

# CEO REPORT

MAY 2018

Item 6-A

June 7, 2018

PRTC Regular Meeting



# 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.





CEO REPORT | MAY 2018

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VIRGINIA RAILWAY EXPRESS  
A better way. A better life.



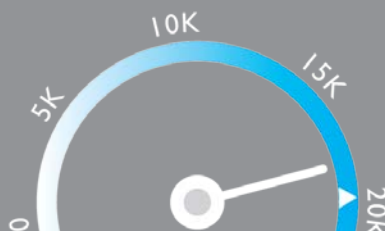
# SUCCESS AT A GLANCE

Data provided reflects March 2018 information.



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.

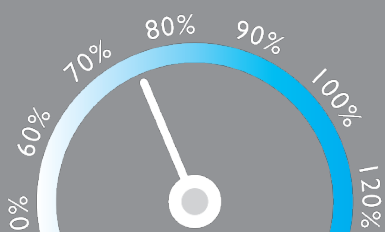
▲ Same month, previous year.



ON-TIME PERFORMANCE

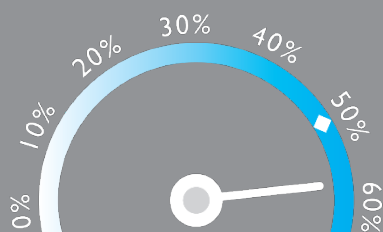
Percentage of trains that arrive at their destination within five minutes of the schedule.

▲ 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 the riders.

◆ Board-established goal.

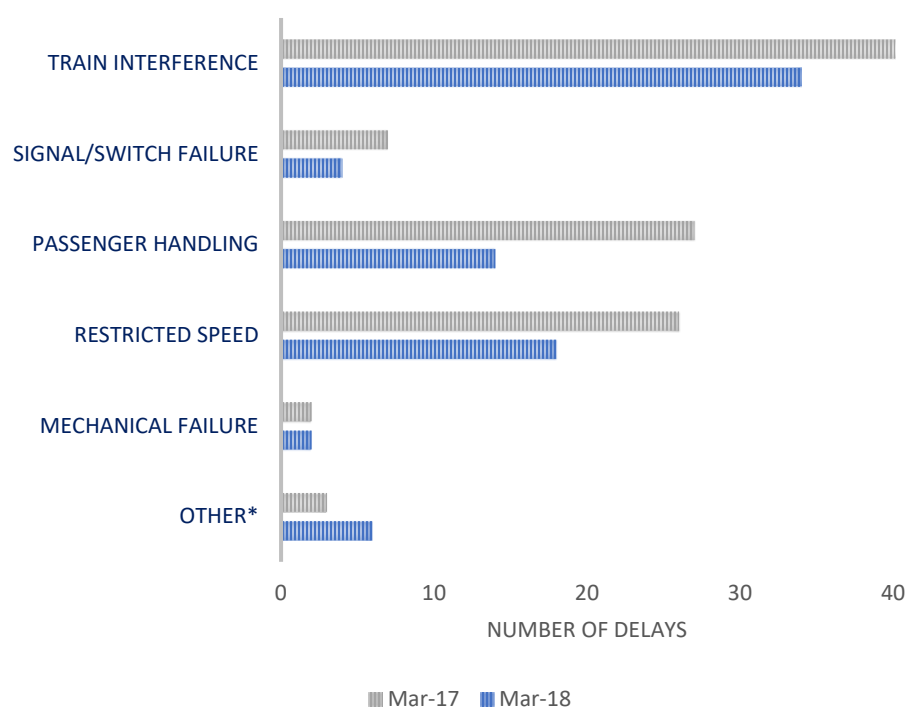


# ON-TIME PERFORMANCE

## OUR RECORD

	March 2018	February 2018	March 2017
Manassas Line	96%	96%	93%
Fredericksburg Line	89%	95%	85%
System Wide	92%	95%	89%

## REASONS FOR DELAYS



VRE operated 624 trains in March.

Our on-time rate for March was 92%.

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

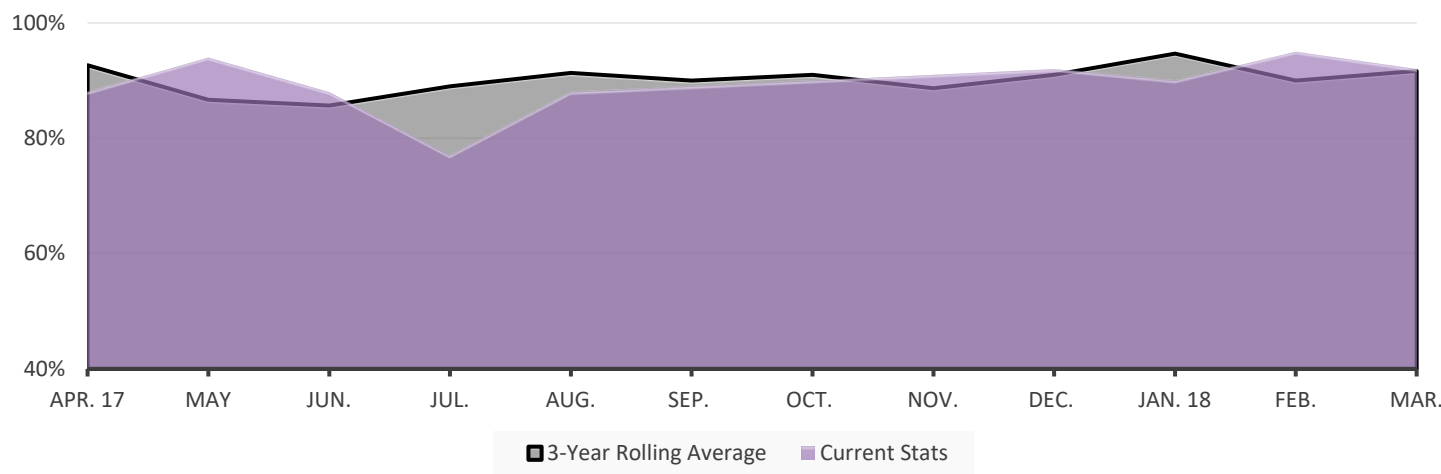
\*Includes those trains that were delayed due to late turns, weather, signal/switch failures and maintenance of way.

## LATE TRAINS

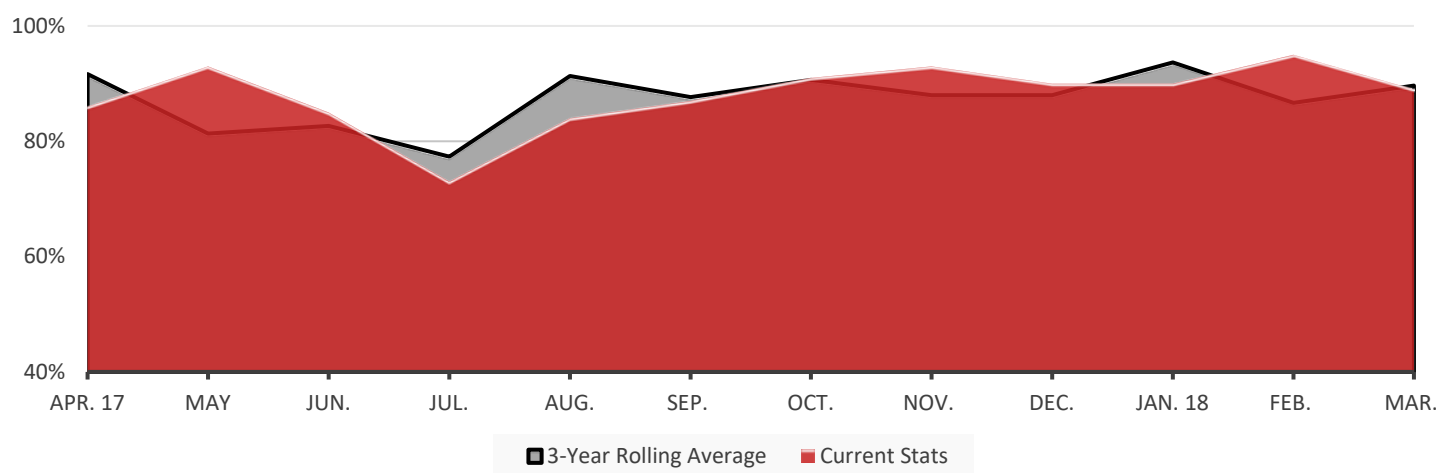
	System Wide			Fredericksburg Line			Manassas Line		
	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.
Total late trains	68	28	47	35	16	34	33	12	13
Average minutes late	25	13	20	14	16	27	35	9	13
Number over 30 minutes	6	2	6	2	2	5	4	0	1
Heat restriction days / total days	0/21	0/19	0/20						

ON-TIME PERFORMANCE

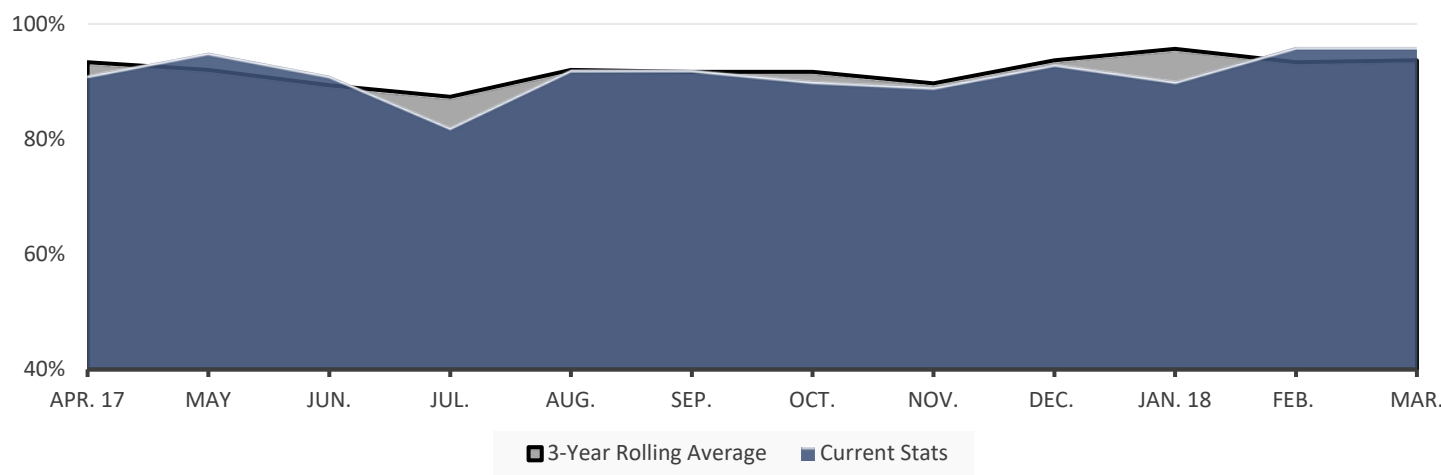
VRE SYSTEM



FREDERICKSBURG LINE



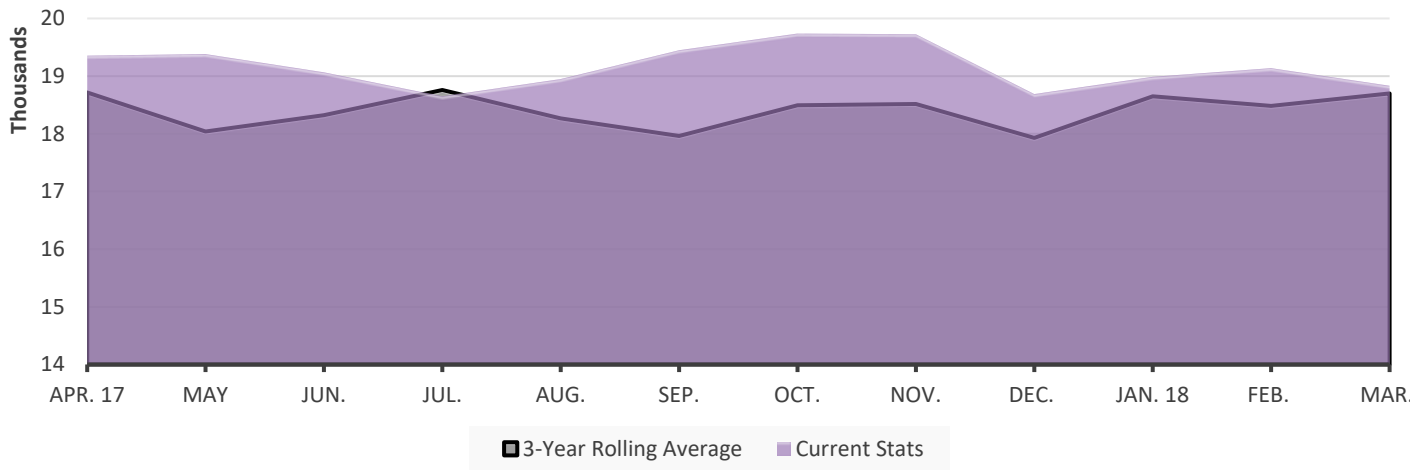
MANASSAS LINE



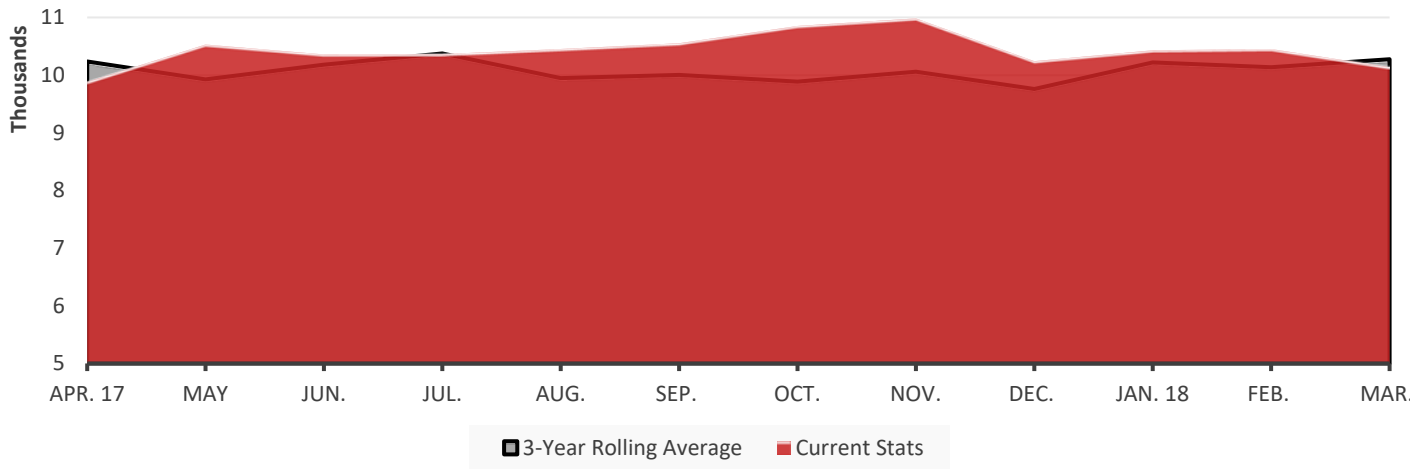


# AVERAGE DAILY RIDERSHIP

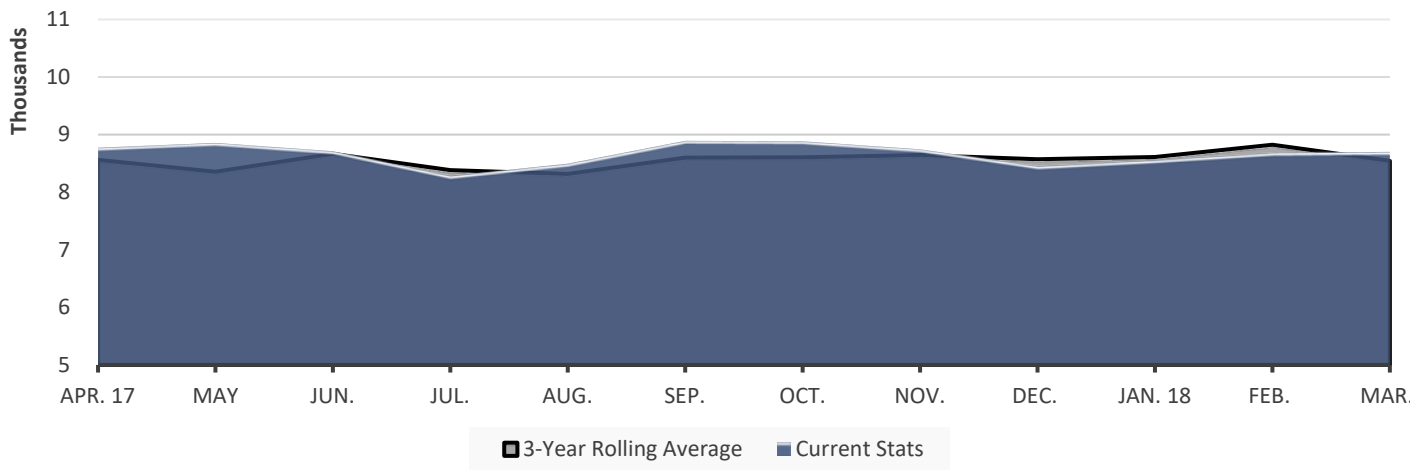
## VRE SYSTEM



## FREDERICKSBURG LINE



## MANASSAS LINE



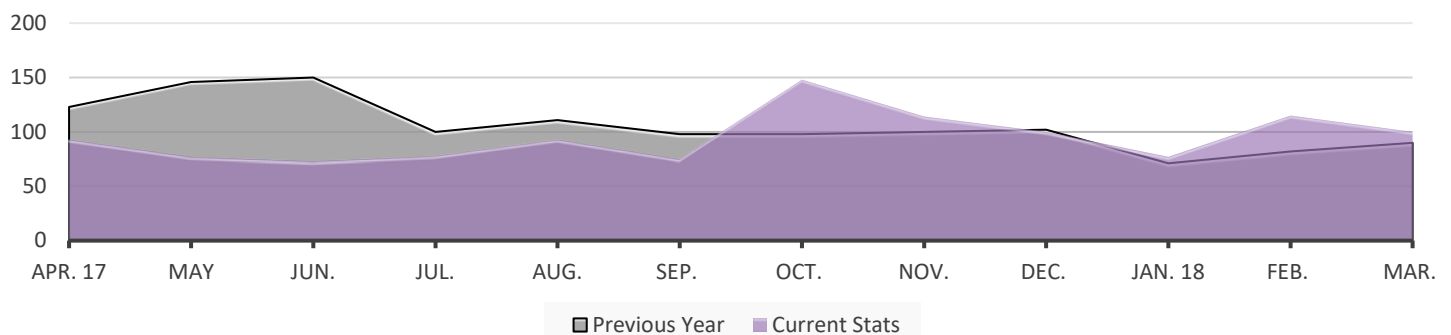
## RIDERSHIP UPDATES

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

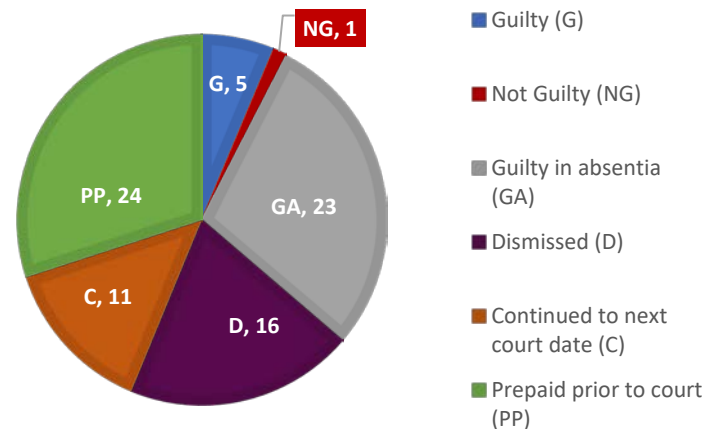
	March 2018	February 2018	March 2017
Monthly Ridership	382,411	363,591	435,471
Average Daily Ridership	18,835	19,136	19,794
Full Service Days	20	19	22
"S" Service Days	0	0	1

## SUMMONSES ISSUED

## VRE SYSTEM

SUMMONSES WAIVED  
OUTSIDE OF COURT

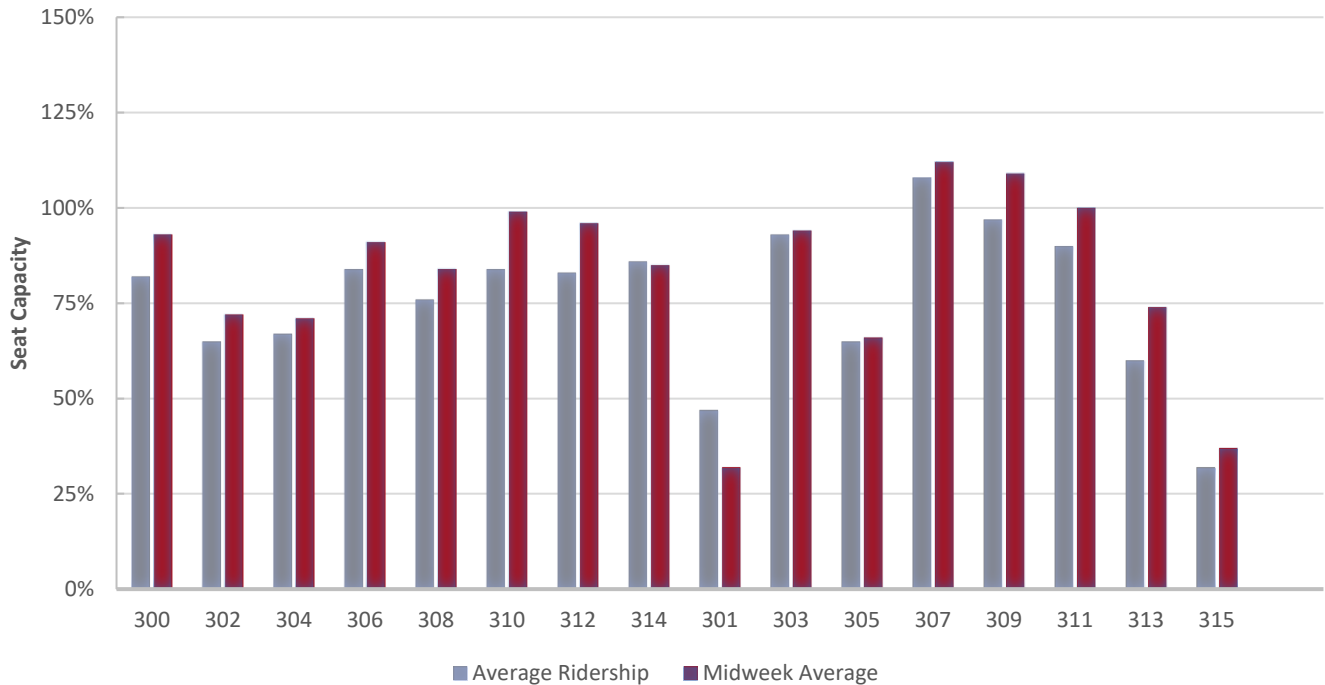
Reason for Dismissal	Occurrences
Passenger showed proof of a monthly ticket	67
One-time courtesy	13
Per the request of the conductor	11
Defective ticket	0
Per Ops Manager	0
Unique circumstances	0
Insufficient information	0
Lost and found ticket	0
Other	0
<b>Total Waived</b>	<b>91</b>

