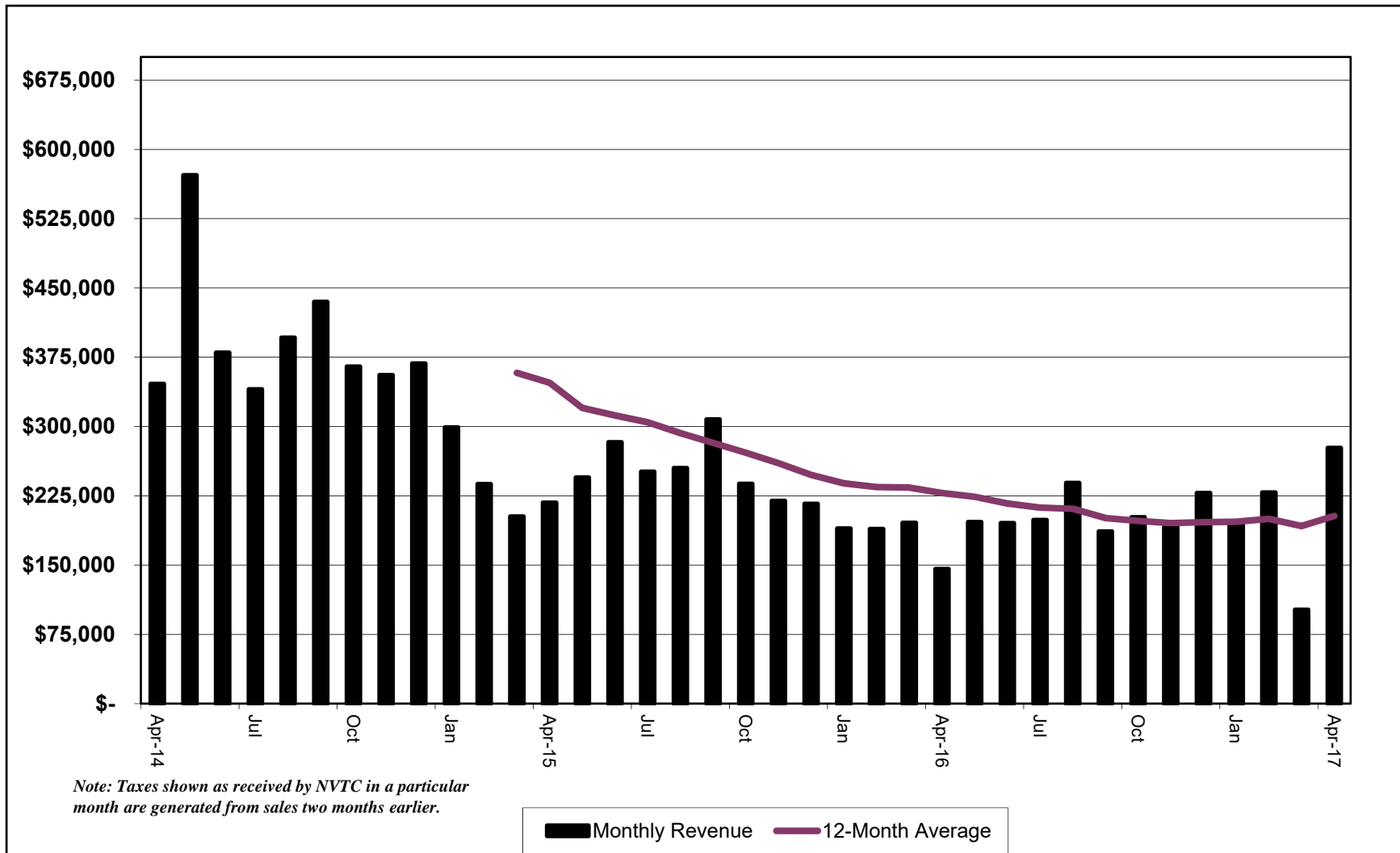
NVTC MONTHLY GAS TAX REVENUE

CITY OF ALEXANDRIA

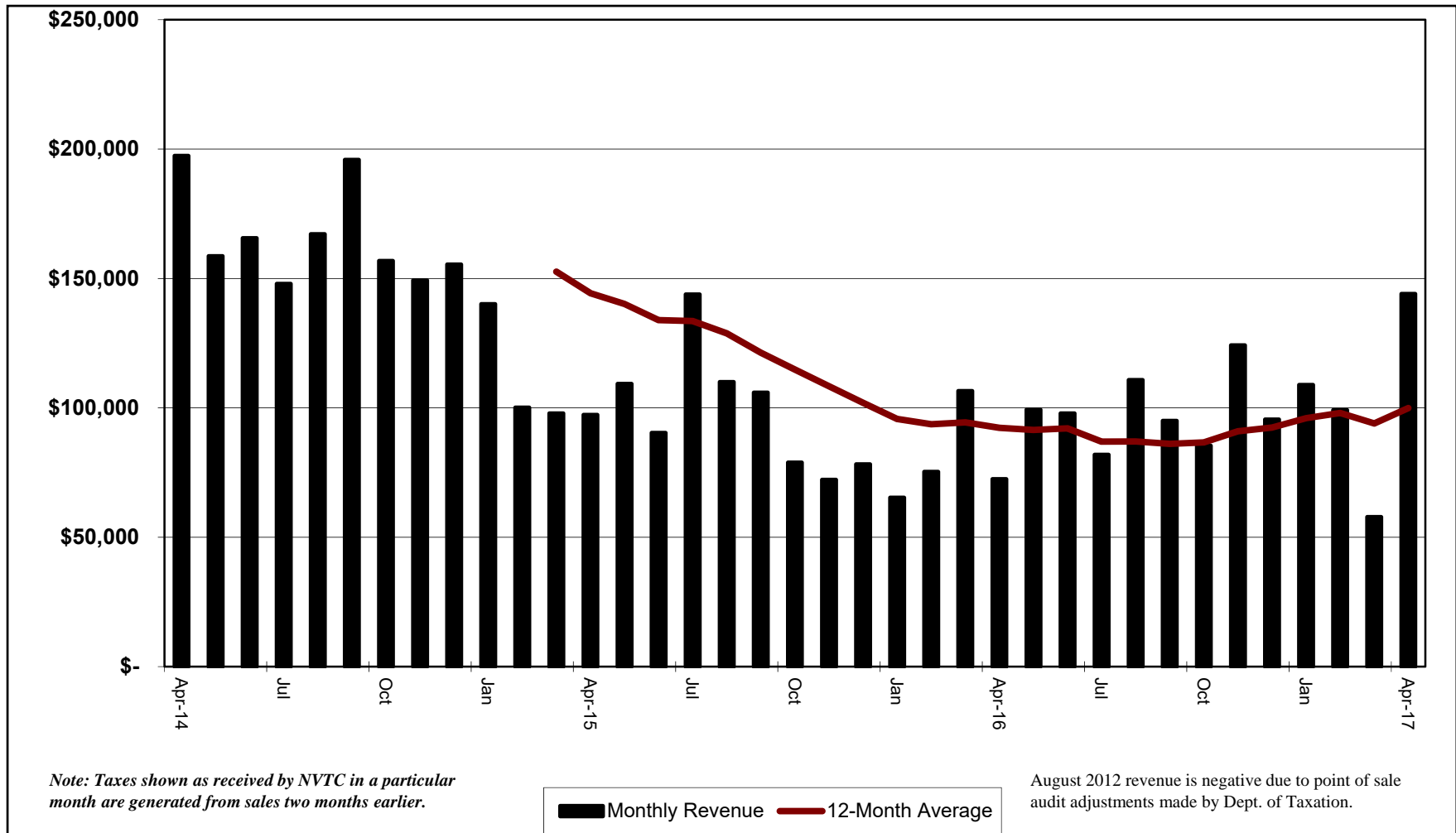
FISCAL YEARS 2014-2017



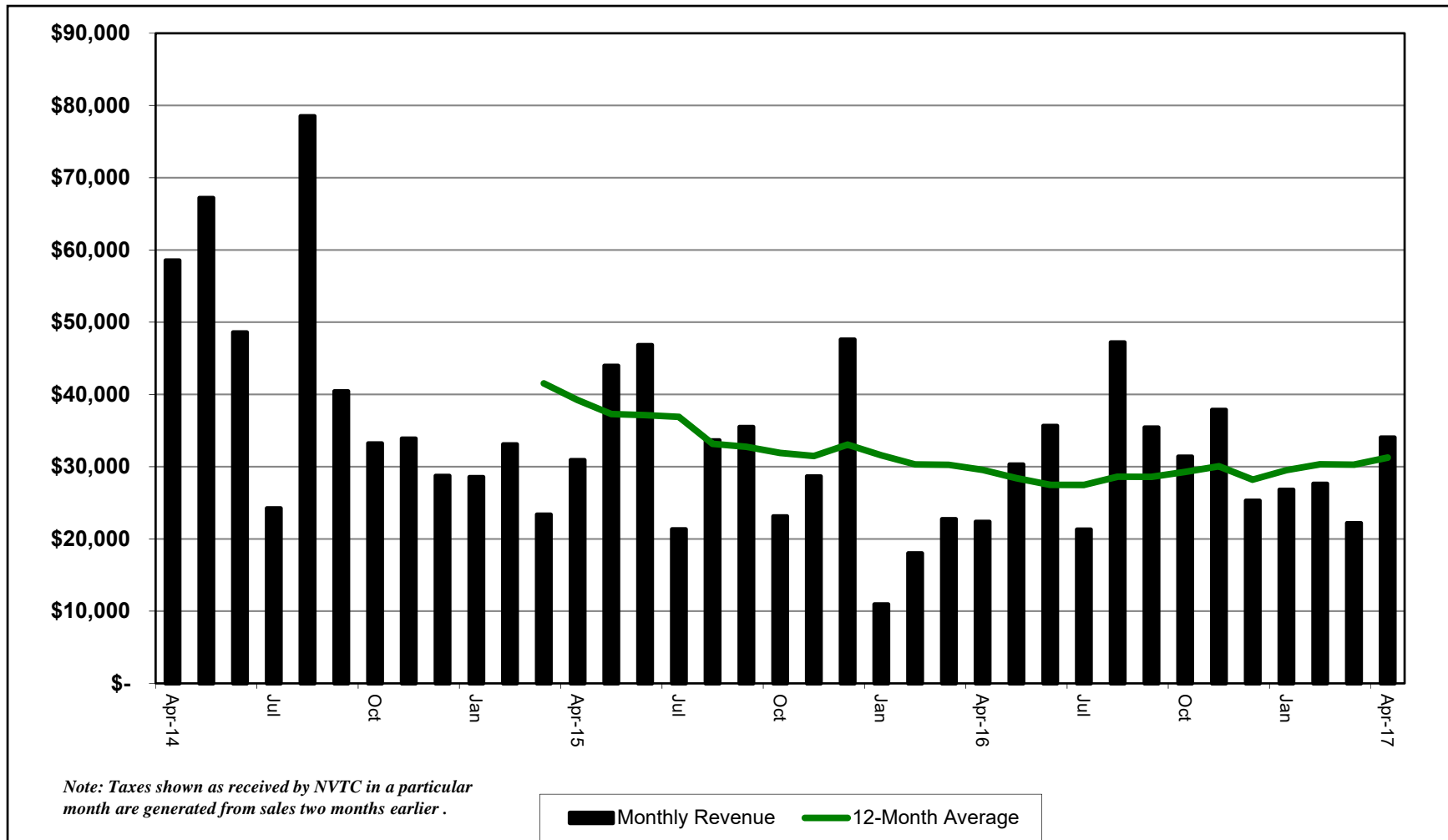
