Virginia Railway Express Transit Development Plan FY2013 - FY2018

DRPT
Virginia Department of Rail and Public Transportation

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ATKINS

CTG Connetics Transportation Group

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1.0 OVERVIEW OF VIRGINIA RAILWAY EXPRESS SERVICES

The Virginia Railway Express (VRE) is headquartered in Alexandria, VA and provides service along the I-66 and I-95 corridors from the Northern Virginia suburbs to Alexandria, Crystal City and Washington, D.C. VRE's service area covers 730 square miles and serves a population of 680,400. The federal government is the largest employer in the region and federal employees are the majority of VRE's ridership.[1] However, the VRE rail corridors are also lined with a mix of residential, commercial and professional uses that generates significant non-federal rail ridership.

1.1 Transit Background/History

Discussions about the potential of commuter rail service in Northern Virginia occurred as early as 1964 at the Northern Virginia Transportation Commission (NVTC). Earlier efforts faltered due to opposition from the freight railroads whose tracks offered ready access to core employment areas. Substantive planning efforts for VRE began in 1984 following a regional feasibility study by R.L. Banks and Associates, Inc. for the Metropolitan Washington Council of Governments. The NVTC initially took the lead in planning and implementation tasks.

By 1986, it became apparent that the jurisdictions outside of NVTC could not reach agreement on an approach to financially support VRE, so a separate commission was created for Prince William and Stafford counties as well as the city of Manassas. Legislation established a two percent motor fuels tax within that new district (known as the Potomac and Rappahannock Transportation Commission). This source of revenue was used to support VRE expenses (as well as other transportation investments).

By 1988 NVTC and PRTC established a VRE Operations Board, consisting of three voting members plus alternates from each of the two commissions, plus a voting representative of the Commonwealth of Virginia. The two commissions delegated certain functions to the Board (e.g. initially spending of $100,000 or less per item, annual budget preparation).

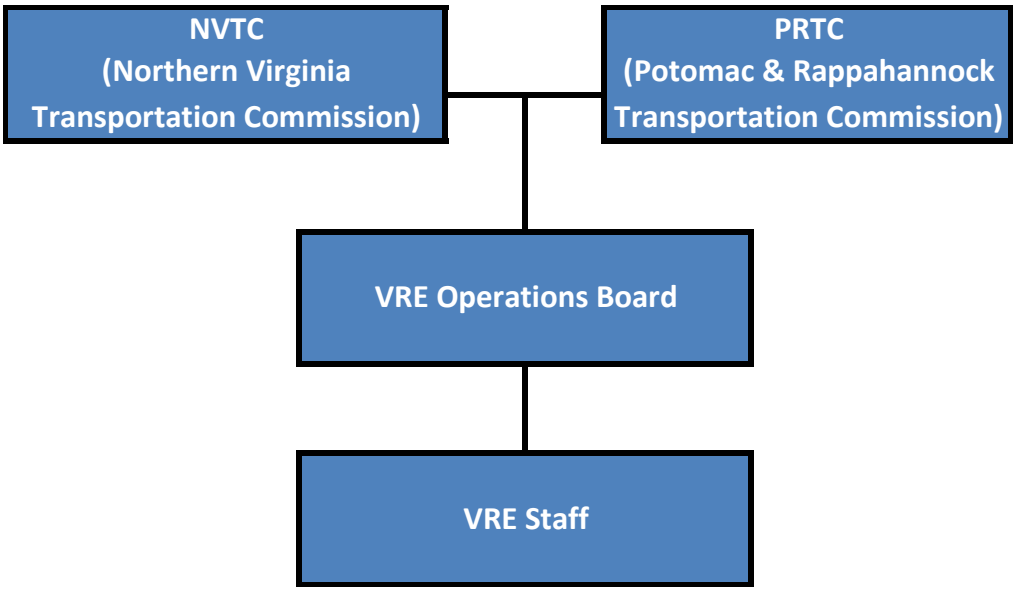
In 1989 NVTC and PRTC executed a Master Agreement with the jurisdictions participating in the VRE project. The participating jurisdictions agreed to pay the local jurisdiction subsidy for VRE through a formula that weighted ridership by jurisdiction of residence with a factor of 90 percent and population with a factor of 10 percent; that formula has since been amended to be determined based 100% on ridership. Arlington and Alexandria joined as contributing members of VRE. Their subsidy is calculated outside the Master Agreement formula. The cities of Fredericksburg and Manassas Park joined PRTC in 1990 and signed the VRE Master Agreement and became VRE participating jurisdictions in 1992. VRE commuter rail service on the Manassas and Fredericksburg lines began in June and July of 1992.

VRE remains a joint project of the two commissions with no independent legal standing (see Figure 1-1). Agreements with the Commonwealth help provide indemnification to the freight railroads whose tracks VRE uses. NVTC has issued and refinanced $150 million of appropriations-based bonds for VRE. The commissions, whose board members are comprised primarily of local and state elected officials, are

[1] 2009 National Transit Database

responsible for hiring a Chief Executive Officer (CEO) to lead VRE's staff. They have delegated authority to approve most VRE policies, fares, budgets and major spending decisions to the VRE Operations Board.

Figure 1-1
VRE Relationship to NVTC and PRTC



1.2 Organizational and Governance Structure

The VRE Operations Board presently consists of 14 board members that represent the VRE member jurisdictions and the Virginia Department of Rail and Public Transportation (DRPT). There are also twelve designated alternates. The VRE Operations Board is responsible for recommending a Chief Executive Officer (CEO) to the Commissions to lead VRE's staff. The CEO oversees a staff of 37 persons. There are five senior-level staff positions that report directly to the CEO – Deputy Chief Executive Officer, Chief Financial Officer (CFO), Director of Engineering and Construction, Director of Rail Equipment and Services and Director of Rail Operations (see Figure 1-2).

The two commissions co-own all the VRE assets (rolling stock, equipment, station platforms, etc.) valued at the end of FY 2007 at almost $170 million (net of $63 million of accumulated depreciation). Station parking is owned by various entities: VRE, PRTC, local jurisdictions and Virginia Department of Transportation (VDOT). Local jurisdictions are responsible for investments in VRE stations and parking within their respective jurisdictional boundaries. VRE leases access to almost 100 route miles of track from CSX Transportation (CSX) and Norfolk Southern (NS), and leases access to Washington Union Terminal and mid-day storage from Amtrak. Most station platforms are located on easements within the railroad right-of-way (ROW) and are maintained by VRE. VRE's operating and maintenance crews are provided by Keolis America, Inc. (Keolis) through a contractual arrangement.

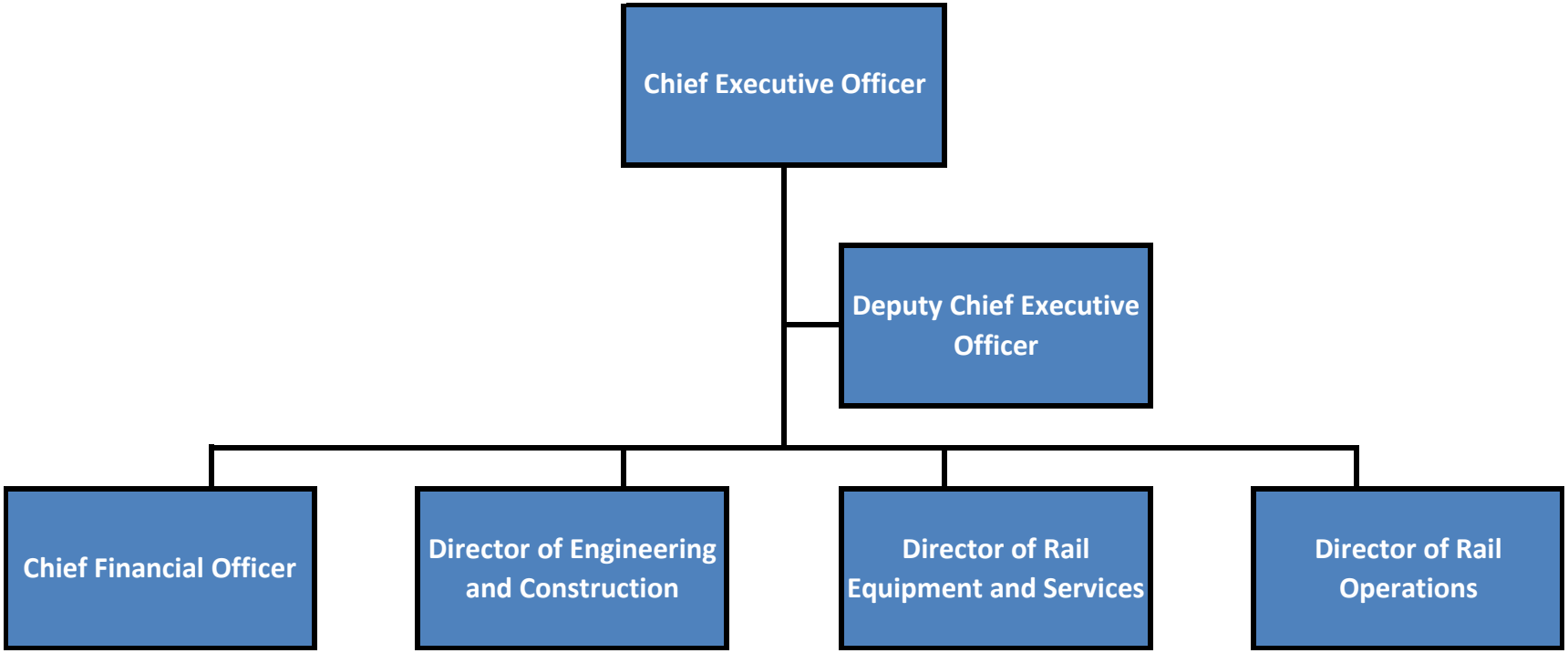
Because the two commissions created VRE and own its assets, staffs of the commissions play active roles in VRE day-to-day operations. NVTC manages VRE's state grants while PRTC does the same for

VRE's federal grants. VRE staff are technically employees of PRTC for administrative purposes. VRE's budget reimburses the commissions for staff time and expenses devoted to VRE support. Through the years VRE staff's role in managing day-to-day operations has grown (e.g. now including legislative advocacy, capital asset accounting) while commission staffs have reduced their involvement in everyday operational matters.

Several members of VRE's Operations Board also sit on other regional transportation agency boards, such as the Washington Metropolitan Area Transit Authority, the Northern Virginia Transportation Authority, the Transportation Planning Board of the National Capital Region (which is the Metropolitan Planning Organization for the Washington, DC region) and the Fredericksburg Area Metropolitan Planning Organization (FAMPO). This provides VRE with valuable representation on those boards.[2]

[2] *Chronology of the Virginia Railway Express – 1964 to Present*, Richard K. Taube, August 11, 2008

Figure 1-2
VRE Staff Structure



1.3 Description of Existing VRE Service

The Virginia Railway Express (VRE) operates passenger trains on an 89 route-mile system connecting Washington, DC with Fredericksburg and Manassas, Virginia. From Union Station in the District of Columbia, the Fredericksburg and Manassas lines share the same right-of-way for approximately nine miles, to just south of Alexandria, Virginia, where they diverge.

The Fredericksburg Line roughly follows Interstate 95 and the Potomac River, using the CSX-owned mainline between Washington and Richmond. The line operates between the District of Columbia and the City of Fredericksburg and passes through Arlington County, the City of Alexandria, Fairfax County, Prince William County and Stafford County.

The Manassas Line runs in a westerly direction from Alexandria, roughly paralleling Interstate 66 approximately five miles to the south of the interstate. After leaving Alexandria, the line serves Fairfax and Prince William counties, passing to the south of the city of Fairfax and going through the Cities of Manassas Park and Manassas. The right-of-way is owned by the Norfolk Southern Corporation.

The primary mission of the Virginia Railway Express is to transport commuters between outlying suburbs and the Washington-Arlington-Alexandria urban core. The service is oriented towards the central business district in the morning peak and in the opposite direction in the evening peak. Some tourists and "day-trippers" also ride the trains, but there are limited opportunities for non-commuters and people who work non-traditional hours to ride VRE. The only non-peak service is an early-afternoon return trip from Washington on each line, and two limited-stop reverse-direction trains on the Manassas Line in each peak period. There is no service on weekends and holidays.

VRE serves 18 stations. The two lines share four stations: Washington Union Station and L'Enfant in the District of Columbia, and Crystal City and Alexandria in Virginia. Union Station, L'Enfant and Alexandria are also Amtrak station stops for intercity passenger trains as well as VRE. MARC commuter trains to Maryland also use Union Station. There are five additional stations that have both Amtrak and VRE service: Woodbridge, Quantico and Fredericksburg on the Fredericksburg Line, and Burke Centre and Manassas on the Manassas Line. The rest of the stations serve VRE trains exclusively. Most VRE stations have free parking lots.

VRE is an integral part of the greater Washington region's public transportation network and is linked to all of the other modes that operate in the region. As noted above, there are connections to Amtrak at eight stations. Amtrak honors VRE tickets on select train trips (in conjunction with an additional Step-Up ticket), which in effect, provides additional train service for stations served by those Amtrak trains. VRE connects with the Washington Metrorail system at five stations (Union Station, L'Enfant, Crystal City, Alexandria and Franconia/Springfield). Local bus routes of several operators provide service to and connections with VRE at many stations, often with free transfer to local buses. Connecting service information generally is readily available to the public through the VRE website or by telephone. Every station except Broad Run, Brooke, Leeland Road and Rippon has a connection to some form of public transportation.

A map of the existing VRE network showing the extent of service and the location of stations is shown in Figure 1-3. VRE is a tenant on three railroads (CSX Transportation, Norfolk Southern, and Amtrak). Tracks used by VRE are in a busy, mixed-traffic environment, with VRE sharing those tracks with intercity passenger (Amtrak) and freight trains. VRE owns rail yards at the two southern ends of its system (Broad Run at Manassas Airport, and Crossroads south of Fredericksburg) for overnight storage and maintenance of equipment. Mid-day storage of VRE train sets at Ivy City in Washington, D.C. is also contracted. During this time, some light servicing occurs. At Broad Run and Crossroads, a contractor does overnight cleaning, and contractors fuel the locomotives. Service and inspection (S&I) buildings are located at each outlying yard where equipment inspections and light maintenance is performed. A train wash facility is located at the Crossroads Yard. None of these facilities is equipped for major overhauls or heavy repairs.

Figure 1-3
VRE System Map

VRE operates a total of 32 trains each weekday (30 revenue trains and 2 non-revenue trains), primarily inbound to Washington, DC during the morning peak period and outbound from Washington in the afternoon peak, requiring 12 different equipment sets of varying length. Tables 1-1 and 1-2 depict the weekday operating schedule for the Fredericksburg Line while Tables 1-3 and 1-4 depict the weekday operating schedule for the Manassas Line. VRE is in the process of implementing a fleet replacement program which has resulted in the purchase of 71 passenger coaches and 20 locomotives. The existing VRE fleet, including equipment currently on order and short-term leased equipment, consists of 27 locomotives and 101 coaches. Once the current fleet replacement program is complete in late 2011, the resulting fleet will include 20 new locomotives, 71 new passenger coaches and 10 of the older or "legacy" coaches. The sale of all remaining legacy equipment is pending. The Washington Terminal Coach Yard, located at Amtrak's Ivy City maintenance complex, can only accommodate 78VRE units for mid-day storage under the current consist configurations which poses a severe capacity constraint for VRE.[3]

[3] *VRE Strategic Plan*, May 2004

Table 1-1
Fredericksburg Line Northbound Weekday Timetable (May 2011)

Fredericksburg Line											
North											
Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	300	302 S	304	306 S	308	*AMT 86	310 S	312 S	*AMT 174	*AMT 84	*AMT 94
Fredericksburg	5:05a	5:15a	5:40a	6:05a	6:30a	7:00a	7:15a	7:40a	8:00a	8:58a	12:04p
Leeland Road	5:12	5:22	5:47	6:12	6:37	--	7:22	7:47	--	--	--
Brooke	5:18	5:28	5:53	6:18	6:43	--	7:28	7:53	--	--	--
Quantico	--	5:40	6:05	6:30	6:55	7:19	7:40	8:05	8:21	9:17	12:24
Rippon	--	5:49	6:14	6:39	7:04	--	7:49	8:14	--	--	--
Woodbridge	5:40	5:56	6:21	6:46	7:11	7:30	7:56	8:20	8:33	--	--
Lorton	--	6:03	6:28	6:53	7:18	--	8:03	8:27	--	--	--
Franconia/Spfld (L)	--	6:11	6:36	7:00	7:26	--	8:11	8:35	--	--	--
Alexandria (L)	6:07	6:24	6:49	7:12	7:38	7:47	8:23	8:47	9:02	9:50	1:00
Crystal City (L)	6:15	6:34	6:58	7:21	7:48	--	8:32	8:55	--	--	--
L'Enfant (L)	6:23	6:44	7:06	7:29	7:56	8:03	8:40	9:02	9:20	--	--
Union Station	6:29a	6:52a	7:14a	7:37a	8:04a	8:15a	8:47a	9:09a	9:30a	10:15	1:35p

(S) = Special schedules for holidays and snow days
(L) = Indicates train may depart when station work is completed regardless of scheduled time.
(*AMT) = Restrictions apply. See Amtrak Cross-Honor Agreement

Table 1-2
Fredericksburg Line Southbound Weekday Timetable (May 2011)

Fredericksburg Line											
South											
Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	301 S	*AMT 95	303 S	*AMT 125	305	307 S	309	*AMT 93/83	311 S	313	*AMT 85/87
Union Station	12:55p	2:30p	3:35p	3:55p	4:10p	4:40p	5:15p	5:50p	6:00p	6:40p	7:00p
L'Enfant	1:01	--	3:43	4:01	4:18	4:48	5:23	5:56	6:08	6:47	--
Crystal City	1:07	--	3:50	--	4:25	4:55	5:30	--	6:15	6:53	--
Alexandria	1:15	2:45	3:57	4:13	4:32	5:03	5:38	6:07	6:22	7:00	7:15
Franconia/Spfld	1:25	--	4:08	--	4:43	5:14	5:49	--	6:33	7:11	--
Lorton	1:32	--	4:15	--	4:50	5:21	5:56	--	6:40	7:18	--
Woodbridge	1:40	3:03	4:23	4:32	4:57	5:29	6:03	--	6:47	7:25	7:32
Rippon	1:45	--	4:28	-	5:02	5:35	6:09	--	6:52	7:30	--
Quantico	1:54	3:17	4:38	4:47	5:12	5:45	6:19	6:36	7:02	7:39	7:46
Brooke (L)	2:12	--	4:52	--	5:25	6:00	6:32	--	7:15	7:52	--
Leeland Road (L)	2:20	--	5:01	--	5:34	6:11	6:40	--	7:23	8:00	--
Fredericksburg	2:26p	3:39p	5:09p	5:18p	5:42p	6:19p	6:47p	6:58p	7:30p	8:08p	8:10p

(S) = Special schedules for holidays and snow days
(L) = Indicates train may depart when station work is completed regardless of scheduled time.
(*AMT) = Restrictions apply. See Amtrak Cross-Honor Agreement

Table 1-3
Manassas Line Northbound Weekday Timetable (May 2011)

Manassas Line									
North									
Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	322	324 S	326	328 S	330 S	332 S	*AMT 176	336	338
Broad Run Airport	5:05a	5:45a	6:15a	6:40a	7:20a	7:50a	--	2:45p	5:10p
Manassas	5:11	5:51	6:21	6:47	7:26	7:56	10:19a	2:51	5:16
Manassas Park	5:16	5:56	6:26	6:53	7:31	8:01	--	2:56	--
Burke Centre	5:28	6:08	6:38	7:05	7:43	8:13	10:36	3:08	--
Rolling Road	5:33	6:13	6:43	7:11	7:48	8:18	--	--	--
Backlick Road	5:40	6:20	6:50	7:18	7:55	8:25	--	--	--
Alexandria (L)	5:52	6:34	7:02	7:28	8:08	8:37	11:05	3:30	5:52
Crystal City (L)	6:01	6:43	7:13	7:41	8:18	8:48	--	--	--
L'Enfant (L)	6:10	6:53	7:23	7:49	8:26	8:58	11:14	--	--
Union Station	6:18a	7:00a	7:30a	7:55a	8:35a	9:05a	11:20a	3:55p	6:25p

(S) = Special schedules for holidays and snow days
(L) = Indicates train may depart when station work is completed regardless of scheduled time.
(*AMT) = Restrictions apply. See Amtrak Cross-Honor Agreement

Table 1-4
Manassas Line Southbound Weekday Timetable (May 2011)

Manassas Line									
South									
Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	321	325 S	327 S	329	*AMT 171	331 S	333	335 S	337
Union Station	6:25a	1:15p	3:45p	4:25p	4:50p	5:05p	5:30p	6:10p	6:50p
L'Enfant	--	1:21	3:51	4:34	4:56	5:11	5:36	6:16	6:56
Crystal City	--	1:26	3:57	4:37	--	5:17	5:42	6:21	7:01
Alexandria	6:42	1:33	4:04	4:44	5:11	5:25	5:49	6:28	7:08
Backlick Road	--	1:44	4:15	4:55	--	5:37	6:00	6:39	7:19
Rolling Road (L)	--	1:51	4:22	5:02	--	5:46	6:07	6:46	7:26
Burke Centre (L)	--	1:56	4:27	5:07	5:30	5:51	6:13	6:52	7:31
Manassas Park (L)	--	2:11	4:42	5:22	--	6:07	6:28	7:07	7:46
Manassas (L)	7:30	2:19	4:50	5:30	5:49	6:15	6:36	7:15	7:54
Broad Run Airport (L)	7:40A	2:28p	5:00p	5:39p	--	6:24p	6:45p	7:24p	8:03p

(S) = Special schedules for holidays and snow days
(L) = Indicates train may depart when station work is completed regardless of scheduled time.
(*AMT) = Restrictions apply. See Amtrak Cross-Honor Agreement

1.4 Other Service Providers

As mentioned previously in this chapter, VRE interfaces with a number of Northern Virginia and Washington-area transit providers. The majority of these providers supply feeder or distribution service while VRE functions as the long-haul transit service provider.

Amtrak

VRE connects with Amtrak intercity service at Alexandria, Fredericksburg, Manassas, Burke Centre, Quantico, Woodbridge, L'Enfant and Washington's Union Station. A cross honor agreement allows VRE multi-ride passengers the ability to use the Amtrak trains listed on the VRE schedule, in conjunction with a Step-Up ticket, for commuter travel. Accepted ticket types for the cross honor agreement are VRE-TLC Ticket, Monthly Ticket, Five Day Pass and Ten-Trip Tickets.

ART (City of Arlington)

VRE connects with ART at the Crystal City VRE station. Free transfers are not provided between VRE and ART.

DASH (Alexandria Transit Company)

VRE connects with DASH at the Alexandria VRE station/King Street Metro station. Passengers holding a Transit Link Card (TLC) may transfer free.

DC Circulator

VRE connects with DC Circulator at the L'Enfant Plaza and Union Station. Free transfers are not provided between VRE and DC Circulator.

Fairfax Connector

VRE connects with Fairfax Connector at Lorton and Franconia/Springfield Stations. Free transfers are provided to and from VRE stations with a valid VRE ticket (excluding express routes).

FRED (City of Fredericksburg)

VRE connects with FRED at Fredericksburg Station. Free transfers are not provided between VRE and FRED.

MARC (State of Maryland)

VRE and Maryland's MARC trains hold a cross-honor agreement. Free transfers between select trains are permitted with a valid VRE ticket.

Metrobus and Metrorail (WMATA)

VRE connects with WMATA's Metrorail and Metrobus at Franconia/Springfield, Burke Centre, Rolling Road, Backlick Road, Alexandria, Crystal City, L'Enfant and Union Station stations. Free transfers to Metrobus are provided to and from VRE stations with a valid VRE ticket (excluding express routes, but including REX). MetroRail fares are separate unless holding a Transit Link Card (TLC).

OmniLink and OmniRide (PRTC)

VRE connects with the Potomac and Rappahannock Transportation Commission's (PRTC) OmniLink and/or OmniRide at Quantico, Woodbridge, Franconia/Springfield, Manassas and Manassas Park Stations. Transfers are free with a valid VRE Monthly ticket from VRE stations.

Quantico Base VRE Shuttle

VRE connects with the Quantico Base VRE Shuttle at Quantico Station. The shuttle provides free taxi service from the station to areas in and around the Marine base.

1.5 Fare Structure

VRE operates a zone-based fare structure. There are nine uniquely priced fare zones on the Fredericksburg Line and six on the Manassas Line. Rides may be purchased individually or in ten-ride quantities. Five-day and monthly passes are also available.

Table 1-5
Fredericksburg Line Fares (as of May 2011)

		Zone 1 Union Station L'Enfant	Zone 2 Crystal City Alexandria	Zone 3 Franc/ Sprgfld	Zone 4 Lorton	Zone 5 W-bridge Rippon	Zone 6 Quantico	Zone 7	Zone 8 Brooke Leeland Road
Zone 9 Fred'burg	Single-Ride	$10.30	$9.70	$6.60	$6.00	$5.35	$4.75	$4.15	$3.50
	Ten-Ride	$94.80	$89.10	$60.60	$54.90	$49.20	$43.50	$37.80	$32.10
	Five-Day	$82.40	$77.40	$52.70	$47.80	$42.80	$37.80	$32.90	$27.90
	Monthly	$285.50	$268.30	$182.70	$165.50	$148.30	$131.10	$113.90	$96.70
Zone 8 Leeland Road Brooke	Single-Ride	$9.70	$9.10	$6.00	$5.35	$4.75	$4.15	$3.50	$2.90
	Ten-Ride	$89.10	$83.40	$54.90	$49.20	$43.50	$37.80	$32.10	$26.40
	Five-Day	$77.40	$72.50	$47.80	$42.80	$37.80	$32.90	$27.90	$23.00
	Monthly	$268.30	$251.10	$165.50	$148.30	$131.10	$113.90	$96.70	$79.60
Zone 7	Single-Ride	$9.10	$8.45	$5.35	$4.75	$4.15	$3.50		
	Ten-Ride	$83.40	$77.70	$49.20	$43.50	$37.80	$32.10		
	Five-Day	$72.50	$67.60	$42.80	$37.80	$32.90	$27.90		
	Monthly	$251.10	$234.20	$148.30	$131.10	$113.90	$96.70		
Zone 6 Quantico	Single-Ride	$8.45	$7.85	$4.75	$4.15	$3.50			
	Ten-Ride	$77.70	$72.00	$43.50	$37.80	$32.10			
	Five-Day	$67.60	$62.60	$37.80	$32.90	$27.90			
	Monthly	$234.20	$217.00	$131.10	$113.90	$96.70			
Zone 5 Rippon W-bridge	Single-Ride	$7.85	$7.25	$4.15	$3.50	$2.90			
	Ten-Ride	$72.00	$66.30	$37.80	$32.10	$26.40			
	Five-Day	$62.60	$57.70	$32.90	$27.90	$23.00			
	Monthly	$217.00	$199.90	$113.90	$96.70	$79.60			
Zone 4 Lorton	Single-Ride	$7.25	$6.60	$3.50					
	Ten-Ride	$66.30	$60.60	$32.10					
	Five-Day	$57.70	$52.70	$27.90					
	Monthly	$199.90	$182.70	$96.70					
Zone 3 Franc/	Single-Ride	$6.60	$6.00						
	Ten-Ride	$60.60	$54.90						

Sprgfld	Five-Day	$52.70	$47.80
	Monthly	$182.70	$165.50
Zone 2 Alexandria Crystal City	Single-Ride	$6.00	$5.35
	Ten-Ride	$54.90	$49.20
	Five-Day	$47.80	$42.80
	Monthly	$165.50	$148.30
Zone 1 L'Enfant Union Station	Single-Ride	$5.35	
	Ten-Ride	$49.20	
	Five-Day	$42.80	
	Monthly	$148.30	

Table 1-6

Manassas Line Fares (as of May 2011)

		Zone 1 Union Station L'Enfant	Zone 2 Crystal City Alexandria	Zone 3 Backlick Road	Zone 4 Rolling Road Burke Centre	Zone 5	Zone 6 Manassas Park Manassas Broad Run
Zone 6 Broad Run, Manassas, Manassas Park	Single-Ride	$8.45	$7.85	$4.75	$4.15	$3.50	$2.90
	Ten-Ride	$77.70	$72.00	$43.50	$37.80	$32.10	$26.40
	Five-Day	$67.60	$62.60	$37.80	$32.90	$27.90	$23.00
	Monthly	$234.20	$217.00	$131.10	$113.90	$96.70	$79.60
Zone 5	Single-Ride	$7.85	$7.25	$4.15	$3.50		
	Ten-Ride	$72.00	$66.30	$37.80	$32.10		
	Five-Day	$62.60	$57.70	$32.90	$27.90		
	Monthly	$217.00	$199.90	$113.90	$96.70		
Zone 4 Burke Centre, Rolling Road	Single-Ride	$7.25	$6.60	$3.50	$2.90		
	Ten-Ride	$66.30	$60.60	$32.10	$26.40		
	Five-Day	$57.70	$52.70	$27.90	$23.00		
	Monthly	$199.90	$182.70	$96.70	$79.60		
Zone 3 Backlick Road	Single-Ride	$6.60	$6.00				
	Ten-Ride	$60.60	$54.90				
	Five-Day	$52.70	$47.80				
	Monthly	$182.70	$165.50				
Zone 2 Alexandria, Crystal City	Single-Ride	$6.00	$5.35				
	Ten-Ride	$54.90	$49.20				
	Five-Day	$47.80	$42.80				
	Monthly	$165.50	$148.30				
Zone 1 L'Enfant, Union Station	Single-Ride	$5.35					
	Ten-Ride	$49.20					
	Five-Day	$42.80					
	Monthly	$148.30					

1.6 Vehicle Fleet

The VRE revenue fleet currently includes 27 locomotives and 101 passenger coaches (see Tables 1-7 and 1-8). Of the 27 locomotives, 24 are owned outright by VRE while three are leased. Replacement of the F40, GP39 and GP40 locomotives with new MP36 units is currently underway. All 20 MP36 locomotives currently on order will be received by the end of 2011. At that time the other locomotives in the VRE fleet will be returned to their lessor or sold.