MONTHLY SUMMONSES  
COURT ACTION

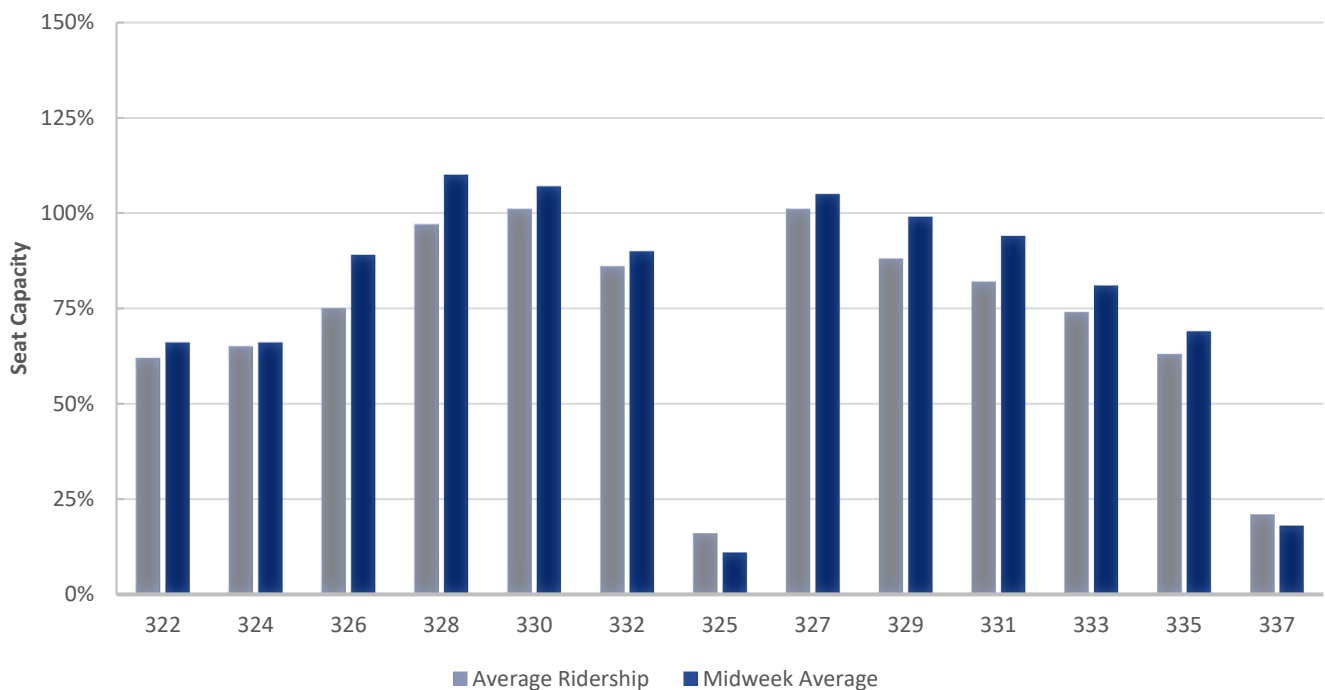


# TRAIN UTILIZATION

## FREDERICKSBURG LINE

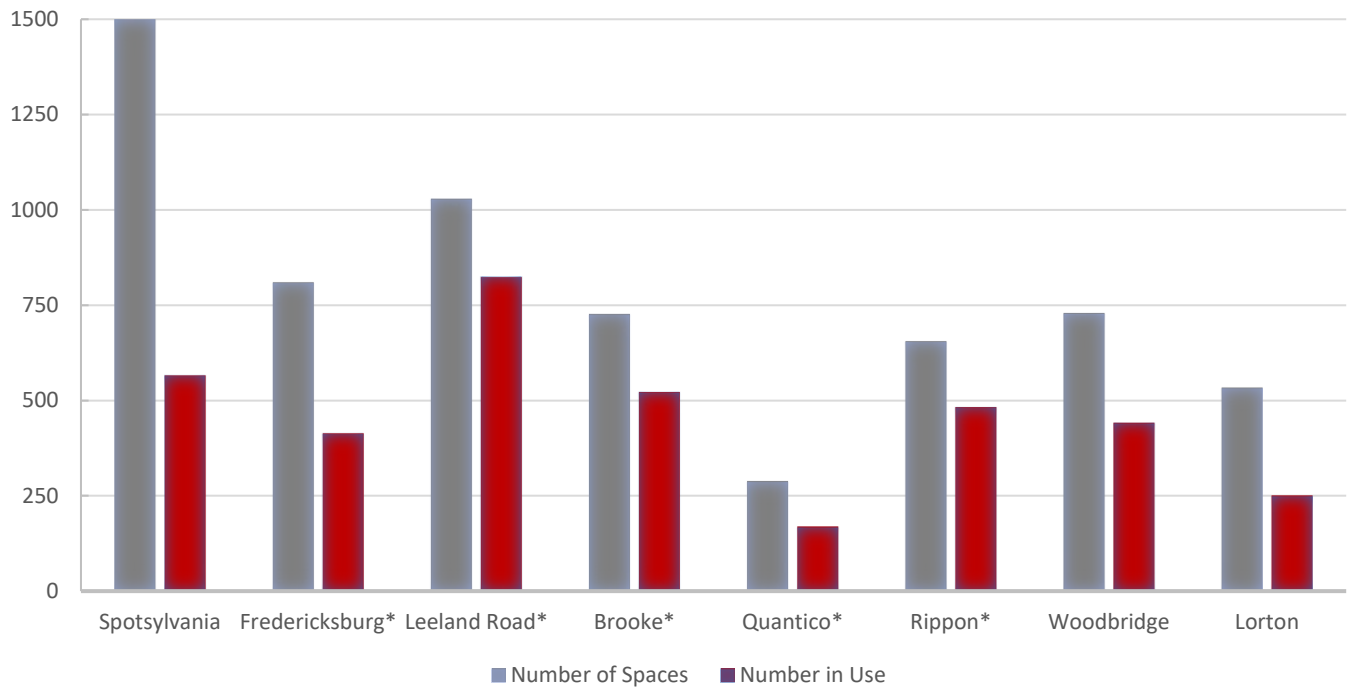


## MANASSAS LINE

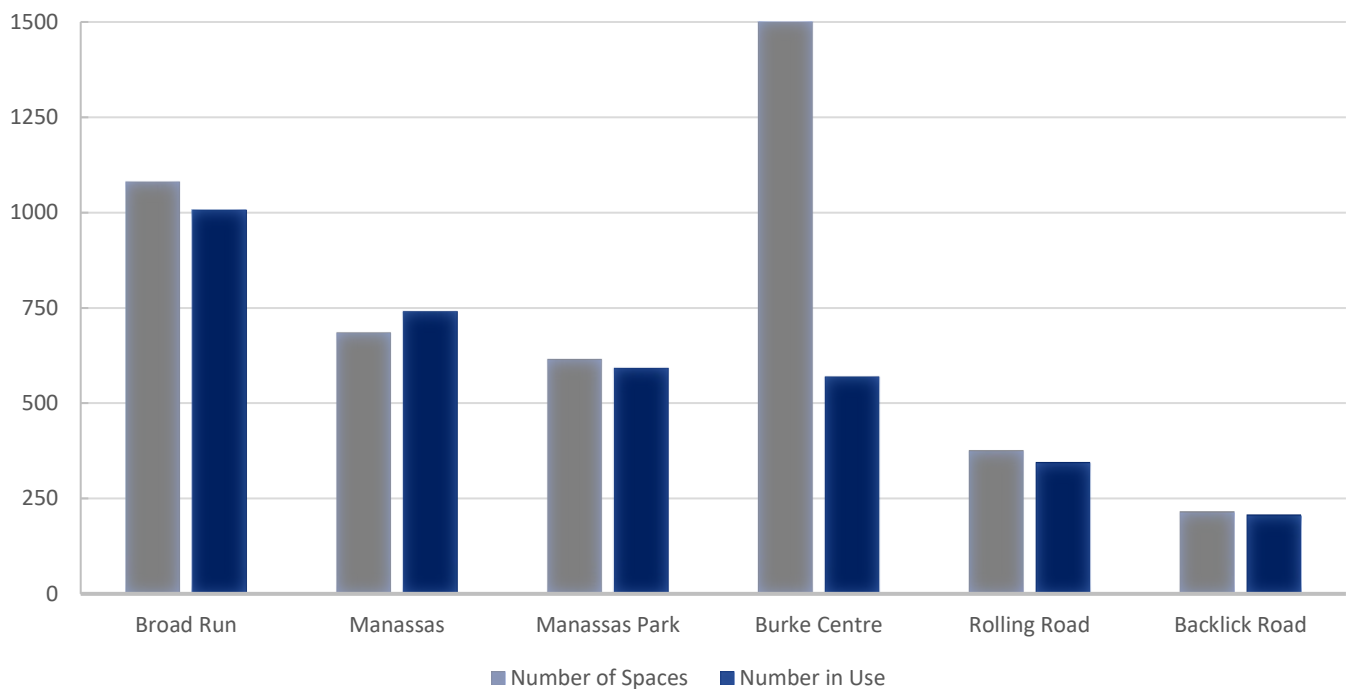


# PARKING UTILIZATION

## FREDERICKSBURG LINE



## MANASSAS LINE





# FINANCIAL REPORT

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

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

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

FY 2018 Operating Budget Report Month Ended March 31, 2018							
	CURR. MO. ACTUAL	CURR. MO. BUDGET	YTD ACTUAL	YTD BUDGET	YTD \$ VARIANCE	YTD % VARIANCE	TOTAL FY18 BUDGET
<b>Operating Revenue</b>							
Passenger Ticket Revenue	3,477,009	3,562,684	31,628,441	30,120,877	1,507,564	5.0%	40,485,050
Other Operating Revenue	1,904	19,800	198,395	167,400	30,995	18.5%	225,000
<b>Subtotal Operating Revenue</b>	<b>3,478,913</b>	<b>3,582,484</b>	<b>31,826,837</b>	<b>30,288,277</b>	<b>1,538,560</b>	<b>5.1%</b>	<b>40,710,050</b>
Jurisdictional Subsidy (1)	-	-	17,250,240	17,250,240	-	0.0%	12,875,140
Federal/State/Other Jurisdictional Subsidy	2,602,635	2,628,501	23,140,476	23,193,807	(53,331)	-0.2%	30,731,253
Appropriation from Reserve/Other Income	-	-	-	-	-	0.0%	955,000
Interest Income	54,618	6,600	422,220	55,800	366,420	656.7%	75,000
<b>Total Operating Revenue</b>	<b>6,136,166</b>	<b>6,217,585</b>	<b>72,639,773</b>	<b>70,788,125</b>	<b>1,851,649</b>	<b>2.6%</b>	<b>85,346,443</b>
<b>Operating Expenses</b>							
Departmental Operating Expenses	5,896,675	6,527,882	55,140,085	58,449,860	3,309,775	5.7%	78,595,573
Debt Service	559,753	559,573	5,037,936	5,036,153	(1,784)	0.0%	6,714,870
Other Non-Departmental Expenses	-	-	-	-	-	0.0%	36,000
<b>Total Operating Expenses</b>	<b>6,456,428</b>	<b>7,087,455</b>	<b>60,178,021</b>	<b>63,486,013</b>	<b>3,307,991</b>	<b>5.2%</b>	<b>85,346,443</b>
<b>Net income (loss) from Operations</b>	<b>(320,262)</b>	<b>(869,870)</b>	<b>12,461,752</b>	<b>7,302,112</b>	<b>5,159,640</b>	<b>0.0%</b>	<b>-</b>
<b>Operating Ratio</b>							
			<b>58%</b>	<b>52%</b>		<b>Goal</b>	<b>50%</b>

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

**VRE Investment Portfolio**  
**As of March 31, 2018**

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

Notes:

PNC contract allows for earnings credit of 0.35% on average monthly balance as an offset to banking service costs; credit earnings through March were 0.17%

LGIP earnings calculated based on the monthly average balance

Insurance trust fund rate based on interest earned through three quarters annualized to full fiscal year.

Percentage of Portfolio:

Checking-PNC	12.0%
LGIP	69.5%
Insurance Trust Fund	18.5%

## FY 2018 YEAR-END FINANCIAL FORECAST

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

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

### Operating Revenues – \$2.4 million positive variance

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



### **Operating Expenses – \$3.2 million positive variance**

- The largest single expense variance is in Diesel Fuel, which was budgeted at \$4.8 million and is forecast to be under budget by \$1.0 million. Fuel price increases that were expected in FY 2018 did not materialize, and VRE has already reduced its fuel price projections in the approved FY 2019 budget.
- All other operating expenses are forecast to be under budget by \$2.2 million, or 3.4% of budgeted operating expenditures:
  - Information Technology costs are forecast to be \$0.7 million below budget. This includes unspent amounts for Other Professional Services of \$0.2 million related to a revised schedule for the SharePoint project. The unspent funds may be carried forward into FY 2019. Total projected savings for Hardware/Software Maintenance is \$0.4 million, related to the development of several ongoing IT projects.
  - Total projected savings for Facilities Maintenance is projected to be \$0.6 million, primarily due to projected savings in Non-Routine Yard Maintenance and in Non-Routine Station/Facility Maintenance and Office Maintenance. Unspent funds of \$0.1 million may be carried forward into FY 2019 for the VRE office renovation.
  - Executive Management costs are projected to be \$0.4 million under budget, primarily due to lower expenditures on Legal Fees (under budget by \$0.3 million).
  - Total projected savings for salary and fringe benefits in the Chief of Staff and Project Implementation divisions is \$0.3 million due to staffing vacancies.
  - Other net departmental savings are projected at \$0.2 million, chiefly in Marketing and Safety and Security.

### **Non-Operating Expenses – \$1.0 million positive variance**

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

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

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

<b>FY2018 Year-End Operating Budget Forecast (in millions)</b>				
<b>Description</b>	<b>Revised Budget</b>	<b>Year-End Forecast</b>	<b>Variance</b>	<b>%</b>
Fare Revenue	\$40.5	\$42.5	\$2.0	4.8%
Local Subsidy*	12.9	12.9	0.0	0.0%
Fed/State Revenue	30.7	30.6	-0.1	-0.3%
Other Revenue	1.3	1.7	0.5	27.4%
Total Revenue	\$85.3	\$87.8	\$2.4	2.7%
Operating Expenses	\$73.9	\$70.7	\$3.2	4.6%
Non-Operating Expenses	4.7	3.7	1.0	26.8%
Debt Service	6.7	6.7	0.0	0.0%
Contribution to Reserve	0.0	0.0	0.0	0.0%
Total Expenses	\$85.3	\$81.1	\$4.2	4.9%
Net Income (Loss)	\$0.0	\$6.6	\$6.6	

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

# FACILITIES UPDATE

The following is a status update of VRE facilities projects:

## Completed projects:

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

## Projects scheduled to be completed this quarter:

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

## Projects scheduled to be initiated this quarter:

1. Design of platform widening at L'Enfant Station
2. Replacement of tactile warning strip at L'Enfant Station
3. Replacement of signage at Franconia-Springfield and Fredericksburg Stations
4. Painting of Franconia-Springfield Station
5. Continuation of painting of Woodbridge Station
6. Replacement of light poles and fixtures at Fredericksburg Station



*Trees and Brush Cleared for L'Enfant Storage Track Project*



*Platform Warning Messages to be Repainted at Broad Run Station*

7. Repairs to platform lighting and communications conduits at Manassas Park Station
8. Replacement of parking lot signage at various stations
9. Installation of monitoring wells on two outfall drainage pipes at Broad Run Yard to allow for accurate discharge sampling for VPDES General Permit compliance
10. Repairs to pavement and striping at Crossroads and Broad Run yards
11. Renovations to Alexandria Headquarters (leased Suite 201, adjacent to current VRE offices)
12. Replacement of parking lot entrance signs at majority of stations
13. Replacement of waste and recycling receptacles throughout VRE system

Ongoing projects:

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

# UPCOMING PROCUREMENTS

## Scope of Work Pending:

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



# CAPITAL PROJECTS UPDATES

AS OF APRIL 6TH, 2018

## Broad Run Expansion Study (BRX)

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

## System Plan 2040 Update

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

## FY18 National Transit Database 100 Percent Survey

- TO approved on March 16th by VRE Operations Board
- TO signed and Notice to Proceed (NTP) issued on March 22nd
- Kick-off meeting held on March 29th

#### Constrained Long Range Plan (CLRP) Update/Quadrennial CLRP Financial Analysis

- Coordinate development of CLRP project forms for SmartScale-funded, I-66 Outside the Beltway (OTB) Concession Payment funded VRE projects with Virginia Department of Transportation (VDOT)

#### Midday Storage Replacement Facility

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

#### Rolling Road Platform Extension

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

#### Crossroads Real Estate Acquisition

- Prepared and submitted offer package to VRE Legal on February 8th

#### Long Bridge Expansion Study

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

#### Southeast High Speed Rail Corridor (DC2RVA) Coordination

- Participated in coordination call with DRPT and the consultant team on March 27th

#### Washington Union Station Project Environmental Impact Statement (EIS)

- Provided comments to Amtrak on 90 percent drawings

#### Lorton Platform Extension

- Final invoice for Hammerhead processed and paid in March

#### Quantico Station Improvements

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

#### Franconia-Springfield Station Improvements

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

#### Lorton Station Improvements (Second Platform)

- 30 percent plan revisions pending final emergency egress and ADA access decisions by VRE, as well as design review comments by CSXT engineering and operations staff

#### Rippon Station Improvements

- Continued development of 30 percent plans and environmental documents

#### Leeland Road Station Improvements

- Continued development of 30 percent plans and environmental documents

#### Brooke Station Improvements

- Continued development of 30 percent plans and environmental documents

#### Alexandria Pedestrian Tunnel Project

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

#### Crossroads Lifecycle Overhaul & Upgrade Facility (LOU)

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

#### L'Enfant (North) Storage Track Wayside Power

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

#### L'Enfant (South) Storage Track Wayside Power

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

#### Slaters Lane/Alexandria Track 1 Access

- One outstanding progress report was passed through from CSXT to Northern Virginia Transportation Authority (NVTA); no additional progress reports are due
- Requested final design plans reported to have been completed in May 2017

#### Manassas Park Station Parking Expansion

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

## Projects Progress Report to Follow



## PASSENGER FACILITIES

PROJECT	DESCRIPTION	PHASE					
		CD	PD	EC	RW	FD	CN
Alexandria Station Improvements	Pedestrian tunnel to METRO and eliminate at-grade track crossing.	◆	◆	◆	N/A	●	
	Modify Slaters Lane Interlocking for passenger trains on Track #1.	◆	◆	◆	N/A	●	
	Extend and widen East Platform and elevate West Platform.	◆	◆	◆	N/A	●	
Franconia-Springfield Station Improvements	Extend both platforms and widen East Platform for future third track. <span style="color: red;">◆</span>	◆	●	●	N/A		
Lorton Station Improvements	Construct new second platform with pedestrian overpass. <span style="color: red;">◆</span>	◆	●	●	N/A		
Rippon Station Improvements	Extend existing platform, construct new second platform with pedestrian overpass. <span style="color: red;">◆</span>	◆	●	●	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. <span style="color: red;">◆</span>	◆	●	●	N/A		
Leeland Road Station Improvements	Extend existing platform, construct new second platform with pedestrian overpass. <span style="color: red;">◆</span>	◆	●	●	N/A		
Manassas Park Parking Expansion	Parking garage to increase parking capacity to 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		
L'Enfant Track and Station Improvements	Replace existing platform with wider, longer island platform. Add fourth track (VA-LE)	◆			N/A		

PHASE: CD - Conceptual Design PD - Preliminary Design EC - Environment Clearance

RW - Right of Way Acquisition FD - Final Design CN - Construction

STATUS: ◆ Completed ● Underway ■ On Hold ◆ part of the "Penta-Platform" program<sup>1</sup>Total project cost estimate in adopted FY2018 CIP Budget<sup>2</sup> Does not include minor (< \$50,000) operating expenditures

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

Total <sup>1</sup>	ESTIMATED COSTS (\$)			Expended <sup>2</sup>	COMPLETION			STATUS
	Funded	Unfunded	Authorized		Percent	Date		
10,021,865	10,021,865	-	1,814,559	1,534,387	70%	3rd QTR 2020	●	60% design complete. Investigating alternative construction strategies.
7,000,000	7,000,000	-	467,500	90,749	30%	3rd QTR 2018	●	Construction is anticipated to start as part of CSXT work program.
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	-	*	313,129	20%	2nd QTR 2020	●	Preliminary engineering is anticipated to be complete in 2nd QTR 2018.
16,150,000	16,150,000	-	*	336,243	20%	2nd QTR 2020	●	Preliminary engineering is anticipated to be complete in 2nd QTR 2018.
16,632,716	16,632,716	-	*	231,125	20%	4th QTR 2021	●	Preliminary engineering is anticipated to be complete in 3rd QTR 2018.
No costs for VRE. Private developer providing station.					10%	TBD	●	Design resumed after resolution of DRPT/CSXT/FRA track project issues.
9,500,000	9,500,000	574,706	-	-	30%	TBD	●	Completion of FD & construction pending execution of IPROC grant by DRPT.
21,334,506	21,334,506	-	*	220,914	20%	4th QTR 2021	●	Completion of PD & EC pending execution of REF grant by DRPT.
14,336,156	14,336,156	-	*	179,310	20%	4th QTR 2021	●	Completion of PD & EC pending execution of REF grant by DRPT.
19,600,000	2,500,000	17,100,000	665,785	601,176	25%	2nd QTR 2018	●	30% design plans received and under review.
2,000,000	2,000,000	-	442,900	224,030	20%	3rd QTR 2020	●	60% design plans under review by NS.
21,160,000	400,000	20,760,000	370,285	360,747	10%	2nd QTR 2023	●	Completion of PD & EC pending execution of REF grant by DRPT.
68,600,000	2,980,000	65,620,000	-	45,139	10%	2nd QTR 2023	●	Completion of planning, PD & EC pending execution of REF grant by DRPT.

