



VIRGINIA RAILWAY EXPRESS
OPERATIONS BOARD

Agenda Item 9-B
Action Item

To: Chair Bohmke and the VRE Operations Board

From: Rich Dalton

Date: March 15, 2024

**Re: Acceptance of Title VI Service Standards and Policies
Monitoring Results**

Recommendation:

The VRE Operations Board is asked to accept the results of the Title VI Service Standards and Policies monitoring and forward them to the Potomac and Rappahannock Transportation Commission (PRTC) for inclusion in PRTC's Title VI submittal.

Summary:

To safeguard against service design and operations that discriminate on the basis of race, color, or national origin, the Federal Transit Administration (FTA) requires transit systems to monitor and analyze the performance of their systems relative to their system-wide service standards, every three years.

Background:

As prescribed in FTA Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" FTA requires transit providers to monitor the performance of their transit system relative to their system-wide service standards and service policies (e.g. vehicle load, vehicle assignment, transit amenities, etc.) every three years.

The results of VRE's Service Standards and Policies monitoring must be submitted as part of PRTC's Title VI submittal due in April 2024.



Northern Virginia
Transportation Commission
2300 Wilson Blvd., Suite 230
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

VRE staff has conducted the monitoring, the results of which are attached along with the VRE Title VI Service Standards and Policies.

Fiscal Impact:

There is no material fiscal impact to this required monitoring.

**Virginia Railway Express
Operations Board Resolution**

9B-03-2024

**Acceptance of Title VI Service Standards and Policies Monitoring
Results**

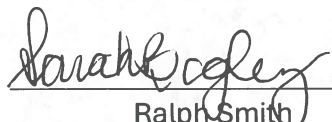
WHEREAS, the Federal Transit Administration requires transit providers to monitor the performance of their transit system relative to their system-wide service standards and service policies; and,

WHEREAS, VRE must submit results of the monitoring of its system-wide service standards and service policies to the Potomac and Rappahannock Transportation Commission for inclusion in the Potomac and Rappahannock Transportation Commission's Title VI submittal; and,

NOW, THEREFORE, BE IT RESOLVED THAT, the VRE Operations Board does hereby accept the results of the system-wide service standards and service policies monitoring; and,

BE IT FURTHER RESOLVED THAT, the VRE Operations Board does hereby direct that the results of the system-wide service standards and service policies monitoring be forwarded to the Potomac and Rappahannock Transportation Commission for inclusion in the Potomac and Rappahannock Transportation Commission's Title VI submittal.

Approved this 15th day of March 2024



Ralph Smith
Secretary

Sarah Bagley
Vire chair



Meg Bohmke
Chair

VRE SYSTEM-WIDE SERVICE STANDARDS AND POLICIES

The Virginia Railway Express (VRE) System-Wide Service Standards and Policies address how service is distributed across the system and ensures services provided are accessible to users. Service policies also ensure that service design and operations practices do not result in discrimination based on race, color, or national origin.

These standards and policies are required by Federal law, as described in Federal Transit Administration (FTA) Circular 4702.1B, “Title VI Requirements and Guidelines for Federal Transit Administration Recipients”, which became effective October 1, 2012. The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service located in urbanized areas (UZA) of 200,000 or more people to develop service standards and policies that monitor performance of service every three years. The service standards and policies, as well as evidence of service monitoring, will become a portion of the Title VI Plan which is submitted to FTA every three years. This document has been updated with monitoring data from Fiscal Year 2023 (for on-time performance) and January/February 2024 (for train capacity/loading, station amenities, and service frequency).

Required quantitative standards are compiled for vehicle load, vehicle headway, on-time performance, and service availability. Required service policies are composed for distribution of transit amenities and vehicle assignments. Additional standards or policies may be developed as appropriate.

SERVICE STANDARDS

A. Vehicle Load

Vehicle load or load factor is expressed as the ratio of passengers per vehicle or the ratio of passengers to the number of seats on a vehicle at the vehicle’s maximum load point. It is used to determine the extent of likely overcrowding, to assign equipment (e.g., number/type of rail cars), and to make subsequent adjustments by lengthening or shortening trains.

VRE’s goal is to not exceed the total number of seats available, plus allow no more than 15 standees per coach for the midweek average on any single train traveling through the maximum load point in the peak direction and hour. A maximum capacity factor of 1.11 per train has been designated to allow for up to 15 standees per passenger coach on VRE trains based on typical train sets currently being operated (Table 1).

Table 1: VRE Passenger Capacity by Train as of February 2024

Cars	2/7/2024	Seats
6	322/321/332/333	780
6	324/335	780
8	326/329	1040
8	328/309	1040
8	330/325/336/331	1040
8	300/305	1040
8	302/327/338/337	1040
5	304/315	650
7	306/307	910
6	308/311	780
6	310/303	780
6	312/313	780
4	314/301	520

Usually, VRE operates its trains in sets of four to eight cars to accommodate the level of ridership on each train. An eight-car train is the largest train set that VRE currently utilizes due to storage limitations in VRE storage yards. Train sets typically include a cab car and three to seven trailer coaches and at least one coach includes a bathroom.

Reviews and adjustment of train sizes are considered when passenger capacity exceeds or falls below established volume points. Adjustments are also made to train length when a typical ridership is expected prior to a holiday, impending weather event or other special circumstance. Capacity guidelines may be relaxed during temporary surges in demand or for special event trains.