Table 1-7
VRE Locomotive Fleet (as of April 2011)

Quantity	Manufacturer	Model	Built/Rebuilt	Locomotive #
9	MotivePower	MP36PH-3CT2R	2010-11	V50-V58
3*	GM-EMD	F40PH	1972/1985	V34-V36
5	GM-EMD-MK	GP40-2C	1968/1994-95	V20-V24
10	GM-EMD-MK	GP39-2C	1968/1991	V01-V10

* Leased Units

Table 1-8
VRE Passenger Coach Fleet (as of April 2011)

Quantity	Manufacturer	Built/Rebuilt	Coach Type	Seating Capacity	Coach Numbers
20	Sumitomo	2007-08	Gallery IV Trailers (with restroom)	132	V800-V819
30	Sumitomo	2007-08	Gallery IV Trailers (without restroom)	144	V850-V879
21	Sumitomo	2006-07	Gallery IV Cab Cars	123	V710-V730
5	Pullman	1956/2002-03	Gallery I Trailers	150	V405, V408, V412, V413, V415
10	Pullman	1956/2002-03	Gallery II Trailers	150	V421-V430
15	Pullman	1961-68/1996-2006	Gallery III Trailers	150	V431-V440, V447, V449, V454-V456

Note: the above table includes 10 Pullman "legacy" coaches for which a sale is pending.

For more detailed information regarding VRE's locomotive and passenger coach fleet, please refer to the *Fleet Management Plan* in Appendix A.

1.7 Facilities

VRE's executive offices are located within an office condominium at 1500 King Street (Suite 202) in Alexandria, VA. The offices house 35 employees. Monthly Board meetings are held at the PRTC offices.

Operations and Maintenance functions are contracted to Keolis – a private transportation operator based in Rockville, MD. VRE owns two yards, both of which perform daily maintenance and overnight storage of locomotives and passenger rail coaches. Both yards feature S&I buildings and a maintenance pit. VRE also leases daytime storage space at Ivy Yard, just north of Union Station in Washington DC. All maintenance functions are performed by contracted vendors.

The Fredericksburg Line houses maintenance and overnight storage at the Crossroads Yard. This yard is located approximately six miles south of Fredericksburg Station. Besides service and inspection buildings, Crossroads Yard is the only facility that currently features a train washer. As of April 2011, Crossroads Yard had a storage capacity of 81 units.

The Manassas Line houses maintenance and overnight storage at the Broad Run Yard. This yard is located immediately south and adjacent to the Broad Run Station. As of April 2011, Broad Run Yard had a storage capacity of 73 units.

Midday storage for both Fredericksburg and Manassas Line trains is located at Amtrak's Ivy City maintenance complex. The section of the yard leased to VRE has a capacity of 88 units. However, due to current consist configuration, VRE is only able to take advantage of 78 units' space. As a result, one Manassas Line train deadheads back to the Broad Run Yard each morning. This same consist deadheads back to Union Station in the afternoon.

For more detailed information regarding VRE's storage and maintenance facilities, please refer to the *Fleet Management Plan* in Appendix A.

1.8 Stations and Amenities

There are 18 stations along the two VRE lines. Eight are unique to the Fredericksburg Line, six are unique to the Manassas Line and four are shared between both lines.

<u>Fredericksburg Line Stations</u>

Fredericksburg Station is located at 200 Lafayette Boulevard in Fredericksburg. The CSX Railroad owned station is a shared facility with Amtrak, thus access is provided through a lease agreement. The City of Fredericksburg maintains the station. Fredericksburg Regional Transit (FRED) provides connecting bus service at a street-level stop adjacent to the station. Fredericksburg Station features 860 surface parking spaces, including approximately 200 unpaved spaces in a gravel lot, spread across eight lots over an approximate five block area. Approximately 127 of those spaces located closer to the station are reserved for City of Fredericksburg residents and residents from VRE member jurisdictions. Ownership is a combination of VRE and City of Fredericksburg owned lots and leased lots. As of September 2011, parking at Fredericksburg Station was at 92% capacity, including the gravel parking spaces.

Leeland Road Station is located at 275 Leeland Road in Falmouth. The station is owned and maintained by VRE for its sole use. There is no public bus transit available at this station. Leeland Road Station

features 827 surface parking spaces (a combination of lots owned by Stafford County and a leased, gravel lot) plus two spaces designated for motorcycles. The main parking lot is maintained by VDOT and VRE and the gravel lot is maintained by Stafford County. As of September 2011, parking at Leeland Road Station was at 90% capacity, including the gravel parking spaces.

Brooke Station is located at 1721 Brooke Road in Stafford. The station is owned and maintained by VRE. There is no public bus transit available at this station. Brooke Station features 499 surface parking spaces plus one space designated for motorcycles. The parking is owned by VDOT and maintained by both VDOT and VRE. As of September 2011, parking at Brooke Station was at 97% capacity.

Quantico Station is located at 550 Railroad Avenue in Quantico. The station is a CSX Railroad owned shared facility with Amtrak, thus access is provided through a lease agreement. The station is maintained by VRE. Given the station is located within an active military base, a valid picture ID must be presented upon entering the base. PRTC's OmniLink provides connecting bus service at a street-level stop adjacent to the station. The Quantico Base VRE Shuttle also provides free taxi service to areas around the Marine base with proper ID. Quantico Station features 258 surface parking spaces. The main lot is owned by Prince William County and maintained by VRE, the Navy lot is owned by the Navy and maintained by Prince William County, and the South lot is owned and maintained by VRE. As of September 2011, parking at Quantico Station was at 72% capacity.

Rippon Station is located at 15511 Farm Creek Drive in Woodbridge. The station is owned and maintained by VRE. There is no public bus transit available at this station. Rippon Station features 676 surface parking spaces. The main parking lot is owned by Prince William County and maintained by VDOT and VRE. The north parking is privately owned and maintained by VRE. As of September 2011, parking at Rippon Station was at 70% capacity.

Woodbridge Station is located at 1040 Express Way in Woodbridge. The station building and adjacent platform is owned by Prince William County while the second off-side platform is owned by VRE. This is a shared facility with Amtrak. The station is maintained by VRE. PRTC's OmniLink and OmniRide provide connecting bus service at a street-level stop adjacent to the station entrance. Woodbridge Station features 738 surface and garage parking spaces. The parking garage is owned by Prince William County and maintained by VRE, and the surface lot is owned and maintained by VRE. As of September 2011, parking at Woodbridge Station was at 68% capacity.

Lorton Station is located at 8990 Lorton Station Boulevard in Lorton. The station is owned and maintained by VRE. Fairfax Connector provides connecting bus service at dedicated sawtooth bays adjacent to the station entry. Lorton Station features 567 surface parking spaces. The parking lots are owned and maintained by Fairfax County. As of September 2011, parking at Lorton Station was at 64% capacity.

Franconia/Springfield Station is located at 6880 Frontier Drive in Springfield. The station platform, 2nd platform and elevators are owned and maintained by VRE. However, the facility is located adjacent to WMATA's Blue Line Metrorail station. Fairfax Connector, Metrobus and OmniRide all provide connecting bus service at dedicated sawtooth bays on the Metrorail station site. Franconia/Springfield

Station features 5,069 garaged parking spaces for a fee. Since parking at this facility is owned and operated by WMATA, capacity utilization data is not available.

Manassas Line Stations

Broad Run/Airport Station is located at 10637 Piper Lane in Bristow. The station is owned and maintained by VRE. There is no public bus transit available at this station. Broad Run/Airport Station features 1,065 surface parking spaces. The main lot, expansion lot and barn lot are owned by Prince William County and maintained by VRE. The PRTC lot is owned by PRTC and maintained by VRE, and the Airport lot is owned by the City of Manassas and maintained by VRE. As of September 2011, parking at Broad Run/Airport Station was at 93% capacity.

Manassas Station is located at 9451 West Street in Manassas. The station, adjacent platform and parking lots C, D and F are owned and maintained by the City of Manassas. The station is a shared facility with Amtrak. The west and north platforms are owned and maintained by VRE. PRTC's OmniLink and OmniRide provide connecting bus service at a street-level stop adjacent to the station. Manassas Station features 683 surface and garage parking spaces. Parking is free but requires a valid parking permit from the City of Manassas. As of September 2011, parking at Manassas Station was at 88% capacity.

Manassas Park Station is located at 9300 Manassas Drive in Manassas Park. The station, the main parking lot and the north lot are owned and maintained by VRE. PRTC's OmniLink and OmniRide provide connecting bus service at a street-level stop adjacent to the station. Manassas Park Station features 600 surface parking spaces. As of September 2011, parking at Manassas Park Station was 8% over capacity.

Burke Centre Station is located at 10399 Premier Court in Burke. The station is owned and maintained by VRE and is a shared facility with Amtrak. WMATA's Metrobus provides connecting bus service within a bus loop adjacent to the station. Burke Centre Station features 1,516 surface and garage parking spaces. The surface and garage parking is owned and maintained by Fairfax County. As of September 2011, parking at Burke Centre Station was at 56% capacity.

Rolling Road Station is located at 9016 Burke Road in Burke. The station is owned and maintained by VRE. WMATA's Metrobus provides connecting bus service at a street-level stop adjacent to the station. Rolling Road Station features 368 surface parking spaces. The parking lot is owned and maintained by Fairfax County. As of September 2011, parking at Rolling Road Station was 2% over capacity.

Backlick Road Station is located at 6900 Hechinger Road in Springfield. The station is owned and maintained by VRE. Fairfax Connector and WMATA's Metrobus provides connecting bus service at a street-level stop adjacent to the station. Backlick Road Station features 220 surface parking spaces. The parking lot is owned and maintained by Fairfax County. As of September 2011, parking at Rolling Road Station was at 71% capacity.

Combined Fredericksburg/Manassas Line Stations

Alexandria Station is located at 110 Callahan Drive in Alexandria. The station is a shared facility with Amtrak, thus access is provided through a lease agreement with the City of Alexandria. The station is owned by the City of Alexandria and maintained by Amtrak. The facility is also located adjacent to

WMATA's King Street Metrorail station, serving the Blue and Yellow Lines. Alexandria Transit Company's DASH and WMATA's Metrobus provide connecting bus service at a street-level stop adjacent to the station. Alexandria Station has no commuter parking spaces as it serves primarily as a destination for VRE suburban commuters.

Crystal City Station is located at 1503 South Crystal Drive in Arlington. The station is owned and maintained by VRE. The facility is also located in close proximity to WMATA's Crystal City Metrorail station, serving the Blue and Yellow Lines. Arlington's ART, Fairfax Connector, PRTC's OmniRide and WMATA's Metrobus provide connecting bus service at a street-level stop adjacent to the station. Crystal City Station has no commuter parking spaces as it serves primarily as a destination for VRE suburban commuters.

L'Enfant Station is located on C Street Southwest between 6th and 7th Streets in Washington, DC. The station is owned and maintained by VRE and is a shared facility with Amtrak. The facility is also located adjacent to WMATA's L'Enfant Plaza Metrorail station, serving the Blue, Green, Orange and Yellow Lines. WMATA's Metrobus, DC Circulator and PRTC's OmniRide provide connecting bus service at a street-level stop adjacent to the station. L'Enfant Station has no commuter parking spaces as it serves primarily as a destination for VRE suburban commuters.

Union Station is located at 50 Massachusetts Avenue Northeast in Washington, DC. The station is a shared facility with Amtrak and Maryland's MARC, thus access is provided through a lease agreement with Amtrak. This Amtrak owned and maintained facility is also located adjacent to WMATA's Union Station Metrorail station, serving the Red Line. WMATA's Metrobus and DC Circulator provide connecting bus service at a street-level stop adjacent to the station. Union Station has no commuter parking spaces as it serves primarily as a destination for VRE suburban commuters.

1.9 Transit Security Program

The *Commuter Rail System Safety Program Plan* was recently updated in April 2011. Due to the sensitive nature of its contents, it is not made available for public consumption. However, a listing of its contents and the *Chief Executive Officer's Policy Statement and Authority of SSPP* is included in Appendix B.

1.10 Public Outreach

VRE offers extensive and diverse means to interact with its customers. Below is a sample of the many ways VRE receives input and communicates with its passengers.

Customer Service

VRE operates a customer call center which fields service inquiries as well as complaints and commendations. Besides telephone, inquiries may also be submitted via fax, mail, email or through a direct link at www.vre.org.

Social Media

VRE utilizes Facebook and Twitter as a means of providing timely service notices as well as to announce scheduled public outreach events. Customers are also able to provide comments, concerns and inquiries through these outlets.

Monthly Online Forum

Once a month, VRE management hosts a virtual town hall meeting to solicit comments and suggestions from its riders. The forums are archived at www.vre.org so that those who were unable to participate can reference the questions and answers.

Meet the Management

During the spring and summer months, a rail station is selected each week for passengers to meet VRE management. On those dates, top-level VRE management make themselves available for face-to-face questions and answers from the riders.

Passenger Alliance Commission

VRE utilizes a committee of riders to provide feedback regarding operations and upcoming policy decisions. Committee representatives come from various parts of the system and make up a diverse range of ages and ethnicities to represent the richness of VRE's client base. The Passenger Alliance Commission typically meets quarterly or when special circumstances exist.

Public Hearings

VRE conducts public hearings whenever major policy and/or service modifications are being considered. The hearings are typically held in each of the member jurisdictions and are conducted at various times to ensure maximum opportunity for public participation. For those unable to attend, a comment period is also advertised to allow input via mail and email.

Annual Onboard Survey

VRE conducts an annual passenger survey to solicit customer satisfaction as well as origin-destination information from its riders. The results of the survey are made available online and are archived to 1997. Not only does this provide a transparent process, but also allows staff (and any other interested parties) to conduct longitudinal analyses of survey responses.

2.0 Goals and Performance Measures

VRE has a concise set of Goals and Performance Measures as outlined in the FY 2012 Budget. Along with those measures, this TDP also recognizes pertinent Goals and Objectives from the jurisdictions within VRE's service area as their coordination is integral to the success of commuter rail in the region.

2.1 Mission Statement

The Virginia Railway Express, a joint project of the Northern Virginia Transportation Commission and the Potomac and Rappahannock Transportation Commission, will provide safe, cost-effective, accessible, customer-responsive, reliable rail passenger service as an integral part of a balanced, intermodal regional transportation system.

2.2 Goals for Fiscal Year 2012

- Achieve at least 55 percent operating ratio (cost recovery).
- Operate trains on time at least 92 percent of time.
- Achieve at least 17,350 average daily ridership.

2.3 Performance Measures for Fiscal Year 2012

Measure	Performance Measure	Target
Safety	Injuries to Passengers	0
On-Time Performance	Percent On-Time Each Month	92%
Average Daily Seat Occupancy	Utilization of Available Seating	95%
Operating Ratio	Ratio of Fare Income to Operating Costs	55%
Ridership Growth	Minimum Growth over Prior Year	3%

2.4 Jurisdictional Goals and Objectives

The following section includes excerpts from each jurisdiction's Comprehensive Plan where VRE operates. While these are not a comprehensive representation of each jurisdiction's commitment to transit, they are intended to identify where connectivity and/or amenities specifically related to VRE have been identified.

Fairfax County Comprehensive Plan, 2011 Edition (Amended March 2009)

BOARD OF SUPERVISORS GOAL

Transportation - Land use must be balanced with the supporting transportation infrastructure, including the regional network, and credibility must be established within the public and private sectors that the transportation program will be implemented. Fairfax County will encourage the development of accessible transportation systems designed, through advanced planning and technology, to move people and goods efficiently while minimizing environmental impact and community disruption.

A keystone policy for future planning and facilities includes achievement of a multi-modal transportation system to reduce excessive reliance upon the automobile. Regional and local efforts will focus on planning and developing a variety of transportation options. Sidewalks, trails and on-road bicycle routes

should be developed as alternate transportation facilities leading to mass transit, high density areas, public facilities and employment areas.

Objective 2: Increase use of public transportation and non-motorized transportation.

Policy b. Provide public transportation facilities (such as rail transit, commuter rail, bus rapid transit and/or HOV lanes) in major radial and intra-county commuter corridors designated as Enhanced Public Transportation Corridors in the Transportation Plan Map. Preserve land and rights-of-way where appropriate.

2008 Prince William County Comprehensive Plan (Adopted March 2008)

Transit Plan - Intent

The intent of this Transit Plan is to develop policies and action strategies that: 1) promote supportive infrastructure and services resulting in reduced traffic congestion by minimizing Single Occupancy Vehicle (SOV) trips that originate in Prince William County; 2) improve quality of life by offering transportation options to county residents; and 3) create a more efficient and coordinated transportation and transit network through transit-supportive development and land use, multiple transit systems and services, transportation demand management, and parking standards.

TR-GOAL: Develop a countywide transit network that provides for the mobility needs of all county residents, connects land uses and people, integrates multiple modes of transportation, and reduces vehicle miles traveled (VMT) in single occupancy vehicles (SOVs).

TR-POLICY 1: Enhance the connectivity of inter- and intra-county transit systems.

TR1.3 Promote an efficiently designed bus feeder network to connect commuter rail stations and other transit centers as an integral part of a broader access plan to curtail single occupancy vehicle (SOV) access.

TR1.6 Coordinate with adjacent jurisdictions, federal, state, transit and regional agencies such as but not limited to VRE, PRTC, VDOT, WMATA to ensure that the county's transit system is compatible and connected to existing transit infrastructure in the surrounding metropolitan region.

TR-POLICY 2: Develop and expand the transit network and supporting infrastructure.

TR2.4 Support VRE in the location of Cherry Hill, Innovation, Gainesville, and Haymarket as the highest priority for the expansion of services.

TR2.10 Work with PRTC and VRE to update the Policy Guide for Monetary Contributions for transit services.

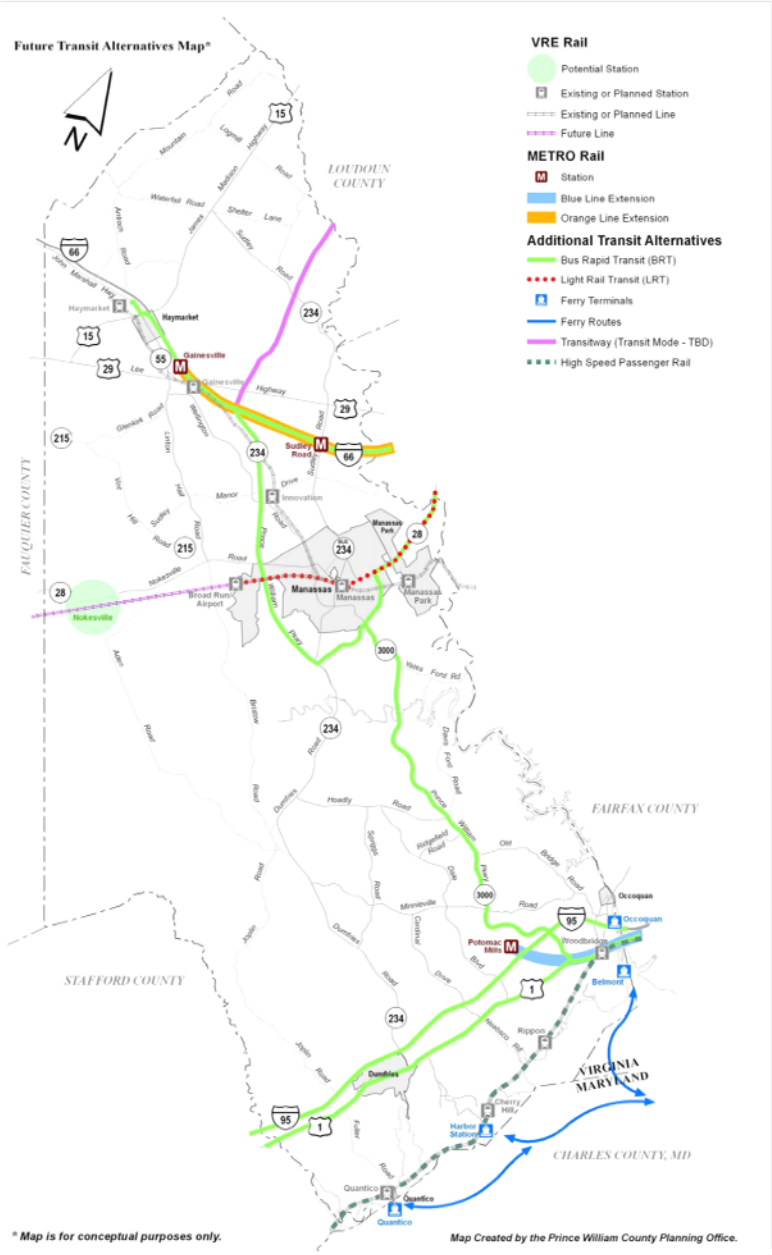
TR2.11 Formulate a prospective amendment to the Policy Guide for Monetary Contributions for addressing the County's share of unfunded capital costs of the PRTC/VRE plans.

TR-POLICY 3: Identify and develop alternative transit concepts such as bus rapid transit (BRT), light rail transit (LRT), Potomac ferry service, Metro rail extension, and VRE extension as shown in Figure 2-1.

TR-POLICY 4: Develop a parking district policy for centers of community and centers of commerce near existing or planned transit facilities that recognizes and balances the need for short-term and long-term parking supply.

TR4.2 Develop parking policies in coordination with VRE and PRTC at transit stations and areas of concentrated development.

Figure 2-1
Prince William County Comprehensive Plan
2030 Transit Improvement Map



Stafford County Comprehensive Plan 2010-2030 (Adopted December 2010)

Commuter Rail

Virginia Railway Express (VRE) is supported by Stafford County, Spotsylvania County, Fairfax County, Arlington County, City of Alexandria, Prince William County, City of Manassas, City of Manassas Park, and the City of Fredericksburg. Commuter rail service is primarily a work-related commuting option operating in the morning from Fredericksburg and Manassas to Washington, D.C. and reversing itself for the evening commute.

The Leeland commuter rail station has 652 parking spaces and often exceeded capacity in 2008. The Brooke commuter rail station has 500 parking spaces in part due to a restriping of the parking lot. Prior to the restriping the lot was regularly reaching 90% capacity. Expansions of both the Brooke and Leeland Station Parking lots are being designed.

This Plan supports commuter rail service, including service expansions for mid-day and reverse commuters, geographic extension of rail service, weekends, late evening connections to other transit programs and additional rush hour trains. Methods which will make better use of capital and operating funds should be pursued as well as economic opportunities associated with the commuter rail program.

City of Fredericksburg Comprehensive Plan (Adopted September 2007)

Commuting

While Fredericksburg is a strong attraction for regional workers, over half of the workers who live in Fredericksburg commute to jobs outside of the City. I-95 carries a tremendous portion of the commuter load, but as roadway options have become less attractive, commuters have looked to other options. The Virginia Railway Express (VRE) provides commuter rail service to the Northern Virginia and Washington, D.C. areas, and has seen continued ridership increases over the last five years. Its southern-most terminus is located in downtown Fredericksburg, and over 1,200 riders board the VRE there on any given work day. There are currently over 700 parking spaces for VRE riders around the station. The influx of drivers coming to park at the VRE station during peak hours adds to traffic congestion along the principal routes into the City. To relieve traffic congestion downtown during peak hours, FRED routes should connect commuters from points around the City along major commuter routes to the VRE station downtown.

Transportation & Mobility Policies

- Provide bus service at peak commuting times from remote parking lots and neighborhoods to the commuter rail station.
- Further develop systems for managing parking in high-use areas, including the commuter rail station and downtown.

City of Manassas 2002 Comprehensive Plan (Amended June 2008)

Rail Service

The Virginia Railway Express (VRE) has been in operation at the downtown station since 1992. VRE is operated by PRTC in partnership with the Northern Virginia Transportation Commission (NVTC) to provide commuter rail service along the Manassas and Fredericksburg lines. The service connects transit providers at several stations in Virginia and the District of Columbia. The rail service has expanded by 60% from 2000 to 2003 with ridership at 14,000 average daily passenger trips.

The Manassas Line of the VRE extends from the Airport/ Broad Run station in Prince William County to Union Station in Washington, D.C. The Old Town Manassas Station is served by this line. The station has several parking lots with a total of 400 total parking spaces to accommodate VRE commuters. Due to the success of VRE and the Old Town station, parking is at capacity. VRE, through federal funding, is in the process of designing and constructing a parking deck adjacent to the station to accommodate the increase in riders. The new deck will add approximately 320 parking spaces for VRE commuters. The parking deck site is proposed for the properties bounded by Main Street to the east, Battle Street to the west, Prince William Street to the south, and the railroad to the north.

As Manassas becomes a regional center and benefits from continued growth, the city will need to manage the increased traffic into and out of the area. It is important that alternative methods of transportation are encouraged to alleviate congestion. Therefore, mass transit, sidewalks, and bike trails should be maintained and expanded to accommodate increased use.

Goals and Objectives

E. Maintain and increase mass transit opportunities and facilities for citizens.

- Support coordination of regional mass transit programs with PRTC and VRE.

City of Manassas Park Comprehensive Plan (Adopted November 2007)

Rail and Bus Services

The VRE provides commuter rail access to the city on weekdays and on special occasions throughout the year (see Figure 12.8). The VRE links to other passenger transportation systems in the Washington DC metropolitan area: Metrorail; Metrobus; Ronald Reagan Washington National Airport; MARC Train Service to Maryland; AMTRAK trains nationwide; and regional/national bus services such as the Fairfax Connector, Arlington ART Bus, DASH/Alexandria Transit Company, and the Greyhound and Trailways bus systems.

The VRE is operated by the Potomac and Rappahannock Transportation Commission (PRTC) in partnership with the Northern Virginia Transportation Commission (NVTC) to provide commuter rail service along the Manassas and Fredericksburg railroad lines. The VRE station in the city is a significant regional transportation hub, drawing riders from the city and neighboring communities such as Prince William and Fairfax Counties and the City of Manassas.

Goals, Objectives and Action Strategies

Goal T1 – The city will maintain a high quality, efficient, safe and accessible transportation system that is coordinated with the city's current and future land use plans. Traffic will move freely throughout the city while avoiding excessive speeds and traffic noise. Access to and from the city by a wide variety of transportation alternatives will be encouraged.

Objective T.1.2 – Protect residential neighborhoods from adverse impacts of commuter and commercial traffic.

Action Strategy T1.2.6 – Pursue the use of off-site parking agreements to allow overflow parking for VRE.

Action Strategy T1.2.9 – Support fixed route and on-demand transportation options such as OmniRide and OmniLink between commercial and industrial areas, shopping areas, the VRE, and residential areas.