## TRACK AND INFRASTRUCTURE

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

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	◆	◆	◆	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	◆	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.	◆	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

Broad Run Expansion (was Gainesville-Haymarket Extension)	NEPA and PE for expanding commuter rail service capacity in Western Prince William County	◆	●	●	-	-	-
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 FD - Final Design CN - Construction

STATUS: ◆ Completed ● Underway ■ On Hold

<sup>1</sup> Total project cost estimate in adopted FY2018 CIP Budget

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

Total <sup>1</sup>	ESTIMATED COSTS (\$)				COMPLETION		STATUS
	Funded	Unfunded	Authorized	Expended <sup>2</sup>	Percent	Date	
32,500,000	32,500,000	-	33,285,519	30,578,003	100%	4th QTR 2015	 Close-out pending repair of storm damage to embankment.
4,398,996	4,398,996	-	4,398,996	3,272,713	100%	4th QTR 2017	 Wayside power installation complete. Track and signals in service.
3,965,000	3,965,000	-	2,937,323	3,045,774	50%	3rd QTR 2017	 Power design under review by CSXT & Pepco. Track and signals in service.
38,146,323	38,146,323	-	3,176,039	3,156,717	30%	TBD	 Design 100% complete. On hold pending property acquisition.
2,950,000	2,950,000	-	2,950,000	2,950,000	90%	TBD	 Property appraisal underway, followed by review by FTA.
88,800,000	88,800,000	-	3,588,305	993,204	15%	4th QTR 2018	 Progress delayed pending Amtrak approval of site access for survey.
75,264,693	75,264,693	-	69,457,809	36,994,353	95%	4th QTR 2020	 All cars received. Completion date reflects end of warranty period.
10,553,000	10,553,000	-	10,294,079	7,472,954	80%	4th QTR 2018	 Onboard installations ongoing.
617,791,163	5,885,163	611,906,000	5,483,720	2,905,615	15%	3rd QTR 2022	 Focus on capacity improvements on existing Broad Run complex.
3,510,307	3,510,307	-	3,510,627	1,950,757	55%	2nd QTR 2018	 Integration with S&B system complete. Mobile now accounts for about 12% of monthly revenue and more than 25% of all tickets sold.



## **VIRGINIA RAILWAY EXPRESS**

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

[VRE.ORG](http://VRE.ORG)







VIRGINIA RAILWAY EXPRESS  
OPERATIONS BOARD

Item 6-B  
June 7, 2018  
PRTC Regular Meeting

# **VRE OPERATIONS BOARD MEETING**

**May 18, 2018**

**Executive Committee Meeting – 8:30 am**

**Operations Board Meeting - 9:00 am**

**CEO Evaluation Committee – Immediately following Operations  
Board Meeting**

**PRTC Headquarters  
14700 Potomac Mills Road  
Woodbridge, VA 22192**

1. Pledge of Allegiance
2. Roll Call
3. Approval of Agenda
4. Approval of Minutes from the April 20, 2018 VRE Operations Board Meeting
5. Chairman's Comments
6. Chief Executive Officer's Report
7. Virginia Railway Express Riders' and Public Comment
8. Consent Items:
  - A. Authorization to Issue a Task Order for Renovations to VRE Headquarters Suite 201
  - B. Authorization to Issue a Task Order for Tactile Warning Strip Replacement at L'Enfant Station



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

- C. Authorization to Issue a Task Order for Pavement Repairs and Striping at Crossroads and Broad Run Yards
9. Action Items:
- A. Authorization to Execute a Contract for Disaster Management Services
  - B. Authorization to Execute a Contract for an Automatic Passenger Count System
  - C. Recommend Authorization to Extend the Amended and Restated Operating/Access Agreement with CSX Transportation
  - D. Recommend Authorization to Submit VRE Projects to USDOT for FY 2018 BUILD Funding Consideration and Authorization of VRE Funds for Required Match
10. Information Items:
- A. Publication of Proposed Disadvantaged Business Enterprise Overall Annual Goal for Federal Fiscal Years 2019-2021
  - B. Broad Run Expansion Project Update
  - C. Spending Authority Report
11. Closed Session
12. Operations Board Member's Time

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**The Next VRE Operations Board Meeting  
June 15, 2018 - 9:00 am at PRTC**



**Virginia Railway  
Express**

Martin E. Nohe  
Chairman

Katie Cristol  
Vice-Chairman

Maureen Caddigan  
Secretary

John C. Cook  
Treasurer

Sharon Bulova  
Mark Dudenhefer  
John D. Jenkins  
Matt Kelly  
Wendy Maurer  
Jennifer Mitchell  
Suhas Naddoni  
Pamela Sebesky  
Gary Skinner  
Paul C. Smedberg

#### Alternates

Ruth Anderson  
Pete Candland  
Jack Cavalier  
Hector Cendejas  
Libby Garvey  
Todd Horsley  
Jeanine Lawson  
Tim Lovain  
Jeff McKay  
Michael McLaughlin  
Cindy Shelton  
Paul Trampe  
Billy Withers  
Mark Wolfe

Doug Allen  
Chief Executive Officer

1500 King Street, Suite 202  
Alexandria, VA 22314-2730

# MINUTES

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

Members Present	Jurisdiction
Sharon Bulova (NVTC)	Fairfax County
Maureen Caddigan (PRTC)	Prince William County
John C. Cook (NVTC)	Fairfax County
Katie Cristol (NVTC)	Arlington County
Mark Dudenhefer (PRTC)	Stafford County
John D. Jenkins (PRTC)	Prince William County
Matt Kelly (PRTC)	City of Fredericksburg
Martin E. Nohe (PRTC)	Prince William County
Pamela Sebesky (PRTC)	City of Manassas
Paul Smedberg (NVTC)	City of Alexandria

Members Absent	Jurisdiction
Wendy Maurer (PRTC)	Stafford County
Jennifer Mitchell	DRPT
Suhas Naddoni (PRTC)	City of Manassas Park
Gary Skinner (PRTC)	Spotsylvania County

Alternates Present	Jurisdiction
Todd Horsley	DRPT
Jeanine Lawson (PRTC)	Prince William County
Paul Trampe (PRTC)	Spotsylvania County

Alternates Absent	Jurisdiction
Ruth Anderson (PRTC)	Prince William County
Pete Candland (PRTC)	Prince William County
Jack Cavalier (PRTC)	Stafford County
Hector Cendejas (PRTC)	City of Manassas Park
Libby Garvey (NVTC)	Arlington County
Tim Lovain (NVTC)	City of Alexandria
Jeff McKay (NVTC)	Fairfax County
Michael McLaughlin	DRPT
Cindy Shelton (PRTC)	Stafford County
Billy Withers (PRTC)	City of Fredericksburg
Mark Wolfe (PRTC)	City of Manassas

Staff and General Public	
Doug Allen – VRE	Mike Lake – Fairfax County DOT
Monica Backmon – NVTA	Lezlie Lamb – VRE
Paolo Belita – Prince William County	Bob Leibbrandt – Prince William County
Nydia Blake – Prince William County	Steve MacIsaac – VRE Legal Counsel
Rick Canizales – Prince William County	Betsy Massie – PRTC
Rich Dalton – VRE	Kate Mattice – NVTC
Andrew D’huyvetter – NVTC	Kristen Nutter – VRE
Julie Elliott – Stafford County	Paul Rink – VRE
Lucy Gaddis – VRE	Bob Schneider – PRTC
Rhonda Gilchrest – NVTC	Mark Schofield – VRE
Tom Hickey – VRE	Steve Sindiong – Alexandria
Christine Hoeffner – VRE	Sonali Soneji – VRE
Pierre Holloman – Arlington County	Alex Sugatan – VRE
Todd Johnson – First Transit	Joe Swartz – VRE
John Kerins – Keolis	Cambria Ungaro – VRE
Cindy King – VRE	Ciara Williams – DRPT

Chairman Nohe called the meeting to order at 9:08 A.M. Following the Pledge of Allegiance, Roll Call was taken.

### Approval of the Agenda – 3

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

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

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

### Chairman's Comments –5

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

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

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

### Chief Executive Officer's Report –6

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

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

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

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

Mr. Allen announced VRE has held its first two Meet the Management events at Union Station (May 9) and L'Enfant Station (May 23), to be followed by Crystal City (May 24),

Alexandria (May 30) and Franconia-Springfield (June 6). VRE will also participate in the annual Manassas Rail Festival on June 2<sup>nd</sup> by running excursion trains to Clifton.

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

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

#### VRE Riders’ and Public Comment – 7

There were no rider or public comments.

#### Consent Agenda – 8

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

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

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

The Board then voted and passed the Consent Agenda.

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

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

Mr. Allen stated the Operations Board is being asked to authorize him to execute a contract with FEI Behavioral Health, Inc. of Milwaukee, Wisconsin for disaster management services



in the amount of \$34,850, plus a 10 percent contingency of \$3,485, for a total amount not to exceed \$38,335, for a base year and four option years, with the CEO exercising the option years at his discretion. Resolution #9A-05-2018 would accomplish this.

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

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

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

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

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

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

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

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

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

Recommend Authorization to Extend the Amended and Restated Operating/Access Agreement with CSX Transportation – 9C

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

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

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

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

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

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

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

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

Mr. Allen reported PRTC and VRE have established a DBE goal in accordance with USDOT regulations of 11.3 percent for federal fiscal years 2019-2021 and provisionally adopted the goal for FTA-assisted contracts. FTA requires all agencies with a DBE program to

advertise their proposed goals for a period of 30 days and seek public comment for 45 days from the date of publication.

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

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

#### Broad Run Expansion Project Update – 10B

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

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

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

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

#### Spending Authority Report –10C

The written report includes one task order for \$74,500 to Vanasse Hangen Brustlin, Inc., for development of a preliminary Maser Program Schedule.

Closed Session – 11

Chairman Nohe stated no Closed Session is needed.

Operations Board Member Time – 12

There were no comments.

Adjournment

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

Approved this 15<sup>th</sup> day of June 2018.

\_\_\_\_\_  
Martin Nohe  
Chairman

\_\_\_\_\_  
Maureen Caddigan  
Secretary

**CERTIFICATION**

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

*Rhonda Gilchrest*

\_\_\_\_\_  
Rhonda Gilchrest

**Virginia Railway Express  
Operations Board**

**Resolution  
8A-05-2018**

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

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

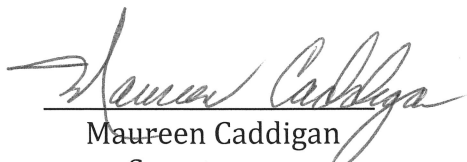
**WHEREAS**, the additional space will be utilized by VRE's Office of Development, currently occupying leased office space on South Peyton Street in Alexandria, as well as VRE executive staff; and,


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

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

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

Approved this 18<sup>th</sup> day of May 2018

  
Maureen Caddigan  
Secretary

  
Martin Nohe  
Chairman

**Virginia Railway Express  
Operations Board**

**Resolution  
8B-05-2018**

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

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

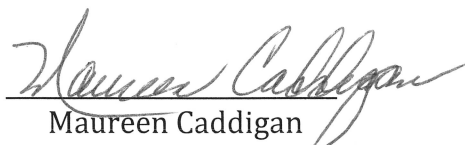
**WHEREAS**, due to years of exposure to the elements, they have experienced fading, delamination and chipping; and,

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

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

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

Approved this 18<sup>th</sup> day of May 2018

  
Maureen Caddigan  
Secretary



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Martin Nohe  
Chairman

**Virginia Railway Express  
Operations Board**

**Resolution  
8C-05-2018**

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

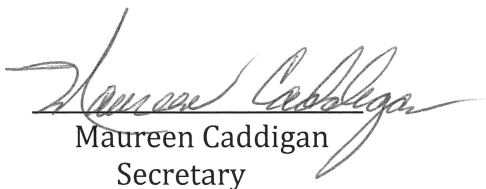
**WHEREAS**, in February 2018, the rail storage yards at Crossroads and Broad Run were assessed for necessary pavement repairs; and,


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

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

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

Approved this 18<sup>th</sup> day of May 2018

  
Maureen Caddigan  
Secretary

  
Martin Nohe  
Chairman



**Virginia Railway Express  
Operations Board**

**Resolution  
9A-05-2018**

**Authorization to Execute a Contract for Disaster Management Services**

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

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

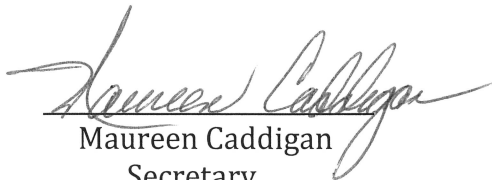
**WHEREAS**, a competitive procurement process was undertaken, yielding two proposals; and,

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

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

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

Approved this 18<sup>th</sup> day of May 2018

  
Maureen Caddigan  
Secretary



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Martin Nohe  
Chairman

**Virginia Railway Express  
Operations Board**

**Resolution  
9C-05-2018**

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

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

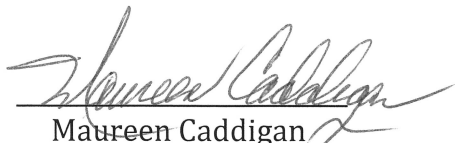
**WHEREAS**, VRE staff is currently engaged in ongoing discussions with CSXT concerning a new agreement and does not anticipate conclusion of these discussions prior to the expiration of the Amended and Restated Operating/Access Agreement on June 30, 2018; and,

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

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

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

Approved this 18<sup>th</sup> day of May 2019

  
Maureen Caddigan  
Secretary



Martin Nohe  
Chairman

**Virginia Railway Express  
Operations Board**

**Resolution  
9D-05-2018**

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

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

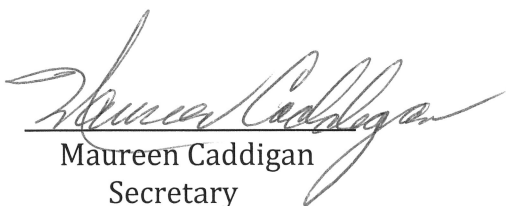
**WHEREAS**, funding is needed to allow the Final Design for the Crystal City and L'Enfant projects to be completed; and,


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

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

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

Approved this 18<sup>th</sup> day of May 2018

  
Maureen Caddigan  
Secretary

  
\_\_\_\_\_  
Martin Nohe  
Chairman



VIRGINIA RAILWAY EXPRESS  
OPERATIONS BOARD

Item 6-E  
June 7, 2018  
PRTC Regular Meeting

**Agenda Item 10-A**  
**Information Item**

**To: Chairman Nohe and the VRE Operations Board**

**From: Doug Allen**

**Date: May 18, 2018**

**Re: Publication of Proposed Disadvantaged Business Enterprise  
Overall Annual Goal for Federal Fiscal Years 2019 - 2021**

---

**Summary:**

At their meeting on May 3, 2018, the PRTC Board authorized the publication of the proposed Disadvantaged Business Enterprise (DBE) goal of 11.3 percent for Federal Fiscal Years (FFY) 2019 - 2021 and provisionally adopted the goal for FTA-assisted contracts.

**Background:**

PRTC and VRE have established a DBE program in accordance with Regulations of the United States Department of Transportation (DOT), 49 CFR Part 26 ("the Regulations"). The DBE program intends to provide contracting opportunities to small businesses owned and controlled by socially and economically disadvantaged individuals. The goal of the program is to "level the playing field" on which DBE businesses compete for contracts and subcontracts in the transportation industry.

The Regulations specify that DOT grantees must establish an overall triennial goal for DBE participation in federally assisted contracts, and prescribe implementation methods for achieving this goal. The methodology for determining the triennial goal is attached.



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



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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

The FTA requires all agencies with a DBE program to advertise their proposed goal for the upcoming fiscal years through various media (e.g. local newspapers and industry publications) for a period of 30 days and seek public comment for 45 days from the date of publication. A copy of the public notice is attached.

In addition to advertising the proposed goal, PRTC and VRE are required to provide for consultation with minority, women's and general contractor groups, which could be expected to provide information concerning the availability of disadvantaged and non-disadvantaged businesses. The consultation must include a scheduled, direct, interactive exchange with as many stakeholders as possible.

The proposed FFY 2019 - 2021 DBE goal of 11.3 percent for FTA-assisted contracts is based on an assessment of projected expenditures for FFY 2019 – 2021; a review of U.S. Census and other sources concerning the availability of DBE companies in the industries and geographic markets relevant to PRTC and VRE; and consideration of PRTC's and VRE's historical utilization of DBE companies. Management believes this goal is a reasonable projection of overall DBE participation for the upcoming fiscal years.

At their meeting on May 3, 2018, the PRTC Board authorized the publication of the proposed FFY 2019 - 2021 goal and provisionally adopted the goal, subject to the condition that the public inspection and consultation process does not result in any public comments that necessitate reconsideration or modification of the proposed goal. If reconsideration is needed, the Commission will be asked to review and adopt the final FFY 2019 - 2021 goal after completion of the consultative process and the public comment period. PRTC is required to submit the proposed FFY 2019 - 2021 DBE overall goal to the FTA by August 1, 2018. The goal, once adopted, will be posted on the PRTC and VRE websites and included in relevant procurement documents involving FTA-assisted contracting opportunities.



VIRGINIA RAILWAY EXPRESS  
OPERATIONS BOARD

Item 6-F  
June 7, 2018  
PRTC Regular Meeting

**Agenda Item 10-B**  
**Information Item**

**To: Chairman Nohe and the VRE Operations Board**

**From: Doug Allen**

**Date: May 18, 2018**

**Re: Broad Run Expansion Project Update**

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**Summary:**

VRE has initiated the design of near-term (2022) improvements for the Broad Run Maintenance and Storage Facility (MSF), Broad Run station, and a third main track between Broad Run and Manassas. Several expansion concepts have been evaluated and discussed. The purpose of this item is to continue the discussion and reach consensus on the preferred alternative to advance into preliminary engineering (PE) and National Environmental Policy Act (NEPA) review.

**Broad Run Expansion Project Background:**

In March 2017, VRE's Operations Board unanimously adopted their preferred alternative for the Gainesville-Haymarket Extension study, which was expansion of the current Broad Run terminus. The Broad Run Expansion (BRX) alternative continues the operation of Manassas Line service out of a larger Broad Run Station and expands the capacity of the existing Broad Run MSF.

Proposed improvements include:

- Additional railcars and expansion of the existing Broad Run MSF to accommodate more and longer trains;
- Additional parking spaces at Broad Run Station;



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- A new third mainline track between Manassas and Broad Run within the existing Norfolk Southern Railway (NS) right-of-way; and
- Adjustments to the Broad Run platform to accommodate the above changes.

Design objectives include: accommodating near-term growth and a long-term focus consistent with proposed System Plan 2040 service expansion.

The near-term plans will be implemented using funds from the I-66 Outside the Beltway (OTB) Express Lanes concessionaire payment and have been developed to minimize impacts to facilities and operations as future, long-term improvements are constructed.

The design process resulted in two concepts for the Broad Run station and MSF expansion:

- “South” concept expands the Broad Run complex within and adjacent to the existing station and MSF footprint, on land already owned by PRTC or Prince William County.
- “North/South” concept expands the MSF within and adjacent to existing facilities and locates additional station parking north of the Broad Run complex and the Norfolk Southern (NS) railroad right-of-way.

Selection of a preferred development concept for the Broad Run complex, including the specific location for parking expansion, is needed before more detailed PE plans can be initiated and NEPA review completed.

### **Project Update:**

Staff will provide an update to facilitate further discussion on this project.





VIRGINIA RAILWAY EXPRESS  
OPERATIONS BOARD

Item 6-G  
June 7, 2018  
PRTC Regular Meeting

**Agenda Item 10-C**  
**Information Item**

**To: Chairman Nohe and the VRE Operations Board**

**From: Doug Allen**

**Date: May 18, 2018**

**Re: Spending Authority Report**

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On May 15, 2015, the VRE Operations Board approved increasing the Chief Executive Officer's spending authority from \$50,000 to \$100,000. It was resolved any purchase of greater than \$50,000 would be communicated to the Board as an information item.

- On April 17, 2018, VRE issue a Task Order for \$74,500, to Vanasse Hangen Brustlin, Inc., for development of a preliminary Master Program Schedule encompassing VRE's capital projects as well as related ancillary projects managed by others, to include Amtrak, DRPT, VDOT and DDOT.