B. Vehicle Headway

Vehicle headway measures the amount of time between two successive vehicles traveling in the same direction on a given line or combination of lines. It is a general indicator of the level of service provided along a line or route. A shorter headway corresponds to more frequent service.

VRE peak headways are generally about 30 minutes for each line. VRE schedules peak service and determines vehicle headway based upon an analysis of ridership, commuter demand, the operating windows and slots allowed in the operating contract with its host railroads (i.e. Norfolk Southern for the Manassas Line, CSX Transportation (CSXT) for the Fredericksburg Line, the shared line between Alexandria and Washington, D.C. Union Station, and Amtrak for access to D.C. Union Station). Since VRE operates within a mixed traffic environment and shares the tracks with freight and Amtrak trains, the amount of time between any two trains is based on how those trains fit into the overall schedule. Train schedules also consider the merging of the Fredericksburg and Manassas Line trains, as well as other trains on the railroad, into one line at Alexandria.

VRE's operating agreements also limit the ability of VRE to add service at will and/or expand its operating territory. The host railroad must approve any service additions or changes in schedule before they can be implemented. Currently, VRE trains operate primarily during the morning and evening peak travel periods in the peak direction of travel. The Manassas Line has some limited reverse-flow service that primarily serves to position equipment for subsequent peak service. Each line has one midday train departing the Washington, D.C. central business district.

C. On-Time Performance

On-time performance (OTP) is the measure of trips completed as scheduled. VRE's OTP standard is that trains shall arrive at their destination at or within five minutes of their scheduled arrival time and no revenue train is allowed to leave an intermediate station before it is scheduled to depart, unless noted otherwise on passenger timetables.

VRE's fiscal year (FY) 2024 target for OTP is greater than 90%. VRE sets an annual target for OTP as part of its budget process. Factors considered in setting the target include operational safety, preventive maintenance scheduled for the right of way provided by the host railroad, ability to meet the current schedule factoring in VRE rolling stock reliability and efficiency testing, and projected impact on service because of weather or other variables.

VRE calculates OTP for each line and for the system as a whole. OTP is calculated as a percentage of on-time trains divided by the total scheduled revenue trains. Trains cancelled or annulled due to force majeure events (e.g., flooded right-of-way, government shutdown, etc.) are excluded from the calculation of OTP.

D. Service Availability

Service availability is a general measure of the distribution of routes within a transit provider's service area. For a commuter rail agency, service availability can be defined as the number or density of residents who are potential riders within a certain driving distance of the stations.

VRE's service area encompasses the nine Virginia jurisdictions that are served under the VRE Master Agreement: Arlington County, City of Alexandria, Fairfax County, Prince William County, City of Manassas, City of Manassas Park, Stafford County, City of Fredericksburg, and Spotsylvania County.

VRE operates trains along two lines that run within existing railroad rights-of-way. Currently, there are six origin stations along the Manassas line and nine origin stations along the Fredericksburg line. Origin stations are located two to 11 miles apart. The population of the catchment areas for the origin stations varies from 100,000 – 150,000 on the Manassas Line, and 50,000 – 125,000 on the Fredericksburg Line. System-wide, there are five destination stations. The destination stations are co-located with Metrorail stations providing VRE riders with access to the greater Washington, D.C. metro area.

VRE's operating agreements with the host railroads, CSXT and Norfolk Southern, affect VRE's ability to add service at will and/or expand its operating territory, including adding stations to a line or extending a Line. New stations or extensions are undertaken in cooperation and coordination with the local jurisdiction where the station or extension will be located. New stations or service extensions must be approved by the host railroad before they can be implemented.

Factors considered in determining service availability of new infill stations or service extensions include:

- Transit Demand/Ridership Potential
- Proximity to existing stations, both VRE and other regional transit hubs
- Operational Feasibility Passenger Transit Access
- Parking Availability
- Capital Funding Availability Community Impact Environmental Impact

SERVICE POLICIES

A. Vehicle Assignment

Vehicle assignment refers to the process by which transit vehicles are assigned to either line on the VRE system.

VRE's locomotive fleet consists solely of standard four-axle diesel-electric locomotives with similar horsepower ratings, tractive effort, and appearance. As none of VRE's territory is electrified using overhead catenary wire, there is no difference in propulsion power requirements throughout the system. All VRE locomotives were put into service in 2011 and are uniformly compatible with VRE's passenger coach fleet. Locomotives are distributed based on need and positioning for service.

VRE's passenger coach fleet consists of two types of coaches as indicated in Table 2. None of the passenger coaches are self-propelled. Coaches are not assigned to trains or routes specifically but are assigned as needed to the Manassas or Fredericksburg lines depending on demand/required seating capacity, routine and non-routine maintenance needs, and inspection cycles. The typical February 2024 vehicle assignment is shown in Tables 2.