Action Strategy T1.2.12 – Study ways to expand parking for the VRE station, to include providing a parking structure.

Objective T1.4 – Work with other local governments, regional and federal agencies, VDOT, and the private sector on transportation issues and the development of new transportation facilities and systems.

Action Strategy T1.4.2 – Promote and encourage use of commuter facilities, such as sheltered community bus and train stops, shuttle services, ridesharing programs, pedestrian walkways.

Action Strategy T1.4.5 – Support the transit services of PRTC: VRE, OmniRide, OmniLink, OmniMatch, Metro Direct and Commuter Programs such as Guaranteed Ride Home and Metrochek.

Action Strategy T1.4.6 – Study the feasibility of a grade separation at the railroad crossing at Manassas Drive to improve the safety of this important intersection near the center of the city.

Action Strategy T1.4.7 – Improve control of the railroad crossing arms to minimize needless delays to the motoring public each time a VRE train stops at the station.

Action Strategy T1.4.8 – Ensure the ability of emergency equipment to quickly access locations on both sides of the city without excessive interference by train traffic.

Action Strategy T1.4.15 – Study the feasibility of providing of a train platform along the west side of the Norfolk Southern railroad tracks, to tie into the pedestrian overpass to be constructed as part of Park Center, to give passengers another access to the VRE trains.

Goal T2 – The city will provide safe and convenient access to existing bicycle, pedestrian and other forms of non-automotive transportation and recreation to minimize congestion enhance local and regional air quality and provide healthy recreational opportunities for the public.

Objective T2.1 – Encourage the use of sidewalks and existing trails as alternate transportation between mass transit system access points (e.g., VRE, bus stops), high-density residential and commercial areas, public facilities and other employment areas.

Action Strategy T2.1.1 – Establish a network of sidewalks to link residential neighborhoods with commercial services, shopping areas, public and private recreational facilities, the VRE station, schools, major public facilities and the Park Center.

Action Strategy T2.1.2 Designate the following as potential shared-use (bicycle and pedestrian) paths to enable the city to obtain federal funding:

1. *VA Route 28 corridor*
2. *Manassas Drive between Signal View Drive and VA Route 28*
3. *Signal View Drive between Manassas Drive and past Signal Hill Park*
4. *Euclid Avenue from Prince William County line to Manassas Drive*
5. *Norfolk-Southern Railroad right-of-way between Manassas Drive and Bull Run in Fairfax County*
6. *Any existing or planned paths within the City, such as South Whitt Drive to Cougar Elementary, connecting developments to the VRE parking lot.*

Washington DC 2006 Comprehensive Plan (Adopted December 2006)

Making Multi-Modal Connections

Multi-modal connections refer to the links between different modes of travel, such as Metrorail, bus, and private cars. These connections can be improved by expanding Metrorail stations to allow for more effective bus and streetcar transfers, particularly as streetcars, RapidBus, and Bus Rapid Transit services become more common. Similarly, better pedestrian amenities, increased bicycle parking and more visible parking for car-share vehicles at Metrorail stations can enhance connections.

Intercity and commuter rail and bus connections are also critical to creating an efficient multimodal transportation system. Amtrak regularly runs trains into and out of Union Station, providing service along the northeastern rail corridor as well as points west and south. The District ranks third in Amtrak station passenger volume, after Philadelphia and New York City. The District is currently served by two commuter rail systems—Maryland Commuter Rail (MARC), which provides service from Maryland, and the Virginia Rail Expressway (VRE), which provides service from Virginia. These systems provide up to 30,000 trips in and out of Union Station on a typical weekday on 96 trains per day. Commuter ridership has increased substantially during recent years, and continued growth of both systems is expected.

The expansion of these two intercity and commuter rail services, coupled with Metrorail and Metrobus service, will increase accessibility and enhance regional transportation options. A number of key facilities on the rail system need improvements to accommodate future ridership and enable intermodal transfers. Increased capacity at Union Station and L'Enfant Plaza is also needed to accommodate commuter rail passenger traffic for MARC and VRE riders respectively. Taxis may also provide enhanced mobility for the disabled and elderly.

Policy T-2.2.1: Multi-Modal Connections – Create more direct connections between the various transit modes consistent with the federal requirement to plan and implement intermodal transportation systems.

Policy T-2.2.4: Commuter and Intercity Rail – Support the expansion of commuter and intercity rail. Intercity rail could include magnetic levitation (MAGLEV) high-speed trains that could provide access to New York in 90 minutes and to Boston in three hours.

Action T-2.2.D: Commuter Rail and Bus Connections – Increase capacity and connectivity at Union Station and at the L'Enfant Plaza VRE station to accommodate additional commuter rail passenger traffic and direct through-train connections between Maryland and Virginia. In addition, support continued investment in commuter bus service and in Metrorail feeder bus service throughout the region

3.0 Service and System Evaluation

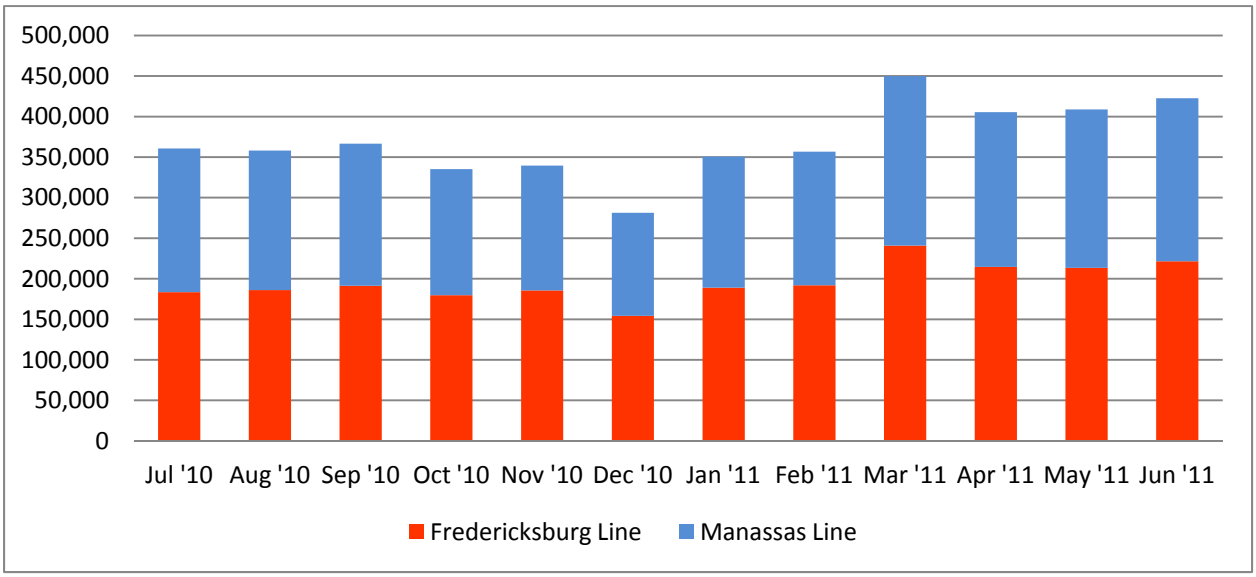
This chapter provides an evaluation of existing VRE service and includes an analysis of existing ridership, fare utilization, a historical performance evaluation over the past five years, peer review, rider survey, recent Title VI and Triennial Review, service area coverage, a land use summary, and a summary of VRE's intelligent transportation systems plan.

3.1 Existing Service Evaluation

3.1.1 Existing and Historical Ridership Characteristics

An analysis of the existing and historical ridership for VRE service was conducted using ridership data collected by VRE. VRE has served over 53 million passengers since inception in FY 1993. In FY 2011, 4,512,176 passengers used VRE services.[1] The Fredericksburg line served slightly more than half (53%) of these passengers. Figure 3-1 shows total monthly VRE ridership for FY 2011. March was the month with the highest ridership and December had the lowest level of ridership.

Figure 3-1
VRE FY 2011 Total Monthly Ridership

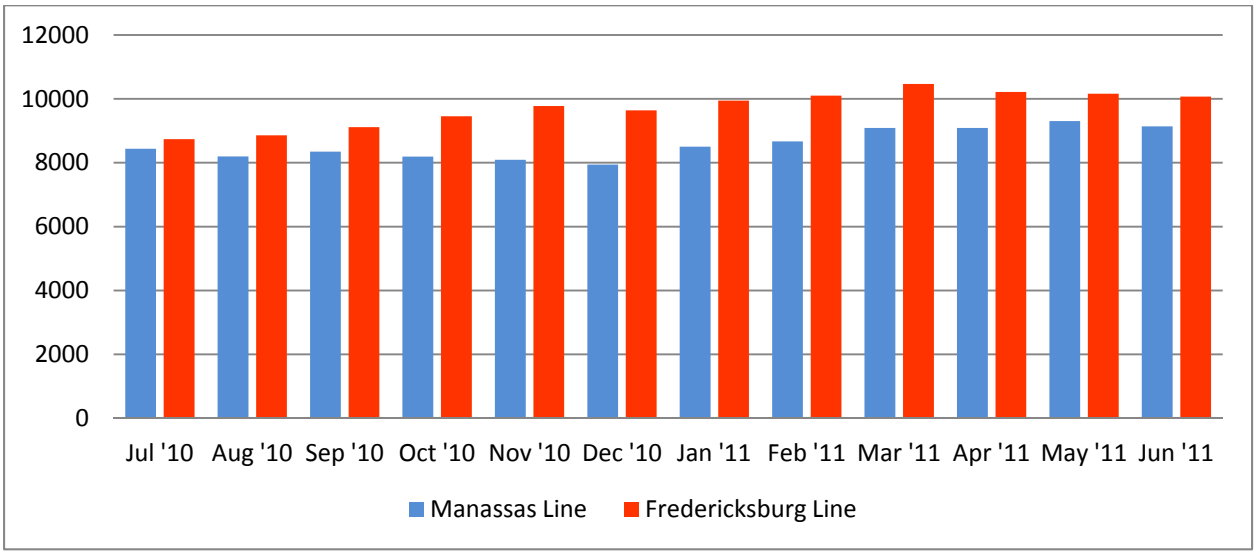


Source: Ridership data provided by VRE

Figure 3-2 displays the FY 2011 average daily ridership by line. Average daily ridership for both lines has increased over the course of the year.

[1] *Ridership numbers have been adjusted to include VRE trips taken on Amtrak trains, but do not include "S" schedule days.*

Figure 3-2
VRE FY 2011 Average Daily Trips by Line



Source: Ridership data provided by VRE

Table 3-1 and Figure 3-3 display VRE's ridership for the past six years (FY 2006-2011) by line. Despite several fare increases (see Figure 3-4), VRE's ridership has increased steadily with annual ridership crossing the 4 million mark in FY 2011. There has been an increase of almost 23 percent in total annual ridership in the past five years.

Table 3-1
Historical Annual Ridership (FY 2006-2011)

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Change %
Manassas Line	1,731,642	1,626,268	1,674,439	1,785,598	1,933,568	2,083,887	20.34%
Fredericksburg Line	1,876,494	1,819,341	1,941,715	2,026,749	2,034,528	2,351,803	25.33%
VRE Total	*3,608,136*	*3,445,609*	*3,616,154*	*3,812,347*	*3,968,096*	*4,435,690*	22.94%

Note: Ridership numbers have been adjusted to include VRE trips taken on Amtrak trains, but do not include "S" schedule days.

Figure 3-3
FY 2011 Annual Ridership by Line

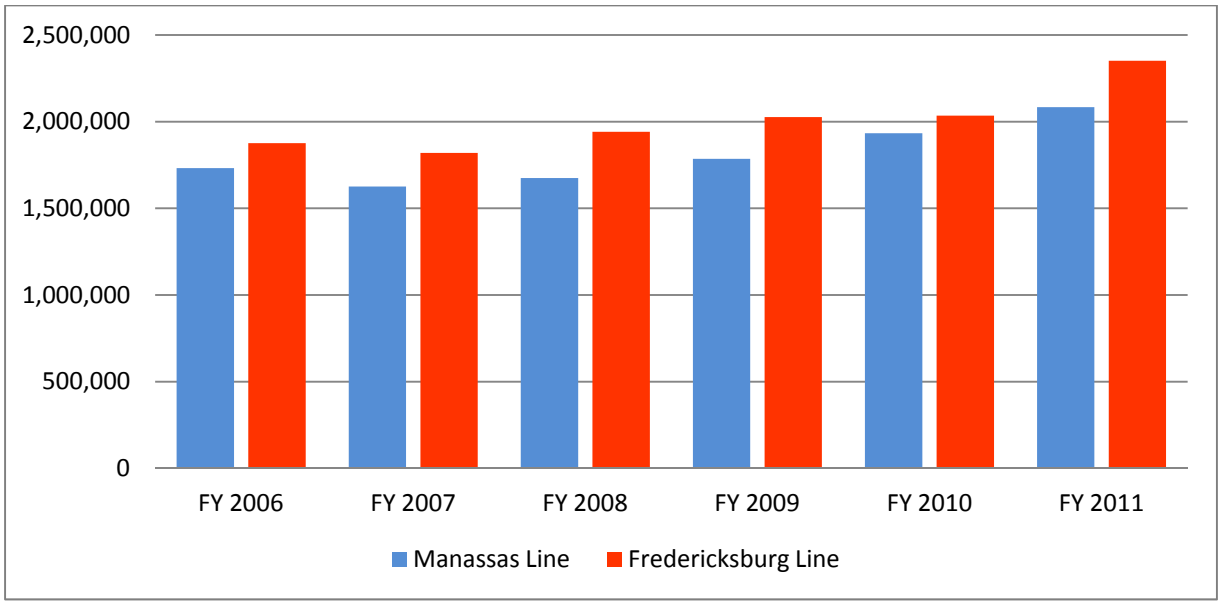
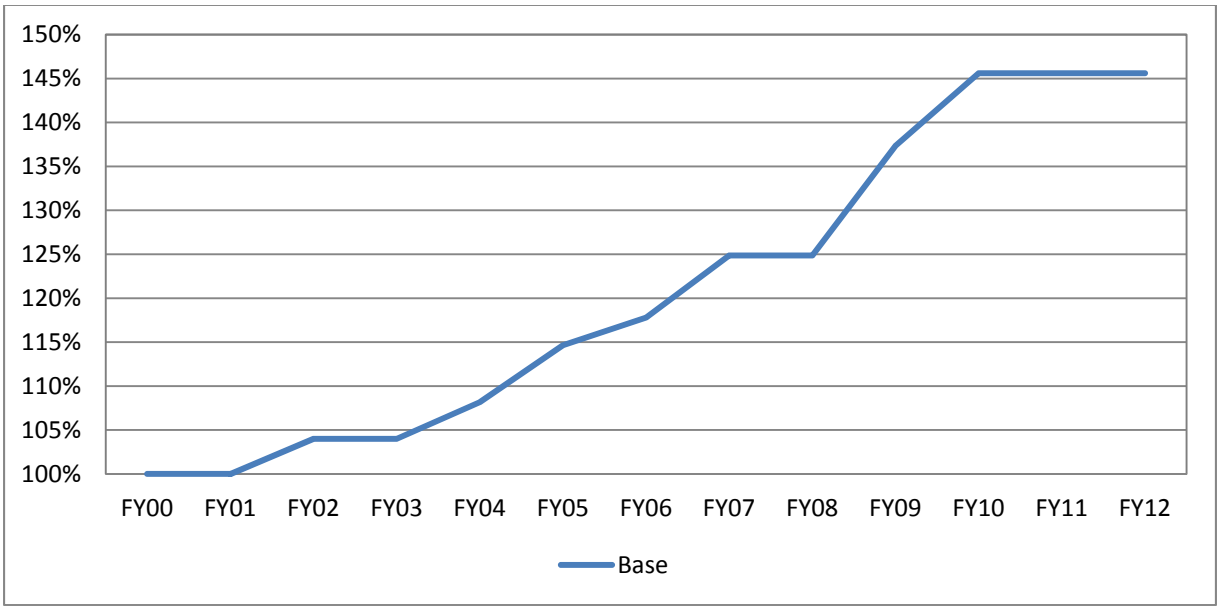


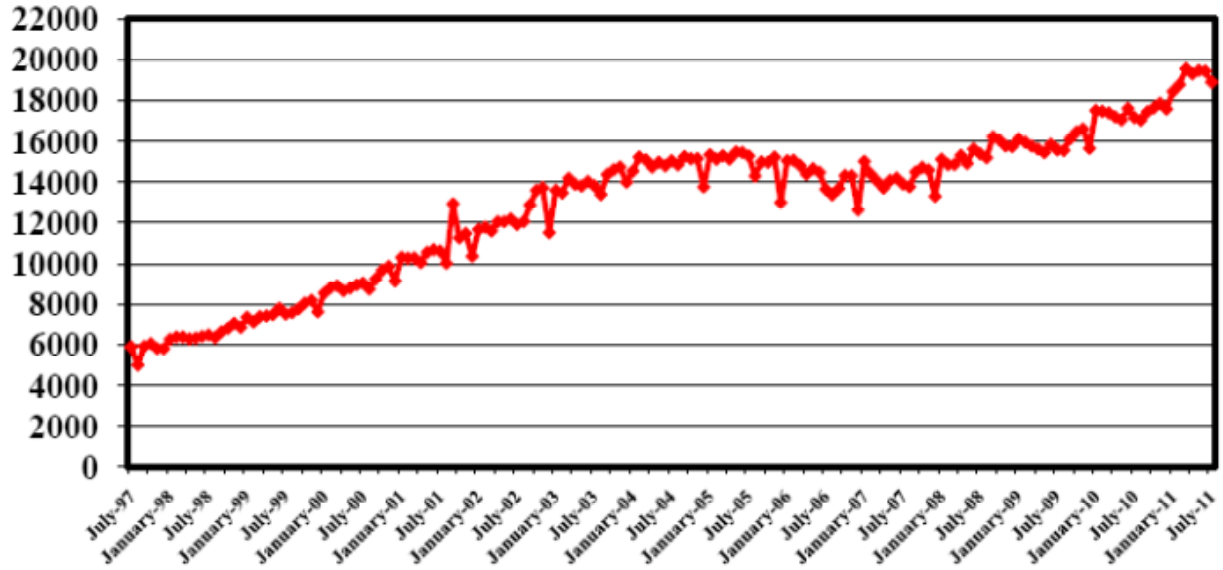
Figure 3-4
VRE Cumulative Fare Increases since FY 2000



Source: Ridership and fare data provided by VRE

Figure 3-5 displays VRE's average daily ridership since July 1997. Generally, VRE's ridership has been growing fairly steadily since inception, with a dip in 2006-07.

Figure 3-5
VRE Average Daily Ridership Since 1997



Source: Performance measures data obtained from VRE website in September 2011

3.1.2 Service Performance Analysis

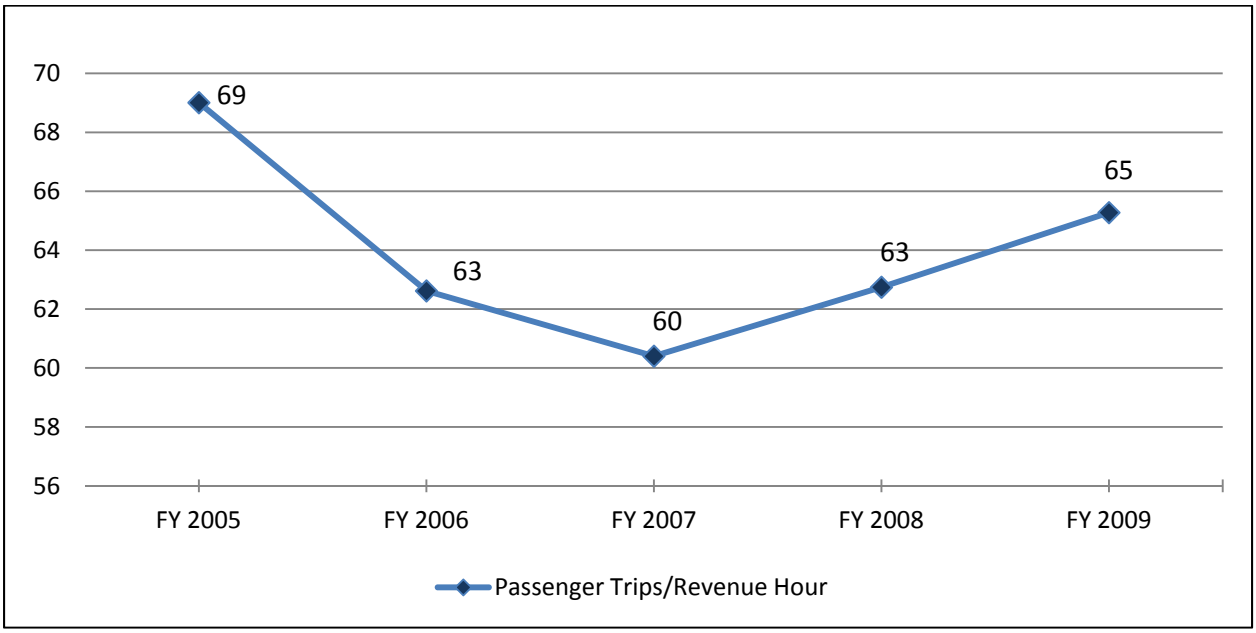
Table 3-2 displays VRE's service data for the last five years (FY 2005-2009) as reported in the National Transit Database (NTD). Over the five-year period, the overall number of unlinked passenger trips grew by 6 percent, while revenue-hours grew by 12 percent. Total operating expenses, as defined by the NTD, grew by 21 percent over the same period.

Table 3-2
VRE Historical Annual Statistics (FY 2005-2009)

Performance Measures	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	% Increase FY 2005 to FY 2009
Unlinked Passenger Trips	3,654,271	3,569,664	3,386,974	3,583,534	3,868,035	6%
Vehicle Revenue Hours	52,954	57,007	56,074	57,115	59,257	12%
Total Operating Expenses ($)	46,030,377	47,283,904	49,689,689	55,458,598	55,891,190	21%

The number of passenger trips per revenue-hour is one measure of how effectively the service is provided. Historically, service effectiveness decreased from FY 2005 to FY 2007 and has since been increasing (see Figure 3-6).

Figure 3-6
VRE Service Effectiveness – Passenger Trips per Revenue-Hour



The ratio of operating costs per passenger trip reflects how cost-effectively the agency is providing the service. Operations and maintenance (O&M) costs were not adjusted for inflation. Figure 3-7 shows that cost effectiveness has decreased since FY 2005 but increased in FY 2009.

Figure 3-7
Cost Effectiveness – Operating Cost per Passenger Trip

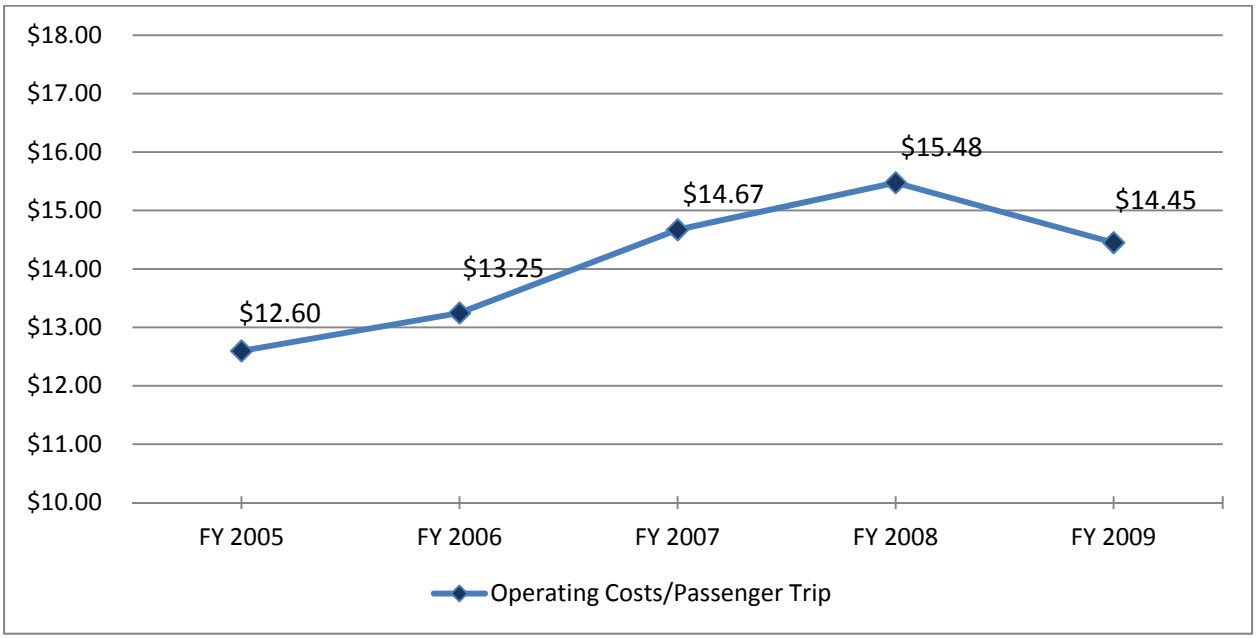


Table 3-3 compares the ridership (demand) and the number of seats (capacity) per train during July 2011. There were more riders than seats (over 100% occupancy) on three morning and three evening trains on the Fredericksburg line, and one morning and one evening train on the Manassas line. Occupancy was approaching capacity (85-100%) on two morning and one evening train on the Fredericksburg line, and three morning and two evening trains on the Manassas line.

Table 3-3
Midweek Ridership and Seating Capacity by Train (July 2011)

Train Number	Departure Time	Seating Capacity	Midweek Ridership	Occupancy
Fredericksburg Line North				
300	5:05 AM	645	648	100%
302	5:15 AM	819	856	105%
304	5:40 AM	798	761	95%
306	6:05 AM	1098	936	85%
308	6:30 AM	798	898	113%
310	7:15 AM	846	657	78%
312	7:40 AM	531	414	78%
Fredericksburg Line South				
301	12:55 PM	531	158	30%
303	3:35 PM	819	1027	125%
305	4:10 PM	798	1078	135%
307	4:40 PM	1098	968	88%
309	5:15 PM	798	1012	127%
311	6:00 PM	846	639	76%
313	6:40 PM	645	301	47%
Manassas Line North				
322	5:05 AM	819	579	71%
324	5:45 AM	855	752	88%
326	6:15 AM	1107	906	82%
328	6:40 AM	1095	945	86%
330	7:20 AM	819	894	109%
332	7:50 AM	819	699	85%
336	2:45 PM	1095	8	1%
338	5:10 PM	819	5	1%
Manassas Line South				
321	6:25 AM	819	4	0%
325	1:15 PM	1095	154	14%
327	3:45 PM	819	888	108%
329	4:25 PM	1095	1024	94%
331	5:05 PM	1107	991	90%
333	5:30PM	819	685	84%
335	6:10 PM	855	509	60%
337	6:50 PM	819	228	28%

Source: Performance measures data and train schedules obtained from VRE website in September 2011

Figure 3-8 and Table 3-4 show the average ridership on VRE trains for each line. March 2011 had the highest average number of riders per train in FY 2011 for both lines.