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Potomac and Rappahannock  
Transportation Commission

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Woodbridge, VA 22192

June 7, 2018

TO: Madam Chair Anderson and PRTC Commissioners

FROM: Perrin A. Palistrant   
Director of Operations and Operations Planning

THROUGH: Robert A. Schneider, PhD   
Executive Director

RE: April System Performance and Ridership Report

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OmniRide Express and Metro Direct Service\*

- April average daily ridership increased just under 1 percent compared to March
- Relatively good weather and the absence of holidays allowed for consistent ridership
- Staff is analyzing various operational challenges, such as staging locations in DC and the travel times from the County back into the urban core to make necessary adjustments

OmniLink Local Bus Service\*

- April average daily ridership increased 9 percent from March
- Warmer weather and no school holidays allowed for a spike in ridership from March
- Woodbridge local service relocated two stops near shopping centers at the request of property owners to reduce loitering and congregating near stores

Vanpool Alliance Program

- Enrollment stayed stable at 664 vans
- March ridership was slightly lower than the same period of the year prior at 124,857, mainly due to weather delays and closures

OmniMatch Program

- Promoted the program as follows:
  - April 5<sup>th</sup> – Patent Trade Office Green Fair

OmniRide • Metro Direct • OmniLink • Cross County Connector • OmniMatch • VRE

Administrative Office: (703) 583-7782 • Customer Info: (703) 730-6664 • Toll Free: (888) 730-6664 • Fax: (703) 583-1377 • [PRTCtransit.org](http://PRTCtransit.org)

Madam Chair Anderson and PRTC Commissioners

June 7, 2018

Page 2

- April 5<sup>th</sup> – George Mason University Health and Wellness Fair
- April 6<sup>th</sup> – George Mason University Transit Roundtable
- April 17<sup>th</sup> – Stratford New Student Meet and Greet
- April 19<sup>th</sup> – Lockheed Martin Earth Day Event
- April 20<sup>th</sup> – PWC Chamber of Commerce Mega Networking Event
- April 24<sup>th</sup> – George Mason University Alternative Transportation Table Top Event
- April 26<sup>th</sup> – Carlyle Center (Alexandria) Ridesharing Event
- April 27<sup>th</sup> – PWC Chamber of Commerce Education/Innovation Breakfast
- April 30<sup>th</sup> – PWC Chamber of Commerce Economic Development Series Luncheon

#### Customer Service Statistics

- Received 4,871 calls in April
- Automated system handled 47 percent of calls
- Average wait time for remaining calls was 1:19
- Responded to 31 general information emails
- Percentage of OmniLink trip denials decreased

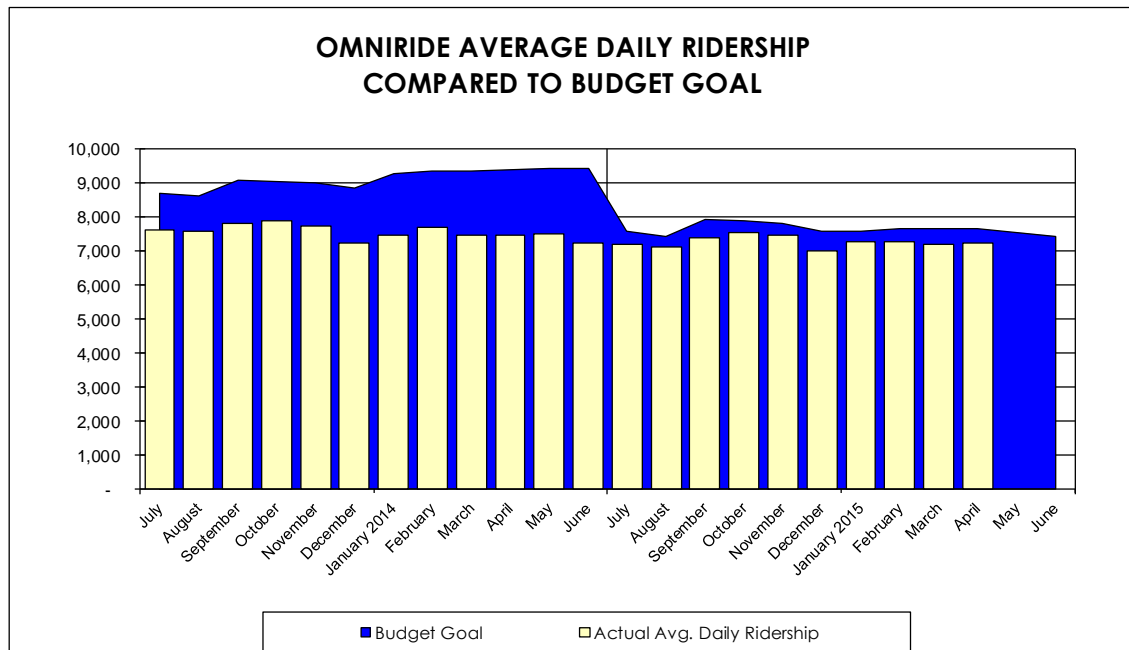
#### Passenger Complaints

- Complaint rate for OmniRide increased and OmniLink decreased in April
- OmniRide complaint rate for FY18 year-to-date is four percent lower than FY17
- OmniLink complaint rate for FY18 year-to-date is 18 percent higher than FY17

\*Excludes heavy rains with localized flooding and traffic delays on April 16<sup>th</sup>

## OMNIRIDE EXPRESS SERVICE

Month	Monthly Ridership		Average Daily Ridership			FY18 Budget Goal	Change from Goal
	FY17	FY18	FY17	FY18	% Change		
July	150,922	140,343	7,621	7,225	-5.2%	7,599	(374)
August	175,881	164,929	7,599	7,114	-6.4%	7,427	(313)
September	162,621	147,004	7,811	7,417	-5.0%	7,943	(526)
October	158,700	158,222	7,919	7,572	-4.4%	7,913	(341)
November	146,086	138,188	7,735	7,458	-3.6%	7,806	(348)
December	133,654	123,853	7,237	7,022	-3.0%	7,602	(580)
January	136,374	145,038	7,485	7,304	-2.4%	7,596	(292)
February	146,303	136,436	7,722	7,290	-5.6%	7,688	(398)
March	166,060	142,166	7,494	7,199	-3.9%	7,655	(456)
April	147,112	152,156	7,459	7,239	-2.9%	7,675	(436)
May							
June							
<b>Year to Date</b>	<b>1,523,713</b>	<b>1,448,335</b>	<b>7,608</b>	<b>7,284</b>	<b>-4.3%</b>	<b>7,690</b>	<b>(406)</b>



**At year's end figures are revised, if needed, to account for any lingering data latency.**

7/16 - Avg. Daily Ridership excludes the Friday before and Tuesday after July 4

9/16 - Avg. Daily Ridership excludes the Friday before Labor Day

10/16 - Avg. Daily Ridership excludes Friday before Columbus Day (7) and Columbus Day (11).

11/16 - Avg. Daily Ridership excludes Election Day (8), Veterans Day (11), and days before and after Thanksgiving (22,23,25 and 30)

12/16 - Avg. Daily Ridership excludes Christmas tree lighting (1), and holiday period (19-30)

1/17 - Avg. Daily Ridership excludes MLK Day (16), Inauguration ESP Service (18-20), AM snow/PWC School in service day (30)

2/17 - Avg. Daily Ridership excludes Friday before President's Day (17) and President's Day (20)

3/17 - Avg. Daily Ridership Excludes Snow/Schools Closed (14,15)

4/17 - Avg. Daily Ridership excludes PWC Spring Break (10-14 and 17)

5/17 - Avg. Daily ridership excludes days before and after Memorial Day holiday (26 and 30)

6/17 - Avg. Daily Ridership excludes Friday before Fourth of July Holiday (30)

7/17 - Avg. Daily ridership excludes days before and after Fourth of July Holiday (3,5,6,7)

9/17 - Avg. Daily Ridership Excludes Friday before Labor Day Holiday (1)

10/17 - Avg. Daily Ridership Excludes Friday before Columbus Day and Columbus Day (5, 8)

11/17 - Avg. Daily Ridership Excludes Day before Veterans Day (10), Week of Thanksgiving and Monday after (20-24 and 27), Christmas Tree Lighting ESP

12/17 - Avg. Daily Ridership excludes holiday period (20-29)

1/18 - Avg. Daily Ridership excludes New Year's holiday and weather related school closures (2-5), MLK Holiday (15), School closures-snow (17), Federal

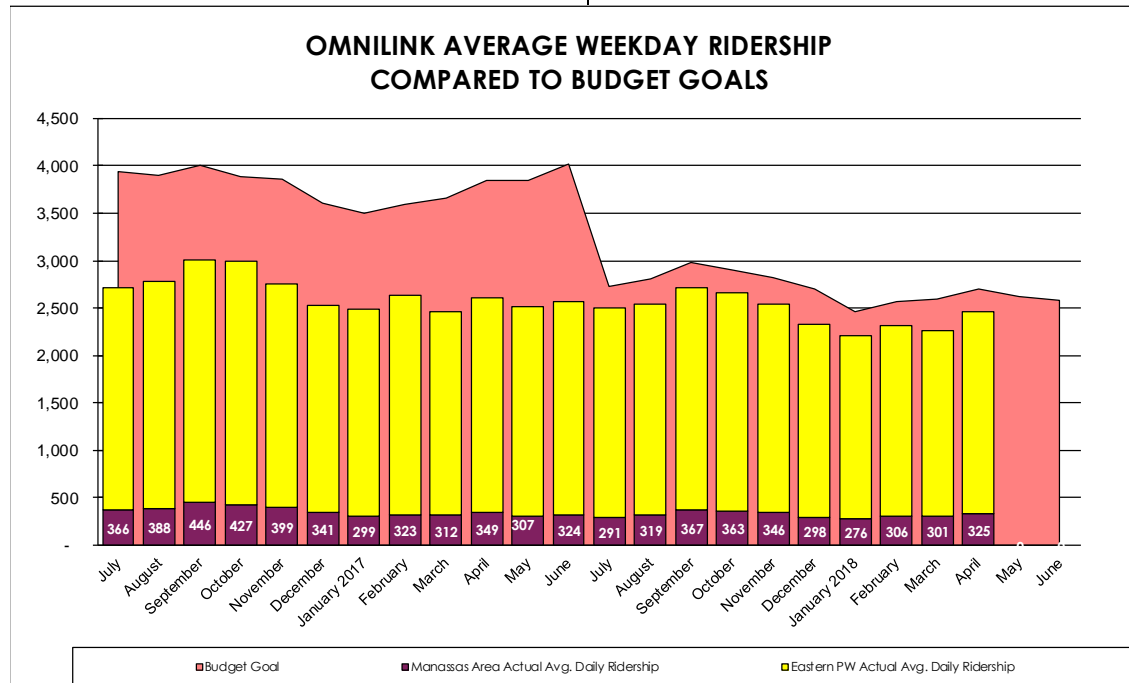
2/18 - Avg. Daily Ridership excludes weather related school closures and delays (7), Friday before President's Day (16) President's Day Holiday (19)

3/18 - Avg. Daily Ridership excludes weather related school closures and delays (2,21,22), PWC Spring Break/Good Friday (26-30)

4/18 - Avg. Daily Ridership excludes weather related road delays and service disruptions (16)

## OMNILINK LOCAL SERVICE

WEEKDAY							
Month	Monthly Ridership		Average Daily Ridership			FY18 Budget Goal	Change from Goal
	FY17	FY18	FY17	FY18	% Change		
July	54,174	49,365	2,715	2,507	-7.7%	2,723	(216)
August	63,944	58,330	2,780	2,536	-8.8%	2,807	(271)
September	61,832	54,048	3,003	2,709	-9.8%	2,985	(276)
October	61,742	57,288	2,991	2,659	-11.1%	2,906	(247)
November	54,900	50,905	2,753	2,540	-7.7%	2,824	(284)
December	50,602	43,042	2,531	2,331	-7.9%	2,695	(364)
January	50,650	44,114	2,483	2,208	-11.1%	2,458	(250)
February	51,955	45,089	2,632	2,320	-11.9%	2,563	(243)
March	54,011	46,223	2,456	2,258	-8.1%	2,600	(342)
April	51,647	51,312	2,603	2,464	-5.3%	2,707	(243)
May							
June							
<b>Year to Date</b>	<b>555,457</b>	<b>499,716</b>	<b>2,695</b>	<b>2,453</b>	<b>-9.0%</b>	<b>2,727</b>	<b>(273)</b>



**At year's end figures are revised, if needed, to account for any lingering data latency.**

7/16 - Avg. Daily ridership excludes Tuesday after Fourth of July holiday.

9/16 - Avg. Daily Ridership excludes heavy rainfall and storms on the 29th and 30th.

10/16 - Avg. Daily Ridership excludes Columbus Day (11).

11/16 - Avg. Daily Ridership excludes Election Day (8), Veterans Day (11), and days before and after Thanksgiving (22,23,25 and 30)

12/16 - Avg. Daily Ridership excludes holiday period (19-30)

1/17 - Avg. Daily Ridership excludes MLK Day (16), Inauguration Day schools closed (20), AM Snow/PWC school in service day (30)

2/17 - Avg. Daily Ridership excludes President's Day (20)

3/17 - Avg. Daily Ridership excludes Snow/Schools Closed (14,15)

4/17 - Avg. Daily Ridership excludes PWC Spring Break (10-14 and 17)

7/17 - Avg. Daily Ridership excludes days before and after Fourth of July Holiday (3,5,6,7)

9/17 - Avg. Daily Ridership excludes Friday before Labor Day (1)

10/17 - Avg. Daily Ridership excludes Columbus Day (8)

11/17 - Avg. Daily Ridership excludes Election Day (7), Veterans Day Observed (10), Wednesday before and Friday after Thanksgiving (23 and 25)

12/17 - Avg. Daily Ridership excludes holiday period (20-29)

1/18 - Avg. Daily Ridership excludes New Year's holiday and weather related school closures (2-5), MLK Holiday (15), School closures-snow (17)

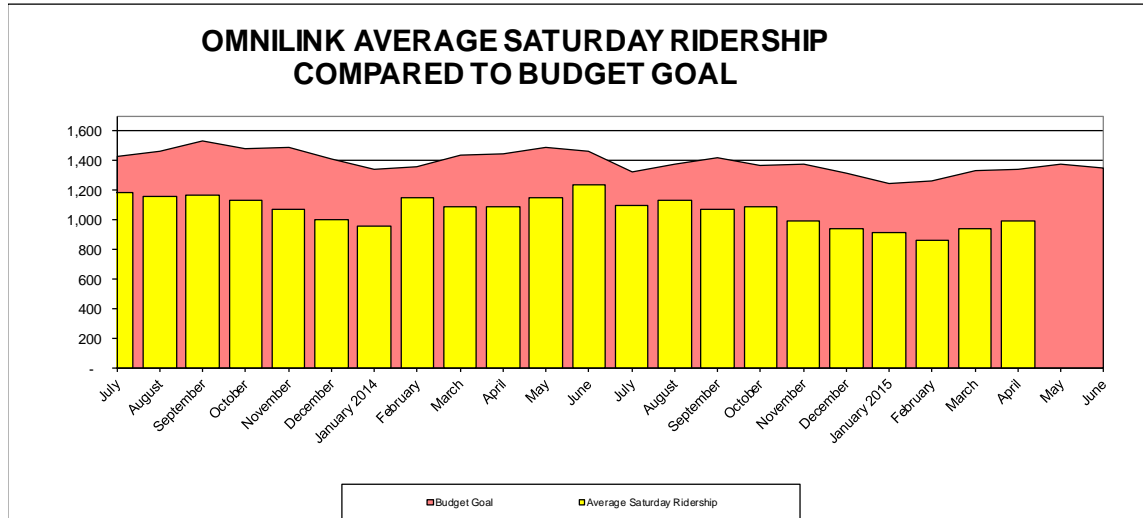
2/18 - Avg. Daily Ridership excludes weather related school closures (7), President's Day Holiday (19)

3/18 - Avg. Daily Ridership excludes weather related school closures (2,21,22), Good Friday (30)

4/18 - Avg. Daily Ridership excludes weather related roadway delays and ridership shifts (16)

## OMNILINK LOCAL SERVICE

SATURDAY							
Month	Monthly Ridership		Average Saturday Ridership			Average Saturday FY18 Budget Goal	Change from Goal
	FY17	FY18	FY17	FY18	% Change		
July	5,931	5,606	1,186	1,099	-7.4%	1,433	(334)
August	4,628	4,528	1,157	1,132	-2.2%	1,482	(350)
September	4,672	5,350	1,168	1,070	-8.4%	1,529	(459)
October	5,661	4,349	1,132	1,087	-4.0%	1,474	(387)
November	4,294	3,966	1,074	992	-7.6%	1,474	(482)
December	4,181	4,119	998	944	-5.4%	1,409	(465)
January	3,511	3,423	961	914	-4.9%	1,334	(420)
February	4,600	3,437	1,150	859	-25.3%	1,364	(505)
March	4,339	4,581	1,085	944	-13.0%	1,428	(484)
April	5,454	3,966	1,091	992	-9.1%	1,438	(446)
May							
June							
<b>Year to Date</b>	<b>47,271</b>	<b>43,325</b>	<b>1,100</b>	<b>1,003</b>	<b>-8.8%</b>	<b>1,436</b>	<b>(433)</b>



**At year's end figures are revised, if needed, to account for any lingering data latency.**

12/16 - Excludes weather/delayed start of service (17) and Christmas Eve (24)

1/17 - Excludes snow/ice (7)

12/17 - Excludes weather (9) and New Years Eve weekend/very cold weather (30)

1/18- Excludes snow/very cold weather (6)

3/18- Excludes wind event/early mall closures and severe traffic (3)

# OMNIMATCH / VANPOOL ALLIANCE

	OmniMatch					Vanpool Alliance			
	FY17	FY18	FY17	FY18	FY18	FY17	FY18	FY17	FY18
	New Applications Received	New Applications Received	Other Applications Received	Other Applications Received	Other Applications Received	Vanpools Enrolled	Vanpools Enrolled	Monthly Passenger Trips	Monthly Passenger Trips
July	30	34	16	5	5	577	653	108,930	117,257
August	16	36	16	20	20	586	658	123,562	133,874
September	84	22	10	15	15	588	659	117,862	116,527
October	71	52	25	12	12	606	662	117,283	127,548
November	40	40	13	17	17	614	663	115,731	120,117
December	28	25	9	10	10	621	650	109,232	108,423
January	44	47	1	10	10	624	652	116,304	128,991
February	27	32	12	5	5	626	664	114,271	117,217
March	47	47	9	13	13	630	664	133,006	124,857
April	43	42	24	13	13	635	668	118,117	130,115
May									
June									
<b>Average</b>	<b>43</b>	<b>38</b>	<b>14</b>	<b>12</b>	<b>12</b>	<b>611</b>	<b>659</b>	<b>117,430</b>	<b>122,493</b>

- 1) "New PRTC Applications Received" include all new customers inquiring about rideshare options in Prince William, Manassas, and Manassas Park.
- 2) "Other Applications Received" include reapplicants, deletions and commuters contacted as a follow-up interested in remaining in the program.
- 3) "Vanpools Enrolled" includes all vanpools approved as of last day of the month.