NVTC MONTHLY GAS TAX REVENUE ARLINGTON COUNTY FISCAL YEARS 2014-2017



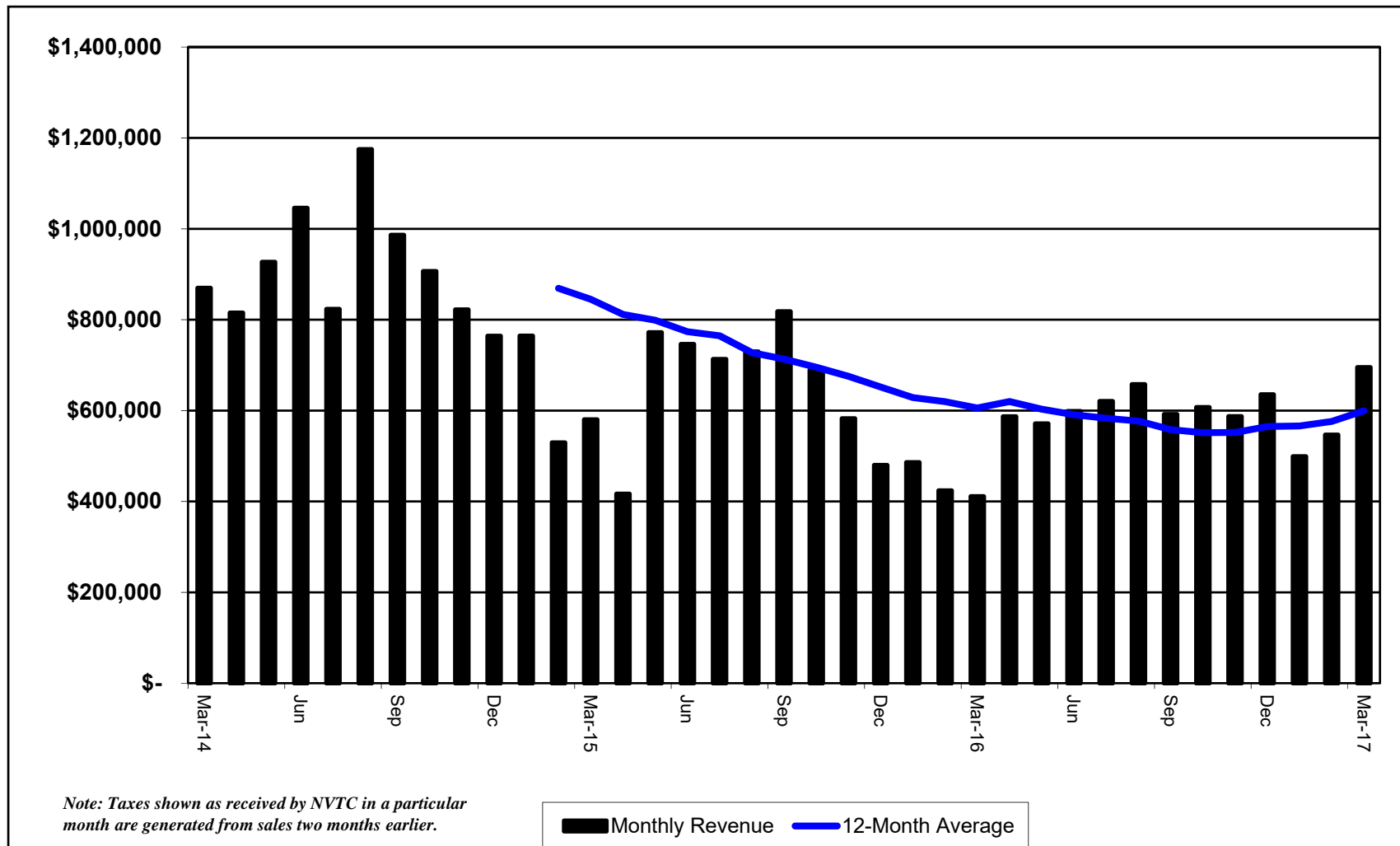
NVTC MONTHLY GAS TAX REVENUE CITY OF FAIRFAX FISCAL YEARS 2014-2017



NVTC MONTHLY GAS TAX REVENUE CITY OF FALLS CHURCH FISCAL YEARS 2014-2017



NVTC MONTHLY GAS TAX REVENUE LOUDOUN COUNTY FISCAL YEARS 2014-2017



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**NORTHERN VIRGINIA TRANSPORTATION COMMISSION
STATE TRANSIT ASSISTANCE APPLIED FOR THROUGH NVTC
FY 2017 Approved SYIP and FY 2018 Draft SYIP**