Figure 3-8
Average Ridership per Train by Line (FY 2011)

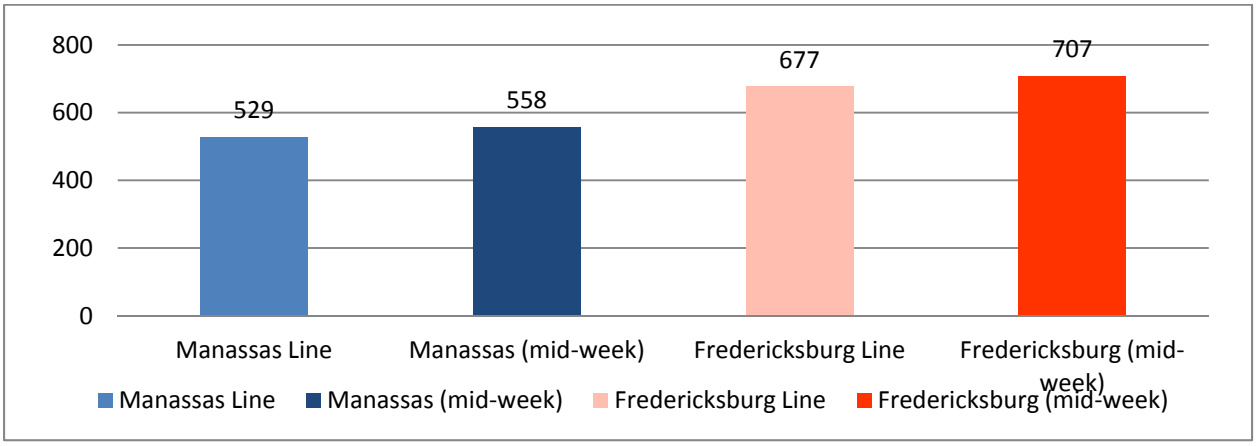


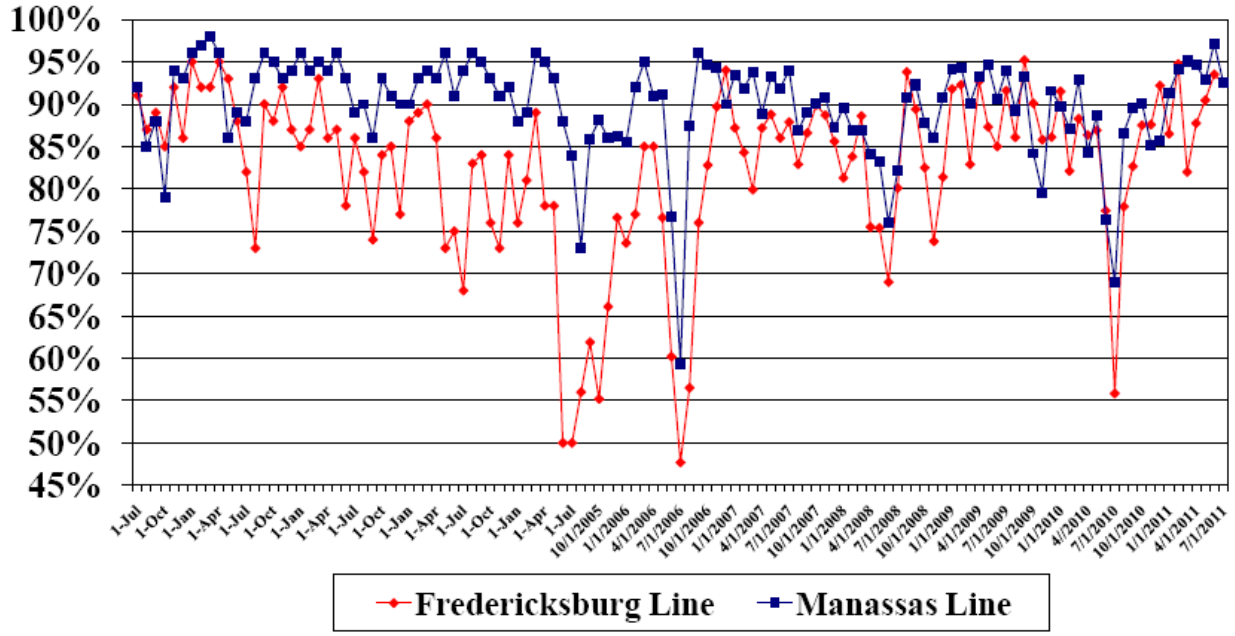
Table 3-4
Average Ridership per Train by Line (FY 2011)

Average Riders Per Train	Manassas Line	Manassas Line (mid-week)	Fredericksburg Line	Fredericksburg Line (mid-week)
Jul-10	528	542	637	659
Aug-10	509	535	618	639
Sep-10	521	539	633	654
Oct-10	508	540	662	686
Nov-10	469	515	675	706
Dec-10	484	541	635	697
Jan-11	507	544	687	724
Feb-11	541	555	708	730
Mar-11	567	589	735	756
Apr-11	565	596	719	750
May-11	574	603	696	737
Jun-11	571	591	719	742
Annual Average	**529**	**558**	**677**	**707**

Note: Ridership information provided by VRE.

Over the past decade, VRE has maintained on-time performance for the Manassas line better than for the Fredericksburg line. On-time performance dropped significantly for both lines during 2005-2006, and most recently, in July 2010. Figure 3-9 shows the on-time performance by line.

Figure 3-9
VRE On-Time Performance by Line (July 2001 – July 2011)



Source: Performance measures data obtained from VRE website in September 2011

3.1.3 Population and Employment

This section summarizes population and employment projections for the VRE service area. The Metropolitan Washington Council of Governments (MWCOG) and Fredericksburg Area Metropolitan Planning Organization (FAMPO) regional travel demand forecast models were used for demographic forecasts. Data included in this section are presented at the traffic analysis zone level (TAZs). Projections cover the following counties and municipalities:

- District of Columbia (Washington, D.C.)
- City of Alexandria
- City of Falls Church
- Fairfax City
- City of Manassas
- City of Manassas Park
- City of Fredericksburg
- Arlington County
- Fairfax County
- Prince William County
- Stafford County
- Spotsylvania County

VRE operates in the fast growing Northern Virginia region. Population and employment growth is projected to continue into the future. As shown in Table 3-5, estimated population in the VRE study

area in 2011 is nearly 3.1 million. Estimated employment is 2.2 million. By 2025, the population is projected to increase to 3.6 million, and employment is projected to increase to 2.6 million. Overall population within the VRE service area is projected to grow by 533,000 between 2011 and 2025, while total employment is projected to grow by 441,000. Between 2011 and 2025, population within the VRE study area is projected to increase by 17.4 percent, and total employment is projected to increase by 20.0 percent.

Table 3-5
Projected Population and Employment in the Study Area (2011 and 2025)

Population	2011	2025
Total	3,074,398	3,607,848
Annual % Growth	n/a	1.1%
% Change from 2011	n/a	17.4%
Employment	**2011**	**2025**
Total	2,204,167	2,645,180
Annual % Growth	n/a	1.2%
% Change from 2011	n/a	20.0%

Source: MWCOG, FAMPO

Population density along the two VRE service corridors is among the highest in the Washington, D.C. metropolitan area. Population density along VRE's Manassas line, which generally parallels I-66, is highest from Union Station in Washington, D.C. to Burke Center station in Fairfax County, although it is also high around Manassas and Manassas Park VRE's stations, even though they are located further away from Washington, D.C. The Fredericksburg line, paralleling I-95, has high population density in the Woodbridge, Rippon, and Quantico station areas in Prince William County and the City of Fredericksburg.

Between 2011 and 2025, all areas in the VRE service area are projected to increase in population density, along with the areas around the I-66 corridor and Reston in the northern part of the study area, and areas around the three southernmost VRE stations along the Fredericksburg line: Brooke, Leeland Road, and Fredericksburg. Figures 3-10 and 3-11 illustrate population density in the VRE service area in 2011 and 2025.

In terms of projected annual population growth, forecast data shows that virtually all areas along the southern portion of the Fredericksburg Line will experience a substantial increase in population density (more than three percent annual growth), with the western and northern zones of Stafford and Spotsylvania counties, and both counties' border areas with neighboring counties (King George and Caroline) attracting the majority of new residents. Other high growth areas along the Fredericksburg Line are around Quantico, Woodbridge, Lorton, and Franconia/Springfield VRE stations. Forecast data also shows that virtually all areas along the westernmost portion of the Manassas Line will experience annual population growth of three percent or more, particularly around Broad Run, Manassas, and Manassas Park VRE stations.

Not all areas in the study area are projected to continue to experience a population boom. Developed and built out parts of Arlington County, the City of Alexandria, and Fairfax County will not experience population gains on par with the high growth areas mentioned above. Population in the study area will continue to move to less developed areas where growth is still possible: western and southern Prince William County served by VRE's Manassas Line and Fredericksburg lines, and Spotsylvania and Stafford counties served by VRE's Fredericksburg Line. Figure 3-12 shows the projected annual population growth in the VRE service area in the 2011 to 2025 time period.

Figure 3-10
2011 Population Density

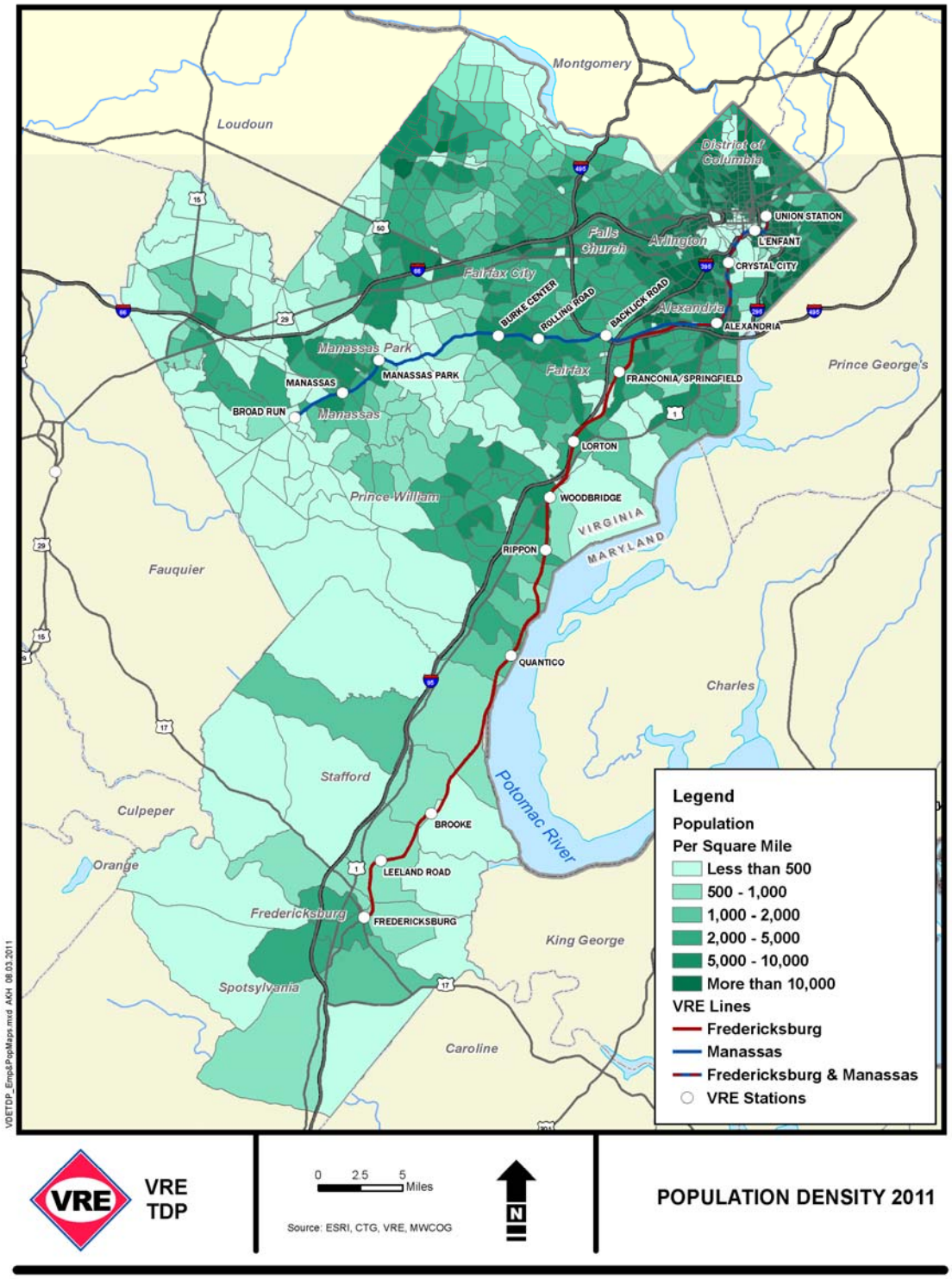


Figure 3-11
2025 Population Density

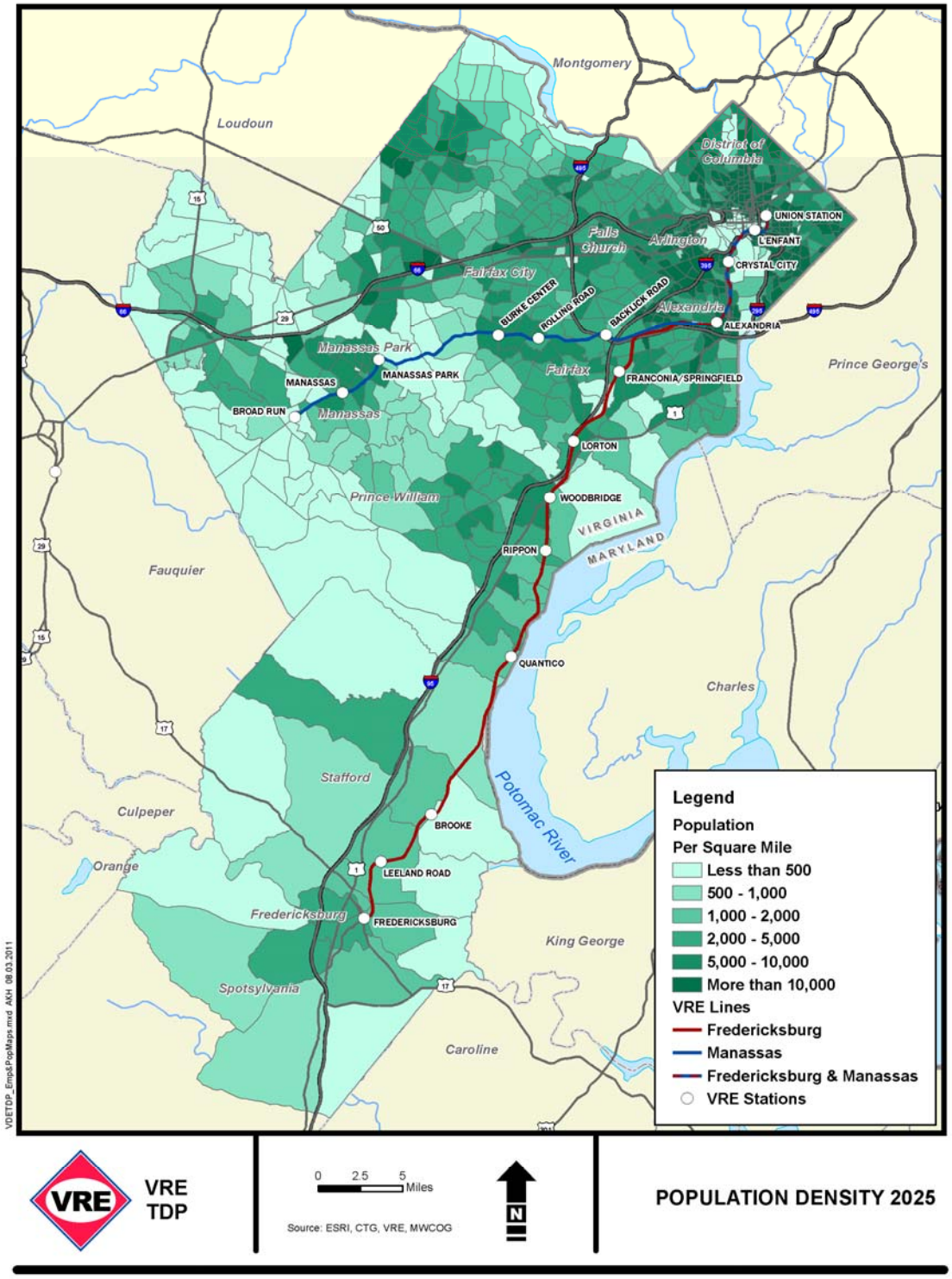
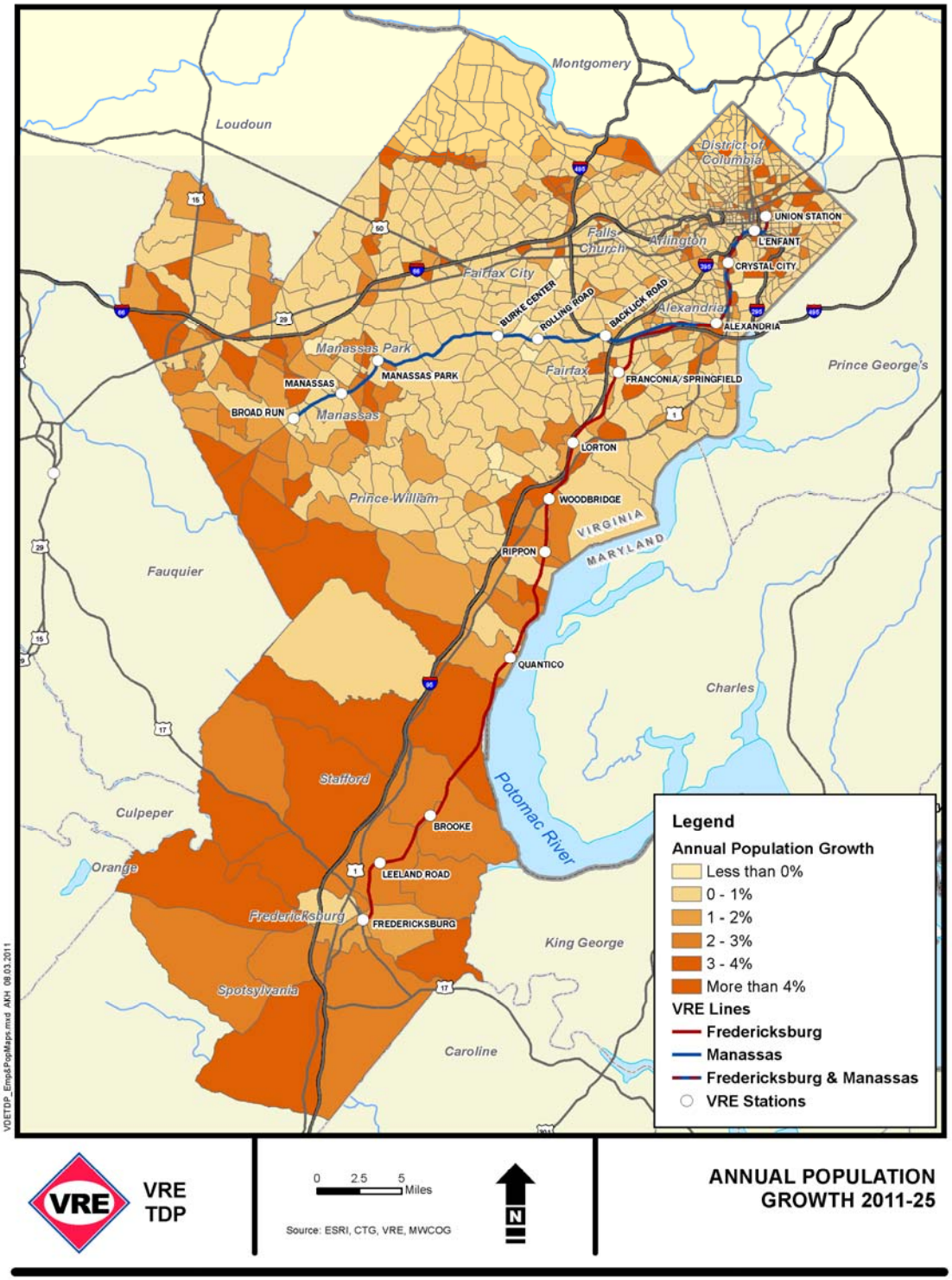


Figure 3-12
2011-2025 Annual Population Growth



Projected employment density in 2011 and 2025 in the VRE service area generally follows population patterns. Between 2011 and 2025, most areas around VRE stations will continue to create additional employment opportunities, especially in the Broad Run, Manassas, and Manassas Park areas along the Manassas line, and Woodbridge, Quantico, and Fredericksburg along the Fredericksburg line. However, Washington D.C. is expected to remain the dominant employment "pull" force for VRE riders. As expected, the lowest projected employment density is in the rural zones. Figures 3-13 and 3-14 illustrate employment density in the VRE service area in 2011 and 2025.

The highest 2011-2025 annual employment growth areas (with annual growth of three percent or more) in the VRE Fredericksburg line service area are located along the I-95 corridor in Fairfax County (Lorton VRE station), Prince William County (Rippon, Woodbridge, and Quantico VRE stations) and the Fredericksburg area in Spotsylvania County. Broad Run, Manassas, Manassas Park, and Alexandria are VRE stations on the Manassas line with very high 2011-2025 annual employment growth. Figure 3-15 shows the projected annual employment growth in the VRE service area.

Figure 3-13
2011 Employment Density

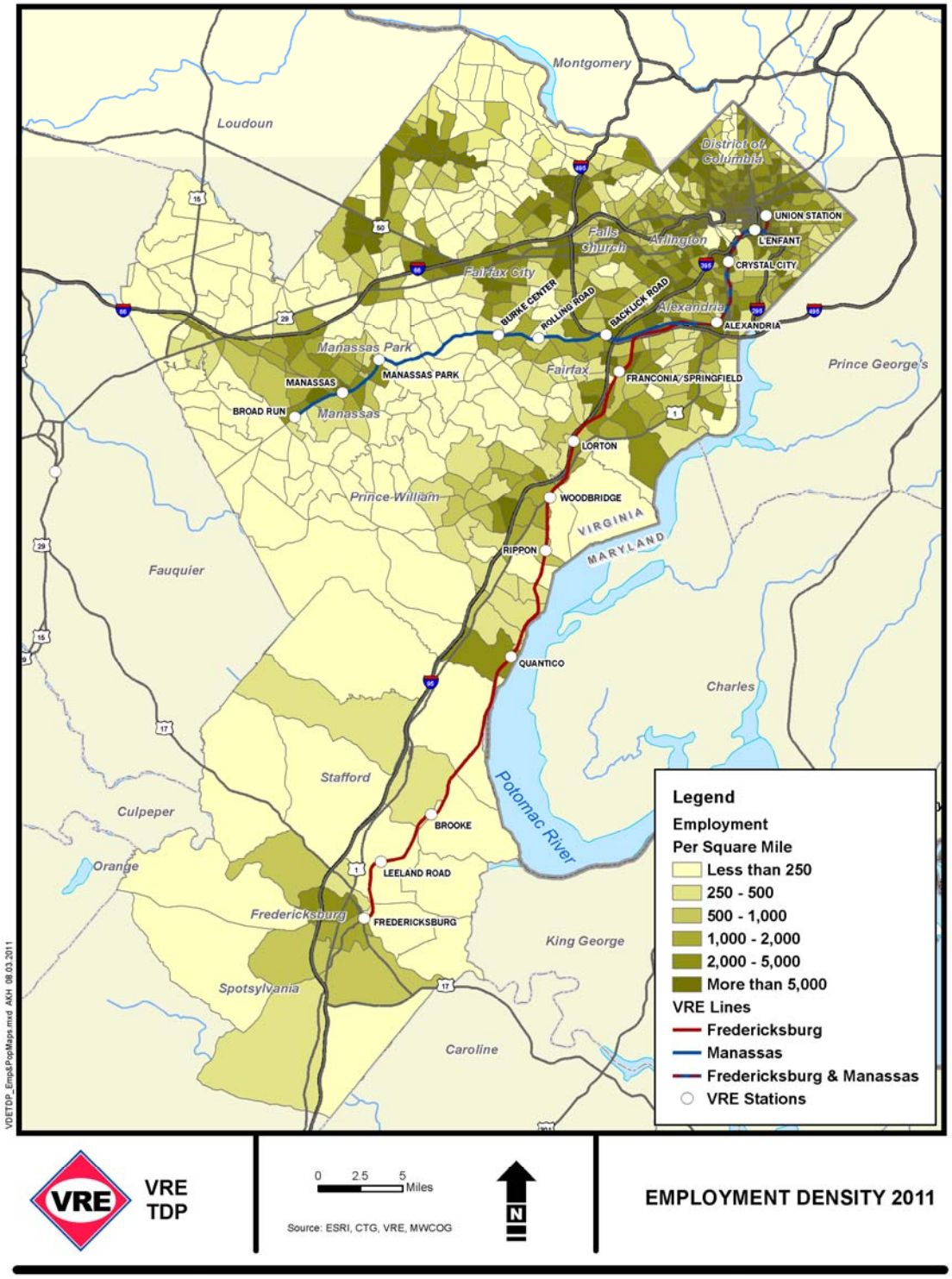


Figure 3-14
2025 Employment Density

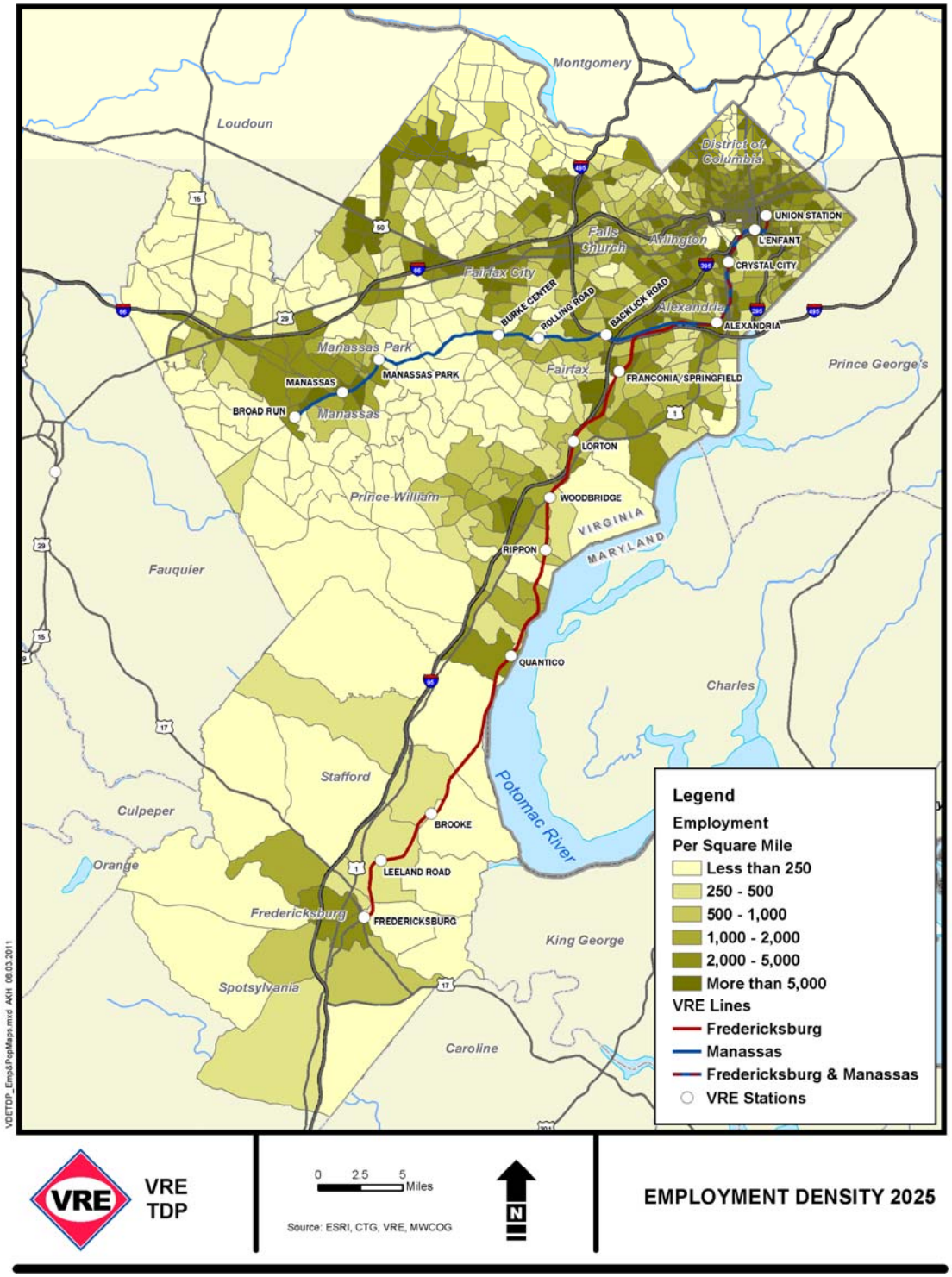
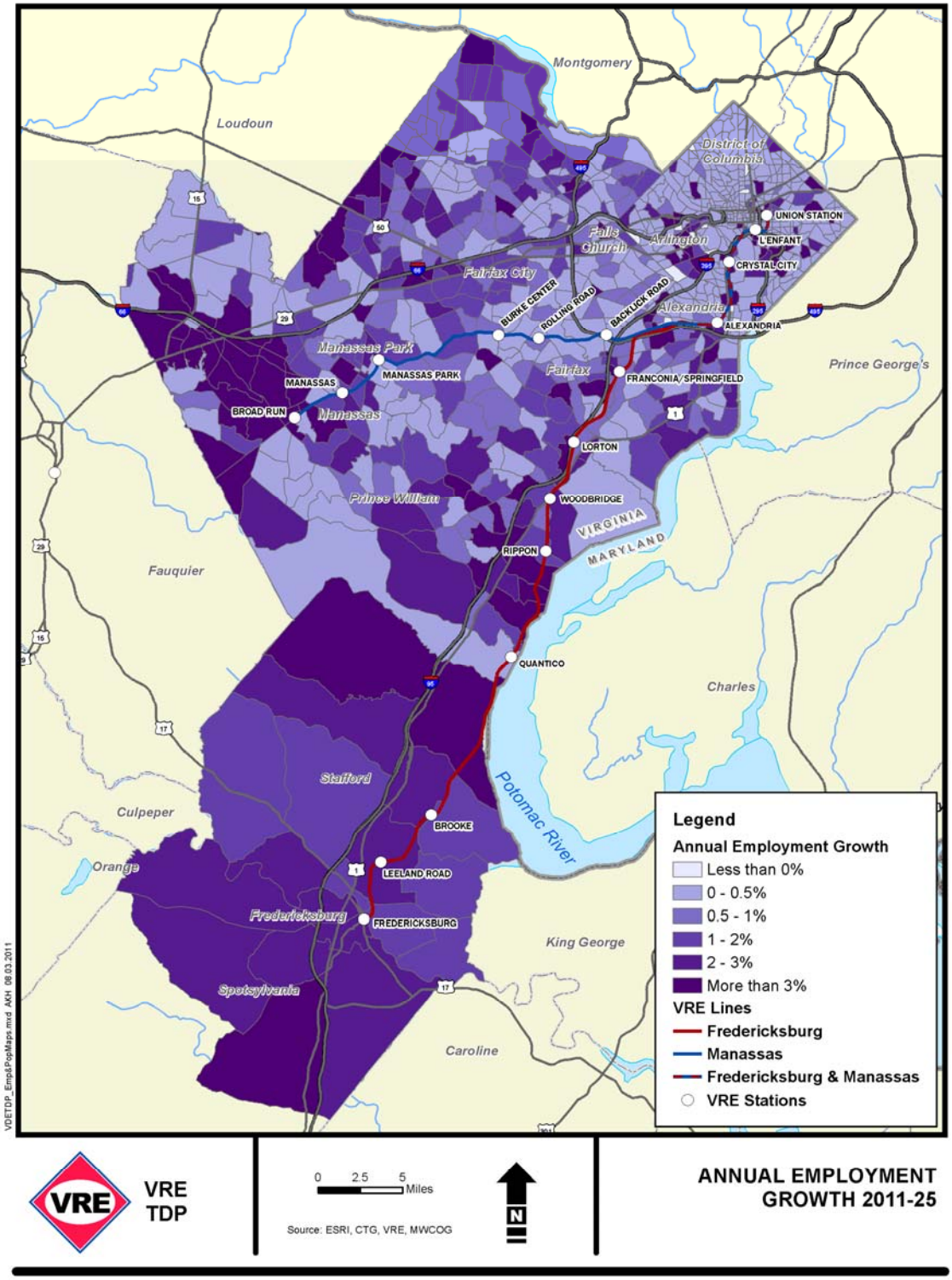


Figure 3-15
2011-2025 Annual Employment Growth



3.2 Peer Review

A peer system review was prepared to compare VRE's system characteristics and performance measures with five other transit systems that exhibited comparable operational and financial characteristics. The Federal Transit Administration's NTD was the primary source of data for these systems, with the most recently available data (2009) used in the analysis. The NTD provides a consistent set of measurable data that can be used in a peer systems analysis. However, it is important to keep in mind other aspects of service quality that are not reported in the NTD, such as passenger satisfaction, vehicle cleanliness and comfort, and schedule adherence. It is also worth noting that there may be unique operating and financial characteristics associated with a particular transit agency.