## FY18 Customer Service Department Monthly Service Totals

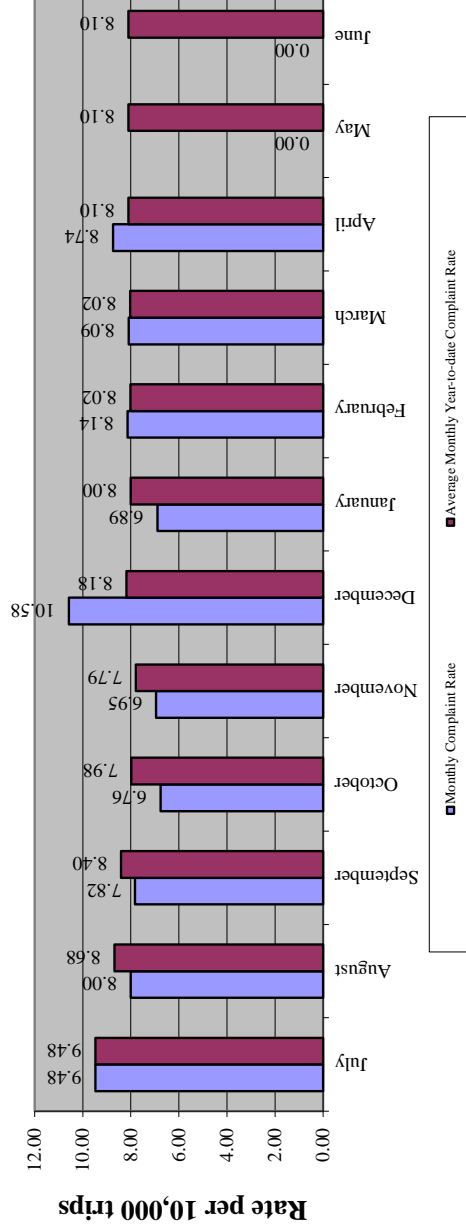
	<u>April</u>	<u>March</u>	<u>Change</u>	<u>% Change</u>
<b>CALL ACTIVITY</b>				
Total Incoming Calls	9,022	9,849	-827	-8%
Percentage Handled by IVR	46%	50%	0	-8%
Percentage Handled by CS	47%	46%	0	2%
Percentage Abandoned	7%	5%	0	38%
Daily Average	170	173	-3	-2%
Average Waiting Time	1:19	:50	:29	#VALUE!
<b>RIDERSHIP</b>				
Off-route trips Scheduled:				
One Time Trips	1,429	1,503	-74	-5%
Standing Order Trips	750	756	-6	-1%
Sub Total	2,179	2,259	-80	-4%
Daily Average	87	90	-3	-4%
Fixed Route:	53,099	46,267	6,832	15%
Total Ridership*	55,278	48,526	6,752	14%
<b>RIDER ACCOMODATIONS</b>				
Total Trip Turn Downs	28	30	-2	-7%
% Of Trips Turned Down	1.27%	1.31%	-0.04%	-3%

\* - Includes Saturday ridership

FY 2017 Year-to-date OmniRide Complaints			
	Ridership	Complaints	Per 10k Trips
July	150,922	154	10.20
August	175,881	127	7.22
September	162,621	141	8.67
October	158,700	126	7.94
November	146,086	99	6.78
December	133,654	165	12.35
January	136,374	84	6.16
February	146,303	88	6.01
March	166,060	132	7.95
April	147,112	168	11.42
May			
June			
Year-to-date totals	1,523,713	1,284	8.43

FY 2018 Year-to-date OmniRide Complaints			
	Ridership	Complaints	Per 10k Trips
July	140,343	133	9.48
August	164,929	132	8.00
September	147,004	115	7.82
October	158,222	107	6.76
November	138,188	96	6.95
December	123,853	131	10.58
January	145,038	100	6.89
February	136,436	111	8.14
March	142,166	115	8.09
April	152,156	133	8.74
May			
June			
Year-to-date totals	1,448,335	1,173	8.10

**FY 2018 OmniRide Complaint Rate per 10,000 Trips Compared to Monthly Average**

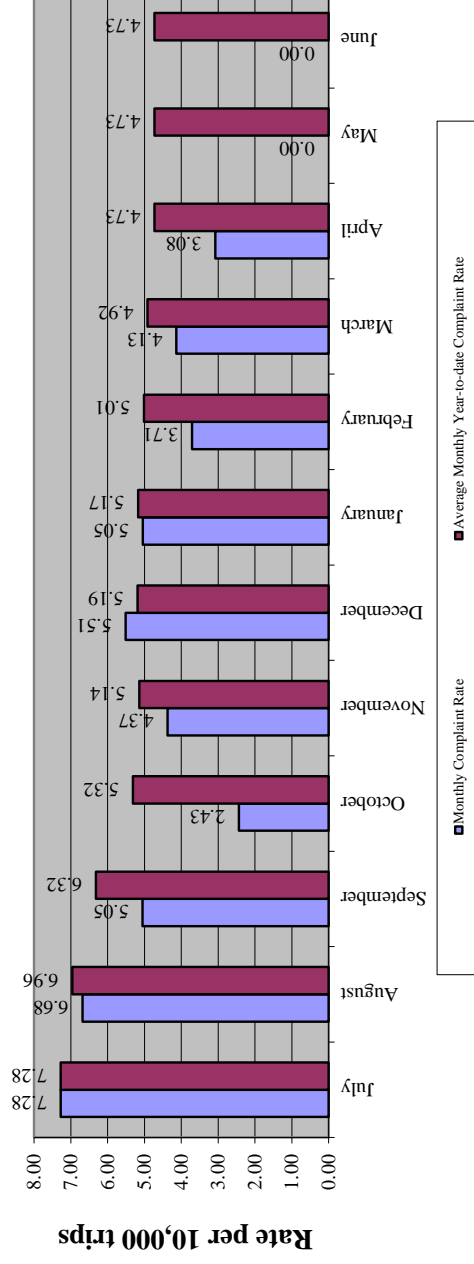


Complaint rates for OmniRide service for the current month and for the year-to-date in contrast to fiscal year 2017 overall rate, which is the benchmark for evaluating contractor performance for fiscal year 2018 in the bus services contract.

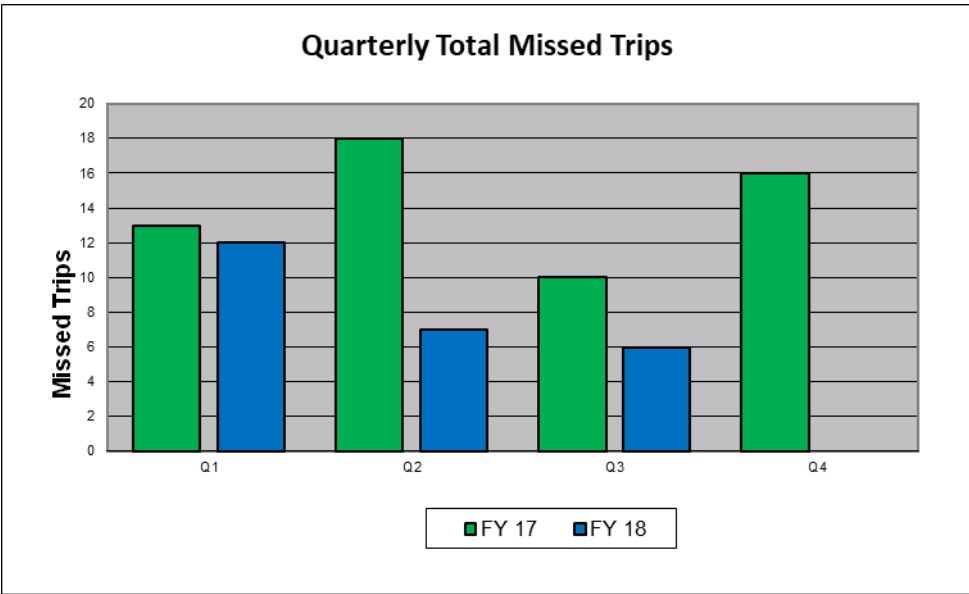
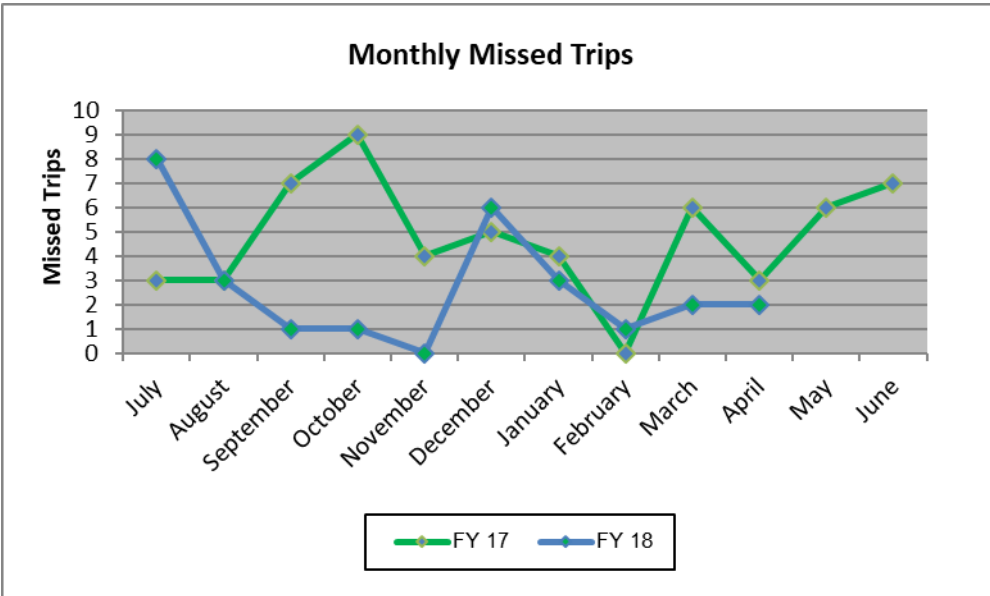
FY 2017 Year-to-date OmniLink Complaints			
	Ridership	Complaints	Per 10k Trips
July	60,105	20	3.33
August	68,572	24	3.50
September	66,504	25	3.76
October	67,403	30	4.45
November	59,194	13	2.20
December	54,783	29	5.29
January	54,161	22	4.06
February	56,555	18	3.18
March	58,350	32	5.48
April	57,101	29	5.08
May			
June			
<b>Year-to-date totals</b>	<b>602,728</b>	<b>242</b>	<b>4.02</b>

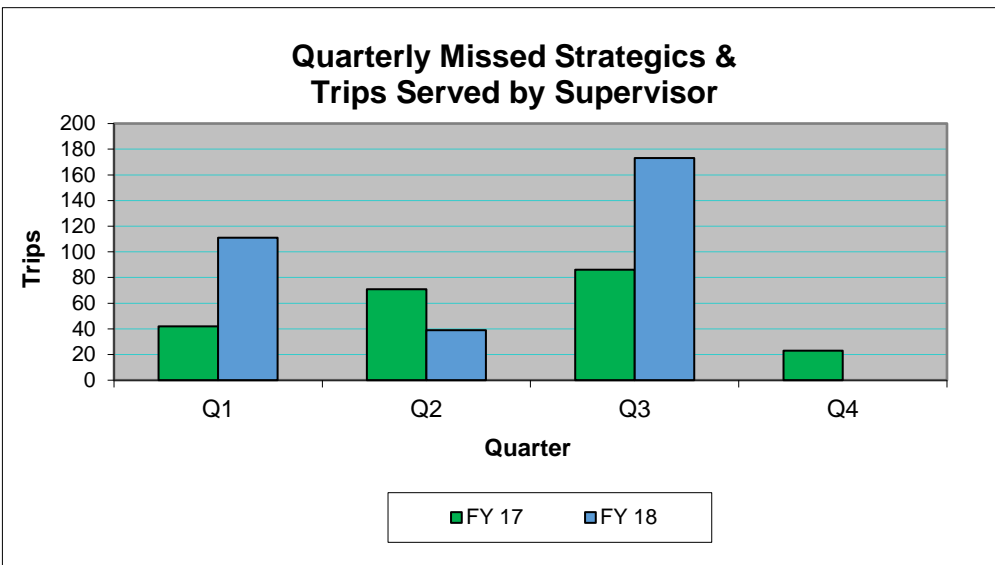
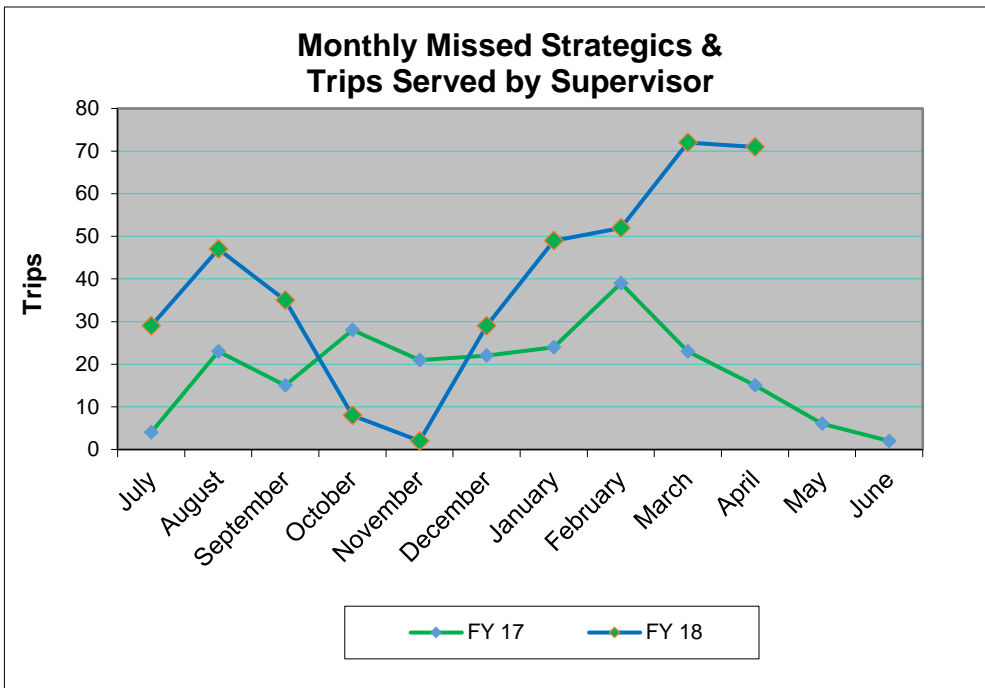
FY 2018 Year-to-date OmniLink Complaints			
	Ridership	Complaints	Per 10k Trips
July	54,971	40	7.28
August	62,858	42	6.68
September	59,398	30	5.05
October	61,637	15	2.43
November	54,871	24	4.37
December	47,161	26	5.51
January	47,537	24	5.05
February	48,526	18	3.71
March	50,804	21	4.13
April	55,278	17	3.08
May			
June			
<b>Year-to-date totals</b>	<b>543,041</b>	<b>257</b>	<b>4.73</b>

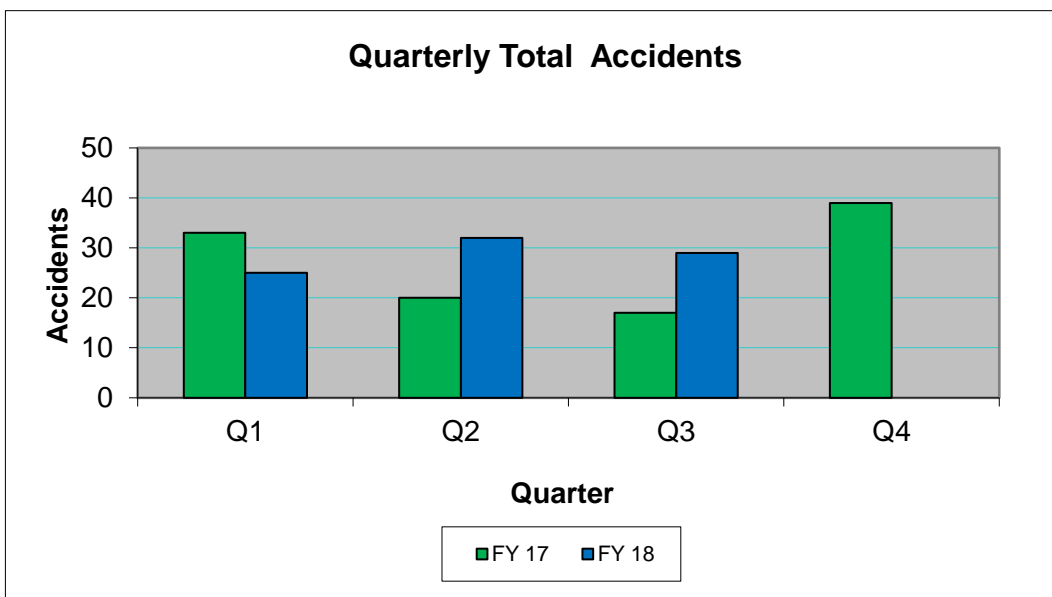
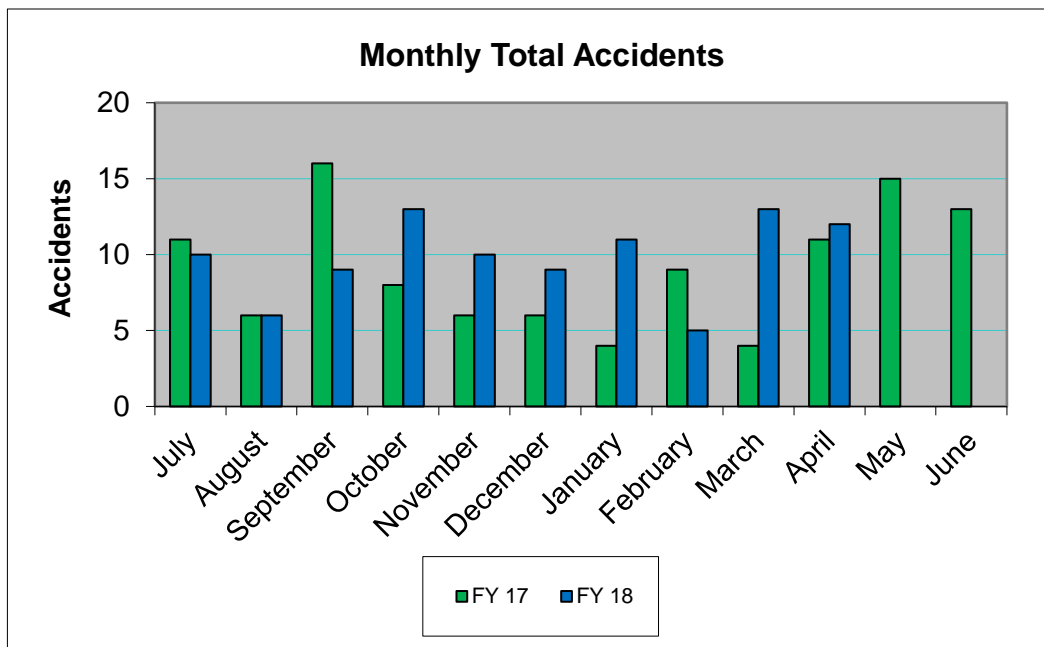
**FY 2018 OmniLink complaint rate per 10,000 Trips compared to monthly average**



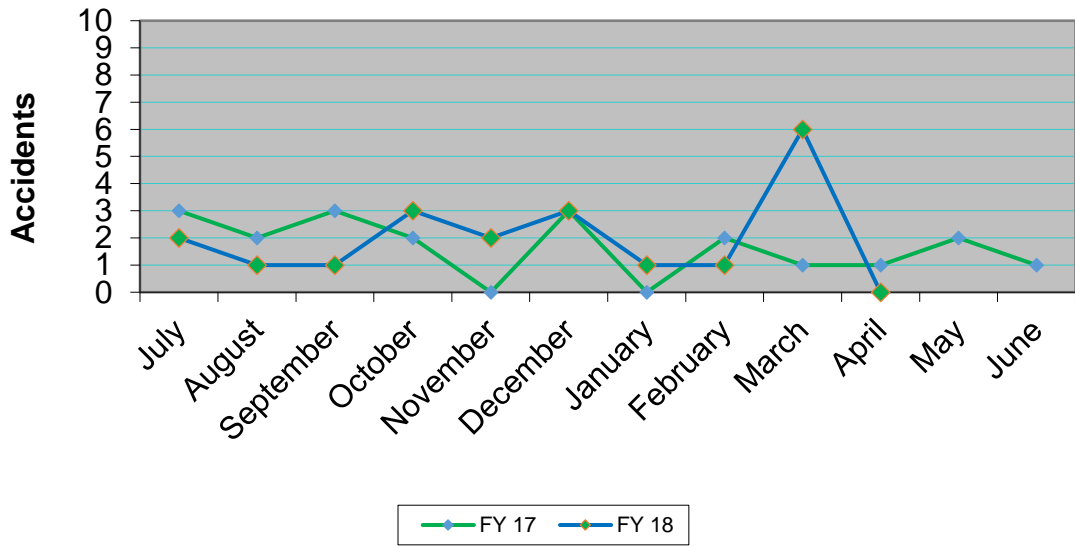
Complaint rates for OmniLink service for the current month and for the year-to-date in contrast to fiscal year 2017 overall rate, which is the benchmark for evaluating contractor performance for fiscal year 2018 in the new bus services contract.