Table 2: Typical Consists (February 2024)

Cars	2/7/2024	Seats	1	2	3	4	5	6	7	8
6	322/321/332/333	780	GC	G	G	G	G	G		
6	324/335	780	GC	GC	G	G	G	G		
8	326/329	1040	GC	G	G	G	G	G	G	G
8	328/309	1040	GC	G	G	G	G	G	G	G
8	330/325/336/331	1040	GC	G	G	G	G	G	G	G
8	300/305	1040	GC	G	G	G	G	G	G	G
8	302/327/338/337	1040	GC	G	G	G	G	G	G	G
5	304/315	650	GC	G	G	G	G			
7	306/307	910	GC	GC	G	G	G	G	G	
6	308/311	780	GC	G	G	G	G	G		
6	310/303	780	GC	G	G	G	G	G		
6	312/313	780	GC	G	G	G	G	G		
4	314/301	520	GC	G	G	G				

GC = Gallery Cab G = Gallery Coach

B. Distribution of Transit Amenities

Transit amenities are items of comfort, convenience, and safety made available to VRE passengers making use of VRE trains and passenger stations.

All VRE coaches are equipped with onboard amenities such as heating and air conditioning; interior lighting; baggage racks; and public-address systems.

The U.S. Department of Transportation requires that transportation vehicles and transportation facilities be readily accessible and useable by individuals with disabilities consistent with the requirements of the Americans with Disabilities Act (ADA) and that access for individuals with disabilities is provided in the most integrated manner possible. That includes providing individuals who use wheelchairs access to all cars available in each train. All coaches purchased in the future will include onboard lifts.

All cab cars and approximately a third of the trailer coaches have bathrooms. Coaches are deployed among trains so that there is a minimum of one cab car and one trailer coach with a bathroom on each consist. Planned coach purchases to complete the fleet replacement program or expand the fleet will include bathrooms.

Amenities available at VRE stations include but are not limited to: benches; covered structures and/or platform canopies; informational amenities such as system maps, schedules/timetables, and public-address systems; intelligent transportation systems (e.g., electronic fare payment equipment and variable message/vehicle arrival information displays); elevators and escalators; waste containers; public telephones; and park-and-ride facilities.

There are two types of stations maintained by VRE: Autonomous VRE stations and Joint Use stations (see Table 4). Autonomous VRE stations were constructed by VRE for the primary purpose and use of accessing VRE train service. Generally, all autonomous VRE stations are provided the same set of amenities.

Joint-use stations also provide access to Amtrak service. Generally, joint-use stations existed prior to the formation of VRE and may contain amenities available to passengers that are not installed within autonomous VRE stations. In many cases, VRE has added amenities to the joint-use stations for VRE passengers to use through separate agreements.

While all VRE stations are ADA-compliant, for the purposes of ADA, the following VRE stations are designated key stations:

- Washington Union Station
- L'Enfant
- Crystal City
- Alexandria
- Woodbridge
- Fredericksburg
- Burke Centre
- Broad Run/Airport
- Spotsylvania

Table 3: VRE Station Amenities

Station	Line	Joint Use	Benches/Exterior Seating	Waiting Room	Rest room	Elevator	Ped. Under/overpass	Shelters	Platform Canopy	Signage/System Maps	Public Address System	Variable Messaging	Ticket Vending	Waste Receptacle	Public Phone	Parking Lots	Bike Racks	Bike Lockers
Spotsylvania	FBG		x	x	x				x	x	x	x	x	x		x	x	
Fredericksburg	FBG	J	x			x	x	x	x	x	x	x	x	x	x	x	x	
Leeland Road	FBG		x					x	x	x	x	x	x	x	x	x	x	
Brooke	FBG		x					x	x	x	x	x	x	x	x	x	x	
Quantico	FBG	J	x	x	x				x	x	x	x	x	x	x	x	x	
Rippon	FBG		x			x	x	x	x	x	x	x	x	x		x	x	
Woodbridge	FBG	J	x	x	x	x	x	x	x	x	x	x	x	x		x	x	
Lorton	FBG		x					x	x	x	x	x	x	x		x	x	
Franc/Springfield	FBG		x			x	x	x	x	x	x	x	x	x		x	x	
Broad Run	MSS		x					x	x	x	x	x	x	x	x	x	x	
Manassas	MSS	J	x	x	x	x			x	x	x	x	x	x		x	x	x
Manassas Park	MSS		x					x	x	x	x	x	x	x		x	x	
Burke Centre	MSS	J	x			x		x	x	x	x	x	x	x	x	x	x	x
Rolling Road	MSS		x					x	x	x	x	x	x	x		x	x	
Backlick Road	MSS		x					x	x	x	x	x	x	x		x	x	x
Alexandria	Both	J	x	x	x		x	x	x	x	x	x	x	x			x	
Crystal City	Both		x					x	x	x	x	x	x	x				
L'Enfant	Both	J	x					x	x	x	x	x	x	x				
Wash. Union Station	Both	J	x	x	x	x	x		x	x	x	x	x	x	x	x	x	

RESULTS OF THE MONITORING PROGRAM

Per the Federal Transit Administration (FTA) Circular 4702.1B, VRE is required to monitor its performance using the quantitative Service Standards and qualitative Service Policies established for the VRE system. Monitoring and assessment of service is intended to compare service provided in areas with a percentage of minority population that exceeds the percentage of minority population in the service area, or “minority routes”, to service provided in areas with a percentage of minority populations that is below the percentage of minority population in the service area, or “non-minority routes”. However, since VRE only has two routes, i.e. the Fredericksburg Line and the Manassas Line, it is not possible to designate minority and non-minority routes. Monitoring was conducted for each route and for the system as a whole.