While no two train systems are alike, the following commuter rail systems were selected as peers to VRE:

- Maryland Transit Administration – NTD #3034
- Central Puget Sound Regional Transit Authority – NTD #0040
- South Florida Regional Transportation Authority – NTD #4077
- North County Transit District– NTD #9030
- Dallas Area Rapid Transit and Fort Worth Transportation Authority – NTD #6056 and 6007 *(Note: Data for DART & TRE systems is the sum of both systems, unless otherwise noted)*

In general, VRE's service area was smaller, service characteristics were similar, and financial characteristics were lower than the peer system averages, as summarized in Table 3-6.

Table 3-6
VRE and Peer-Average Characteristics

Characteristic	Peer Average	VRE
Service Area		
Square Miles	1,820	703
Population (millions)	2.70	0.68
Population Density (persons per sq. mile)	2,059	932
Service		
Peak Vehicles	57	78
Passenger Trips (millions)	3.81	3.87
Revenue-Miles (millions)	2.42	1.87
Revenue-Hours	68,344	59,257
Financial		
Annual Operating Cost (millions)	$ 47.34	$ 50.60
Fare Revenue (millions)	$ 12.54	$ 25.91

Source: NTD 2009

A complete review of service characteristics and performance measures of the peers is included in Appendix C. Key findings of the peer review were as follows, although it should be noted when making

comparisons that all peers except Sounder operate a greater number of daily trains than VRE including midday, reverse flow and weekend service:

- ***Vehicle Utilization:*** VRE's revenue-miles and revenue-hours per peak vehicles were about half the peer average, respectively. All the peers except MTA exhibited higher spare ratios than the FTA guidelines of 20 percent spares.
- ***Service Supplied:*** In comparison to its peers, VRE operates more service miles per capita, and more service hours and revenue-miles per square mile than the peer averages. However, VRE operated significantly fewer service hours per capita.
- ***Ridership Productivity:*** The passenger trips per capita for VRE are much higher than the peer average. Despite the fact that VRE has fewer revenue hours per capita than most of its peers, the productivity of those revenue hours is better than the peer average. VRE's productivity in terms of passenger-trips per revenue-hour is 19 percent higher than the peer average. VRE serves 29 percent more passenger-trips per revenue-mile than its peers. The high incidence of employer-sponsored commuting benefits in the DC region has a significant impact on these measures.
- ***Cost Efficiency:*** VRE was less cost efficient than the peer average on an operating cost per passenger trip, operating cost per revenue-hour, and operating cost per revenue-mile basis.
- ***Farebox Revenues:*** VRE's farebox recovery rate was 20 percent more than the peer average.
- ***O&M Funds:*** VRE's FY2009 operating budget was similar to the peer average. VRE derived a significant share of its operating revenue from fares (46 percent).
- ***Capital Funds:*** VRE's capital budget was 19 percent less than the peer average.

To conclude, this peer review analysis has determined that VRE's productivity is higher that its peers. Although VRE's cost efficiency is lower, as a result of a higher operating budget along with fewer revenue hours and revenue miles being operated compared to the peers, the VRE farebox recovery rate is much higher than the peer average due to higher ridership and more expensive fare structure compared to the peers.

3.3 On-Board Survey Results

3.3.1 2011 Spring Survey Results

The purpose of this section is to present results of the 2011 annual VRE customer service survey and compare them to the previous year. VRE conducted its 2011 customer on-board customer survey in the morning of May 11, 2011. The survey provided riders an opportunity to evaluate VRE operations and performance as a system. More than 5,600 passengers completed the survey, which is comparable to the participation levels in 2010. All data presented below comes from the 2010 and 2011 VRE customer service surveys.

Top Line Results

When comparing VRE service overall from 2011 to 2010 (as shown in Figure 3-16), nearly half of the respondents indicated that service has improved. This compares to 30 percent of surveyed riders who picked that answer when comparing VRE service in 2010 to 2009. At the same time, 45 percent of survey respondents in 2011 perceived VRE service to be about the same in 2010 and 2011, in line with results in 2010.

Top Concerns about VRE Service in 2011

1. **On-Time Performance – 40%**
2. **Lack of Seats – 18%**
3. **Cost – 12%**

When asked about their number one concern about VRE service (Figure 3-17), 40 percent of riders in 2011 stated it is on-time performance (compared to 37 percent in 2010), followed by 18 percent who claimed it is lack of seats (17 percent on 2010), and lesser percentages citing cost, frequency of service, and lack of parking. Concerns about the on-time performance and lack of seats are not surprising given that at the time of the survey, more than half of VRE trains were regularly over 90 percent capacity. With the majority of those trains over 100 percent capacity, these crowded conditions were likely to have caused riders to score as they did. In fact, the surveyed riders perceived lack of seats to be the top priority VRE should focus on in 2012 – as shown in Figure 3-18, 35 percent of them voiced that opinion, followed by more frequent service with 27 percent of the total responses.

VRE Report Card

VRE "Report Card" part of the survey contained questions grouped into three customer satisfaction categories: customer service, train crew members, and VRE operations. Riders rated specific line items within each category with on scale of 'A' to 'F', with A = excellent, B = very good, C =average, D = needs improvement, and F = poor. This analysis focuses on reporting percentages of riders who rated VRE with an 'A' or 'B'.

<u>VRE Customer Service</u>

In the category of customer service, which included questions dealing with customer service friendliness, quality of service information, and VRE follow-up to delays or problems, the percentage of riders who rated VRE with an 'A' or 'B' improved considerably from 2010 to 2011 in the following

categories (ranked by the largest percentage increase): usefulness of rail time, quality of website, and lost and found department (as shown in Table 3-6 and Figure 3-19). VRE riders have continued to be very pleased with several aspects of VRE customer service, particularly responsiveness and friendliness of VRE staff, both rated with an 'A' or 'B' by 83 percent of respondents or more in both 2010 and 2011.

The overall customer service performance remained the same in 2010 and 2011, with 67 percent of respondents assigning it 'A' or 'B' ranking. Riders were less satisfied in 2011 than in 2010 with timeliness and quality of email responses from VRE, indicating that the agency needs to address the way it handles electronic communication with its customers. This is especially important given the changing dynamics of how VRE customers obtain information about VRE services; as shown in Figure 3-22, VRE customers have relied increasingly on email to obtain information about VRE services: the percentage increased from 3 percent in 2010 to 15 percent in 2011, and is bound to increase given that 74 percent of riders reported they own a smart phone (meaning they have email access on the go).

VRE Train Crew Members

In the category of train crew members, which rates how knowledgeable, helpful, courteous and attentive VRE crew members are, the overall performance dropped two percentage points from 2010, when Amtrak was providing staff support, from 87 to 85 percent (as shown in Table 3-6 and Figure 3-20). The percentage of riders who rated VRE with an 'A' or 'B' improved considerably from 2010 to 2011 in only one category, ticket checking. The year-to-year improvement was substantial – from 73 to 78 percent, a 7 percent increase. Given that the VRE crews have only been on the job for a year, the learning curve issues with certain tasks such as making station and delay announcements might have caused them to rank lower than the previous, more experienced operators.

VRE Operations

The final category in VRE Report Card is perhaps the most important since it deals with VRE operating subcategories such as on-time performance, ease of purchasing a ticket, security, safety, and cleanliness of stations, platforms, and trains, and level of fare for quality and value of service. VRE scored higher in 2011 than 2010 in categories such as reliability of ticket vending machines and ease of buying a ticket, level of fare for quality and value of service, on-time performance, and cleanliness of trains and stations (as shown in Table 3-7 and Figure 3-21). The first three cited categories experienced the biggest percentage improvement since 2010, indicating that VRE customers perceive VRE service to be a good value and that on-time performance (the number one concern of riders) has improved substantially year-to-year.

VRE Operations – Top Improvement Categories (2010-2011)

1. ***Reliability of Ticket Vending Machines - 13% improvement since 2010***
2. ***Level of Fare for Quality and Value of service – 9% improvement***

Despite these positive results, about half of the graded categories received scores lower than last year. While specific components of VRE system were identified for improvement, only nine percent of respondents felt that service declined from last year. Overall service quality was rated 78 percent, the highest since 2003.

Rider Trip Characteristics

2011 annual VRE customer service survey included rider trip-specific questions asking riders about how long they have been VRE patrons, trip frequency, trip origin and destination, trip fare payment, home and work zip code, and means and time needed to get to VRE stations. Figure 3-23 illustrates that nearly half of the respondents are established VRE riders who have been using the system four or more years. As shown in Figure 3-24, VRE riders tend to use the system five days a week (73 percent of the respondents in 2011, compared to 76 percent in 2010), followed by riders who use it four days a week (17 percent, compared to 15 percent in 2010).

The fact that the percentage of commuters traveling aboard VRE trains four days a week has increased year-over-year is not surprising given that the survey data shows that percentage of surveyed respondents who telecommute or work at home one day per week increased from 12 percent in 2010 to 15 percent in 2011. Since VRE riders tend to commute five days a week, they tend to use a monthly or weekly pass; as shown in Figure 3-25, 72 percent of riders use monthly passes, while 21 percent purchase weekly passes.

These riders tend to reside in VRE stations' immediate catchment areas, with 83 percent commuting 10 miles or less to their departure VRE station in the morning, as shown in Figure 3-26. The overwhelming majority of VRE riders drive alone to VRE stations in the morning, 81 percent, 8 percent get dropped off, and 6 percent carpool (see Figure 3-27). In similar to 2010, in 2011, the surveyed riders cited traffic congestion, new job, and new home as the three primary reasons for switching to VRE.

Rider Demographics

As part of the survey process, VRE collects demographic information from surveyed riders to meet Federal transit Administration guidelines. The surveyed riders in 2011 are very similar in demographic composition to surveyed passengers in the previous year. They can be characterized as follows:

- 61 percent are male (compared to 63 percent in 2010)
- 85 percent are between 35 to 64 years old (82 percent in 2010)
- 88 percent earn $75,000 or more per year (same as 2010)
- 86 percent are homeowners (85 percent in 2010)
- 82 percent own two cars or more (83 percent in 2010)
- 71 percent are Caucasian, 15 percent African American, 6 percent Asian, 4 percent Hispanic (compared to 69 percent, 15 percent, 6 percent, and 4 percent in 2010, respectively)
- 25 percent of riders are proficient in another language, in addition to English (same as 2010)
- 64 percent work are federal government employees (62 percent in 2010)

Figure 3-16
VRE Customer Service Survey: Has VRE service improved over the last year? (2010 and 2011)

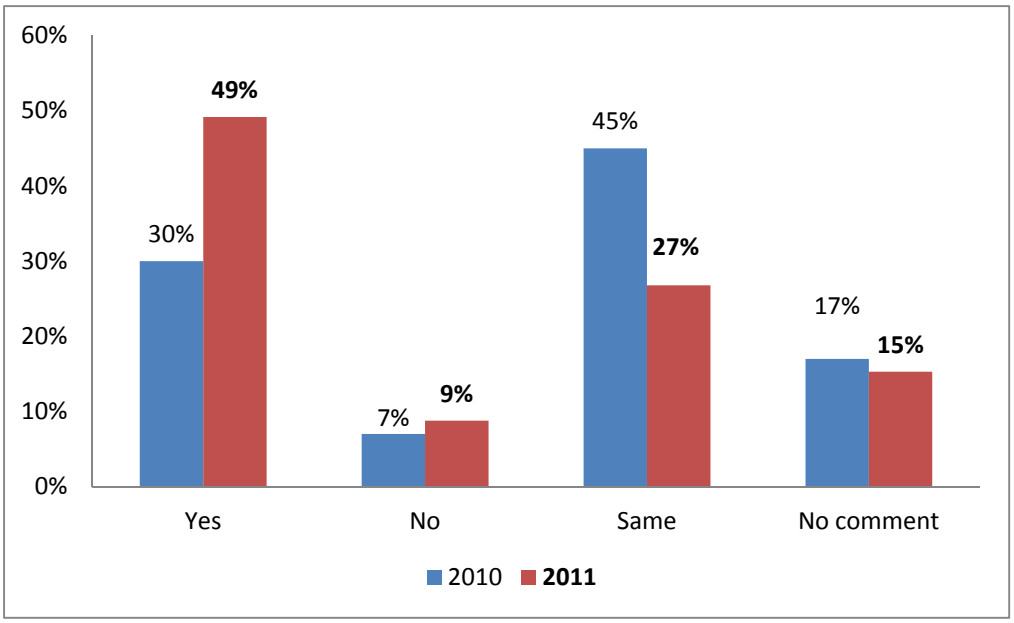


Figure 3-17
VRE Customer Service Survey: What is your number one concern about VRE service? (2010 and 2011)

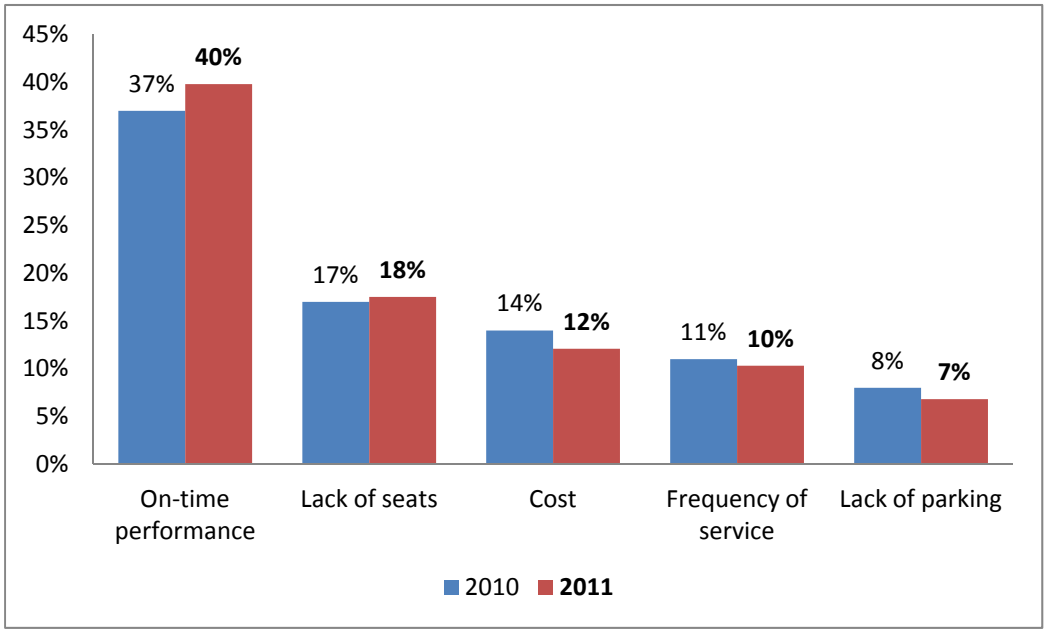


Figure 3-18

VRE Customer Service Survey: What should be VRE's top priority over the next year? (2010 and 2011)

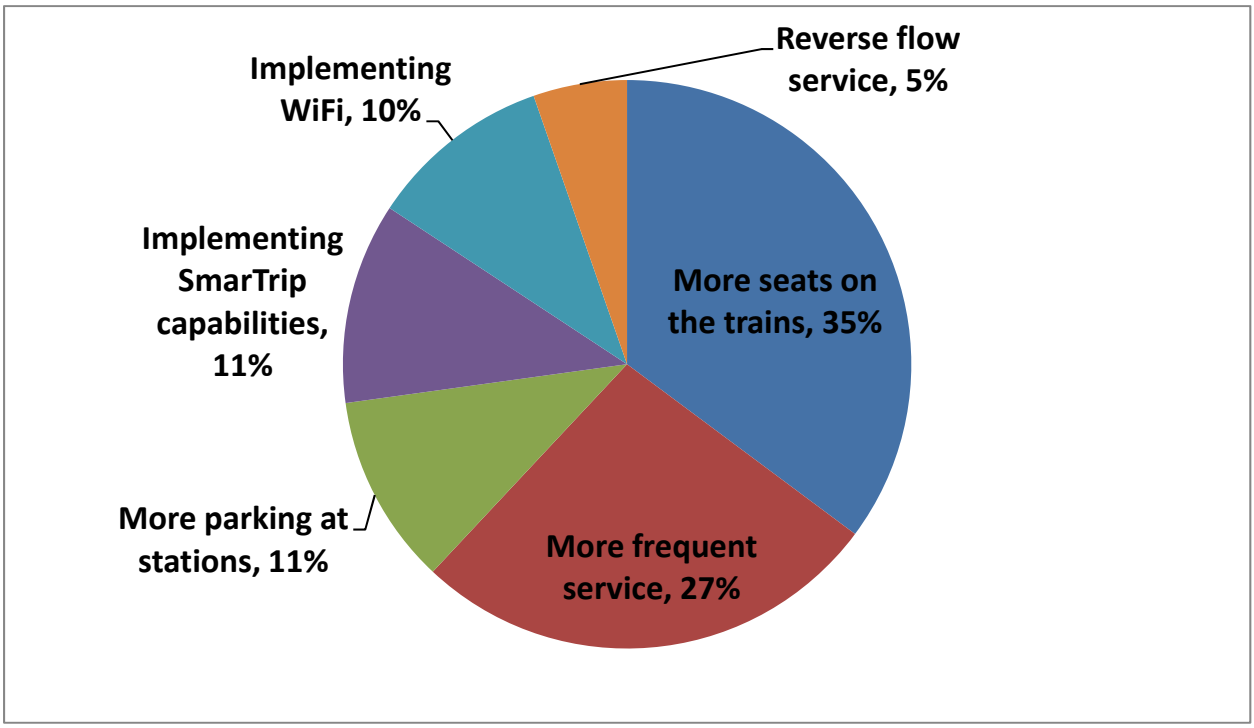
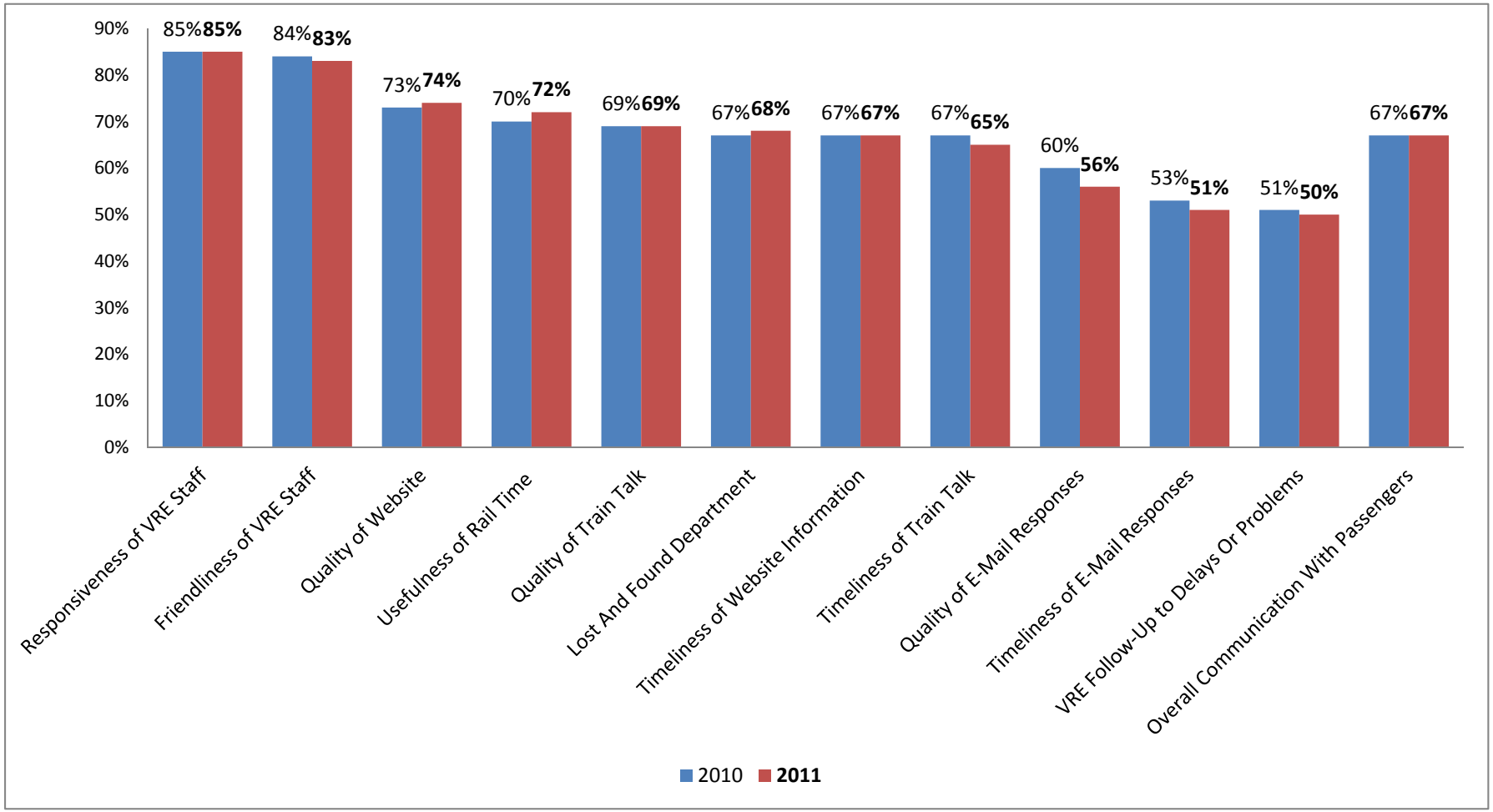
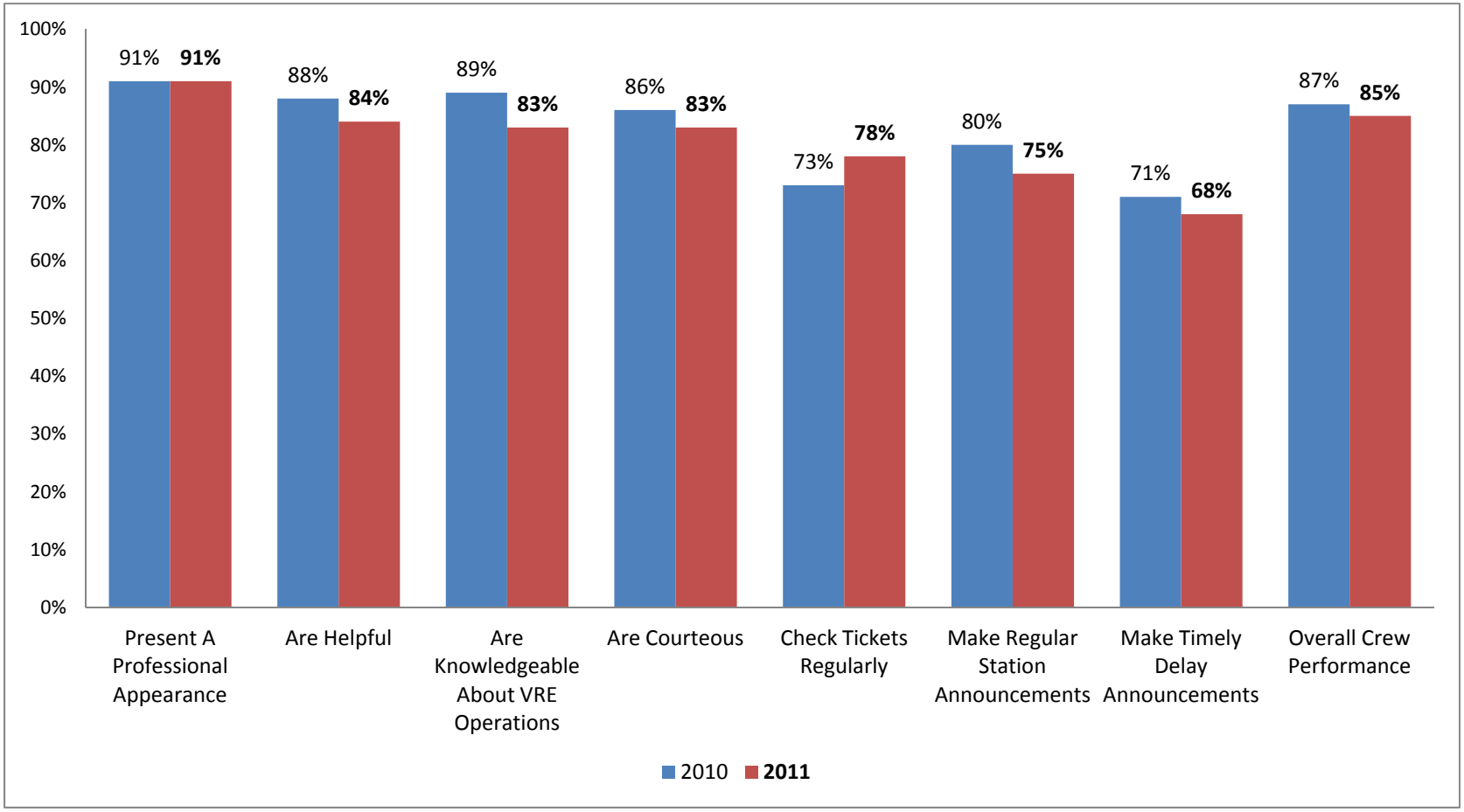