#9C

	FY 2017 Approved		FY 2018 Draft		Increase (Decrease)	
	State Assistance	Effective State %*	State Assistance	Effective State %*	\$	%
<u>NVTC</u>						
Transit Capital Assistance						
WMATA Subsidies (schedule A)						
Tier 1 - 68% (total cost)	\$ 19.536	86.5%	\$ 19.605	87.9%		
Tier 2 - 34% (total cost)	14.519	57.2%	19.766	82.9%		
Tier 3 - 17% (total cost)	2.209	22.5%	3.334	17.0%		
Total WMATA Subsidies	36.264	62.8%	42.705	64.9%	6.441	17.8%
Local Systems (schedule B)						
Tier 1 - 68% (total cost)	7.813	68.0%	8.770	68.0%		
Tier 2 - 34% (total cost)	10.539	34.0%	18.143	34.0%		
Tier 3 - 17% (total cost)	1.475	17.0%	0.140	17.0%		
Total Local Systems	19.827	38.8%	27.054	40.3%	7.227	36.4%
Total Transit Capital	56.091	51.5%	69.758	52.5%	13.668	24.4%
Transit Operating Assistance						
WMATA Subsidies (schedule C)						
Traditional Formula	59.695		60.461		0.766	
Performance Based Formula	48.942		44.722		(4.220)	
Total WMATA Subsidies	108.637	23.8%	105.183	22.2%	(3.454)	-3.2%
Local Systems (schedule D)						
Traditional Formula	14.875		14.600		(0.276)	
Performance Based Formula	8.889		8.076		(0.812)	
Total Local Systems	23.764	20.9%	22.676	19.5%	(1.088)	-4.6%
Total Transit Operating	132.401	23.3%	127.859	21.7%	(4.542)	-3.4%
Total Transit Capital and Operating	188.492		197.618		9.126	4.8%
Other Transit Assistance (schedule E)	-	0.0%	0.190	0.0%	0.190	-
Total NVTC Transit Assistance	\$ 188.492		\$ 197.808		\$ 9.316	4.9%
<u>VRE</u>						
Transit Capital Assistance (schedule F)						
Tier 1 - 68%	\$ 14.885	92.2%	\$ 2.423	80.0%		
Tier 2 - 34%	15.185	79.2%	24.596	73.7%		
Tier 3 - 17%	-	0.0%	0.078	79.2%		
Total	30.070	85.1%	27.096	74.3%	(2.973)	-9.9%
Transit Operating Assistance						
Traditional Formula	6.692		6.661		(0.031)	
Performance Based Formula	3.859		2.939		(0.920)	
Total	10.551	20.5%	9.600	18.4%	(0.951)	-9.0%
Total VRE Transit Assistance	\$ 40.620		\$ 36.696		\$ (3.924)	-9.7%

Notes:

- > The effective state percentage is based on non-federal costs for capital, and second prior year actual expenses for operating.
- > For multi-year agreements, only FY2018 assistance shown above.
- > The table excludes \$50M PRIIA match provided directly to WMATA.
- > The draft SYIP also includes FY18 allocations to VRE from DRPT's Rail Program totaling \$2.9 million as shown on