SERVICE STANDARDS**A. Vehicle Load**

The maximum capacity factor designated for VRE trains is 1.11 under normal circumstances. The tables below show the capacity factors for the VRE trains on three mid-week days in January and February 2024. These capacity factors indicated there were seats for all passengers onboard that train.

Table 4

1/24/2024			
FBG	Seats	Ridership	Load Factor
300	1040	431	0.41
301	520	139	0.27
302	1040	247	0.24
303	780	312	0.40
304	650	167	0.26
305	1040	538	0.52
306	910	291	0.32
307	910	460	0.51
308	780	326	0.42
309	1040	507	0.49
310	780	457	0.59
311	780	382	0.49
312	780	407	0.52
313	780	183	0.23
314	520	198	0.38
315	650	53	0.08
MSS			
321	780	4	0.01
322	780	141	0.18
324	780	105	0.13
325	1040	71	0.07
326	1040	260	0.25
327	1040	370	0.36
328	1040	360	0.35
329	1040	472	0.45
330	1040	564	0.54
331	1040	409	0.39
332	780	252	0.32
333	780	153	0.20
335	780	120	0.15
336	1040	99	0.10
337	1040	55	0.05
338	1040	7	0.01

Table 5


1/31/2024			
FBG	Seats	Ridership	Load Factor
300	1040	479	0.46
301	520	193	0.37
302	1040	265	0.25
303	780	367	0.47
304	650	193	0.30
305	1040	629	0.60
306	910	309	0.34
307	910	427	0.47
308	780	386	0.49
309	1040	562	0.54
310	780	489	0.63
311	780	367	0.47
312	780	443	0.57
313	780	180	0.23
314	520	199	0.38
315	650	46	0.07
MSS			
321	780	7	0.01
322	780	151	0.19
324	780	102	0.13
325	1040	91	0.09
326	1040	275	0.26
327	1040	266	0.26
328	1040	363	0.35
329	1040	425	0.41
330	1040	606	0.58
331	1040	417	0.40
332	780	248	0.32
333	780	163	0.21
335	780	136	0.17
336	1040	8	0.01
337	1040	32	0.03
338	1040	2	0.00

Table 6

2/7/2024			
FBG	Seats	Ridership	Load Factor
300	1040	382	0.37
301	520	148	0.28
302	1040	293	0.28
303	780	406	0.52
304	650	255	0.39
305	1040	614	0.59
306	910	306	0.34
307	910	427	0.47
308	780	358	0.46
309	1040	666	0.64
310	780	474	0.61
311	780	384	0.49
312	780	480	0.62
313	780	188	0.24
314	520	259	0.50
315	650	66	0.10
MSS			
321	780	2	0.00
322	780	160	0.21
324	780	100	0.13
325	1040	77	0.07
326	1040	258	0.25
327	1040	377	0.36
328	1040	378	0.36
329	1040	356	0.34
330	1040	554	0.53
331	1040	481	0.46
332	780	281	0.36
333	780	72	0.09
335	780	130	0.17
336	1040	8	0.01
337	1040	56	0.05
338	1040	2	0.00

B. Vehicle Headways

VRE peak headways are about 30 minutes for each Line. The current schedules are below and available online at <https://www.vre.org/service/schedules/>.



FREDERICKSBURG LINE

Effective October 18, 2021

EFFECTIVE OCTOBER 18, 2021

VIRGINIA RAILWAY EXPRESS

NORTHBOUND

NORTHBOUND VRE TRAINS M-F		S	S	S	S
TRAIN #		300	302	304	306
SPOTSYLVANIA		4:52a	5:06a	5:21a	5:41a
FREDERICKSBURG		5:03	5:17	5:32	5:52
LEELAND ROAD		5:10	5:24	5:39	5:59
BROOKE		5:16	5:30	5:45	6:05
QUANTICO		-	5:42	5:57	6:17
RIPPO		-	5:51	6:06	6:26
WOODBRIDGE		5:38	5:58	6:13	6:33
LORTON		-	6:05	6:20	6:40
FRANCONIA/SPRINGFIELD		-	6:13	6:28	6:48
ALEXANDRIA		6:05	6:25	6:40	7:00
CRYSTAL CITY (L)		6:14	6:34	6:49	7:09
L'ENFANT (L)		6:22	6:42	6:57	7:17
ALEXANDRIA UNION STATION		6:30a	6:50a	7:05a	7:25a
CRYSTAL CITY (L)	6:04	6:24	6:59	7:19	8:24
L'ENFANT (L)	6:12	6:32	7:07	7:27	8:32
UNION STATION	6:12	6:32	7:07	7:27	8:32

SOUTHBOUND VRE TRAINS M-F

S	S	S	S
301	303	305	307
UNION STATION	1:00p	2:40p	3:30p
L'ENFANT	1:08	2:48	3:38
CRYSTAL CITY	1:15	2:55	3:45
ALEXANDRIA	1:23	3:03	3:53
FRANCONIA/SPRINGFIELD	1:34	3:14	4:04
LORTON	1:41	3:21	4:11
WOODBRIDGE	1:49	3:29	4:19
RIPPO	1:55	3:35	4:25
QUANTICO	2:05	3:45	4:35
BROOKE (L)	2:19	3:59	4:49
LEELAND ROAD (L)	2:28	4:08	4:58
FREDERICKSBURG (L)	2:36	4:16	5:06
SPOTSYLVANIA	2:47p	4:27p	5:17p

Seasonal Adjustment Memorial Day through Labor Day

301	303	305	307	309	311
QUANTICO	2:07	3:47	4:37	5:07	5:47
BROOKE (L)	2:26	4:06	4:56	5:26	6:06
LEELAND ROAD (L)	2:35	4:15	5:05	5:35	6:15
FREDERICKSBURG (L)	2:43	4:23	5:13	5:43	6:23
SPOTSYLVANIA	2:54p	4:34p	5:24p	5:54p	6:34p

S = Special schedules for holidays and snow days. L = Train may depart when station work is completed, regardless of scheduled time. Full-size and collapsible bicycles are allowed on all trains.
 VRE Info: www.vre.org or 800-RIDE-VRE.