Figure 3-19
VRE Customer Service Survey: Report Card – Customer Service* (2010 and 2011)



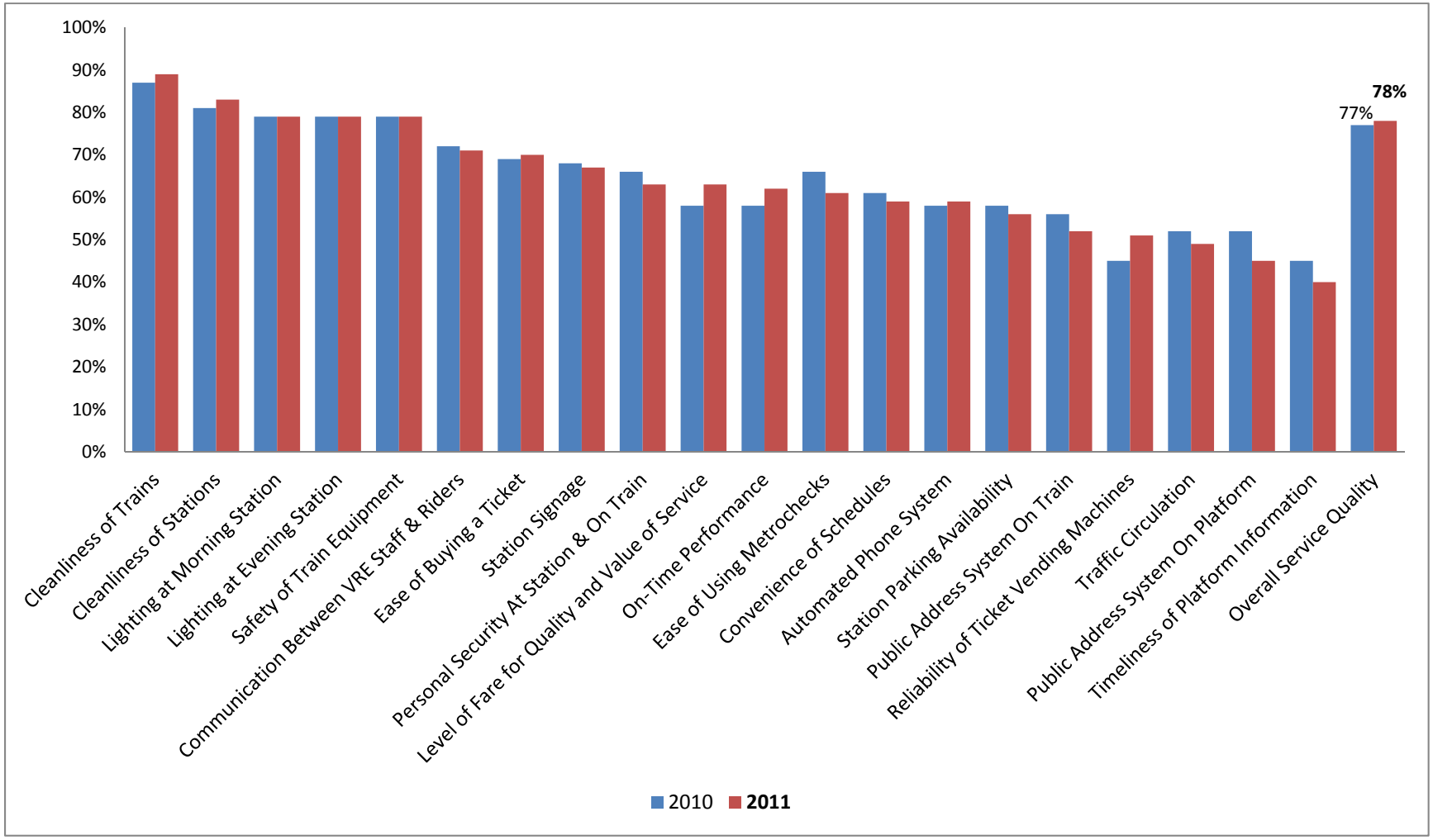
**Percentage of riders who rated VRE with an 'A' or 'B' rating on scale of A – F*

Figure 3-20
VRE Customer Service Survey: Report Card – Train Crew Members* (2010 and 2011)



**Percentage of riders who rated VRE with an 'A' or 'B' rating on scale of A – F*

Figure 3-21
VRE Customer Service Survey: Report Card – VRE Operations* (2010 and 2011)



**Percentage of riders who rated VRE with an 'A' or 'B' rating on scale of A – F*

Figure 3-22
VRE Customer Service Survey: When you need more detailed information about VRE, how do you go about getting it? (2010 and 2011)

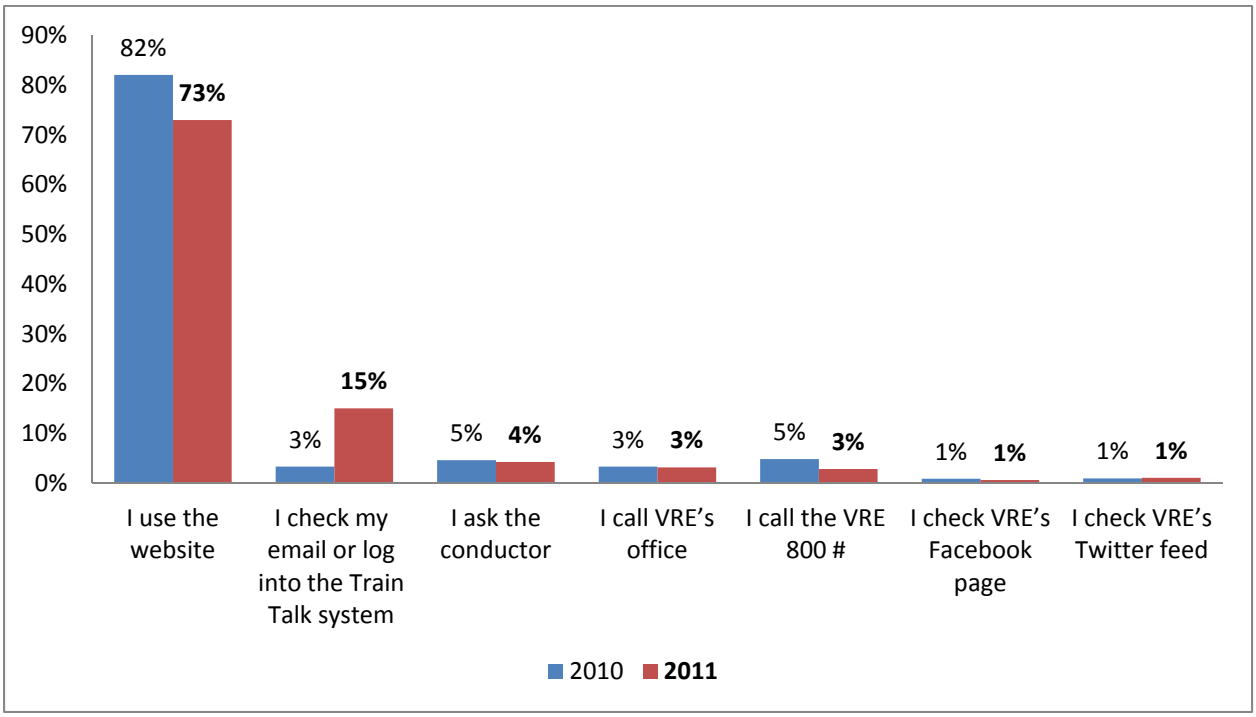


Table 3-7

VRE Report Card (2010 and 2011)

Report Card Categories:	2010*	2011*
Customer Service:		
Responsiveness of VRE Staff	85%	85%
Friendliness of VRE Staff	84%	83%
Quality of Website	73%	74%
Usefulness of Rail Time	70%	72%
Quality of Train Talk	69%	69%
Lost And Found Department	67%	68%
Timeliness of Website Information	67%	67%
Timeliness of Train Talk	67%	65%
Quality of E-Mail Responses	60%	56%
Timeliness of E-Mail Responses	53%	51%
VRE Follow-Up to Delays Or Problems	51%	50%
Overall Communication With Passengers	***67%***	***67%***
Train Crew Members:		
Present A Professional Appearance	91%	91%
Are Helpful	88%	84%
Are Knowledgeable About VRE Operations	89%	83%
Are Courteous	86%	83%
Check Tickets Regularly	73%	78%
Make Regular Station Announcements	80%	75%
Make Timely Delay Announcements	71%	68%
Overall Crew Performance	***87%***	***85%***
VRE Operations:		
Cleanliness of Trains	87%	89%
Cleanliness of Stations	81%	83%
Lighting at Morning Station	79%	79%
Lighting at Evening Station	79%	79%
Safety of Train Equipment	79%	79%
Communication Between VRE Staff & Riders	72%	71%
Ease of Buying a Ticket	69%	70%
Station Signage	68%	67%
Personal Security At Station & On Train	66%	63%
Level of Fare for Quality and Value of Service	58%	63%
On-Time Performance	58%	62%
Ease of Using Metrochecks	66%	61%
Convenience of Schedules	61%	59%
Automated Phone System	58%	59%
Station Parking Availability	58%	56%
Public Address System On Train	56%	52%
Reliability of Ticket Vending Machines	45%	51%
Traffic Circulation	52%	49%
Public Address System On Platform	52%	45%
Timeliness of Platform Information	45%	40%
Overall Service Quality	***77%***	***78%***

**Percentage of riders who rated VRE with an 'A' or 'B' rating on scale of A – F*

Figure 3-23
VRE Customer Service Survey: How long have you been riding VRE? (2010 and 2011)

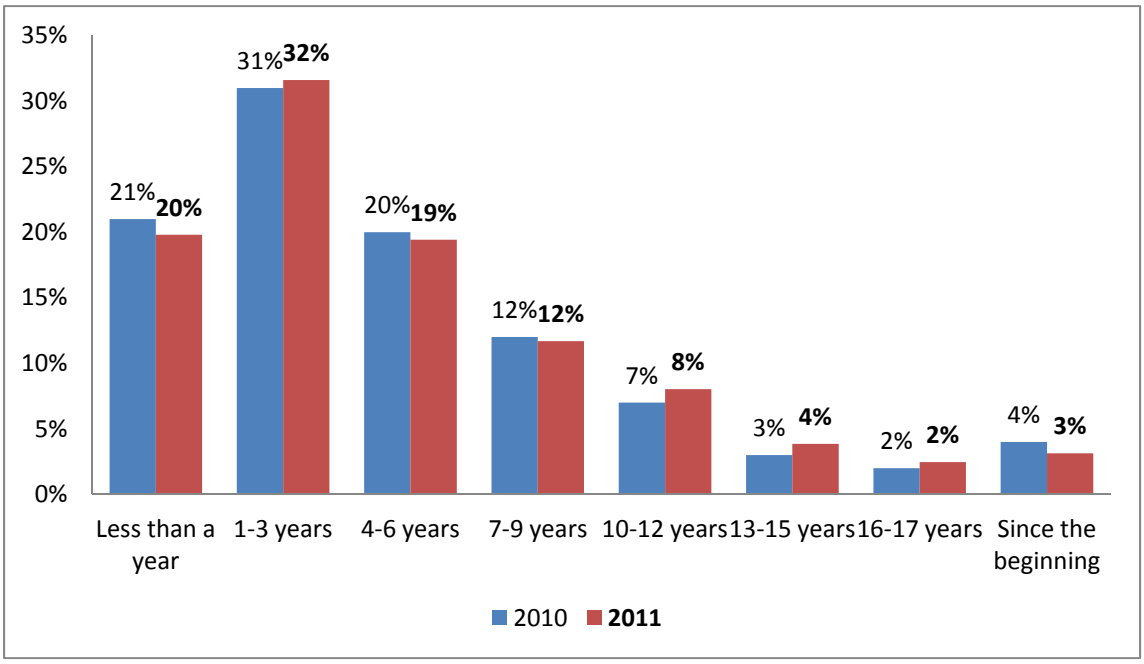


Figure 3-24
VRE Customer Service Survey: How often do you normally ride VRE? (2010 and 2011)

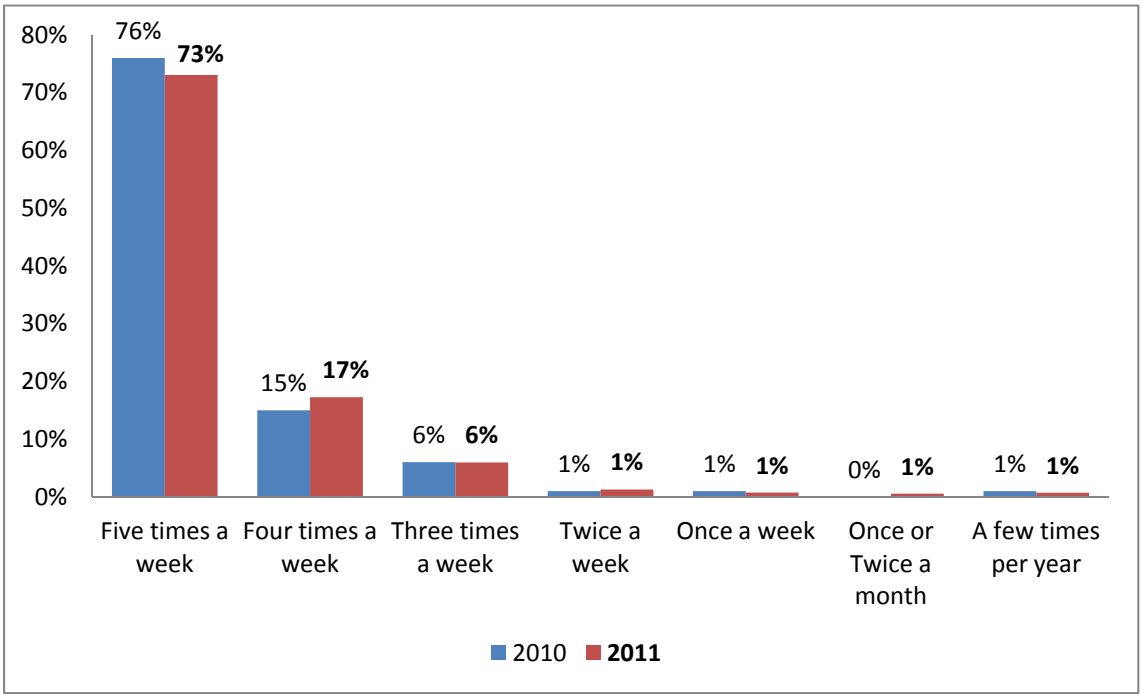


Figure 3-25
VRE Customer Service Survey: What type of ticket do you normally use? (2010 and 2011)

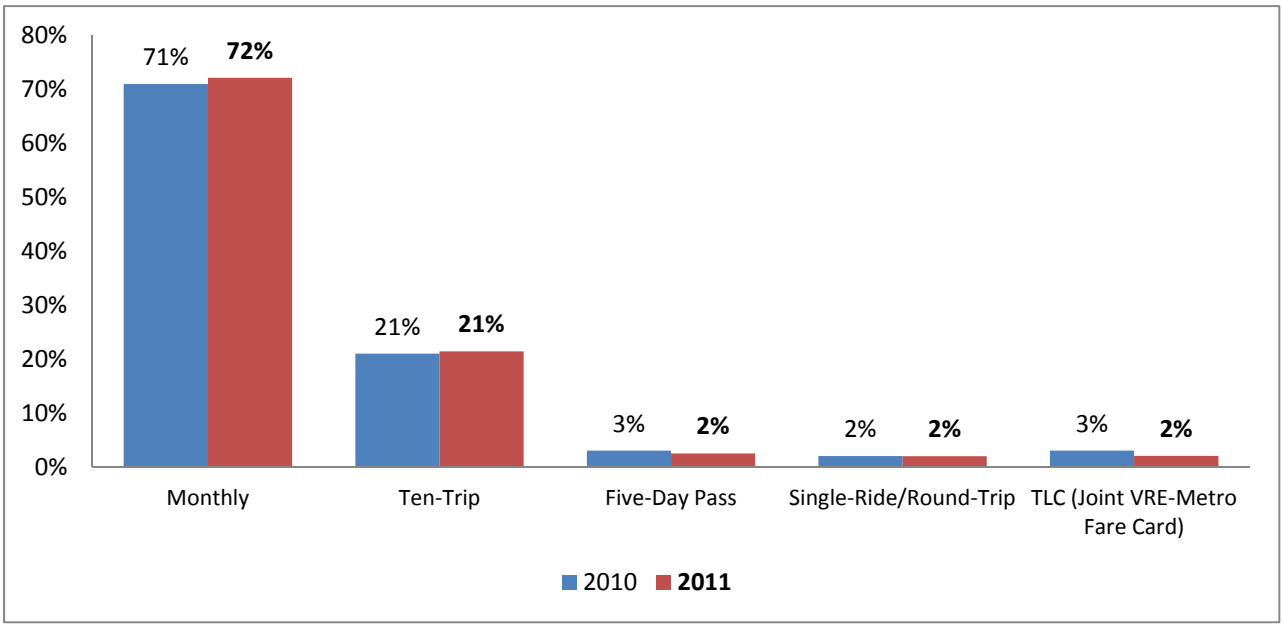


Figure 3-26
VRE Customer Service Survey: How many miles did you travel from your home to the train station this morning? (2010 and 2011)

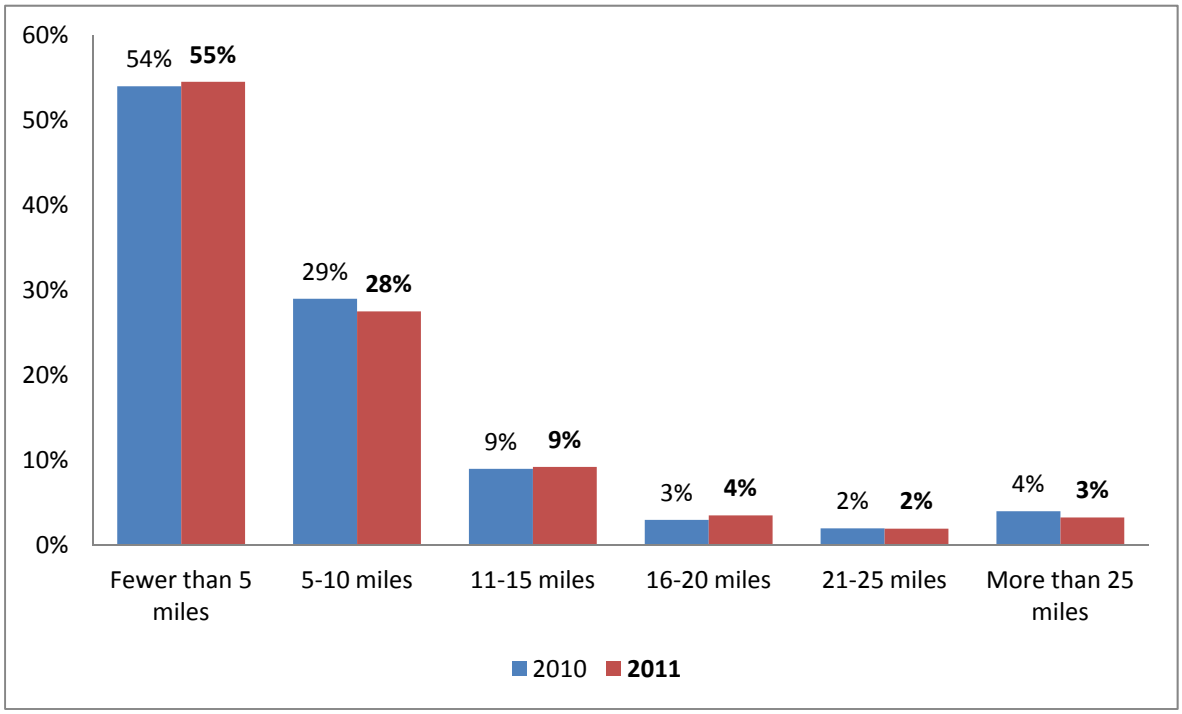
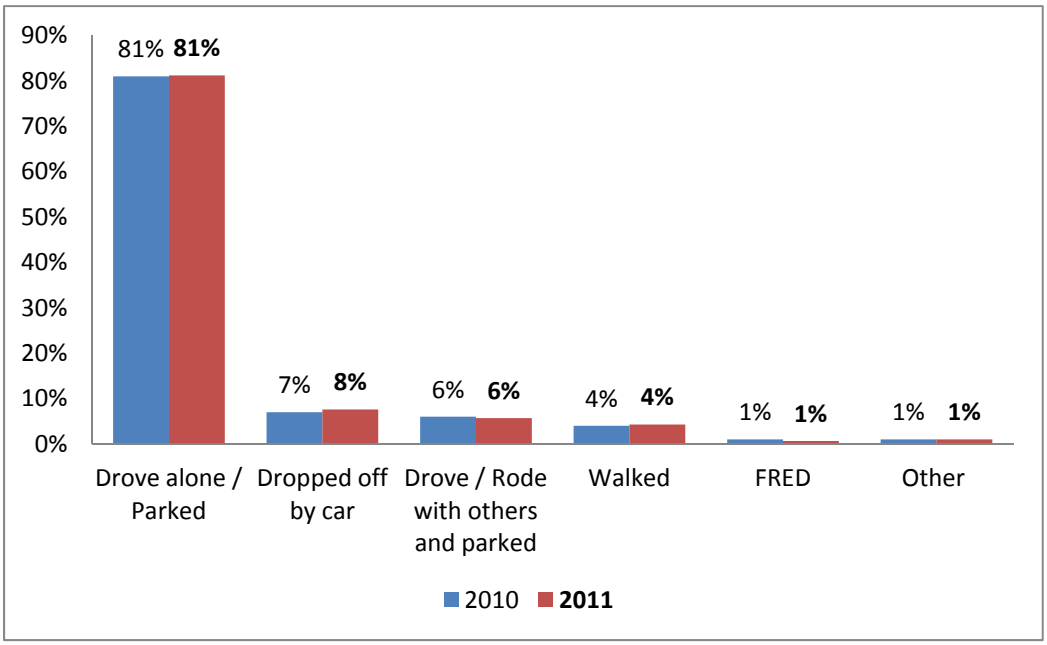


Figure 3-27
VRE Customer Service Survey: How did you travel to VRE station this morning? (2010 and 2011)



3.3.2 2010 Fall Survey Trip Origins and Destinations

An on-board survey focused on questions about VRE riders' inbound trip origins and destinations was conducted by VRE in Fall 2010. Data from the survey was utilized to map respondents' trip origins and destinations. Survey database contained 1,409 usable records with origins and 1,522 records with destinations.

The origin catchment areas extend well beyond VRE lines, with many respondents' trips originating 10 miles or more west and south of the southernmost station on the Fredericksburg line, and 10 miles or more west and north of the westernmost stop on the Manassas line. In comparison to the VRE trip origins data presented in the VRE *2004 Strategic Plan*, VRE passengers are willing to travel from further away in order to get to VRE train stations. Figure 3-28 shows VRE trip origins by passenger origin; the results are color coded by station of origin.

VRE's principal travel market comprises trips from the origin catchment areas in Northern Virginia to the downtown central business district (CBD) destination zones, identified as Union Station and L'Enfant VRE stations in Washington D.C., Crystal City in Arlington, and Alexandria in the City of Alexandria. Figure 3-29 shows destination zones surrounding the four innermost VRE stations – Union Station, L'Enfant, Crystal City and Alexandria. The results are color coded by destination station. Table 3-8 illustrates the current magnitude of these trips. Nearly 92 percent of surveyed passengers on the Fredericksburg line detrained VRE trains at the four CBD stations. Almost all Manassas line passengers' destinations are in the CBD area. Passengers boarding VRE trains at the two southernmost stations on the Fredericksburg

line (Leeland Road and Fredericksburg) are more likely to disembark VRE trains at stations located outside the four CBD area stations than passengers boarding VRE trains at any other stations.