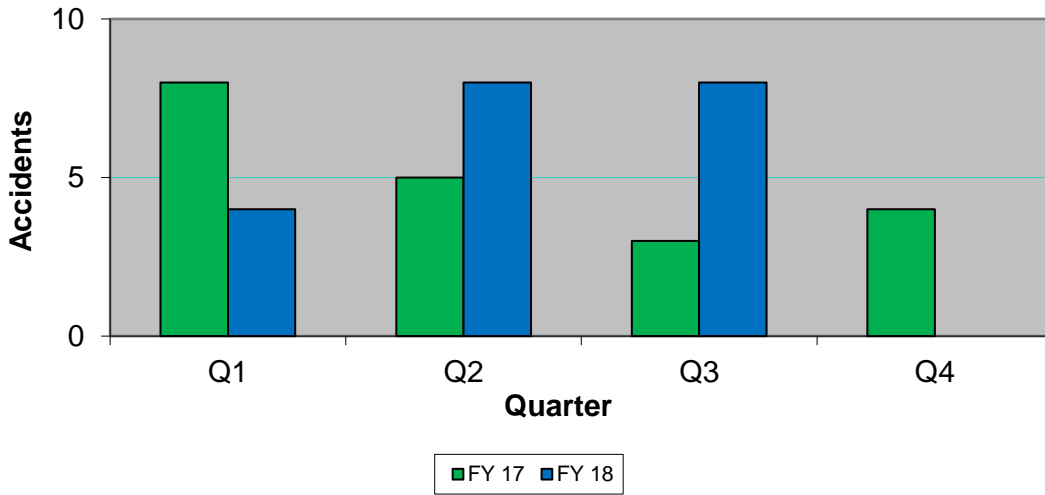




**Monthly Preventable Accidents**

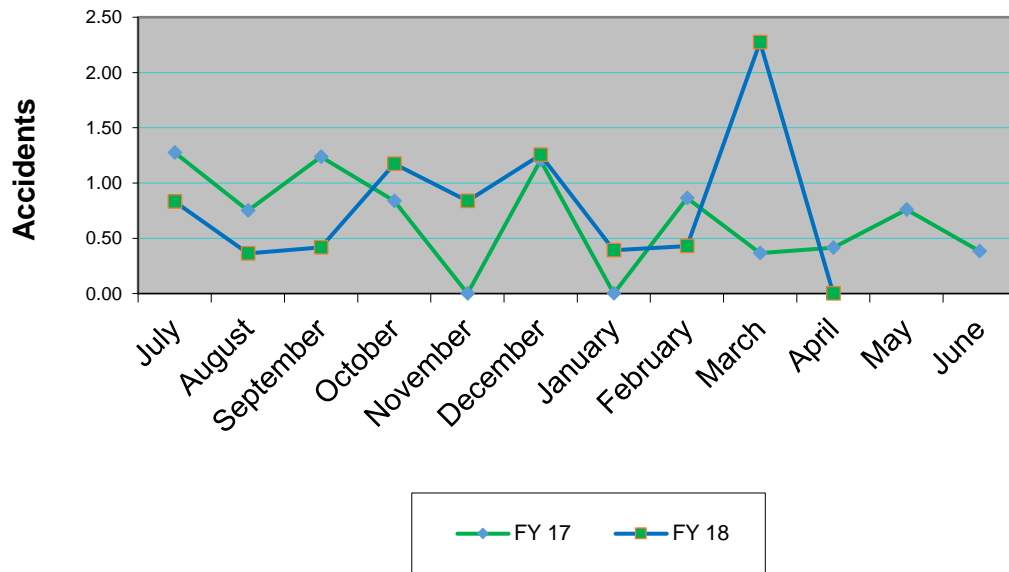


**Quarterly Preventable Accidents**

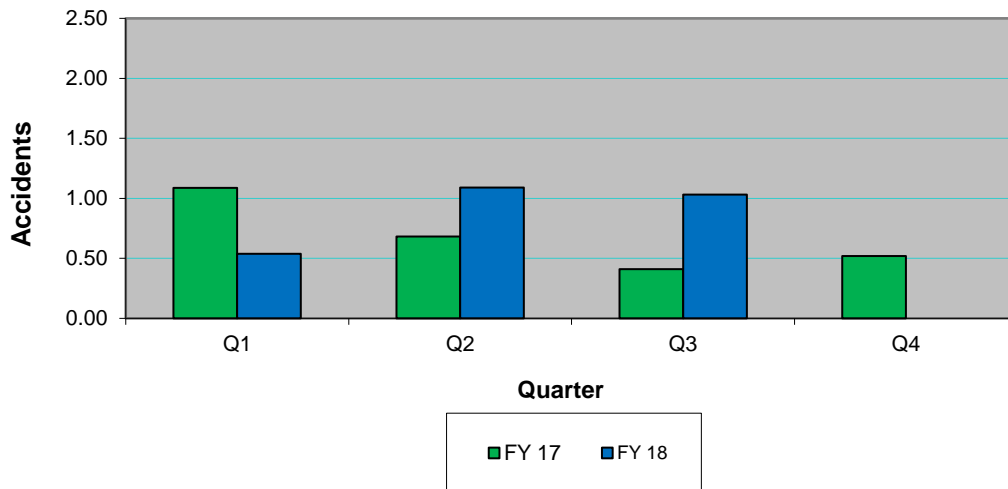




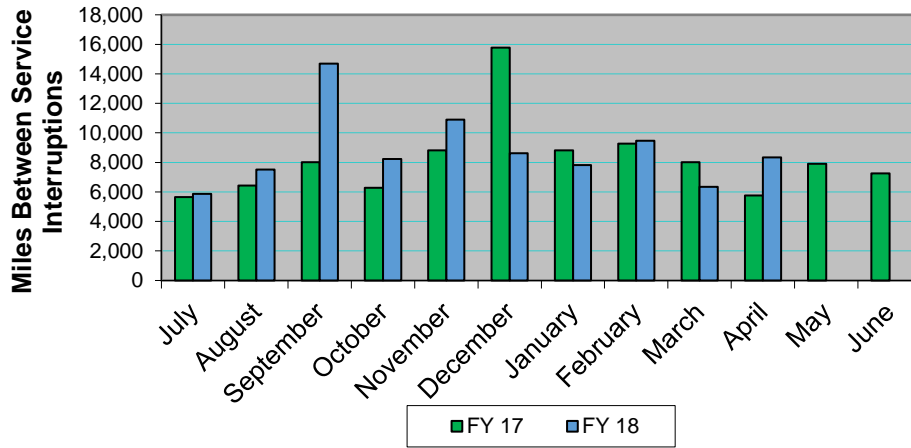
**Monthly Preventable Accidents per 100,000 Miles**



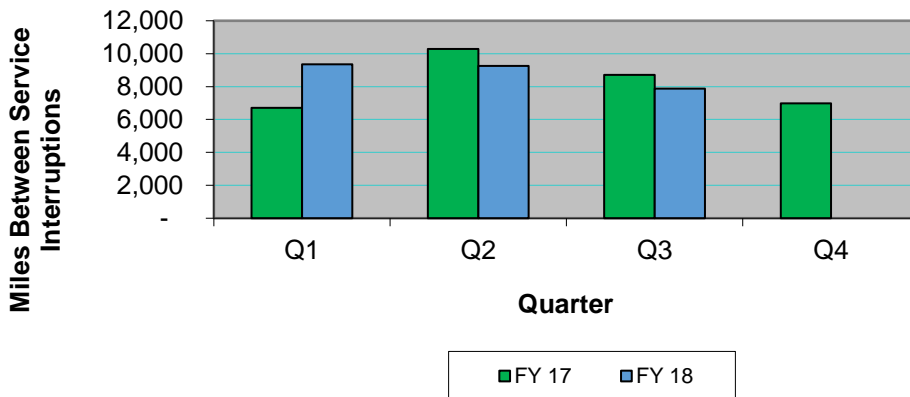
**Quarterly Average Preventable Accidents per 100,000 Miles**



**Monthly Miles Between Service Interruptions**



**Average Quarterly Miles Between Service Interruptions**





Potomac and Rappahannock  
Transportation Commission

14700 Potomac Mills Road  
Woodbridge, VA 22192

June 7, 2018

TO: Chair Anderson and PRTC Commissioners

FROM: Perrin Palistrant, Director of Operations and Operations Planning

THROUGH: Robert A. Schneider, Executive Director

RE: April 2018 Fleet Maintenance Audit

---

### Overview

The most recent fleet maintenance audit (attached) was conducted in April 2018, the first such audit conducted under the recently approved contract which began February 12, 2018. Random, sample audits are conducted three times per year by PRTC's independent contractor, Transit Resource Center (TRC) -- the report summary is presented below. Average defects decreased significantly for both active and contingency vehicles. First Transit management worked diligently to reduce the number of defects and improved processes to assist maintenance staff. PRTC management continues to work with First Transit management staff to ensure TRC's suggested improvements are being followed, and will maintain stepped up service monitoring of various aspects of maintenance activities.

### Report Summary

Bus audits are conducted three times annually (once every four months) on behalf of the Potomac and Rappahannock Transportation Commission (PRTC) by TRC. First Transit is under contract to PRTC to maintain PRTC's bus fleet. This is the fifteenth audit conducted of First Transit since their contract with PRTC began on July 1, 2013.

Audits consist of a physical bus inspection of 51 buses, which represents about one-third of the total fleet. The audits also include a fluids analysis, records review, and road test of one-quarter of the sample. A review is also made of maintenance worker qualifications as agreed to by PRTC and First Transit. Reporting is based on a random sampling of the active fleet (47 buses) with separate analysis made of the contingency fleet (4 buses).

For this audit there was an average of 3.0 defects per bus for all buses inspected (active and contingency buses combined), a significant reduction from 4.75 at the last audit. The 47 active buses inspected averaged 2.8 defects per bus, while the four contingency buses averaged 4.75 defects per bus, down significantly from 11.0 per bus last audit.

The summary table which follows compares active and contingency buses in several defect categories for the past four audits; defects are down in all categories. On-time adherence to preventive maintenance inspections (PMIs) scheduled at 6,000-mile intervals continues to be perfect at 100% for thirty-two consecutive audits.

<b>TABLE 1</b> <i>Comparison of Active &amp; Contingency Buses</i>				
	<b>Apr. '17</b>	<b>Aug. '17</b>	<b>Dec. '17</b>	<b>Apr. '18</b>
<b>Average # of Defects per Bus:</b> <b>All Buses</b>	3.2	3.5	4.75	3.0
<b>Average # of Defects per Bus:</b> <b>Active Fleet</b>	3.0	3.3	4.2	2.8
<b>Mechanical Defects (net of</b> <b>cosmetic defects): Active Fleet</b>	2.0	2.1	2.6	1.8
<b>Average # of Defects per Bus:</b> <b>Contingency Fleet</b>	5.5	6.2	11.0	4.75
<b>Average # of "A" Defects per</b> <b>Bus: All Buses</b>	0.25	0.31	0.41	0.23
<b>Average # of "A" Defects per</b> <b>Bus: Active Fleet</b>	0.21	0.25	0.40	0.23
<b>Average # of "A" Defects per</b> <b>Bus: Contingency Fleet</b>	0.75	1.0	0.50	0.25
<b>PMI Adherence</b>	100%	100%	100%	100%

The number of "A" defects, which totaled 21 last audit, decreased significantly to 12 this audit. "A" defects are those agreed upon by PRTC and First Transit as being more serious, those that would keep a bus from resuming revenue service until repaired. "A" category defects were reported to First Transit shortly after being identified. A copy of the "A" defect list used for all audits is attached as Appendix B.

The four contingency buses inspected averaged 4.75 defects per bus, down from 11.0 last audit and 6.2 the audit before last. This compares to an average of 2.8 defects for the active fleet. Conclusions drawn from such a small fleet sampling (only four buses) are difficult to make. However, with contingency buses being operated more frequently, PRTC expects fewer defects because operators will be conducting more daily inspections, reporting any defects found, and First Transit repairing those defects.

TRC will continue to conduct a separate analysis of contingency buses, determine if operators are reporting defects as part of their pre and post trip inspections, and whether First Transit is correcting those defects. In conducting the analysis of four contingency buses, TRC found that seven of the 19 contingency fleet defects should have been noted by the operator. Of the seven, all defects were noted by operators on the Zonar (pre/post trip software) reports, a vast improvement over past audits.

Other aspects of the audit revealed:

- The workshop continues to be clean.
- Preventive Maintenance Inspections (PMI) records, filed electronically, continue to be extremely well organized and easy to locate.
- Bus exteriors and interiors are exceptionally clean.
- Exterior-related body defects for the active fleet decreased to 46 for this audit compared to 65 last audit and 43 the audit before last. Exterior-related body defects continue to rank as the highest defect category behind Engine Compartment defects, a total of 45 for the active fleet this audit.
- The number of interior condition defects for the active fleet fell significantly to only three compared to nine last audit and 15 the audit before last.
- When cosmetic (interior condition and exterior body) defects are removed from the active fleet totals, the number of mechanical defects equals 1.8 per bus compared to 2.6 last audit.
- Bus areas where no defects were found on any of the active buses inspected include Tires, Passenger Controls, Safety Equipment, Exhaust, Structure/Chassis/Fuel Tank, and Climate Control. Lack of any climate control defects in 14 of the past 17 audits continues to be impressive.
- Seven categories saw a significant decrease in the number of average defects per bus: Destination Signs, Electrical Systems, Engine/Engine Compartment, Exterior Body, Interior Condition, Suspension/Steering, and Safety Equipment.
- One category saw a significant increase: Driver's Controls.
- The road tests of the 13 buses selected at random revealed one defect this audit compared to three defects last audit.
- Refrigerant-related air conditioning (AC) repairs examined were all performed by EPA certified personnel as required by PRTC.

- First Transit management continues to show a willingness to minimize defects by immediately repairing “A” defects shortly after being identified.
- The review of PMI records revealed that except for four cases where repairs were deferred, First Transit continues to have a process to follow up on defects identified during PM inspections.
- Testing of fluid samples showed six alerts compared to three last audit: one engine oil, two transmission, and three coolant. Of the six alerts, all require some action to be taken before the next PM interval. Results appear to be providing an early warning of possible problems as opposed to neglected maintenance.
- Regarding fluid alerts reported last audit where First Transit was recommended by the lab to take corrective action, an examination found that follow-up action was taken in all cases.
- First Transit is compliant in three of the four workforce categories (two employees do not meet minimum work experience requirements).
- Required annual refresher training is at full compliance, understanding that two mechanics have not been onboard a full year to receive the required training.
- First Transit management continues to be cooperative with regard to providing the buses and workspace needed for carrying out inspections in a timely fashion.
- A review of all contingency bus records revealed that all but three were driven at least 30 miles per month; all three were down for extensive repairs. All contingency buses have current registrations, all are being given required maintenance attention, and the four contingency buses selected for inspection for this audit did start prior to being inspected.

Attachment: As stated



TRANSIT RESOURCE CENTER

Presents:

# **Fleet Maintenance Audit Report**

## **April 2018**

Presented to:



### **Potomac & Rappahannock Transportation Commission**

14700 Potomac Mills Road  
Woodbridge, VA 22192

**May 16, 2018**

#### **TRANSIT RESOURCE CENTER**

5840 Red Bug Lake Road  
Suite 165  
Winter Springs, FL 32708  
Phone: (407) 977-4500  
Fax: (407) 977-7333  
Email: [tranrc@earthlink.net](mailto:tranrc@earthlink.net)

**Potomac and Rappahannock Transportation Commission  
(PRTC)**

**VEHICLE MAINTENANCE AUDIT  
Conducted April 9-13, 2018**

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**POTOMAC AND RAPPAHANNOCK TRANSPORTATION COMMISSION**  
**VEHICLE MAINTENANCE AUDIT**  
**Conducted April 9-13, 2018**

**SUMMARY**

Bus audits are conducted of First Transit three times annually (one every four months) on behalf of the Potomac and Rappahannock Transportation Commission (PRTC) by Transit Resource Center (TRC). First Transit is under contract to PRTC to maintain PRTC's bus fleet. This is the fifteenth audit conducted of First Transit since their new contract with PRTC began on July 1, 2013.

Audits consist of a physical bus inspection of 51 buses, which represents about one-third of the total fleet. The audits also include a fluids analysis, records review, and road test of one-quarter of the sample. A review is also made of maintenance worker qualifications as agreed to by PRTC and First Transit. Reporting is based on a random sampling of the active fleet (47 buses) with separate analysis made of the contingency fleet (4 buses).

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<b>Average # of Defects per Bus: Active Fleet</b>	3.0	3.3	4.2	2.8
<b>Mechanical Defects (net of cosmetic defects): Active Fleet</b>	2.0	2.1	2.6	1.8
<b>Average # of Defects per Bus: Contingency Fleet</b>	5.5	6.2	11.0	4.75
<b>Average # of "A" Defects per Bus: All Buses</b>	0.25	0.31	0.41	0.23
<b>Average # of "A" Defects per Bus: Active Fleet</b>	0.21	0.25	0.40	0.23
<b>Average # of "A" Defects per Bus: Contingency Fleet</b>	0.75	1.0	0.50	0.25
<b>PMI Adherence</b>	100%	100%	100%	100%

The number of "A" defects, which totaled 21 last audit, decreased significantly to 12 this audit. "A" defects are those agreed upon by PRTC and First Transit as being more serious, those that would keep a

bus from resuming revenue service until repaired. “A” category defects were reported to First Transit shortly after being identified. A copy of the “A” defect list used for all audits is attached as Appendix B.

The four contingency buses inspected averaged 4.75 defects per bus, down from 11.0 last audit and 6.2 the audit before last. This compares to an average of 2.8 defects for the active fleet. Conclusions drawn from such a small fleet sampling (only four buses) are difficult to make. However, with contingency buses being operated more frequently, PRTC expects fewer defects because operators will be conducting more daily inspections, reporting any defects found, and First Transit repairing those defects.

TRC will continue to conduct a separate analysis of contingency buses, determine if operators are reporting defects as part of their pre and post trip inspections, and whether First Transit is correcting those defects. In conducting the analysis of four contingency buses, TRC found that seven of the 19 contingency fleet defects should have been noted by the operator. Of the seven, all defects were noted by operators on the Zonar reports, a vast improvement over past audits.

Other aspects of the audit revealed:

- The workshop continues to be clean.
- PMI records, filed electronically, continue to be extremely well organized and easy to locate.
- Bus exteriors and interiors are exceptionally clean.
- Exterior-related body defects for the active fleet decreased to 46 for this audit compared to 65 last audit and 43 the audit before last. Exterior-related body defects continue to rank as the highest defect category behind Engine Compartment defects, a total of 45 for the active fleet this audit.
- The number of interior condition defects for the active fleet fell significantly to only three compared to nine last audit and 15 the audit before last.
- When cosmetic (interior condition and exterior body) defects are removed from the active fleet totals, the number of mechanical defects equals 1.8 per bus compared to 2.6 last audit.
- Bus areas where no defects were found on any of the active buses inspected include Tires, Passenger Controls, Safety Equipment, Exhaust, Structure/Chassis/Fuel Tank, and Climate Control. Lack of any climate control defects in 14 of the past 17 audits continues to be impressive.
- Seven categories saw a significant decrease in the number of average defects per bus: Destination Signs, Electrical Systems, Engine/Engine Compartment, Exterior Body, Interior Condition, Suspension/Steering, and Safety Equipment.
- One category saw a significant increase: Driver’s Controls.
- The road tests of the 13 buses selected at random revealed one defect this audit compared to three defects last audit.
- Refrigerant-related air conditioning (AC) repairs examined were all performed by EPA certified personnel as required by PRTC.
- First Transit management continues to show a willingness to minimize defects by immediately repairing “A” defects shortly after being identified.
- The review of PMI records revealed that except for four cases where repairs were deferred, First Transit continues to have a process to follow up on defects identified during PM inspections.
- Testing of fluid samples showed six alerts compared to three last audit: one engine oil, two transmission, and three coolant. Of the six alerts, all require some action to be taken before the next PM interval. Results appear to be providing an early warning of possible problems as opposed to neglected maintenance.

- Regarding fluid alerts reported last audit where First Transit was recommended by the lab to take corrective action, an examination found that follow-up action was taken in all cases.
- First Transit is compliant in three of the four workforce categories (two employees do not meet minimum work experience requirements).
- Required annual refresher training is at full compliance understanding that two mechanics have not been onboard a full year to receive the required training.
- First Transit management continues to be cooperative with regard to providing the buses and workspace needed for carrying out inspections in a timely fashion.
- A review of all contingency bus records revealed that all but three were driven at least 30 miles per month; all three were down for extensive repairs. All contingency buses have current registrations, all are being given required maintenance attention, and the four contingency buses selected for inspection for this audit did start prior to being inspected.

Given the significant improvement in maintenance performance, there are no specific recommendations except to continue taking steps to reduce exterior-related defects, engine/engine compartment defects, contingency bus defects, and “A” defects.

Audit details are presented in the various sections found in the body of this report. Various tables used throughout this report are based on more complete data contained in Excel spreadsheets included on a separate CD.

## **BUSES INSPECTED**

TRC selected at random 47 active buses and four contingency buses (51 in total) for a physical fleet inspection and then selected 13 of them at random to receive a Fluids Analysis Audit and a Records Review. Thirteen buses were also selected at random by TRC to undergo road tests. Appendix A lists those buses.

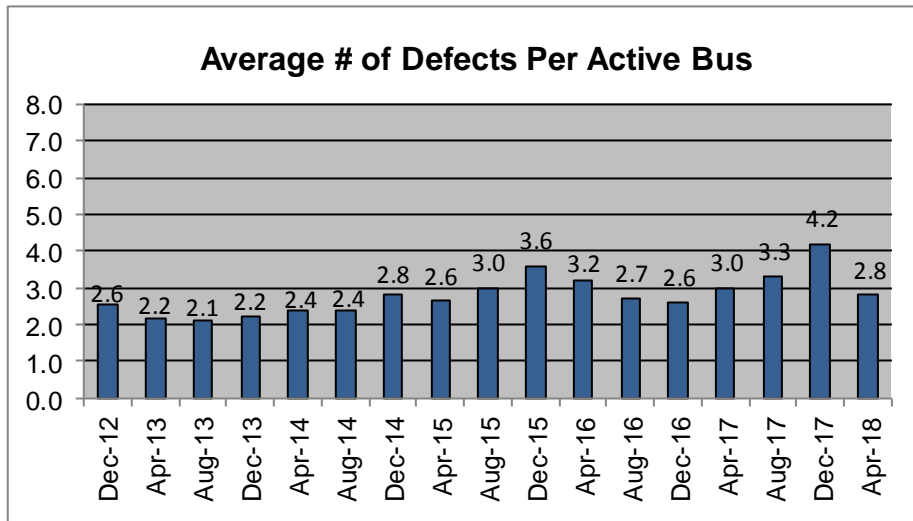
## **FINDINGS – ACTIVE BUS FLEET**

### **Overall Fleet Condition**

The PRTC fleet continues to be exceptionally clean. The number of interior condition defects for the active fleet fell significantly from nine last audit to only three this audit. Exterior body defects, which set a new record at 65 for the active fleet last audit fell to 46 this audit, but overall are trending upwards. Tight parking conditions where approximately 122 parking spots must accommodate 153 buses could be contributing to higher exterior body damage defects. The long-term trend for interior defects, however, continues downward.

Defects continue to remain in the three-per-bus average. Only once in the past twenty-four audits did defect averages exceed four. **Table 2** which follows shows the historical defect trend for the last 17 audits of First Transit. During that 17-audit period, 12 audits averaged three defects or less per bus. Although the industry does not have a standard for per-bus defects, an average of defects in the range traditionally exhibited by First Transit is exceptional based upon similar audits conducted by TRC for other transit agencies. A more detailed analysis of the defects is provided in report sections that follow.

**Table 2: Summary of Average Defects per Active Bus**



### Overall Defect Summary

All defects identified during the inspections were entered in a database, which was used to generate a Master Defect Sheet. Data contained in that spreadsheet were then used to produce a series of detailed Excel reports, which are included as a CD attachment to this report.

**Table 3**, which follows summarizes active bus defects under each of the 18 functional categories and compares them to the previous audit. For this audit, seven categories saw a significant decrease in the number of average defects per bus: Destination Signs, Electrical Systems, Engine/Engine Compartment, Exterior Body, Interior Condition, Suspension/Steering, and Safety Equipment. One category saw a significant increase: Driver's Controls.

Three of the buses inspected had no defects found. In addition, as shown in **Table 3**, there were no defects found in six of the 18 functional categories for all active buses inspected: Tires, Passenger Controls, Safety Equipment, Exhaust, Structure/Chassis/Fuel Tank, and Climate Control.

Defects by category for the last four audits are shown in **Table 3 which follows**. Trend tabs in the attached spreadsheet show defect trends over longer intervals.