MANASSAS LINE

EFFECTIVE OCTOBER 18, 2021

VIRGINIA RAILWAY EXPRESS

NORTHBOUND

VRE TRAINS M-F

	S		S		S		S	
TRAIN #	322	324	326	328	330	332	336	338
BROAD RUN	5:01a	5:21a	5:56a	6:16a	7:21a	8:01a	3:38p	5:10p
MANASSAS	5:09	5:29	6:04	6:24	7:29	8:09	3:46	5:18
MANASSAS PARK	5:15	5:35	6:10	6:30	7:35	8:15	3:52	-
BURKE CENTRE	5:29	5:49	6:24	6:44	7:49	8:29	4:06	-
ROLLING ROAD	5:34	5:54	6:29	6:49	7:54	8:34	-	-
BACKLICK ROAD	5:42	6:02	6:37	6:57	8:02	8:42	-	-
ALEXANDRIA	5:55	6:15	6:50	7:10	8:15	8:55	4:32	6:04
CRYSTAL CITY (L)	6:04	6:24	6:59	7:19	8:24	9:04	-	-
L'ENFANT (L)	6:12	6:32	7:07	7:27	8:32	9:12	-	-
UNION STATION	6:20a	6:40a	7:15a	7:35a	8:40a	9:20a	4:57p	6:29p

SOUTHBOUND

VRE TRAINS M-F

	S		S		S		S	
TRAIN #	321	325	327	329	331	333	335	337
UNION STATION	6:35a	1:15p	3:20p	4:10p	5:10p	5:30p	6:00p	7:00p
L'ENFANT	-	1:23	3:28	4:18	5:18	5:38	6:08	7:08
CRYSTAL CITY	-	1:30	3:35	4:25	5:25	5:45	6:15	7:15
ALEXANDRIA	6:52	1:38	3:43	4:33	5:33	5:53	6:23	7:23
BACKLICK ROAD	-	1:49	3:54	4:44	5:44	6:04	6:34	7:34
ROLLING ROAD (L)	-	1:57	4:02	4:52	5:52	6:12	6:42	7:42
BURKE CENTRE (L)	-	2:03	4:08	4:58	5:58	6:18	6:48	7:48
MANASSAS PARK (L)	-	2:17	4:22	5:12	6:12	6:32	7:02	8:02
MANASSAS (L)	7:37	2:24	4:29	5:19	6:19	6:39	7:09	8:09
BROAD RUN	7:47a	2:34p	4:39p	5:29p	6:29p	6:49p	7:19p	8:19p

S = Special schedules for holidays and snow days. L = Train may depart when station work is completed, regardless of scheduled time. Full-size and collapsible bicycles are allowed on all trains.
VRE Info: www.vre.org or 800-RIDE-VRE.

C. On-Time Performance

VRE's OTP for FY 2023 is shown by each line and for the system in Table 7. The system's Fiscal Year 2023 OTP was 84%, which was below the VRE Budget Goal of greater than 90%.

Table 7: On-Time Performance for Fiscal Year 2023

FY 2023 OTP		Fredericksburg Line				Manassas Line			
Month	Number of Trains Operated	Number of Trains Delayed	Canceled	OTP	Number of Trains Operated	Number of Trains Delayed	Canceled	OTP	
July-22	320	42	0	86.88%	320	64	0	80.00%	
Aug-22	366	31	2	91.53%	365	71	1	80.55%	
Sep-22	336	48	0	85.71%	328	75	8	77.13%	
Oct-22	318	64	2	79.87%	320	80	0	75.00%	
Nov-22	304	41	0	86.51%	303	62	1	79.54%	
Dec-22	287	34	5	88.15%	296	45	0	84.80%	
Jan-23	320	43	0	86.56%	320	48	0	85.00%	
Feb-23	304	54	0	82.24%	304	38	0	87.50%	
Mar-23	368	102	0	72.28%	364	54	4	85.16%	
Apr-23	320	60	0	81.25%	318	39	2	87.74%	
May-23	343	52	9	84.84%	337	55	15	83.68%	
Jun-23	344	34	0	90.12%	344	48	0	86.05%	
YTD	3930	605	18	84.61%	3919	679	31	82.67%	
Combined				Serv Days					
Number of Trains Operated	Number of Trains Delayed	Canceled	OTP						
640	106	0	83.44%	20					
731	102	3	86.05%	23					
664	123	8	81.48%	21					
638	144	2	77.43%	20					
607	103	1	83.03%	19					
583	79	5	86.45%	21					
640	91	0	85.78%	20					
608	92	0	84.87%	19					
732	156	4	78.69%	23					
638	99	2	84.48%	20					
680	107	24	84.26%	22					
688	82	0	88.08%	22					
7849	1284	49	83.64%	250					

D. Service Availability

VRE has defined catchment areas for each origin station based on data collected through customer surveys on the home locations of riders. The populations of the catchment areas for VRE's origin stations, as well as the percentage of minority population, are shown in Table 8. Fredericksburg Line stations are shown in red and Manassas Line stations are shown in blue. While the overall population and minority percentage for each Line are similar, station catchment areas vary throughout the system.