Figure 3-28
Existing VRE Trip Origins

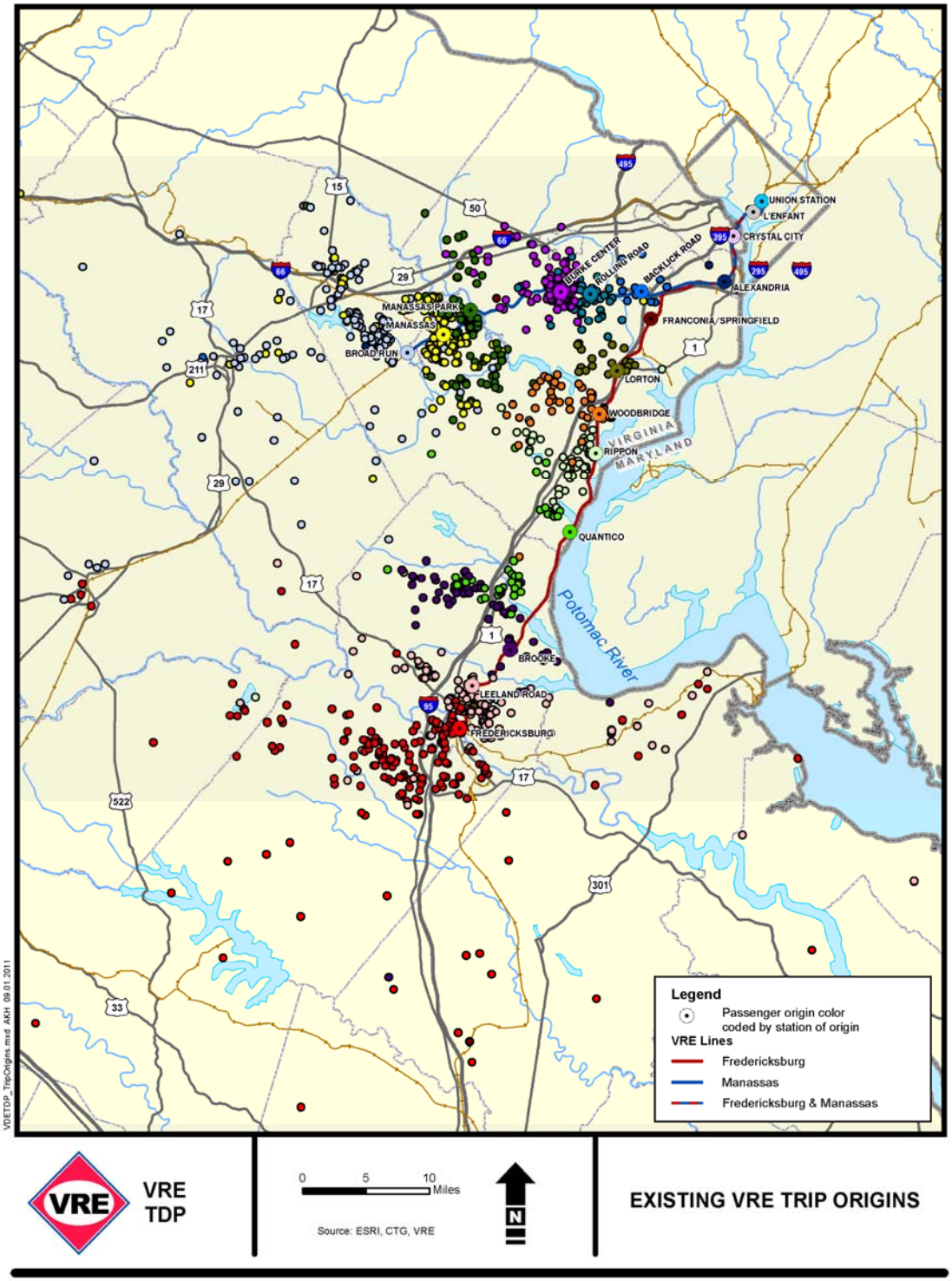


Figure 3-29
Existing VRE Trip Destinations

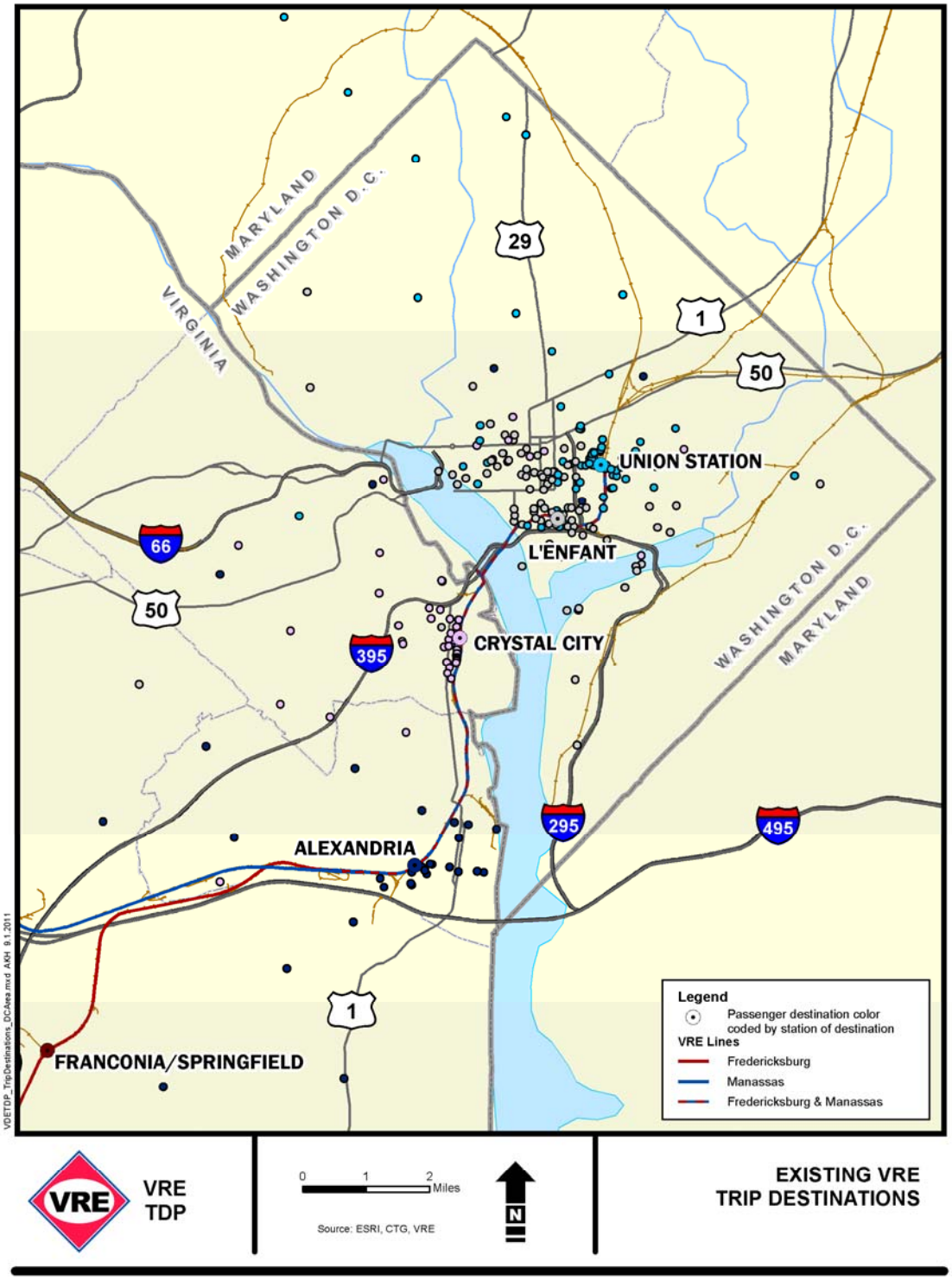


Table 3-8
VRE CBD Destinations by Origin Station

	CBD Destination Station				
Origin Station	**Union Station**	**L'Enfant Plaza**	**Crystal City**	**Alexandria**	**% of all Trips to CBD**
Fredericksburg line:					
Fredericksburg	14.8%	31.5%	22.5%	12.7%	81.5%
Leeland Road	10.1%	36.1%	22.9%	11.1%	80.3%
Brooke	10.7%	34.1%	32.3%	9.5%	86.6%
Quantico	16.6%	32.4%	33.6%	9.5%	92.1%
Rippon	21.7%	35.0%	25.4%	15.2%	97.3%
Woodbridge	27.2%	37.5%	21.1%	11.9%	97.7%
Lorton	29.6%	39.3%	22.2%	8.1%	99.3%
Franconia/Springfield	57.1%	32.1%	3.6%	7.1%	100.0%
Line Average	23.5%	34.8%	22.9%	10.7%	91.8%
Manassas line:					
Broad Run	19.2%	45.6%	26.3%	8.2%	99.3%
Manassas	19.4%	46.1%	24.0%	9.9%	99.3%
Manassas Park	17.8%	44.4%	26.6%	9.7%	98.5%
Burke Center	26.0%	46.5%	21.3%	6.0%	99.9%
Rolling Road	30.7%	41.5%	21.1%	6.7%	100.0%
Backlick Road	52.6%	0.0%	7.7%	39.7%	100.0%
Line Average	27.6%	37.3%	21.2%	13.4%	99.5%

Source: VRE Fall 2010 survey

3.4 Stakeholder Participation

VRE has an established VRE Coordinating Committee (VCC) which consists of staff representatives from local jurisdictions. The purpose of this committee is to provide review and input related to the proposed Capital Improvement Program and Annual Capital and Operating Budget development process. Throughout the development of the VRE TDP, staff has been coordinating the development of the agency six-year Capital Improvement Program (CIP) and the development of the VRE's Annual Operating Budget with the VCC. Both the CIP and Annual Operating Budget are used as the basis for the development of the TDP. Consequently the process used for review and comment from the VCC (local jurisdictions) is utilized for the purpose of vetting comments of the driving elements of the TDP, the CIP and the Annual Budget.

In addition to the use of the VCC for review of the proposed CIP and Budget, the VCC, which represents all funding partners and jurisdictions served by VRE service, has reviewed the full TDP document. Upon the adoption of the final six year CIP and annual operating budget at its December 2011 meeting, the VRE Operations Board has also been given the opportunity to comment and revise the TDP prior to acceptance of the Final TDP document at its January 2012 meeting.

3.5 Existing Equipment and Facilities

This section provides an overview of VRE's existing facilities and equipment, along with identification of deficiencies and needs. VRE service is influenced by equipment, station and layover yard capacities.

3.5.1 Parking and Station Capacity

Section 1.8 of this Transit Development Plan describes VRE station facilities in detail. The purpose of this section is to provide more insight regarding ownership responsibilities associated with the stations, examine parking capacity at each VRE station, and highlight existing capital improvement projects.

There are 18 stations in the system, located in nine Virginia political jurisdictions plus the District of Columbia. Union Station, Alexandria, Quantico, Fredericksburg and Manassas stations pre-date the establishment of VRE and are owned by other entities; the remaining VRE stations are owned by VRE/VRE member jurisdictions and were built specifically for commuter rail use. Five of the VRE stations are adjacent to Washington Metropolitan Area Transit Authority (WMATA) Metrorail stations: Union Station, L'Enfant, Crystal City, Alexandria/King Street, and Franconia-Springfield. Union Station, Alexandria, L'Enfant, Woodbridge, Quantico, Fredericksburg, Burke Centre and Manassas are joint use stations with Amtrak. VRE station amenities ownership and responsibilities matrix is shown in Appendix D.

Meeting growing parking demand at the existing stations is one of VRE's most pressing capital needs. Although 8,877 parking spaces are currently available systemwide, demand exceeds capacity at the Manassas Park and Rolling Road stations on the Manassas line, and parking demand is near capacity at the Fredericksburg and Leeland Road stations on the Fredericksburg line, and Broad Run and Manassas City on the Manassas line (as shown in Table 3-9). There is no parking provided for VRE patrons at the four innermost stations (Alexandria, Crystal City, L'Enfant, and Union Station). Parking at the Franconia Springfield station is co-located with the WMATA Metrorail station and managed by WMATA. Parking expansion has been viewed as one of the priorities by VRE. VRE recently constructed a five-level, 532 space parking garage in the City of Manassas for VRE patrons and other drivers. Use of that garage is split between VRE (319 spaces) and the City of Manassas (213 spaces). The agency has also programmed expansion of the existing parking lots at the Brooke and Leeland Stations. This expansion will add approximately 430 new parking spaces to the stations: 196 spaces at Leeland and 234 spaces at Brooke.

Table 3-9
Existing Parking Supply and Demand at VRE Stations

VRE Station	Available Parking Spaces	Average Utilization (%)
Fredericksburg line		
Fredericksburg	860	92%
Leeland Road	827	90%
Brooke	499	97%
Quantico	258	72%
Rippon	676	70%
Woodbridge	738	68%
Lorton	567	64%
Franconia/Springfield	0	
Total Fredericksburg line	**4,425**	
Manassas line		
Broad Run	1,065	93%
Manassas City	683	88%
Manassas Park	600	108%
Burke Centre	1,516	56%
Rolling Road	368	102%
Backlick Road	220	71%
Total Manassas line	**4,452**	

Note: Parking utilization represents monthly average utilization; mid-week utilization is higher at most stations. No parking is available for VRE patrons at the Alexandria, Crystal City, L-Enfant, and Union Station. Parking at the Franconia-Springfield station is managed by WMATA. Parking at Fredericksburg and Leeland include spaces in gravel overflow lots.
Source: VRE, September 2011

Parking capacity is not the only capital deficiency at the VRE stations. A steady increase in VRE ridership warrants longer passenger trains to accommodate the growing number of passengers. While VRE has increased the frequency of the trains on its lines, crowding on trains has persisted. As maximum VRE-operated train lengths on all trains are increased to eight or more cars in the future, the need to lengthen station platforms will increase. Most of the VRE stations have an approximately 400 foot long passenger-boarding platform, designed to handle trains of up to six cars in length, although some station platforms will only accommodate five bi-level gallery coaches. VRE's goal is to lengthen shorter platforms to approximately 600 feet, in the short term for eight-car consists, and eventually to 800 feet to accommodate ten-car consists throughout the system. Platform extensions have been completed at the Manassas Park and Burke Centre stations on the Manassas line. An extension of the Broad Run platform will be complete by the end of 2011. Extensions are programmed in the VRE capital improvements plan for the Rolling Road and Lorton stations.

VRE has also implemented dual station platforms to provide greater operational flexibility and efficiency by allowing stations to be served from either side of the tracks. Currently, the Fredericksburg, Quantico, Woodbridge, Franconia-Springfield, Manassas and Alexandria stations have dual platforms, and VRE is planning to extend this program to other stations.

3.5.2 Rolling Stock

The VRE revenue fleet consists of 128 vehicles as of May 2011, which includes 27 locomotives and 101 passenger coaches. VRE is in the process of fleet replacement of its oldest locomotives and passenger coaches. Of the 27 locomotives, 24 are owned outright by VRE while the three F40PHs are leased. Table 3-10 summarizes the locomotive fleet. VRE is in the process of retiring the GP39/40 and F40 locomotives and replacing them with MP36 locomotives. VRE will have received all 20 MP36 locomotives procured in 2010-2011 by the end of 2011.

VRE's passenger car fleet consists of 101 bi-level, gallery-style coaches (see Table 3-11). VRE purchased 71 bi-level, gallery-style coaches from the Sumitomo Corporation of America between 2006 and 2010. Prior to the procurement of the new coaches, VRE operated a fleet comprised primarily of 50 gallery-style Pullman coaches (Legacy Gallery) acquired from Chicago's Metra commuter rail system between 2001 and 2004. Those coaches were supplemented by a mixed fleet that included Mafersa single-level coaches that were part of VRE's original fleet, Kawasaki bi-level coaches purchased new in 2000 and Bombardier bi-level coaches leased from Sound Transit.

As the Sumitomo coaches entered the fleet, VRE sold 30 of the aging Legacy Gallery coaches. Twenty coaches have been transferred to their new owners; transfer of the remaining 10 coaches is pending. The 20 Legacy Gallery coaches remaining in the VRE fleet will require additional maintenance investment to be serviceable beyond 2013. The VRE Operations Board approved the procurement of 50 additional coaches in May 2011 to meet existing and future fleet needs and prevent the use of scarce funding to overhaul the 50+ year old Legacy Gallery coaches. Funding has been programmed in the VRE CIP to procure up to 21 new coaches; the remaining coaches will be procured as funding sources are identified.

Fleet utilization is challenging given the nature of the VRE services, which is focused on meeting peak demand loads. The VRE equipment utilization, based on planned operations through 2018, is shown in Table 3-12. The projected number of available passenger seats is shown in Table 3-13. Total locomotive fleet is projected to remain constant in the next couple of years, but the number of passenger coaches is projected to decrease slightly beginning in 2015, due to the expected sale of the remaining Legacy Gallery coaches. The projected number of available passenger seats is expected to drop between today and 2016 as the Legacy Gallery coaches leave the fleet, but will increase as VRE takes delivery of new coaches.

Table 3-10
Locomotive Fleet

Quantity	Manufacturer	Model	Built/Rebuilt	Locomotive #
9	MotivePower	MP36PH-3CT2R	2010-11/ n/a	V50-V58
3*	GM-EMD	F40PH	1972/1985	V34-V36
5	GM-EMD-MK	GP40-2C	1968/1994-95	V20-V24
10	GM-EMD-MK	GP39-2C	1968/1991	V01-V10

** Leased Units*
Data as of May 2011

Table 3-11
Existing Passenger Car Fleet

Quantity	Manufacturer	Built/Rebuilt	Car Type	Seating Capacity	Car Numbers
20	Sumitomo	2007-08 / n/a	Gallery IV Trailers (w/ restroom)	132	V800-V819
30	Sumitomo	2007-08 / n/a	Gallery IV Trailers (w/out restroom)	144	V850-V879
21	Sumitomo	2006-07 / n/a	Gallery IV Cab Cars	123	V710-V730
5	Pullman	1956/2002-03	Gallery Trailers I	150	V405, V408, V412, V413, V415
10	Pullman	1956/2002-03	Gallery Trailers II	150	V421-V430
15	Pullman	1961-68/1996-2006	Gallery Trailers III	150	V431-V440, V447, V449, V454-V456

Note: Includes 10 Pullman coaches that have been sold and are pending shipment to the new owner.
Data as of May 2011
Source: Fleet Management Plan

Table 3-12
Projected Equipment Utilization (2011-2018)

	2011	2012	2013	2014	2015	2016	2017	2018
Locomotives								
Locomotives in Service	12	12	12	12	13	13	13	13
Protect Locomotives	3	3	3	3	3	3	3	3
Spares	5	5	5	5	4	4	4	4
Total Locomotive Fleet	***20***	***20***	***20***	***20***	***20***	***20***	***20***	***20***
Passenger Coaches								
Coaches in Service	75	75	75	75	79	79	79	79
Spares	16	16	16	16	7	7	7	7
Total Coach Fleet	***91***	***91***	***91***	***91***	***86***	***86***	***86***	***86***

Note: Assumes two locomotives and six coaches are out of service at any one time for regular servicing/ maintenance. It also assumes the VRE fleet includes 20 MP36 locomotives and excludes ten legacy gallery coaches for which a sale is pending. The procurement of up to 50 additional coaches was authorized in May 2011 – the table reflects only 15 coaches of the 50.
Source: Fleet Management Plan

Table 3-13
Projected Passenger Seats (2011-2018)

Type of Coach	2011	2012	2013	2014	2015	2016	2017	2018
Sumitomo Gallery IV	9,543	9,543	9,543	9,543	9,543	9,543	9,543	9,543
Pullman Legacy Gallery	4,500	3,000	3,000	2,250	1,500	0	0	0
New Procurement	0	0	0	750	1,500	2,160	2,160	2,160
Number of Coaches	91	91	91	91	86	86	86	86
Total Seats	***14,043***	***12,543***	***12,543***	***12,489***	***11,715***	***11,703***	***11,703***	***11,703***
Total Seats in Daily Operation	***10,266***	***10,266***	***10,266***	***10,236***	***10,749***	***10,782***	***10,782***	***10,782***

Note: Total seats represent all seats within the fleet, including spares. Total seats in daily operation represent only those seats in revenue service on any given day. The reduction in total seats beginning in FY 2014 is a result of the replacement of Legacy Gallery coaches with new Gallery IV coaches that have a lower seating capacity.
For more detailed information regarding VRE's locomotive and passenger car fleet, please refer to the Fleet Management Plan in Appendix A.
Source: VRE

3.5.3 Storage Yards and Maintenance Facilities

VRE owns overnight storage/maintenance yards at the termini of both of its lines: at Broad Run in Prince William County (with a storage capacity of 81 units), and at Crossroads in Spotsylvania County just south of Fredericksburg (with a storage capacity of 73 units). Both facilities perform daily maintenance and overnight storage of locomotives and passenger rail cars. Both feature service and inspection (S&I) buildings, but neither can handle heavy repairs for locomotives. All maintenance functions, both light

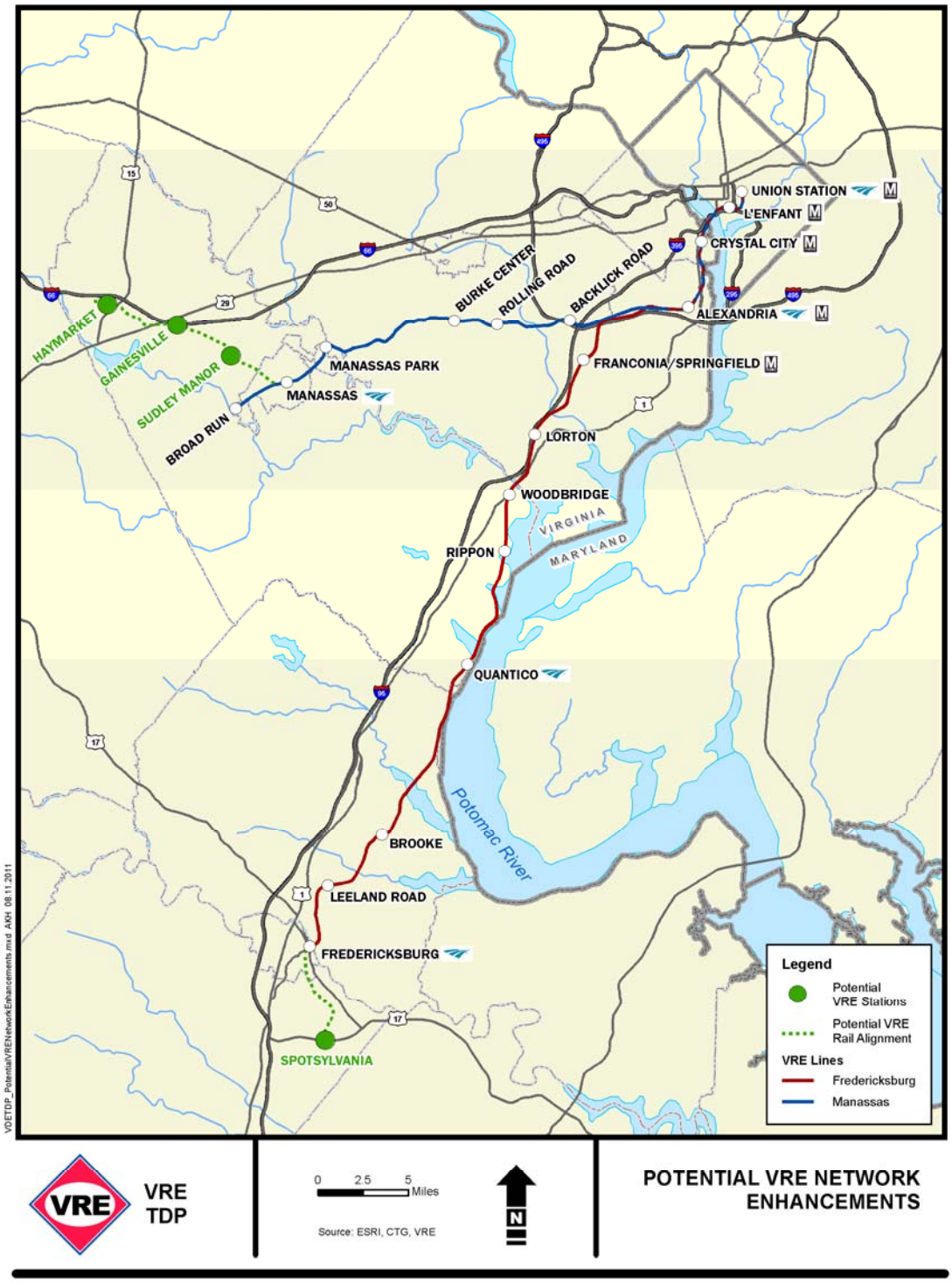
and heavy, are performed by contracted vendors. VRE trains are dispatched by one of its host railroads (Norfolk Southern, CSX, and Amtrak) and supported by a real time GPS-based train tracking system monitored at the central communications center at VRE headquarters.

Midday storage capacity in Washington, D.C. has proven to be an issue for VRE. At present, midday storage for both Fredericksburg and Manassas line trains is located at Amtrak's Ivy City complex. Only light cleaning of the coaches is conducted at Ivy City between the morning and evening service peaks. The section of the yard leased to VRE has a capacity of 88 units, but VRE is only able to use the space of 78 units due to its current consist configuration. As a result, one Manassas line train is forced to deadhead to the Broad Run Yard each morning and back to Union Station in the afternoon. VRE parks 11 train consists at Ivy City each weekday. VRE entered into an agreement with CSXT to lease land within the railroad right-of-way north of the L'Enfant station for train storage. When completed in late 2011, the L'Enfant storage track will accommodate up to two six-car VRE consists (up to 14 units).

Layover yard capacity is critical to meeting any increase in VRE traffic. Expanding VRE beyond 13 train sets per day will require expanding all three layover yard capacities. At present, Ivy City can accommodate layover of 11 train sets, the L'Enfant storage track will accommodate up to two train sets for midday storage, and the Crossroads and Broad Run yards each have enough room for one additional train set today (or 13 trainsets in total). The proposed VRE service extensions to the Gainesville-Haymarket, as shown in Figure 3-30, also has potential fleet storage implications, since overnight storage or layover yard capacity at the termini or along the proposed route have not yet been identified.

For more detailed information regarding VRE's storage and maintenance facilities, please refer to the *Fleet Management Plan* in Appendix A.

Figure 3-30
Potential VRE Network Extensions



3.6 Land Use Summary

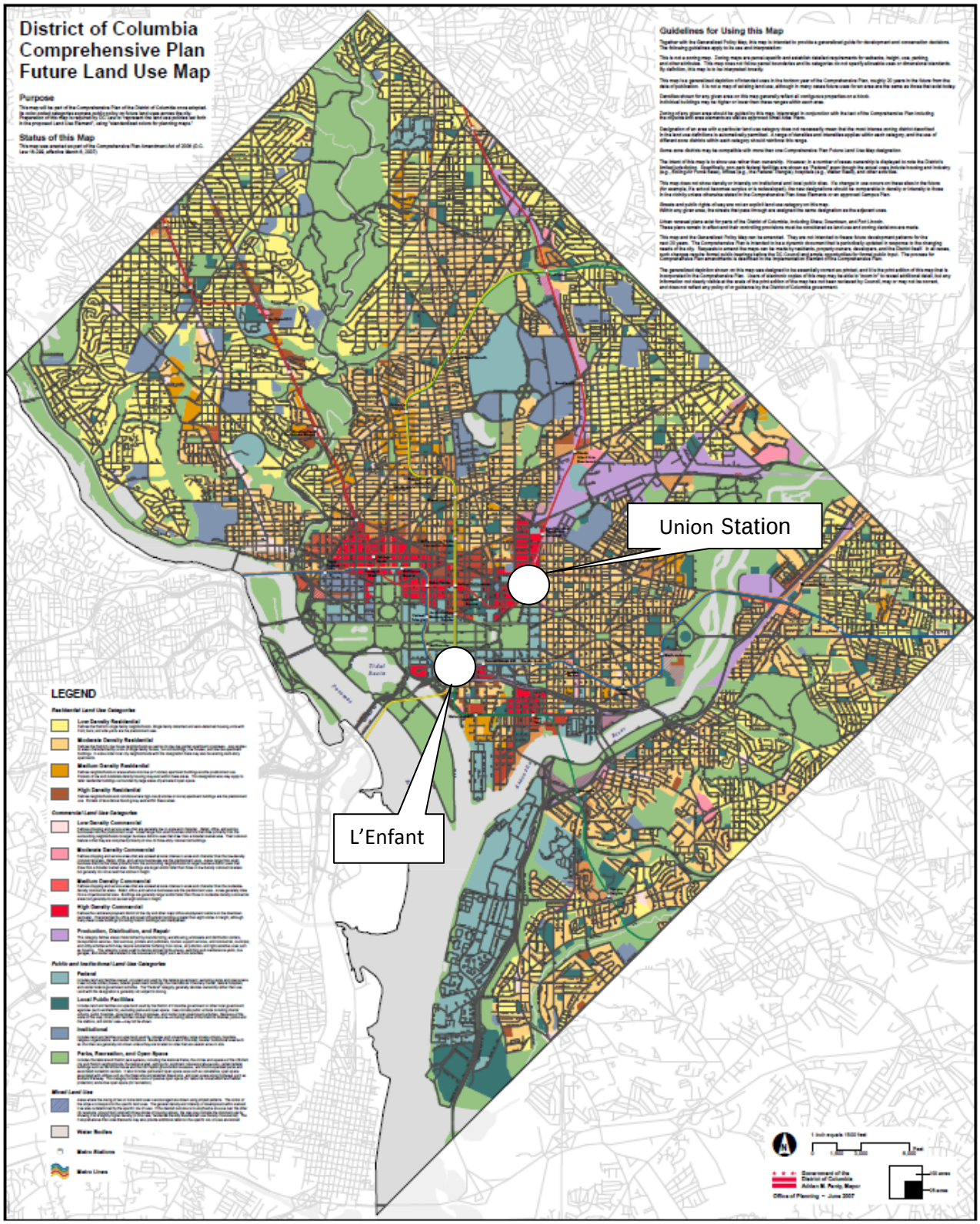
This section provides an overview of the existing land uses and development areas identified in the VRE service area based on current local government comprehensive plans. The reviewed long range comprehensive plans provide insights regarding the existing and future land use patterns and trends in the VRE service area. Long range plans adopted by counties and municipalities in the VRE service area share a few common traits that can potentially affect VRE services. Many of the reviewed plans:

- Point to the diminishing supply of vacant land with most areas in the study area being built out or close to being built out.
- Encourage smart growth and concentration of higher density, mixed-use development near transit stations.
- Favor integration of land use and transportation through a variety of strategies, with most focusing on public transportation as a crucial applied policy component (e.g., Transit-Oriented Development, Complete Streets, Smart Growth, Mass Transit Nodes, sustainable development).
- Perceive transit, and VRE specifically where available, as an effective measure in addressing mobility.
- Recognize that VRE stations need to be integrated as an amenity and focal point of any future developments.
- View redevelopment of underutilized land as both a challenge and opportunity, with public transportation in the spotlight of any redevelopment efforts.

WASHINGTON, D.C. COMPREHENSIVE PLAN

The current Washington, D.C. Comprehensive Plan was adopted in 2006. The plan notes that although the District of Columbia was almost fully developed by 1960, the demand for land for housing and jobs has continued to fuel land use changes. The city's aging building stock still requires refurbishment and replacement. The renewed popularity of city living generates the need for more housing and new amenities. The Land Use Element of the Comprehensive Plan strives for positive outcomes in all parts of the city by setting policies on appropriate uses and densities. The desired pattern of growth and development in the District of Columbia over the next 20 years includes focus on three major policy goals: strengthening the core, creating and maintaining successful neighborhoods, and balancing competing demands for land. VRE has two existing stations within the District of Columbia that will benefit from those policy goals. Increased land use densities and mixed-use developments in the District will continue to provide a pull factor for inbound VRE passengers. Figure 3-31 presents the 2006 Comprehensive Plan future land use map and shows the locations of VRE stations in Washington, D.C.