<b>TABLE 3</b> <b><i>Defects by Category - Active Buses</i></b>					
<b>Defect Category</b>	<b>Apr. '17 Defects Avg. per Bus</b>	<b>Aug. '17 Defects Avg. per Bus</b>	<b>Dec. '17 Defects Avg. per Bus</b>	<b>Apr. '18 Defects Avg. per Bus</b>	<b>Significant Increase (+) or Decrease (-) Current vs. Prior Audit</b>
Accessibility Features	0.09	0.17	0.17	0.15	
Air System/Brake System	0.06	0.13	0.17	0.11	
Climate Control	0.00	0.00	0.00	0.00	
Destination Signs	0.00	0.00	0.09	0.02	-
Differential	0.06	0.02	0.04	0.06	
Driver's Controls	0.02	0.15	0.06	0.23	+
Electrical System	0.11	0.04	0.11	0.02	-
Engine/Engine Compartment	1.19	1.00	1.28	0.96	-
Exhaust	0.00	0.00	0.02	0.00	
Exterior Body Condition	0.83	0.91	1.38	0.98	-
Interior Condition	0.11	0.32	0.19	0.06	-
Lights	0.06	0.04	0.04	0.06	
Passenger Controls	0.00	0.00	0.00	0.00	
Safety Equipment	0.09	0.06	1.13	0.00	-
Structure/Chassis/Fuel Tank	0.04	0.02	0.02	0.00	
Suspension/Steering	0.13	0.30	0.34	0.04	-
Tires	0.02	0.04	0.00	0.00	
Transmission	0.15	0.11	0.17	0.11	
<b>Active Bus Defect Totals:</b>	<b>139</b>	<b>156</b>	<b>198</b>	<b>132</b>	
<b>Active Buses Inspected:</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>47</b>	
<b>Average Defects per Bus:</b>	<b>3.0</b>	<b>3.3</b>	<b>4.2</b>	<b>2.8</b>	

As indicated above, each defect was given a severity code:

**A** – Indicates a critical defect that when identified during a regularly scheduled PMI requires immediate repair before the vehicle could resume revenue service.

**B** – Indicates a non-critical defect, the repair of which could be deferred to later time.

### **“A” Defect Summary**

A total of 12 “A” defects were identified for this audit for all buses inspected compared to 21 last audit and 16 the audit before last. **Table 4** which follows shows a breakdown of those defects classified under active and contingency buses.

<b>TABLE 4</b> <i>A-Category Defects</i>		
<b>Defect Category</b>	<b>A-Defects Active Fleet</b>	<b>A-Defects Contingency Fleet</b>
<b>Accessibility</b> - Wheelchair lift controller - Lift door malfunction - Seat belt malfunction	2 1 1	
<b>Air/Brake System</b> - Air leaks	5	1
<b>Driver's Control</b> - Turn signal	2	
<b>Subtotal "A" Defects</b>	<b>11</b>	<b>1</b>
<b>Total "A" Defects</b>	12	

First Transit understood they would not operate buses with "A" defects until those defects were repaired. It should be noted that not all "A" defects will keep the bus from service according to DOT standards. Air leaks, for example, have an acceptable DOT allowance and can lose three pounds of air pressure in just two minutes.

### **Contested Defects**

First Transit contested no defects this audit compared to 25 defects last audit. As a result, Appendix D is blank.

### **Defect Analysis (Active and Contingency Buses)**

Defects identified by TRC were analyzed to determine the severity or detrimental impact they pose in terms of safety, comfort and convenience, structural integrity, and life expectancy of major components.

#### Safety

There were 12 "A" category defects identified during this audit for all buses inspected compared to 21 found last audit. Of the 12 "A" defects, all should have been noted by operators during their daily inspections understanding that some air leaks may be difficult for operators to detect. There were no defects related specifically to safety equipment compared to six last audit.

#### Comfort and Convenience

Exteriors and interiors continue to be exceptionally clean. There was one climate control defects this audit. Since August 2013 only three climate control defects were found. There were no Passenger Control defects. Interior-related defects for all buses inspected decreased to only four compared to 12 last audit.

#### Structural Integrity

There continue to be no defects that impact structural integrity.

#### Life Expectancy of Major Components

First Transit continued its perfect adherence to scheduled PM inspections. The changing of fluids that occurs during these inspections combined with fluid analysis maximizes the life expectancy of major components.

Regarding fluid samples taken by TRC, there were six alerts reported this audit compared to three last audit: one engine, two transmission, and three coolant. Of the six alerts, all require action to be taken before the next PM inspection. First Transit immediately responded with the action it would take in response to these alerts. The alerts are consistent with First Transit's fluid analysis program providing an early warning of potential problems as opposed to neglected maintenance. The three abnormal coolant samples where antifreeze mixture is expected to be 50/50 glycol/water were close to 40/60 and not in any danger of freezing.

Records also continue to show that First Transit has an aggressive program to follow up on defects noted during PMIs (i.e., getting them repaired in a timely fashion) and quickly investigating fluid sampling alerts, which together help extend vehicle and component life.

### **Trend Analysis**

The long-term trend line for all defects as shown in the separate spreadsheet tab now indicates a very gradual upwards trajectory. Mechanical defects (excludes interior and exterior body defects), however, continue on a downward slope (fewer defects). Other categories where defects are on a downward trend include Driver's Controls, Air/Brake System, Safety, Interior Body, Lights, Differential, and Passenger Controls. Categories with an overall long-term trend increase include Engine/Engine Compartment, Electrical Systems, and Exterior Condition. The trend for "A" defects for all buses, which had increased steadily from December of 2016 (10) to December 2017 (21), has now reversed that trend and fallen (12). TRC will continue to monitor.

## **RECORDS REVIEW**

### **PMI Schedule Adherence**

TRC examined the records of 13 buses selected at random (12 active, 1 contingency) to determine if PMIs are being done at scheduled 6,000-mile intervals. PMI intervals are considered "on time" if performed on or before 6,600 miles ("late window" of 10% or 600 miles).

All PMI records, now filed electronically, are well organized and very easy to access and locate.

**Table 5** which follows shows the PMI intervals compared to the previous PMIs performed by First Transit for each of the 13 buses selected at random.

<b>TABLE 5</b> <b><i>PMI Schedule Adherence</i></b>		
<b>Bus #</b>	<b>PMI Mileage Intervals</b>	<b>Notes</b>
186	6391	On time
1000	5925	On time
272	6215	On time
286	5934	On time
303-C	6323	On time
326	5510	On time
332	6314	On time
349	6484	On time
359	5913	On time

<b>TABLE 5</b> <i>PMI Schedule Adherence</i>		
<b>Bus #</b>	<b>PMI Mileage Intervals</b>	<b>Notes</b>
368	6248	On time
383	6257	On time
390	6319	On time
294	6222	On time

The review of records by TRC revealed that all 13 buses (100%) had their PM inspections done on time. The on-time performance for PMI schedule adherence remains at 100% for thirty-two consecutive audits, an impressive accomplishment. First Transit management continues its process whereby upcoming PMIs are identified and reviewed daily to ensure on-time completion.

### **Repair of Defects Identified During PMIs**

TRC reviewed the last three PMI e-files for all 13 buses chosen at random (39 PMI records total) to determine if repairs were performed properly and made promptly. TRC examined the PMI files to determine if First Transit has:

- A process in place to distinguish those defects identified and repaired during the PMI from those scheduled for repair at a later date; and
- Actually followed up and repaired the defects identified during the previous PMI.

Of the 39 bus records reviewed, there were seven cases where similar defects seem to reappear. An in-depth review of the seven cases revealed that in four of them First Transit had deferred repairs to the next PM (defects were repeated from one PM to the next). In the other three cases, separate repair actions had been taken because either the first repair was not successful or the defects were in fact not related.

**Table 6** which follows shows a listing of the seven random cases of a repeated defect where repair of those defects was either deferred or separate follow-up maintenance action had been taken.

<b>TABLE 6</b> <i>Repeated Defects</i>		
<b>Bus #</b>	<b>Date</b>	<b>Was Follow-Up Repair Action(s) Found?</b>
1000	2/28/18 – right side mirror 3/27/18 – right side mirror	<b>No, repair deferred</b>
	2/28/18 – interior water leak 3/27/18 – interior water leak	Yes, separate actions taken
272	7/03/17 – fire ext. bracket 10/2/17 – fire ext. bracket	Yes, separate actions taken
286	2/16/18 – right tire damage 3/27/18 – right tire damage	<b>No, repair deferred</b>
	2/16/18 – power steer leak 3/27/18 – power steer leak	<b>No, repair deferred</b>
390	10/25/17 – ping tank valve 2/20/18 – ping tank valve	Yes, separate actions taken



<b>TABLE 6</b> <i>Repeated Defects</i>		
<b>Bus #</b>	<b>Date</b>	<b>Was Follow-Up Repair Action(s) Found?</b>
294	1/25/18 – body damage 3/13/18 – body damage	<b>No, repair deferred</b>

With its change to electronic filing, First Transit continues to have a record-keeping system that clearly distinguishes defects that get deferred or repaired as a follow-up to scheduled PM inspections.

### **Mechanic Training & Certification**

TRC set out to determine if qualified mechanics are performing maintenance tasks by virtue of documented training and certification by selecting five HVAC repairs/inspections at random. TRC then asked First Transit to provide a copy of the repair order and the name of the mechanic performing the repair or inspection. **Table 7** which follows shows the five HVAC work orders examined.

<b>TABLE 7</b> <i>A/C Repairs by Certified Mechanics</i>			
<b>Bus #</b>	<b>Date</b>	<b>HVAC Repair</b>	<b>Mechanic</b>
307	3-30-18	AC inop. Replaced valves, and recharge system	Romano
334	1-19-18	While checking heating system noted AC needed recharging.	Graham
327	2-16-18	AC clutch not engaging. Check pressures and recharge system. .	Romano, Criste, Mitchell
384	2-21-18	Repaired condenser leak and recharge system.	Adkins
336	2-19-18	Freon leak, tighten valve, recharge system	Nickens

TRC then compared the mechanic(s) who performed the HVAC repairs to the listing of certified technicians compiled for this audit. **Table 8** which follows shows all mechanics along with those certified to perform HVAC (refrigerant-related) repairs and their AC certification status.

<b>TABLE 8</b> <i>Mechanic and Foreman Work Status</i>	
<b>Mechanic's Name</b>	<b>AC Certification</b>
Andy Velez (Foreman) (FT)	YES
S. Nanthavongsa (FT)	YES
F. Brownell (Foreman) (FT)	YES
W. Nickens (FT)	YES
R. Ahenkora (10 per week – 25%)	YES
F. Artieda (FT)	YES
J. Mitchell (30 per week – 75%)	YES
A. Romano (FT)	YES
D. Alemayehu (30 per week – 75%)	YES
C. Adkins (FT)	YES

<b>TABLE 8</b> <i>Mechanic and Foreman Work Status</i>	
<b>Mechanic's Name</b>	<b>AC Certification</b>
A. Ahanda (30 per week – 75%)	YES
A. Amoakohene (FT)	YES
W. Morales (FT)	YES
M. Osei (FT)	YES
T. Criste (FT)	YES
M. Moore (FT)	YES
S. Bacchus (FT)	YES
C. Graham (FT)	YES
T. Tsega (FT) (15 per week – 50%)	YES
J. Bowles (FT)	YES
B. Terrell (FT)	YES
M. Amankwah (15 per week – 50%) (recent hire)	YES
D. Espinal (FT)	YES
J. Galo (FT)	YES
F. Reinoso (15 per week – 50%)	YES
D. Betitia (Foreman) (FT)	YES
A. Gugessa (new hire)	YES
F. Hutchinson (FT) (new hire)	YES

TRC found that all HVAC repairs involving refrigerant were performed by a certified AC technician. In fact, all 28 mechanics/foremen are AC certified.

As part of this inspection, TRC also requested an updated listing of all First Transit technicians and a summary of their experience and ASE certifications to determine compliance with the following PRTC requirement:

Maintenance Personnel will be trained to proficiency on each of PRTC's vehicles and sub-systems prior to the start of service. Contractor will be required to ensure that all repairs involving warrantied vehicles, sub-systems, parts, etc., are performed at all times by maintenance personnel who are properly certified to perform such work such that qualifications cannot be questioned when submitting warranty claims. All mechanics (defined as mechanics and foremen) must have at least one ASE certification and five (5) years' experience on heavy duty trucks or buses. Alternately, mechanics may be graduates of a certified two-year technical/vocational institute and have two (2) years' experience with heavy duty trucks or buses. At least 33 percent of the maintenance staff (defined as mechanics only) shall be ASE Master Certified for medium and heavy duty trucks (or transit buses). In addition, all mechanics (defined as mechanics and foremen) shall receive a minimum of 16 hours of technical/refresher training annually.

PRTC also requires that the ratio of buses per mechanic not exceed eight. As indicated in **Table 8** above, full-time employees are classified as "(FT)"; others include the number of hours they work per week (e.g., 30 per week). Those working 15-20 hours per week are classified as 0.50; 30 per week are classified as 0.75 equivalent of a full-time worker. **Table 9** which follows shows required versus actual staffing levels, experience/certifications, and annual refresher/technical training compliance. The table is based on First Transit's current staffing levels of 22 full time equivalent mechanics (18 full time + 4; 1 @ .25 + 3 @

0.50 + 3 @ 0.75 = 22) and three full-time foremen. There are a total of 28 maintenance employees: three full-time foremen and 25 full or part-time mechanics. Two new mechanics have been hired since the last audit.

<b>TABLE 9</b> <i><b>Mechanic Staffing Level, Certifications, and Experience</b></i>				
<b>Measure</b>	<b>Ratio of buses to mechanics (excluding foremen)</b>	<b>Mechanics/foremen with ASE &amp; 5 years exp. or voc. degree &amp; 2 years exp.</b>	<b>Mechanics/w/ ASE Master Certification</b>	<b>Mechanics/foremen w/ min. 16 hours annual refresher/technical training</b>
<b>Required</b>	Max. 8.0	100%	Min. 33% of techs	100%
<b>Actual</b>	7.0 (153/22 full time equivalent mechanics)	<b>93%</b> (26 of 28 total mechanics/foremen )	41% (9 of 22 full time equivalent mechanics)	<b>93%</b> (26 of 28 total mechanics/foremen)*

\* The two technicians lacking a minimum of 16 hours of annual training are new employees.

Based on a review of the documentation provided, First Transit is compliant in three of the four workforce categories acknowledging that two of the newly hired or recently hired (less than one year) employees have not been employed long enough to receive 16 hours of annual training. Two employees, however, do not meet the experience requirements as described above and bring compliance down to 93% instead of the required 100%.

### **Management of Fluid Analysis Program**

First Transit is required to send engine oil, transmission, and coolant fluid samples to a laboratory for testing and evaluation at each PMI to determine if:

- fluid samples were taken at each PMI;
- fluid records were filed and had easy access; and
- the contractor is making use of the fluids analysis results as part of its maintenance program.

Samples are sent out weekly and results are returned in about seven days. Copies are made of each report and filed; this is in addition to computerized records that First Transit maintains for each sampling. Locating fluid analysis reports for each of the 13 buses examined was again made easy because of the well-organized electronic recordkeeping system.

First Transit's fluid analysis vendor uses a coding system of 1-5, where "1" indicates the sample finding is normal and "5" indicates the most critical condition. A review of each record found that First Transit continues its practice of highlighting in yellow each lab recommendation for follow-up.

In examining the last two PMIs for each of the 13 buses selected at random (26 records), TRC found that:

- Evidence exists that in all cases fluid samples were taken at the appropriate interval.
- Recordkeeping of the fluid analysis program is adequate.

Results indicate the fluid analysis program is doing its job by providing First Transit with early warnings of potential engine and transmission-related failures. There were no cases where corrective action was recommended by the lab for the 26 bus records reviewed for this audit (all samples were normal).

TRC also drew engine, transmission, and coolant fluid samples from 13 buses selected at random (39 samples) to provide another level of fluid condition verification. The results from TRC's lab, which uses a different grading system than First Transit's lab, are shown below. In each case, First Transit responded with an action plan for resolving the deficiencies.

### **Engine Oil**

There was one engine oil alert compared to the same last audit.

**383 – Abnormal:** All engine wear rates normal. Fuel dilution at problem level. Silicon level (dirt/sealant material) satisfactory. Water content acceptable. Viscosity low for specified oil grade. Action: Check fuel injection system. Change oil and filter(s) if not already done. Resample after corrective action to further monitor.

*First Transit Response: W/O 51029712 – REFURBISHED WARRANTY ENGINE. 5 PREVIOUS SAMPLES SHOW NO FUEL DILUTION. 4/19/2018, SCHEDULED ENGINE SERVICE COMPLETED, AWAITING RESULTS. SHOULD IT BE ABNORMAL, FIRST TRANSIT WILL TAKE APPROPRIATE DEALER WARRANTY ACTIONS.*

### **Transmission Fluid**

There were two transmission fluid alerts compared to none last audit.

294 – Abnormal: Increase in Iron level noted. Torque converter/pump wear indicated. Silicon level (dirt/sealant material) satisfactory. Water content acceptable. Viscosity within specified operating range. Action: Change oil and filter(s) if not already done. Resample at a reduced service interval to further monitor.

*First Transit Response: W/O 51294454 – INITIAL TRANSMISSION SERVICE JUST COMPLETED 30 DAYS AGO INDICATED A SATISFACTORY RESULT. AS WE HAVE NO SERVICE HISTORY ON THIS NEW BUS, FIRST TRANSIT WILL RESAMPLE AND TAKE APPROPRIATE DEALER WARRANTY ACTIONS ACCORDINGLY.*

303 – Severe: Bearing/bushing/thrust washer wear indicated. Silicon level (dirt/sealant material) abnormal. Water content acceptable. Viscosity within specified operating range. Action: Check all dirt access points as a precaution. Drain oil from unit if not already changed. Resample after corrective action to further monitor.

*First Transit Response: W/O 51294480 – THREE PREVIOUS SAMPLES INDICATE A SATISFACTORY RESULT. WITH 11,000 MILES UNTIL NEXT SCHEDULED TRANSMISSION SERVICE, FIRST TRANSIT WILL CHANGE OIL AND FILTER AND RESAMPLE NOW AND AGAIN DURING IT'S NORMAL SERVICE INTERVAL AND TAKE APPROPRIATE ACTIONS.*

### **Coolant**

There were three coolant alerts compared to two last audit.

186 – Abnormal: Glycol level is high. pH level is normal. Pressure check radiator cap, if it fails replace cap and recheck pressure. Check that proper coolant volume is being maintained. Recommend adjust coolant to a 50/50 mix. Recommend take corrective action and resample to monitor.

*First Transit Response: W/O 51294489 – CONFIRMED USING REFRACTOMETER 37/63 %. BEING 3 % OUTSIDE OF PREFERRED TOLERANCE, MEASURES WILL BE TAKEN TO BRING THE RATIO TO A MORE TOLERABLE 50/50 MIX. PRESSURE TESTING OF THE CAP AND COOLANT SYSTEM WILL ALSO BE COMPLETED.*

286 – Caution: Glycol level is high. pH level is normal. Pressure check radiator cap, if it fails replace cap and recheck pressure. Check that proper coolant volume is being maintained. Recommend adjust coolant to a 50/50 mix. Recommend take corrective action and resample to monitor.

*First Transit Response: W/O 51294564 – CONFIRMED USING REFRACTOMETER 40/60 %. BEING AT THE TOP OF THE PREFERRED TOLERANCE, MEASURES WILL BE TAKEN TO BRING THE RATIO TO A MORE TOLERABLE 50/50 MIX. PRESSURE TESTING OF THE CAP AND COOLANT SYSTEM WILL ALSO BE COMPLETED.*

1000 – Abnormal: Glycol level is high. pH level is normal. Pressure check radiator cap, if it fails replace cap and recheck pressure. Check that proper coolant volume is being maintained. Recommend adjust coolant to a 50/50 mix. Recommend take corrective action and resample to monitor.

*First Transit Response: W/O 51294580 – CONFIRMED USING REFRACTOMETER 40/60 %. BEING AT THE TOP OF THE PREFERRED TOLERANCE, MEASURES WILL BE TAKEN TO BRING THE RATIO TO A MORE TOLERABLE 50/50 MIX. PRESSURE TESTING OF THE CAP AND COOLANT SYSTEM WILL ALSO BE COMPLETED.*

For this audit, the number of fluid alerts from the samples taken by TRC totaled six compared to three last audit. Of the six alerts, all require corrective action before the next scheduled PM inspection. The findings are consistent with a program that provides early warning of more serious potential future problems. In each case, First Transit responded with an action plan. TRC will follow up on these actions at the next audit. For alerts reported during TRC's fluid sampling last audit, there was evidence to support that First Transit followed up and took necessary corrective action as recommended by TRC's lab.

## **ROAD TEST INSPECTION**

TRC conducted a road test of 13 buses selected at random after the static inspections had been conducted. The road testing began during the October 2007 audit. As indicated earlier, a protocol for assigning any defects identified during the road test was established for this audit. Road test defects are classified as those that would render a vehicle out of service or not according to PRTC's "Out of Service Defects – While Operating" criteria. The Road Test protocol is fully described in Appendix E.

Defects identified during the road tests are not included with the static inspection defects to maintain consistency with previous audits where road tests were not part of the audit. Details of any road test defects found are shown in the "Road Test Defects" tab of the attached spreadsheet.

One road test defect was found this audit compared to three such defects last audit, which was noted as an “out of service” defect, the first in the past nine audits. A historical summary of road test defects, including those that would render a bus out of service, is shown in **Table 10**.