Table 8: VRE Station Catchment Area Population Characteristics

VRE Catchment Area Demographic Analysis			Last Updated 3/6/2024			
Station	Distance to Next Station (Miles)	2022 Population Estimate	White Population Estimate	Non White Estimate	% Non White	Difference from System Wide Average
Backlick Road		113,645	45,423	68,222	60.00%	17.20%
Rolling Road	4	106,207	66,589	39,618	37.30%	-5.50%
Burke Centre	2.3	166,726	95,320	71,406	42.80%	0.00%
Manassas Park	9.1	107,127	56,847	50,280	46.90%	4.10%
Manassas	2	111,072	63,118	47,954	43.20%	0.40%
Broad Run	3.1	266,138	191,636	74,502	28.00%	-14.80%
Manassas Line Origins		870,915	518,933	351,982	40.40%	
Franconia Springfield		44,046	21,633	22,413	50.90%	8.10%
Lorton		67,064	32,362	34,702	51.70%	8.90%
Woodbridge	4.4	97,260	45,120	52,140	53.60%	10.80%
Rippon	3.2	154,346	56,812	97,534	63.20%	20.40%
Quantico	7	48,447	21,431	27,016	55.80%	13.00%
Brooke	10.7	73,772	41,364	32,408	43.90%	1.10%
Leeland Road	4.8	66,913	47,774	19,139	28.60%	-14.20%
Fredericksburg	3.8	77,892	48,192	29,700	38.10%	-4.70%
Spotsylvania	7	192,765	136,449	56,316	29.20%	-13.60%
Fredericksburg Line Origins		822,505	451,137	371,368	45.20%	
System Wide		1,693,420			42.80%	
Notes:						
Population and Non White Population taken from ACS 5-year 2022 data						
Catchment areas found by taking census tracts with concentrations of VRE riders home locations (from VRE Master Agreement Survey Data)						
Catchment areas for Broad Run and Spotsylvania stations were defined by a 25-mile buffer, excluding census tracts that overlap with stations' catchment areas north of those two stations.						
Stations with higher numbers of alightings than boardings in the AM period were excluded from this analysis (Alexandria, Crystal City, L'Enfant, and Union Station)						

E. Vehicle Assignment

VRE does not assign locomotives or coaches to trains or routes specifically. Equipment is assigned as needed to the Manassas or Fredericksburg lines depending on demand/required seating capacity, routine and non-routine maintenance needs, and inspection cycles. Consists for three mid-week days in February 2024 are shown below.

Table 9: February 6, 2024

VIRGINIA RAILWAY EXPRESS CONSIST LINE UPS - 2/6/2024

Broad Run					
Out - 7	In - 7	Out - 1	In - 1	Out - 4	In - 5
Trains		Trains		Trains	
68		69		65	
322		324		328	
321				309	
332					
333					
6		6		8	
V725 Cab-T	V720 Cab-T	V727 Cab-T	V715 Cab-T	V714 Cab-T	V720 Cab-T
V833 Psgr Car-T	V711 Cab-T	V863 Psgr Car	V861 Psgr Car	V876 Psgr Car	V711 Cab-T
V840 Psgr Car-T	V854 Psgr Car	V836 Psgr Car-T	V800 Psgr Car-T	V804 Psgr Car-T	V854 Psgr Car
V857 Psgr Car	V842 Psgr Car-T	V834 Psgr Car-T	V814 Psgr Car-T	V847 Psgr Car-T	V842 Psgr Car-T
V812 Psgr Car-T	V818 Psgr Car-T	V848 Psgr Car-T	V825 Psgr Car-T	V805 Psgr Car-T	V818 Psgr Car-T
V878 Psgr Car	V871 Psgr Car	V820 Psgr Car-T	V827 Psgr Car-T	V817 Psgr Car-T	V871 Psgr Car
V51 Engine	V67 Engine	V835 Psgr Car-T	V815 Psgr Car-T	V843 Psgr Car-T	V67 Engine
		V862 Psgr Car	V856 Psgr Car	V879 Psgr Car	V59 Engine
		V57 Engine	V62 Engine	V63 Engine	

Broad Run		
Protect		
PM	V50	
	V64 Engine	V69 Engine
	V853 Psgr Car	V875 Psgr Car
	V830 Psgr Car-T	V710 Cab-T
		V811 Psgr Car-T
Shopped	V66 Engine	V55 Engine
	V712 Cab-T	V56 Engine
	V716 Cab-T	V730 Cab-T
	V806 Psgr Car-T	
Available	V723 Cab-T	V850 Psgr Car
		V873 Psgr Car
		V729 Cab-T
		V829 Psgr Car-T