NVTC
STATE TRANSIT CAPITAL ASSISTANCE
WMATA CAPITAL SUBSIDIES
FY 2018

SCHEDULE A

	<u>Alexandria</u>	<u>Arlington</u>	<u>Fairfax City</u>	<u>Fairfax County</u>	<u>Falls Church</u>	<u>Total</u>	<u>State Assistance</u>			
							<u>68% Tier 1</u>	<u>34% Tier 2</u>	<u>17% Tier 3</u>	<u>Total</u>
FY 18 CIP Program (a)										
Total Cost	\$ 22,760,101	\$ 43,173,799	\$ 1,407,840	\$ 76,023,429	\$ 1,642,481	\$ 145,007,650				
Federal Share	12,979,500	24,620,906	802,855	43,354,205	936,665	82,694,131				
Non-Federal Share	9,780,601	18,552,893	604,985	32,669,224	705,816	62,313,519	\$19,605,134	\$18,872,150	\$3,193,863	\$41,671,147
WMATA Debt Service (c)	-	-	-	-	-	-				-
Metro Matters Program (d)	-	-	-	-	52,943	52,943		18,001		18,001
Jurisdiction Debt Service - MM Opt Out (e)	970,472	1,604,228	-	-	-	2,574,700		875,398		875,398
Project Development (f)	133,000	261,000	6,000	417,000	8,000	825,000			140,250	140,250
Reimbursable Projects (g)	-	-	-	-	-	-				
Total	<u>\$ 10,884,073</u>	<u>\$ 20,418,121</u>	<u>\$ 610,985</u>	<u>\$ 33,086,224</u>	<u>\$ 766,759</u>	<u>\$ 65,766,162</u>	<u>\$19,605,134</u>	<u>\$19,765,549</u>	<u>\$3,334,113</u>	<u>\$42,704,796</u>

(a) Virginia Compact members' share of FY18 Capital Improvement Program included in the Capital Funding Agreement eligible to be funded by DRPT, excluding PRIIA matching funds which are contracted directly with WMATA. Preventative maintenance has been excluded from the capital assistance request, but included in the operating assistance request according to DRPT requirements. The assistance request is based on the WMATA's proposed budget.

(c) Long Term debt is anticipated to be issued FY18, however no debt service is included in the FY18 proposed budget.

(d) Balance due under Metro Matters program for those members who did not opt out of the FY09 debt issue.

(e) Debt Service to be incurred directly by jurisdictions on their share of debt used to opt out of the Metro Matters FY09 debt issue.

(f) Project Development - a regional reimbursable capital program stated separately from the FY18 CIP

(g) Reimbursable projects - Non-regional projects that the individual jurisdictions include on their respective jurisdiction state capital grant requests based upon their understanding of the current year budgeted expenditures.