<b>TABLE 10</b> <i>Summary of Road Test Defects</i>					
	<b>Dec. ‘16</b>	<b>Apr. ‘17</b>	<b>Aug. ‘17</b>	<b>Dec. ‘17</b>	<b>Apr. ‘18</b>
<b>Total Road Test Defects</b>	1	2	0	3	1
<b>Out-of-Service Total</b>	0	0	0	0	1
<b>Nature of Out-of-Service Defect(s)</b>	n/a	n/a	n/a	n/a	Erratic acceleration

## **ANALYSIS OF CONTINGENCY BUSES INSPECTED**

The four contingency buses inspected averaged 4.75 defects per bus compared to 11 defects last audit and 6.2 the audit before last. The active bus fleet averaged 2.8 defects per bus by comparison. TRC will continue to monitor contingency buses. There was one “A” defect found on contingency buses for this audit compared to two last audit.

One contingency bus (#303) was flagged for a fluid alert (transmission), breaking a string of five consecutive audits where no contingency bus was found with an abnormal finding.

A historical summary of contingency bus defects compared to the active fleet is shown in **Table 11**.

<b>TABLE 11</b> <i>Summary of Contingency Bus Defects</i>				
	<b>Apr. ‘17</b>	<b>Aug. ‘17</b>	<b>Dec. ‘17</b>	<b>Apr. ‘18</b>
<b>Total Defects - Contingency Bus</b>	22	25	44	19
<b>Average Defects per Contingency Bus</b>	5.5	6.2	11.0	4.75
<b>Average Defects per Active Bus</b>	3.0	3.3	4.2	2.8
<b>Average # of “A” Defects per Bus: Contingency Fleet</b>	0.75	1.0	0.5	0.25
<b>Average # of “A” Defects per Bus: Active Fleet</b>	0.21	0.25	0.40	0.23

All contingency buses selected at random for inspection were inspected first to determine if their engines would start -- an indication if First Transit is keeping the fleet ready for operation. Of the four contingency buses inspected, all started this audit compared to the same number last audit.

## **ANALYSIS OF ALL CONTINGENCY BUS RECORDS**

An analysis of all Contingency Bus records was conducted to determine if First Transit is meeting its contractual requirements to conduct the following:

- Perform PMIs twice per year, including oil and filter changes
- Keep batteries charged, air systems operational, etc.
- Maintain current state inspections
- Operate buses frequently and for substantial periods of time (minimum 30 miles per month)

It was agreed that a minimum of 30 miles per month (360 miles per year) would be sufficient for the contingency fleet, and two full PMs including oil and filter changes would be conducted annually regardless of accumulated mileage and regardless of the number of specialized “Contingency Bus Inspections” already conducted to check safety items. It was also agreed that subsequent audits would first begin with an inspection of the Contingency Buses selected for the audit as a way to determine if buses would start and, therefore, be ready for service on a moment’s notice if needed. The 30-miles-per-month-per-contingency-bus requirement will be monitored and is subject to change.

A review of all Contingency Buses in meeting contract requirements is shown in **Table 12**. The number of designated Contingency Buses in the fleet totaled nine this audit, same as last. The review revealed two of the nine Contingency Buses received a minimum of two full PMIs during the past year (Contingency Buses 269 and 270 were down for extensive repairs). Three Contingency Buses failed to travel a minimum of thirty miles per month for the entire three-month period (Contingency Bus 300 was also down for extensive repairs). The review also indicated that five of the nine Contingency Buses showed activities related to battery maintenance, and one bus had air system maintenance activity. It should be noted that not all buses need this service within a three-month period. As mentioned above, all Contingency Buses inspected did start prior to conducting the inspections. **Table 12** also shows that all annual state inspections are current.

<b>TABLE 12</b> <i>Review of Contingency Bus Records</i>				
<b>Bus Number</b>	<b>Last Two PMs Performed</b>	<b>Batteries Charged &amp; Air Systems (since last audit)</b>	<b>Valid State Inspections</b>	<b>Miles Traveled Per Month (30 min.) Since Last Audit</b>
262	01/17/18 11/29/17	Charge batteries: 02/8/18  No air system activity found	Yes	Jan – 716 Feb – 44 Mar – 598
267	01/17/18 08/1/17	Replace batteries: 12/8/17  No air system activity found	Yes	Jan – 544 Feb – 445 Mar – 637
268	03/27/18 01/17/18	Replace batteries: 12/11/17  No air system activity found	Yes	Jan – 262 Feb – 65 Mar – 659
269	02/28/17 (no other PM found)*	No battery activity found  No air system activity found	Yes	Jan – 0* Feb – 0* Mar – 0*
270	08/1/17 (no other PM found)*	Replace batteries: 8/25/17  No air system activity found	Yes	Jan – 0* Feb – 0* Mar – 0*
300	06/19/17	No battery activity	Yes	Jan – 0*

<b>TABLE 12</b> <b>Review of Contingency Bus Records</b>				
<b>Bus Number</b>	<b>Last Two PMs Performed</b>	<b>Batteries Charged &amp; Air Systems (since last audit)</b>	<b>Valid State Inspections</b>	<b>Miles Traveled Per Month (30 min.) Since Last Audit</b>
	10/4/17	found  No air system activity found		Feb – 0* Mar – 0*
301	02/22/18 01/19/18	No battery activity found  No air system activity found	Yes	Jan – 4624 Feb – 4976 Mar – 3555
302	02/2/18 03/16/18	No battery activity found  Service air drier 12/27/17	Yes	Jan – 5499 Feb – 3847 Mar – 3933
303	01/5/18 03/2/18	Replace batteries: 11/10/17  No air system activity found	Yes	Jan – 3944 Feb – 3038 Mar – 3338

\* Failed to meet requirement (269, 270 & 300 are down for extensive time awaiting repairs)

### **Additional Contingency Bus Records Inspection**

As noted in Table 11 above, the average defects for the Contingency Bus fleet equaled 4.75 per bus compared to 2.8 for the active fleet, an improvement over last audit of 11 versus 4.2. It should be noted that direct comparisons between the two fleets is difficult to make because of the small sampling size of the Contingency Bus fleet. Contingency Buses are also older and are driven less frequently than active buses, which typically results in a higher number of defects. TRC will continue to conduct a separate analysis for this subfleet to include if operators are reporting defects as part of their pre and post trip inspections.

Of the four Contingency Buses inspected, the analysis found 11 of the 19 defects identified were ones that an operator should have noted (see **Table 13**). However, because Bus 262 was not used for revenue service in April (no Zonar reports to examine), the four defects for that bus were removed from the total leaving seven. Of the seven defects that an operator should have noted, all were found in the Zonar records, a vast improvement over past audits. A review of First Transit records revealed that body damage was deferred as is typically done given the contracted nature of that activity. First Transit initiated repair action on the other defects noted by operators.



<b>Table 13</b> <b><i>Additional Review of Contingency Bus Records</i></b>			
<b>Bus Number</b>	<b>Defects that Should Have Been Identified by Operator</b>	<b>Zonar Record</b>	<b>Action Taken by First Transit</b>
267	- - Exterior body damage (two separate defects)	- Body damage defects noted by operator	Body work deferred
262	- Air valve leaking - Floor cover lifting, ramp - Rear license plat light out - Missing decals	No Zonar records for month of April because bus was not used	n/a
302	- Exterior body damage (four separate defects) -	- Body damage defects noted by operator	Body work deferred
303	- Rear destination sign inoperative	- Destination sign reported by operator	Destination sign Work Order generated

## RECOMMENDATIONS

Given the significant improvement in maintenance performance, there are no specific recommendations except to continue taking steps to reduce exterior-related defects, engine/engine compartment defects, contingency bus defects, and “A” defects.

# APPENDIX A – List of Buses Inspected

<b>TABLE 1</b> <i>Buses Inspected</i>		
<b>FLEET INSPECTION</b>	<b>RECORDS &amp; FLUIDS ANALYSIS</b>	<b>ROAD TEST INSPECTION</b>
<b>2005-06 GILLIG 40’</b> <b>Phantom</b> <b>184-188</b>		
184		184
185	186*	
<b>2010-12 GILLIG 40’ LF</b> <b>189-199,1000-1002</b>		
190		
191		
195		
197		
1000	1000	1000
<b>2004-13 GILLIG 30’</b> <b>262, 267-288</b>		
262 - C		
267 - C		267-C
273	272*	
274		
279		
283		
286	286	
<b>2002-06 MCI</b> <b>300-360</b>		
302 - C		
303 - C	303-C	303-C
307		
308		
314		
316		316
317		
320		
325		
326	326	
331		
332	332	

<b>TABLE 1</b> <i>Buses Inspected</i>		
<b>FLEET INSPECTION</b>	<b>RECORDS &amp; FLUIDS ANALYSIS</b>	<b>ROAD TEST INSPECTION</b>
339		
343		
347		
349	349	349
353		
356		
359	359	
360		360
<b>2008-14 MCI 361-393</b>		
363		363
364		
368	368	368
371		
375		
378		
381		
383	383	
387		387
389		
390	390	
<b>2016 Gillig 1003-1009</b>		
1005		1005
1007		
<b>2016 Gillig Low Floor 289-294</b>		
289		
294	294	294
<b>2017 MCI 394-398</b>		
396		
397		397
<b>TOTAL: 51 47 Active 4 Cont.</b>	<b>TOTAL: 13 12 Active 1 Cont.</b>	<b>TOTAL: 13 11 Active 2 Cont.</b>

*\*Bus was sampled for fluids on Sunday and then became unavailable for inspection later in the week. Another bus was substituted for the fleet inspection.*

## **APPENDIX B – Evaluation Criteria & Methodology**

TRC continued its audit process of evaluating fleet condition, records, fluids, and worker certification/training using identical procedures from the previous audits. A team of three bus inspectors was assigned to physically inspect the buses, conduct road tests, and draw oil samples. A separate Project Manager organized the overall inspection process, performed the Records and Fluids Analysis Audit, and prepared the final report.

The material which follows describes the evaluation criteria and methodology used by TRC to conduct the various audit inspections.

### **Fleet Inspection**

Specific defects noted during the bus inspections were classified under 18 functional categories:

- 1) Accessibility Features
- 2) Air System/Brake System
- 3) Climate Control
- 4) Destination Signs
- 5) Differential
- 6) Driver's Controls
- 7) Electrical System
- 8) Engine Compartment
- 9) Exhaust
- 10) Exterior Body Condition
- 11) Interior Condition
- 12) Lights
- 13) Passenger Controls
- 14) Safety Equipment
- 15) Structure/Chassis/Fuel Tank
- 16) Suspension/Steering
- 17) Tires
- 18) Transmission

An “A/B” designation system was used to denote defects requiring immediate repair from those that could be repaired at a later time.

**A** – Indicates a critical defect that when identified during a regularly scheduled PMI requires immediate repair and would keep the vehicle from returning to revenue service until the defect is corrected.

**B** – Indicates a non-critical defect, the repair of which could be deferred to a later time.

“A” category defects were agreed upon by PRTC and First Transit early in the audit process and remain the same to keep audit comparisons consistent. A copy of the “A” defects used for all audits is attached as Appendix B. TRC informed First Transit management of “A” category defects as soon as they were

identified, which First Transit repaired immediately or scheduled for repair soon afterwards. First Transit was given an opportunity to contest defects as soon as they were brought to their attention.

TRC shared the entire list of preliminary defects found during each day's inspections with First Transit management with the understanding that the defects would need to be reviewed by TRC and may change based on that review. The sharing of defects is intended to keep First Transit informed of TRC's findings as part of a cooperative and objective evaluation process. TRC inspectors also worked with First Transit personnel to confirm operation of certain controls in advance to ensure that defects were legitimate and not the result of the inspectors not being familiar with specific PRTC bus equipment. If there was any doubt about a defect, TRC either removed it from the list or downgraded "A" defects to "B" level status.

### **Records and Fluids Analysis Audit**

Thirteen buses were selected at random by PRTC for the Records and Fluids Analysis Audits. The records examination set out to determine if:

- Preventive maintenance (PM) had been performed correctly and at prescribed intervals;
- Repairs had been performed properly and made promptly;
- Qualified mechanics performed maintenance tasks by virtue of documented training certification; and
- The fluids analysis program is being administered properly.

#### PM Intervals

To determine if preventive maintenance inspections (PMIs) were performed correctly and on time, TRC examined the PMI records of the thirteen buses selected at random. Mileage between the last two PMIs was calculated to determine if the inspections were performed on time (within 10% or 600 miles of the scheduled 6,000-mile interval).

#### Repairs

To determine if repairs were performed properly and made promptly, two audit procedures were used:

- 1) PMI sheets going back three PMIs were examined for each of the thirteen buses selected at random to determine if and when defects noted during the PMI process were repaired.
- 2) Defects from the previous PMIs were then compared to determine if any defects were repeated from one PMI to the next.

From this comparison TRC could determine if the defects were repaired or if they were simply noted on subsequent inspections.

#### Mechanic Qualification

To determine if qualified mechanics performed maintenance tasks by virtue of documented training and certification, TRC selected five (5) air conditioning (AC) repairs at random from the work orders.

TRC examined AC-related work orders to identify a) the nature of the repair, and b) the mechanics performing the actual work. TRC then compared the name of the mechanic performing the repair to the list of AC certified technicians that TRC updated with First Transit to determine if the technicians were certified to perform the tasks. Technicians performing routine mechanical tasks to AC systems (i.e., those that do not involve refrigerant) are not required to be certified.

TRC also collected and reviewed a listing of Automotive Service Excellence (ASE) certifications and work experiences of all First Transit mechanics to allow PRTC to determine compliance with established requirements.

#### Fluids Analysis Management

To determine if the fluids analysis program is being administered properly, TRC examined oil analysis records for each of the thirteen buses selected at random for the Records Inspection. TRC noted if the fluid analysis was being performed at the appropriate PMI interval, if fluid analysis records were properly filed for easy reference, and if any actions were being taken as a result of the fluid analysis findings.

TRC also drew engine oil, transmission fluid, and coolant samples from thirteen buses selected at random and reviewed those results (39 samples total). In reviewing the results, TRC looked for evidence of inappropriate levels of deterioration. TRC also looked for evidence that First Transit is making use of the fluids analysis results. In addition, TRC reviewed the actions recommended by the lab for the samples it took during the last audit to determine if First Transit did, in fact, act on those recommendations.

#### **Road Test Protocol**

A defined protocol based on PRTC's "Out of Service Defects While Operating" list was used for assigning defects identified during the road test of 13 buses. All road test defects continue to be listed separately and are not included in the fleet defect totals. Instead of assigning an "A" or "B" designation as is done with static inspection defects, road test defects are classified as either:

- Those that in the opinion of the operator would render the vehicle out of service according to PRTC's "Out of Service Defects While Operating" list.
- Those that would not render the vehicle out of service in the opinion of the operator.

PRTC's "Out of Service Defects While Operating" list is attached as Appendix F, which also describes the entire Road Test Protocol as agreed to by PRTC and First Transit.

#### **Contingency Bus Records Review**

A review of all contingency bus records (9 in total for this audit) was made to determine if contract obligations are being met by First Transit to:

- Conduct a minimum of two PM inspections annually, including oil and filter changes
- Make sure batteries are charged and air systems operational
- Make sure current annual state inspections are maintained
- Make sure buses are operated frequently and for sustained periods of time (minimum 30 miles per month).

**APPENDIX C – Excel Spreadsheet Reports  
(Attached as a CD)**

- Defect Summary – All Buses
- Defect Summary – Active Buses
- Defect Summary – Contingency Buses
- Static Defects – All Buses
- Road Test Defects – All Buses
- Defects by Category – All Buses
- “A” Defects – All Buses
- Static Defects – Active Buses
- Road Test Defects – Active Buses
- Defects by Category – Active Buses
- “A” Defects – Active Buses
- Static Defects – Contingency Buses
- Road Test Defects – Contingency Buses
- Defects by Category – Contingency Buses
- “A” Defects – Contingency Buses
- Defect Category Trends – Active Buses
- All Buses Inspected
- Active Buses Inspected
- Contingency Buses Inspected

## **APPENDIX D – Listing of “A” Category Defects**

### **PRTC “A” Defect List**

- Fire extinguisher (expired tag OK unless indicator in red)
- Headlights
- Wipers (either)
- Cracked windshield in driver’s view (larger than a quarter)
- Seat belts, driver
- Turn signals
- Horn
- Emergency flashers
- Brake lights (more than one)
- Air pressure/Air leaks (except series 60 EGR engines at dryer and air operated wipers on delay)
- Brake lining thickness @ 7/32-inch; Disc lining at 1/8-inch
- Tire tread depth @ 2/32 rear; 4/32 front
- Fuel leak
- Exposed wires (insulation missing)
- Oil/Grease on brakes (saturated)
- Wheelchair lift/Ramp & securement
- Sharp edges – interior
- Tripping hazard – interior
- Critical steering/Suspension play, wear
- Sensitive edges – doors – not working at all
- Tire pressure below 80 psi (tag tires 70 psi)
- Wheel lug nuts
- Exhaust leak into bus
- Back-up alarm
- Excessive slack adjuster throw: 30=2”; 36=2.5”
- Emergency window won’t open



## **APPENDIX E – Listing of Contested Defects and TRC Response**

**None for this audit**

## **APPENDIX F – Road Test Protocol**

### **A) Process**

First Transit assigns consistent operator(s) to road test approximately 25% of buses selected for each maintenance audit. The process consists of a TRC inspector accompanying the operator during the road test, asking questions if needed to ensure the operator has not overlooked a defect.

Defects and abnormalities are classified as either:

- Those that in the opinion of the operator would render the vehicle out of service according to PRTC's "Out of Service Defects – While Operating" list (see below).
- Those that would not render the vehicle out of service in the opinion of the operator.

Defects that render the vehicle out of service are then inspected by First Transit with a TRC inspector serving as an observer. First Transit indicates the findings of their investigation to the TRC inspector along with the proposed corrective action (if any). The TRC inspector records this information and gains concurrence from First Transit that the report is accurate. The TRC inspector then adds his observations separately.

All road test defects and reporting are itemized separately in the Audit Report and are not counted or reported with the static defect totals.

### **B) Out of Service Defects – While Operating**

Per the PRTC/First Transit Bus Service Operating Procedures, the following items require the operator to stop the bus as soon as it is safe to do so and contact dispatch. If they occur during a road test, they will be noted as such in the Audit Report.

1. Transmission
  - a. slips
  - b. will not shift
  - c. overheats
2. Engine Problems
  - a. hot engine
  - b. cuts off
  - c. unusual acceleration (e.g., bucks, hesitates, sticking accelerator)
3. Oil System Problems
  - a. Oil light
  - b. Severe oil leak
4. Air System Problems
  - a. No or low air pressure (under 80 psi)
5. Brake System Problems
  - a. Hot brakes or wheels
  - b. Slack brakes

6. Fuel leak or smell
7. Excessive steering condition
8. Exhaust fumes leaking into bus (obvious smell)
9. Inoperative defroster system
10. Flat tire(s)
11. Inoperative windshield wiper(s)
12. Any other defect rendering the vehicle unsafe to operate




Potomac and Rappahannock  
Transportation Commission

14700 Potomac Mills Road  
Woodbridge, VA 22192

June 7, 2018

TO: Madame Chair Anderson and Commissioners

FROM: Robert A. Schneider, PhD.   
Executive Director

RE: Revised Purchasing Authority Report

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On June 4, 2015, the Commission approved increasing the Executive Director's delegated purchasing authority from \$50,000 to \$100,000. It was resolved that any purchase of greater than \$50,000 would be communicated to the Board as an information item.

In April 2018 there were no purchase orders issued within the Executive Director's new spending authority.

**Wheels-to-Wellness Funding Status**  
As of April 30, 2018

Grant/Contribution	Organization	Amount	Notes	
Enrollment Fees Collected		\$165		
<b>Sub Total</b>		<b>\$165</b>		

Pending

Grant/Contribution	Organization	Amount	Notes	
<b>Sub Total</b>		<b>\$0</b>		

Previously Reported

Grant/Contribution	Organization	Amount	Notes	Date
Enrollment Fees		\$2,940		
Contribution	Lake Jackson Volunteer Fire & Rescue Department - Bingo Account	\$500		02/09/2018
Contribution	Linda Lee - Go Fund Me	\$931		02/16/2018
Contribution	Davita Dialysis Center	\$1,261	Net IEC 3% admin fee per agreement (actual donation	01/18/2018
Grant	MWCOG Enhanced Mobility Grant/Potomac Health Foundation 50% match (disabled and seniors)	\$250,000		06/14/17
Contribution	First United Presbyterian Church of Dale City	\$500		08/31/16
Contribution	St. Francis of Assisi Church	\$2,000		08/25/16
Grant	Kaiser Permanente (low income individuals)	\$72,750	Net IEC 3% admin fee per agreement (actual grant was \$75,000)	8/9/2016
Contribution	Prince William County	\$75,000		July 2016
Contribution	First United Presbyterian Church of Dale City	\$500		06/21/16
Contribution	Zion Baptist Church in Baltimore	\$700		05/10/16
Contribution	First United Presbyterian Church of Dale City	\$500		04/25/16
Contribution	Gregg and Jean Reynolds	\$50		04/19/16
Contribution	NOVEC (corporate)	\$500		04/14/16
Grant	Transurban Express Lane Grant	\$1,500		04/11/16
Contribution	Malloy	\$500		04/11/16
Contribution	NOVEC HELPS	\$485	Net IEC 3% admin fee per agreement (actual contribution was \$500)	04/08/16
Contribution	Findley Asphalt	\$1,000		03/31/16
Contribution	Lustine Toyota	\$2,000		03/29/16
Contribution	Infinity Solutions, Inc	\$250		03/29/16
Contribution	Sacred Heart Catholic Church	\$200		03/21/16
Contribution	Holy Family Catholic Church	\$1,000		03/21/16
Contribution	First Baptist Church of Woodbridge	\$5,000		03/08/16
Contribution	First United Presbyterian Church of Dale City	\$1,000		02/25/16
Contribution	First Mount Zion	\$5,000		02/01/16
Contribution	Prince William County	\$160,000		Aug 2015
<b>Sub Total:</b>		<b>\$586,067</b>		
<b>Grand Total (excluding Pending)</b>		<b>\$586,232</b>		
<b>Remaining (excluding Pending)</b>		<b>\$159,560</b>		