Crossroads									
Out - 8	In - 8	Out - 9	In - 3	Out - 6	In - 10	Out - A	In - A	Out - 7	In - 7
Trains		Trains		Trains		Trains		Trains	
51		41		31		17		46	
300		302		304		306		308	
305		327		315		307		311	
		338							
		337							
8		8		5		7		6	
V728 Cab-T	V717 Cab-T	V722 Cab-T		V719 Cab-T		V713 Cab-T		V726 Cab-T	
V816 Psgr Car-T	V826 Psgr Car-T	V823 Psgr Car-T		V721 Cab-T		V860 Psgr Car		V810 Psgr Car-T	
V866 Psgr Car	V802 Psgr Car-T	V877 Psgr Car		V832 Psgr Car-T		V831 Psgr Car-T		V864 Psgr Car	
V870 Psgr Car	V839 Psgr Car-T	V828 Psgr Car-T		V845 Psgr Car-T		V837 Psgr Car-T		V806 Psgr Car-T	
V824 Psgr Car-T	V844 Psgr Car-T	V869 Psgr Car		V846 Psgr Car-T		V801 Psgr Car-T		V851 Psgr Car	
V838 Psgr Car-T	V822 Psgr Car-T	V60 Engine		V819 Psgr Car-T		V872 Psgr Car		V852 Psgr Car	
V821 Psgr Car-T	V859 Psgr Car			V865 Psgr Car		V53 Engine		V65 Engine	
V867 Psgr Car	V855 Psgr Car			V54 Engine				V874 Psgr Car	
V61 Engine	V58 Engine								

Consist Notes:

The V55 was cut and the V66 was added to the North End of train 312. Request the V66 be wyed and returned to CRDS on the South End of train 313. Cut the v68 and replaced with V63 on trains 330/325/336/331 at BRD..... V59 dc protect added to V335 set at Ivy City

Table 10: February 7, 2024

VIRGINIA RAILWAY EXPRESS CONSIST LINE UPS - 2/7/2024

Broad Run					
Out - 7 In - 7	Out - 1 In - 1	Out - 5 In - 4	Out - 3 In - 10	Out - 4 In - 5	Out - 4 In - 5
Trains	Trains	Trains	Trains	Trains	Trains
68	69	65	41	70	71
322	324	326	328	330	325
321	335	329	309		336
332					331
333					
6	6	8	8	8	8
V725 Cab-T	V720 Cab-T	V727 Cab-T	V717 Cab-T	V714 Cab-T	V714 Cab-T
V833 Psgr Car-T	V711 Cab-T	V863 Psgr Car	V826 Psgr Car-T	V876 Psgr Car	V876 Psgr Car
V840 Psgr Car-T	V854 Psgr Car	V836 Psgr Car-T	V802 Psgr Car-T	V804 Psgr Car-T	V804 Psgr Car-T
V857 Psgr Car	V842 Psgr Car-T	V834 Psgr Car-T	V839 Psgr Car-T	V847 Psgr Car-T	V847 Psgr Car-T
V812 Psgr Car-T	V818 Psgr Car-T	V848 Psgr Car-T	V844 Psgr Car-T	V805 Psgr Car-T	V805 Psgr Car-T
V878 Psgr Car	V871 Psgr Car	V820 Psgr Car-T	V822 Psgr Car-T	V817 Psgr Car-T	V817 Psgr Car-T
V51 Engine	V67 Engine	V835 Psgr Car-T	V859 Psgr Car	V843 Psgr Car-T	V843 Psgr Car-T
		V862 Psgr Car	V855 Psgr Car	V879 Psgr Car	V879 Psgr Car
		V57 Engine	V58 Engine	V63 Engine	V63 Engine
				V68 Engine	

Broad Run		
Protect	V50	
Shopped	V59 Engine V716 Cab-T V808 Psgr Car-T	V55 Engine V56 Engine V730 Cab-T
PM	V64 Engine V830 Psgr Car-T	V875 Psgr Car V710 Cab-T V811 Psgr Car-T
Available	V853 Psgr Car V712 Cab-T V723 Cab-T	V850 Psgr Car V873 Psgr Car V729 Cab-T V829 Psgr Car-T

Crossroads							
Out - 8 In - 9	Out - 9 In - 3	Out - 10 In - A	Out - A In - 6	Out - 7 In - 8	Out - 5 In - 5	Out - 6 In - 7	Out - 0 In - 0
Trains	Trains	Trains	Trains	Trains	Trains	Trains	Trains
51	64	31	17	46	19	56	58
300	302	304	306	308	310	312	314
305	327	315	307	311	303	313	301
	338						
	337						
8	8	5	7	6	6	6	4
V728 Cab-T	V715 Cab-T	V722 Cab-T	V719 Cab-T	V713 Cab-T	V726 Cab-T	V724 Cab-T	V69 Engine
V816 Psgr Car-T	V861 Psgr Car	V823 Psgr Car-T	V721 Cab-T	V860 Psgr Car	V810 Psgr Car-T	V858 Psgr Car	V718 Cab-T
V866 Psgr Car	V800 Psgr Car-T	V877 Psgr Car	V832 Psgr Car-T	V831 Psgr Car-T	V864 Psgr Car	V809 Psgr Car-T	V807 Psgr Car-T
V870 Psgr Car	V814 Psgr Car-T	V828 Psgr Car-T	V845 Psgr Car-T	V837 Psgr Car-T	V806 Psgr Car-T	V803 Psgr Car-T	V841 Psgr Car-T
V824 Psgr Car-T	V825 Psgr Car-T	V869 Psgr Car	V846 Psgr Car-T	V801 Psgr Car-T	V851 Psgr Car	V813 Psgr Car-T	V868 Psgr Car
V838 Psgr Car-T	V827 Psgr Car-T	V60 Engine	V819 Psgr Car-T	V872 Psgr Car	V852 Psgr Car	V874 Psgr Car	V52 Engine
V821 Psgr Car-T	V815 Psgr Car-T		V865 Psgr Car	V53 Engine	V65 Engine	V66 Engine	
V867 Psgr Car	V856 Psgr Car		V54 Engine				
V61 Engine	V62 Engine						