NVTC
STATE TRANSIT CAPITAL ASSISTANCE
LOCAL SYSTEMS
FY 2018

SCHEDULE B

Draft SYIP

FY 2018	As Applied					TIER	Costs by DRPT Tier				State Funding			
	Total Costs	Federal	Non-Federal Costs	Adjustments To Application	Non-Federal Costs		68% Tier 1	34% Tier 2	17% Tier 3	Total	68% Tier 1	34% Tier 2	17% Tier 3	Total
CITY OF ALEXANDRIA														
Construction of rail related facility - Van Dorn Metrorail ir	\$ 2,300,000	\$1,251,000	\$ 1,049,000	\$ (1,049,000)	\$ -	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Purchase replacement 35-ft buses (6)	3,900,000	-	3,900,000		3,900,000	1	3,900,000	-	-	3,900,000	2,652,000	-	-	2,652,000
Purchase hybrid bus battery packs (25)	250,000	-	250,000		250,000	3	-	-	250,000	250,000	-	-	42,500	42,500
Total	6,450,000	1,251,000	5,199,000	(1,049,000)	4,150,000		3,900,000	-	250,000	4,150,000	2,652,000	-	42,500	2,694,500
CITY OF FAIRFAX														
Rehabilitation of bus wash	23,000	-	23,000	-	23,000	2	-	23,000	-	23,000	-	7,820	-	7,820
Total	23,000	-	23,000	-	23,000		-	23,000	-	23,000	-	7,820	-	7,820
FAIRFAX COUNTY														
3rd party maintenance inspections and audits	450,000	-	450,000	(450,000)	-		-	-	-	-	-	-	-	-
3rd party project management - Rt 1 BRT design	4,000,000	-	4,000,000		4,000,000	2	-	4,000,000	-	4,000,000	-	1,360,000	-	1,360,000
Construction of bus facility - Springfield CBC parking gar	895,000	-	895,000		895,000	2	-	895,000	-	895,000	-	304,300	-	304,300
Construction of Innovation Center Metrorail garage	25,000,000	-	25,000,000		25,000,000	2	-	25,000,000	-	25,000,000	-	8,500,000	-	8,500,000
Construction of Herndon Metrorail garage	14,000,000	-	14,000,000		14,000,000	2	-	14,000,000	-	14,000,000	-	4,760,000	-	4,760,000
Purchase ADP software - ITS implementation P2	300,000	-	300,000	(300,000)	-		-	-	-	-	-	-	-	-
Purchase fare collection equipment	1,100,000	-	1,100,000		1,100,000	1	1,100,000	-	-	1,100,000	748,000	-	-	748,000
Purchase passenger shelters	1,500,000	-	1,500,000	(1,500,000)	-		-	-	-	-	-	-	-	-
Purchase shop equipment	146,000	-	146,000	(146,000)	-		-	-	-	-	-	-	-	-
Purchase spare parts	450,000	-	450,000		450,000	3	-	-	450,000	450,000	-	-	76,500	76,500
Purchase support vehicles	125,000	-	125,000		125,000	3	-	-	125,000	125,000	-	-	21,250	21,250
Rebuild bus program	2,940,000	-	2,940,000	450,000	3,390,000	1	3,390,000	-	-	3,390,000	2,305,200	-	-	2,305,200
Total	50,906,000	-	50,906,000	(1,946,000)	48,960,000		4,490,000	43,895,000	575,000	48,960,000	3,053,200	14,924,300	97,750	18,075,250
ARLINGTON														
Bus stops and shelter program	427,000	-	427,000	(427,000)	-		-	-	-	-	-	-	-	-
Bus bay expansion - East Falls Church Metro station	5,821,000	-	5,821,000		5,821,000	2	-	5,821,000	-	5,821,000	-	1,979,140	-	1,979,140
Bus stop ADA accessibility improvements	742,000	-	742,000		742,000	2	-	742,000	-	742,000	-	252,280	-	252,280
Purchase 40-ft expansion buses (5)	3,074,275	-	3,074,275		3,074,275	1	3,074,275	-	-	3,074,275	2,090,507	-	-	2,090,507
Bus rehabilitation (12)	2,148,996	-	2,148,996	(716,332)	1,432,664	1	1,432,664	-	-	1,432,664	974,212	-	-	974,212
Transitway extension to Pentagon City	2,882,000	-	2,882,000		2,882,000	2	-	2,882,000	-	2,882,000	-	979,880	-	979,880
Total	15,095,271	-	15,095,271	(1,143,332)	13,951,939		4,506,939	9,445,000	-	13,951,939	3,064,719	3,211,300	-	6,276,019
CITY OF FALLS CHURCH														
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-		-	-	-	-	-	-	-	-
TOTAL LOCAL CAPITAL	\$ 72,474,271	\$1,251,000	\$71,223,271	\$ (4,138,332)	\$ 67,084,939		\$12,896,939	\$53,363,000	\$825,000	\$67,084,939	\$8,769,919	\$18,143,420	\$ 140,250	\$27,053,589

**NVTC
STATE TRANSIT OPERATING ASSISTANCE
WMATA OPERATING SUBSIDIES
FY 2018**

SCHEDULE C

FY 2018 Draft SYIP

FY 2016 Actual Operating Expenses	\$ 474,143,320
FY 2016 Ridership	121,919,948
Operating Assistance	
Traditional Formula	\$ 60,461,304
Performance Based Formula	<u>44,722,066</u>
Total Operating Assistance	<u>\$ 105,183,370</u>

FY 2017 Approved SYIP

FY 2015 Actual Operating Expenses	\$ 455,630,399
FY 2015 Ridership	130,579,358
Operating Assistance	
Traditional Formula	\$ 59,694,910
Performance Based Formula	<u>48,942,230</u>
Total Operating Assistance	<u>\$ 108,637,140</u>

NVTC

STATE TRANSIT OPERATING ASSISTANCE

LOCAL SYSTEMS

FY 2018

SCHEDULE D

LOCAL SYSTEMS

	<u>Alexandria</u>	<u>City of Fairfax</u>	<u>Fairfax County</u>	<u>Arlington County</u>	<u>Total</u>
FY 2018 Draft SYIP					
FY 2016 Operating Expenses	\$ 17,117,042	\$4,037,333	\$ 80,874,793	\$14,072,592	\$116,101,760
FY 2016 Ridership	4,160,094	678,967	8,984,286	3,215,459	17,038,806
Operating Assistance					
Traditional Formula	\$ 2,107,061	\$ 484,350	\$ 10,321,501	\$ 1,686,608	\$ 14,599,520
Performance Based Formula	1,472,702	291,703	5,080,461	1,231,410	8,076,276
Total Operating Assistance	<u>\$ 3,579,763</u>	<u>\$ 776,053</u>	<u>\$ 15,401,962</u>	<u>\$ 2,918,018</u>	<u>\$ 22,675,796</u>
FY 2017 Approved SYIP					
FY 2015 Operating Expenses	\$ 16,839,680	\$3,498,600	\$ 81,081,664	\$12,119,230	\$113,539,174
FY 2015 Ridership	4,269,915	771,254	9,764,166	2,927,851	17,733,186
Operating Assistance					
Traditional Formula	\$ 2,206,292	\$ 458,373	\$ 10,623,002	\$ 1,587,814	\$ 14,875,481
Performance Based Formula	1,651,624	322,501	5,724,224	1,190,421	8,888,770
Total Operating Assistance	<u>\$ 3,857,916</u>	<u>\$ 780,874</u>	<u>\$ 16,347,226</u>	<u>\$ 2,778,235</u>	<u>\$ 23,764,251</u>

**NVTC
OTHER STATE TRANSIT ASSISTANCE
FY 2018**

SCHEDULE E

	<u>Costs</u>	<u>State Assistance</u>
Technical Assistance Program		
NVTC - Envision Route 7 Conceptual Engineering Study (Phase III)	\$ 300,000	\$ 150,000
Intern Program		
NVTC Fellows Program	50,000	40,000
	<u>\$ 350,000</u>	<u>\$ 190,000</u>

**NVTC
STATE TRANSIT CAPITAL ASSISTANCE
VRE
FY 2018**

SCHEDULE F

	As Applied			Adjustments		Draft SYIP (FY18 Funding Only for Multi-year Agreements)				
	Total Cost	Federal	Non-Federal	Cost	Federal	Costs	Federal	Non-Federal	TIER	State Funds
Construction of rail related facilities - equipment storage	\$ 17,591,257	\$10,906,579	\$ 6,684,678	\$ -	\$ -	\$17,591,257	\$10,906,579	\$ 6,684,678	2	\$ 5,981,027
Construction of rail related facilities - facilities asset management prog.	2,760,000	2,208,000	552,000	-	-	2,760,000	2,208,000	552,000	2	441,500
Debt service for rail project - 11 cab cars (FY06)	1,931,357	1,545,086	386,271	-	-	1,931,357	1,545,086	386,271	1	309,017
Debt service for rail projects - 60 railcars (FY06/FY08)	4,673,071	3,738,457	934,614	-	-	4,673,071	3,738,457	934,614	1	747,691
Positive train control	3,638,833	2,911,066	727,767	-	-	3,638,833	2,911,066	727,767	1	582,214
Security cameras	386,400	309,120	77,280	-	-	386,400	309,120	77,280	3	61,084
Security enhancements	105,000	84,000	21,000	-	-	105,000	84,000	21,000	3	16,800
Major lifecycle repair and overhaul costs of rolling stock	4,900,000	3,920,000	980,000	-	-	4,900,000	3,920,000	980,000	1	784,000
Washington Union station improvements	5,000,000	3,100,000	1,900,000	-	-	5,000,000	3,100,000	1,900,000	2	1,700,000
Track lease payments (FY18 through FY23)	48,450,000	24,225,000	24,225,000	-	-	48,450,000	24,225,000	24,225,000	2	16,473,000
	\$ 89,435,918	\$52,947,308	\$ 36,488,610	\$ -	\$ -	\$89,435,918	\$52,947,308	\$36,488,610		\$27,096,333

State Rail Program Assistance - Rail Enhancement Fund (REF)

Crystal City station platform	\$ 1,010,000	\$ 707,000				\$ 707,000
L'Enfant station platform improvements and fourth track	3,180,000	2,226,000				2,226,000
	\$ 4,190,000	\$ 2,933,000				\$ 2,933,000