Consist Notes:

The V68 was added to the south end of train 330, requesting that the V68 be cut and held in WDC as protect.
The V69 was added to the North End of trains 314/301.

Table 11: February 8, 2024

VIRGINIA RAILWAY EXPRESS CONSIST LINE UPS - 2/8/2024

Broad Run				
Out - 7 In - 7	Out - 1 In - 1	Out - 4 In - 5	Out - 3 In - 8	Out - 5 In - 4
Trains	Trains	Trains	Trains	Trains
68	69	65	64	70
322	324	326	328	330
321	335	329	309	325
332				336
333				331
6	6	8	8	8
V725 Cab-T	V720 Cab-T	V727 Cab-T	V715 Cab-T	V714 Cab-T
V833 Psgr Car-T	V711 Cab-T	V853 Psgr Car	V861 Psgr Car	V876 Psgr Car
V840 Psgr Car-T	V854 Psgr Car	V836 Psgr Car-T	V800 Psgr Car-T	V804 Psgr Car-T
V857 Psgr Car	V842 Psgr Car-T	V834 Psgr Car-T	V814 Psgr Car-T	V847 Psgr Car-T
V812 Psgr Car-T	V818 Psgr Car-T	V848 Psgr Car-T	V825 Psgr Car-T	V805 Psgr Car-T
V878 Psgr Car	V871 Psgr Car	V820 Psgr Car-T	V827 Psgr Car-T	V817 Psgr Car-T
V51 Engine	V67 Engine	V835 Psgr Car-T	V815 Psgr Car-T	V843 Psgr Car-T
		V862 Psgr Car	V856 Psgr Car	V879 Psgr Car
		V57 Engine	V62 Engine	V63 Engine

	Broad Run	Crossroads	Washington
Protect	V50	V69	
Shopped	V59 Engine V716 Cab-T V808 Psgr Car-T	V56 Engine	
PM	V64 Engine V863 Psgr Car V723 Cab-T V830 Psgr Car-T	V62 Engine V876 Psgr Car V710 Cab-T V811 Psgr Car-T	
Available	V712 Cab-T	V850 Psgr Car V873 Psgr Car V729 Cab-T V730 Cab-T V829 Psgr Car-T	

Crossroads							
Out - 9 In - 9	Out - 10 In - 3	Out - 0 In - A	Out - 6 In - 0	Out - 7 In - 7	Out - 5 In - 5	Out - 8 In - 10	Out - A In - 6
Trains	Trains	Trains	Trains	Trains	Trains	Trains	Trains
51	41	31	17	46	19	56	58
300	302	304	306	308	310	312	314
305	327	315	307	311	303	313	301
	338						
	337						
8	8	5	7	6	6	6	4
V728 Cab-T	V717 Cab-T	V722 Cab-T	V719 Cab-T	V713 Cab-T	V726 Cab-T	V724 Cab-T	V718 Cab-T
V816 Psgr Car-T	V826 Psgr Car-T	V823 Psgr Car-T	V721 Cab-T	V860 Psgr Car	V810 Psgr Car-T	V858 Psgr Car	V807 Psgr Car-T
V866 Psgr Car	V802 Psgr Car-T	V877 Psgr Car	V832 Psgr Car-T	V831 Psgr Car-T	V864 Psgr Car	V809 Psgr Car-T	V841 Psgr Car-T
V870 Psgr Car	V839 Psgr Car-T	V828 Psgr Car-T	V845 Psgr Car-T	V837 Psgr Car-T	V806 Psgr Car-T	V803 Psgr Car-T	V868 Psgr Car
V824 Psgr Car-T	V844 Psgr Car-T	V869 Psgr Car	V846 Psgr Car-T	V801 Psgr Car-T	V851 Psgr Car	V813 Psgr Car-T	V55 Engine
V838 Psgr Car-T	V822 Psgr Car-T	V60 Engine	V819 Psgr Car-T	V872 Psgr Car	V852 Psgr Car	V874 Psgr Car	
V821 Psgr Car-T	V859 Psgr Car		V865 Psgr Car	V53 Engine	V65 Engine	V66 Engine	
V867 Psgr Car	V855 Psgr Car		V54 Engine				
V61 Engine	V58 Engine						

Consist Notes:

The V52 was cut and replaced with the V55 on trains 314/301.
The V863 was cut and replaced with the V853 on trains 326/329.

F. Distribution of Transit Amenities

VRE makes transit amenities available to VRE passengers to the greatest extent feasible to support their comfort, convenience, and safety on VRE trains and passenger stations. VRE strives to maintain existing amenities in good repair and installs additional amenities as the need arises.