Figure 3-31
Washington, D.C. Future Land Use Map



ARLINGTON COUNTY COMPREHENSIVE PLAN

Arlington County has long been a national model of smart growth. The county has endorsed a land use policy that concentrates high-density development within the Metro subway corridors and preserves lower-density residential areas throughout the county. The following adopted land use goals and objectives have been incorporated into the General Land Use Plan (one element of the County's Comprehensive Plan):

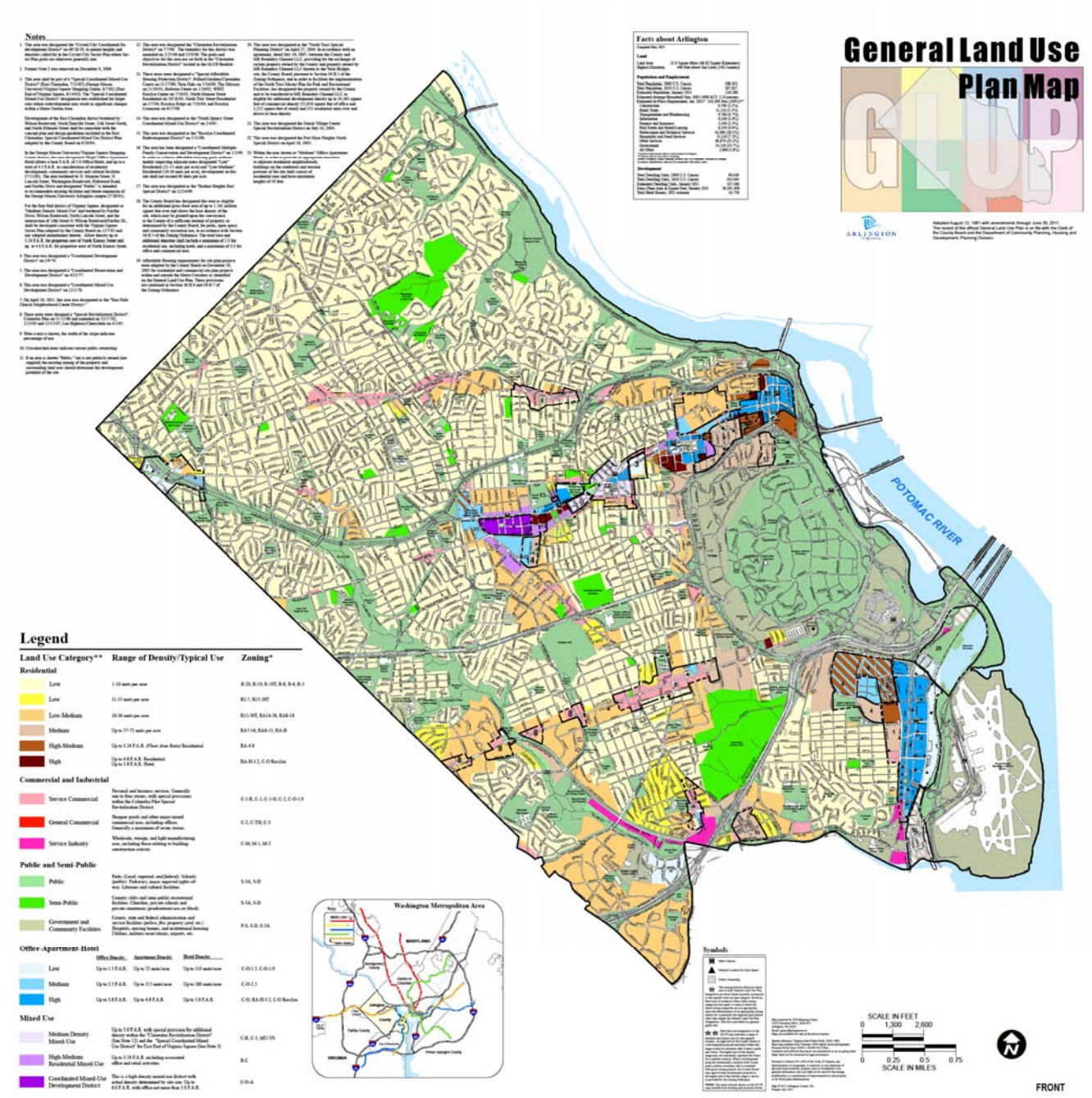
1. Concentrate high-density residential, commercial and office development within designated Metro station areas in the Rosslyn-Ballston and Jefferson Davis Metrorail Transit Corridors.
2. Promote mixed-use development in Metro station areas to provide a balance of residential, shopping and employment opportunities.
3. Increase the supply of housing by encouraging construction of a variety of housing types and prices at a range of heights and densities in and near Metro station areas.
4. Preserve and enhance existing single-family and apartment neighborhoods.
5. Preserve and enhance neighborhood retail areas.

The Master Transportation Plan (another element of the County's Comprehensive Plan) specifies three general policies that form transportation in Arlington County in the years ahead:

1. Integrate transportation with land use - organize community development and redevelopment around high quality and high capacity transit. Design and operate transportation facilities to be compatible with adjacent existing and/or planned development.
2. Support the design and operation of complete streets - design and operate a comprehensive network of Arlington's local and arterial streets to enable safe access by all user groups.
3. Manage travel demand and transportation systems - influence travel demand generated from new development through County Board-approved conditions and actively manage County-controlled streets, parking, transit services, and commuter service programs to minimize the growth in single occupant vehicle trips and to promote the use of all other modes of travel.

VRE's Crystal City train station is located in proximity to but not directly connected to Metro's Yellow and Blue lines. VRE will benefit from Arlington County's innovative land use policies that integrate land use and transportation, and more specifically promote increased land use densities around Metro stations by focusing on mixed-use development that balances residential, shopping and employment opportunities. Any substantial growth employment opportunities around Crystal City station could lead to an increase in demand for VRE service to and from the station. Figure 3-32 presents the Arlington County land use map and shows the location of the joint VRE/Metro Crystal City station.

Figure 3-32
Arlington County Land Use Map



CITY OF FALLS CHURCH COMPREHENSIVE PLAN

The current City of Falls Church Comprehensive Plan was adopted in 1997 and updated in 2005. The plan notes that land use has remained fairly stable over the last ten years. Distinctive commercial corridors exist along Washington Street (Route 29) and Broad Street (Route 7), with the remainder of the city developed with a mix of residential uses and low-intensity office buildings. In terms of future development, the plan notes that although opportunities for new development on vacant land are limited, there are numerous instances of underutilized properties that could be subject to either additional development or redevelopment. The goal of the resulting future land uses map is to propose land use changes resulting in a more efficient pattern of different land uses (create regular boundaries between commercial and residential land uses), and also promote new land uses (new development or redevelopment). At present, VRE does not have any service stops in the City of Falls Church, and none are currently being considered. The closest VRE stops are on the Manassas line, and include Backlick Road and Rolling Road stations. Therefore, the Falls Church plans have no direct relevance for VRE.

Figure 3-33 presents the City of Falls Church Existing Land Use Map and Figure 3-34 presents the City of Falls Church Future Land Use Map from its current Comprehensive Plan.

Figure 3-33
City of Falls Church Existing Land Use Map

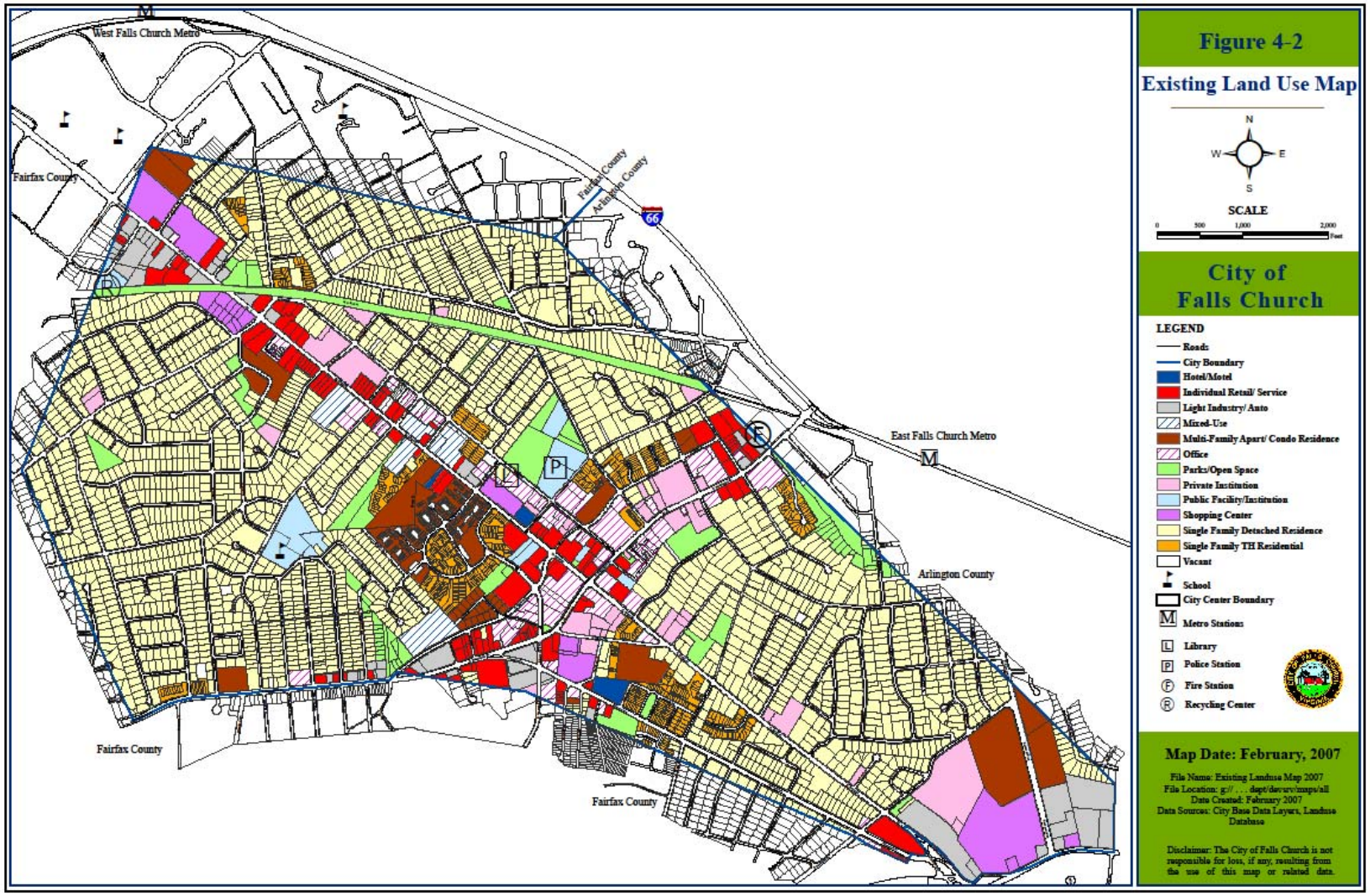
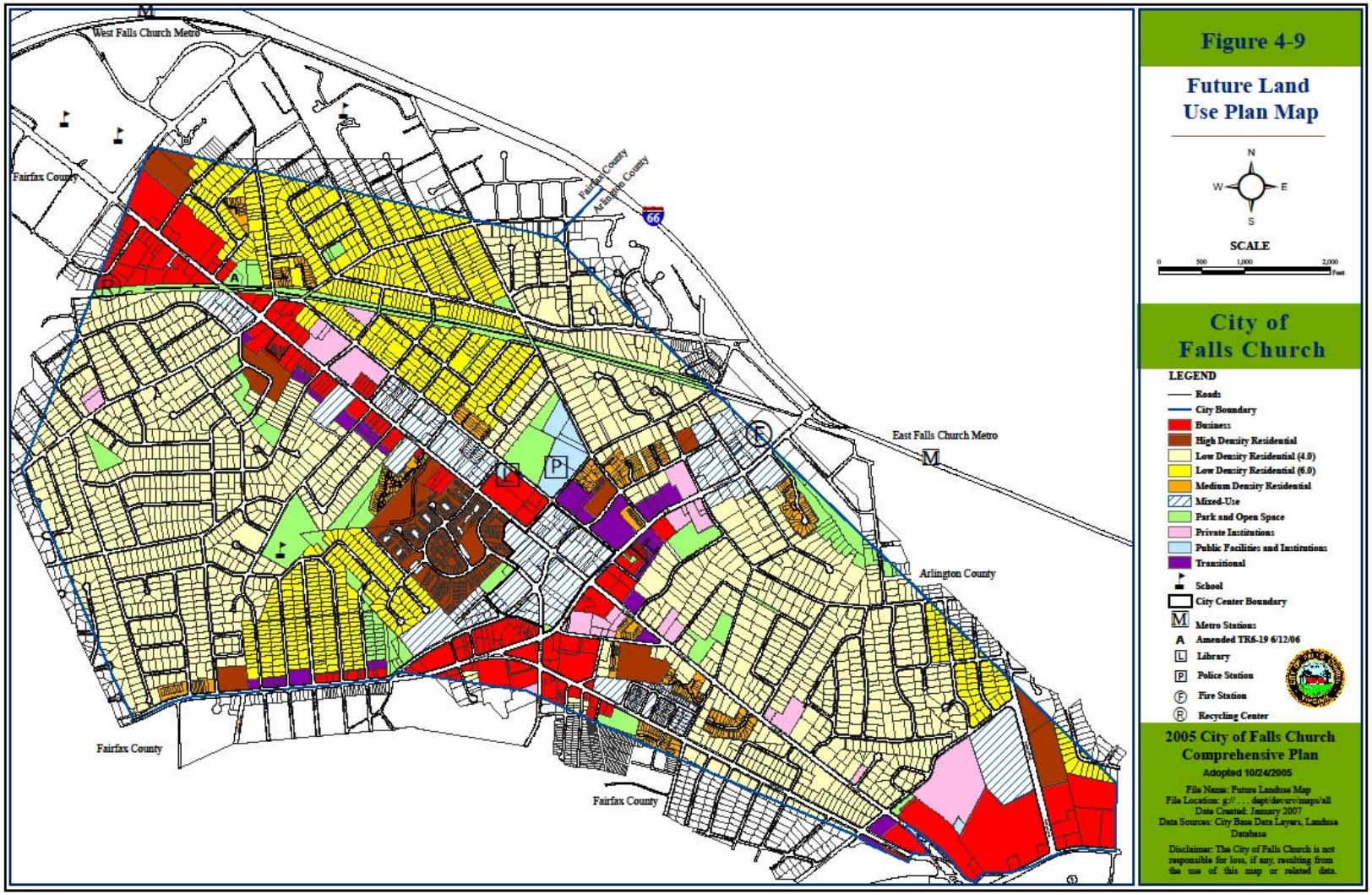


Figure 3-34
City of Falls Church Future Land Use Map



FAIRFAX COUNTY

The 2011 Fairfax County Comprehensive Plan notes that the area has been transformed from a residential suburb of Washington, D.C. into a complex commercial, residential, office, and research community. Fairfax County has become the region's pre-eminent location for new office, research, and shopping center development. The plan identifies the effects of growth in Fairfax County as follows:

- Impact on the public facilities and infrastructure systems
- Diminishing supply of vacant land

The Fairfax County Comprehensive Plan identifies developing and implementing effective measures to address mobility as a principal challenge for the county. The plan notes that as land values increase due to decreasing supply, the pressure to redevelop existing lower density neighborhoods will increase. The practice of redevelopment must be carefully controlled so as to not undermine stable neighborhoods and the provision of public services and facilities. VRE serves an important role in providing mobility to the county's residents, with three existing stops on the Manassas line, and two stops on the Fredericksburg line. The proposed VRE service extension to the Gainesville-Haymarket area could greatly influence development patterns in the western part of the county and be in line with the policy measures outlined in the plan, most notably by offering enhanced mobility to its residents.

CITY OF FAIRFAX

The current Comprehensive Plan for the City of Fairfax was used to identify the city's existing and future land use characteristics. The plan notes that the City of Fairfax is essentially built-out. Residential usage in the city is primarily single family, with more than 90 percent of residentially developed land composed of single-family homes. In 2003, about 12 percent of the city's land area was considered undeveloped. Although VRE does not have a service stop in Fairfax, trip origins data (see Figure 3-16) shows that many of its residents use VRE services by travelling to the Burke Center station, the closest VRE station on the Manassas line.

Figure 3-35 presents the City of Fairfax Existing Land Use Map and Figure 3-36 presents the City of Fairfax Future Land Use Map from its current Comprehensive Plan.

Figure 3-35
City of Fairfax Existing Land Use Map

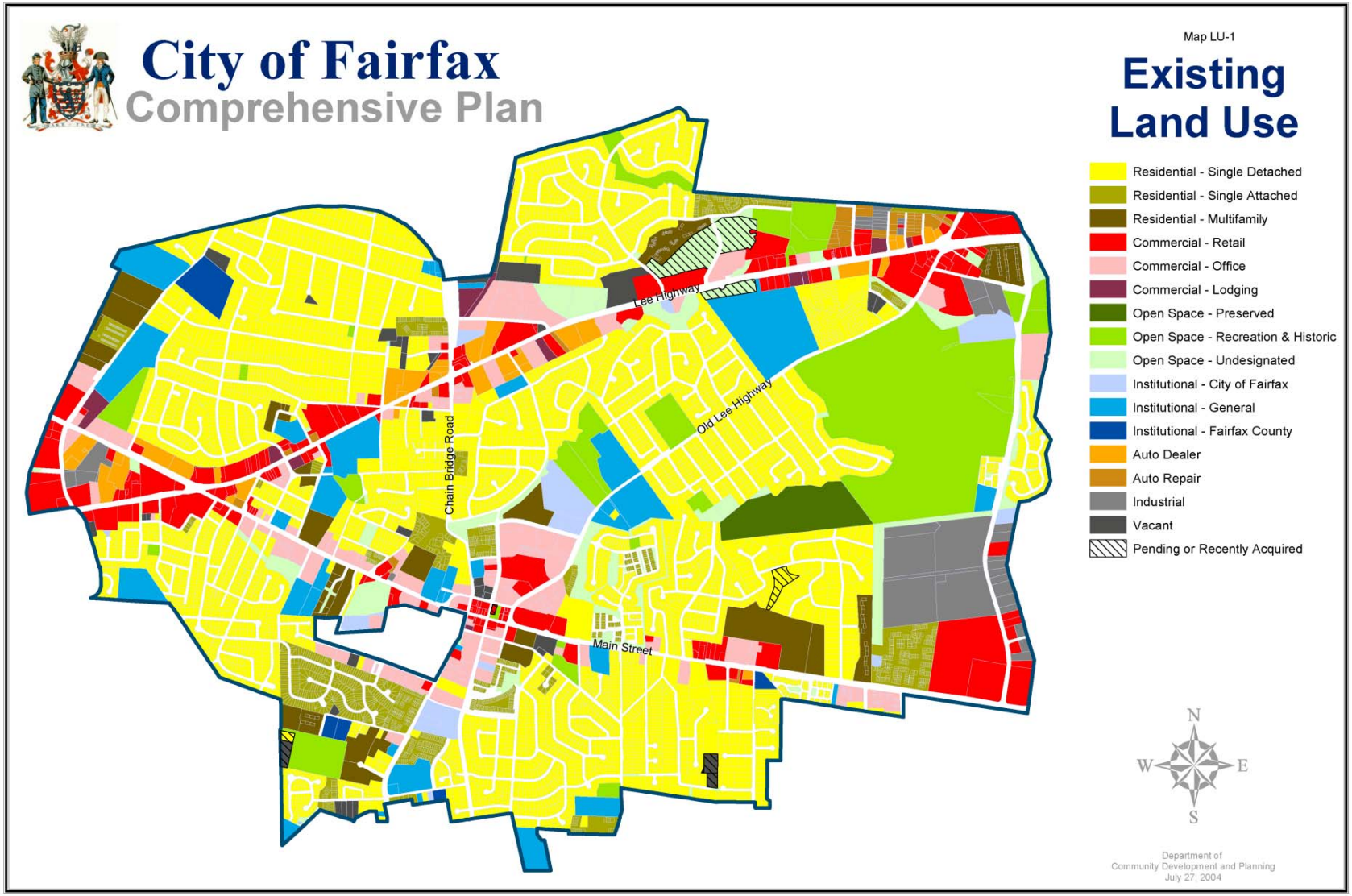
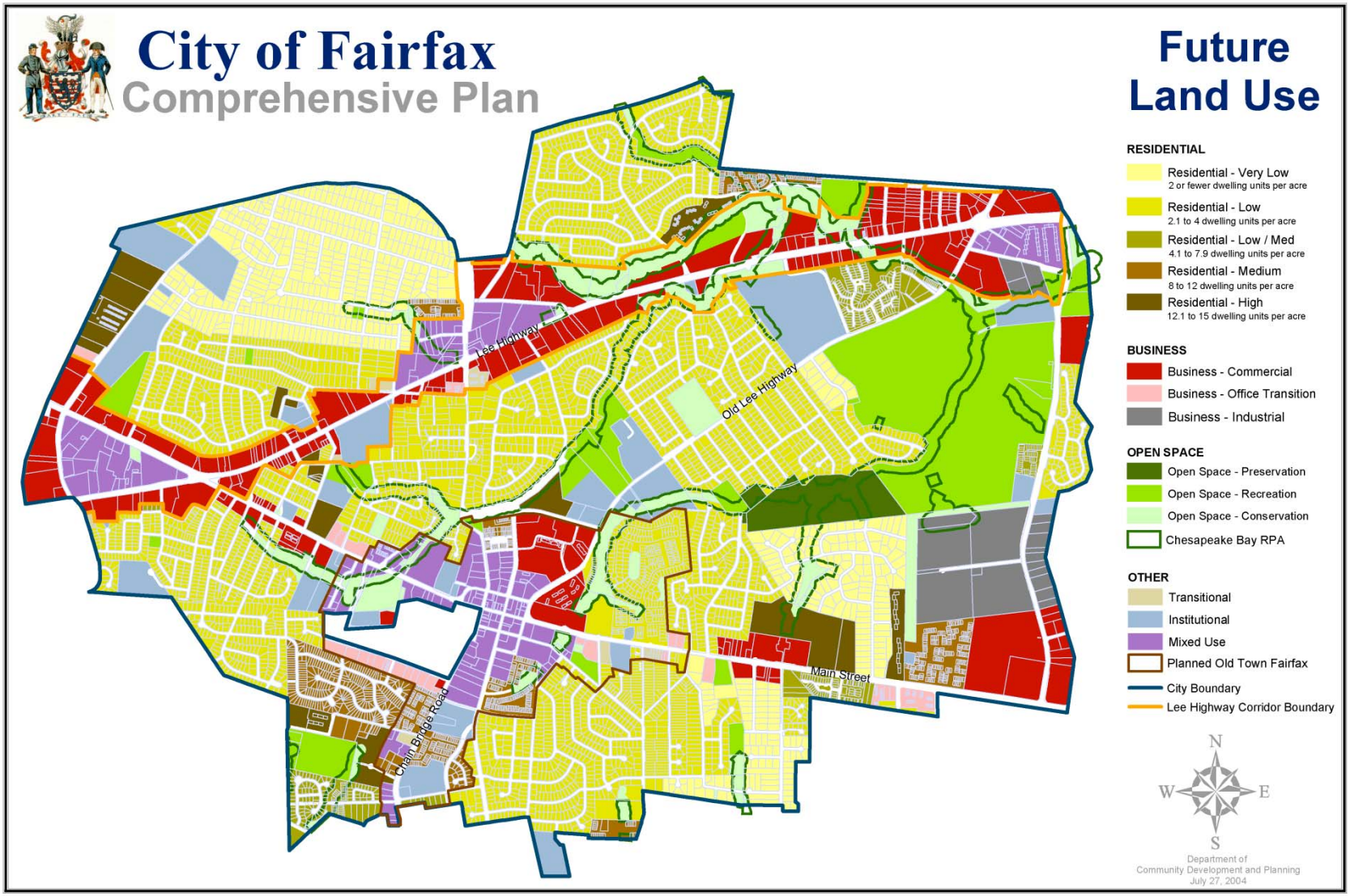


Figure 3-36
City of Fairfax Future Land Use Map

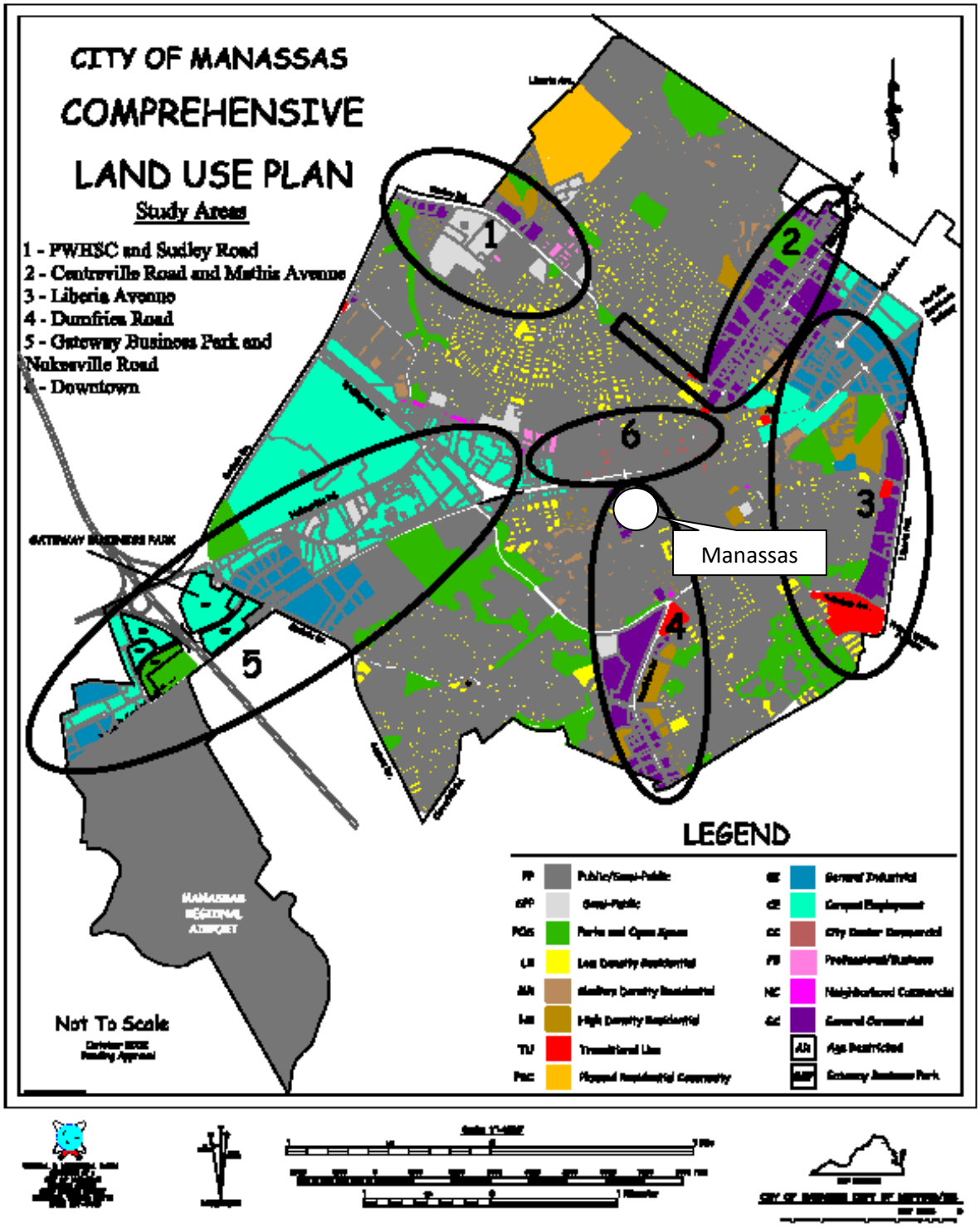


CITY OF MANASSAS COMPREHENSIVE PLAN

The current City of Manassas Comprehensive Plan was adopted in 2002. The plan notes that 90 percent of land in the city had already been developed. It identified six specific study areas needing a further inspection of future development patterns and particular land uses. In general, revitalization will be encouraged in those areas, with the outlying sections becoming an attractive gateway to the city; Old Town will retain its distinctive mixed-use character with an emphasis on retail and entertainment uses and supporting office and residential uses. VRE's station in downtown Manassas has been a centerpiece of that strategy. VRE has played an on-going role in the city's revitalization efforts, as shown by its recently constructed five-level parking garage along Prince William Street, shared by not only VRE passengers but also other drivers traveling to Manassas.

Figure 3-37 presents the Existing and Future Land Use Map from the city's current Comprehensive Plan and identifies the location of VRE station.

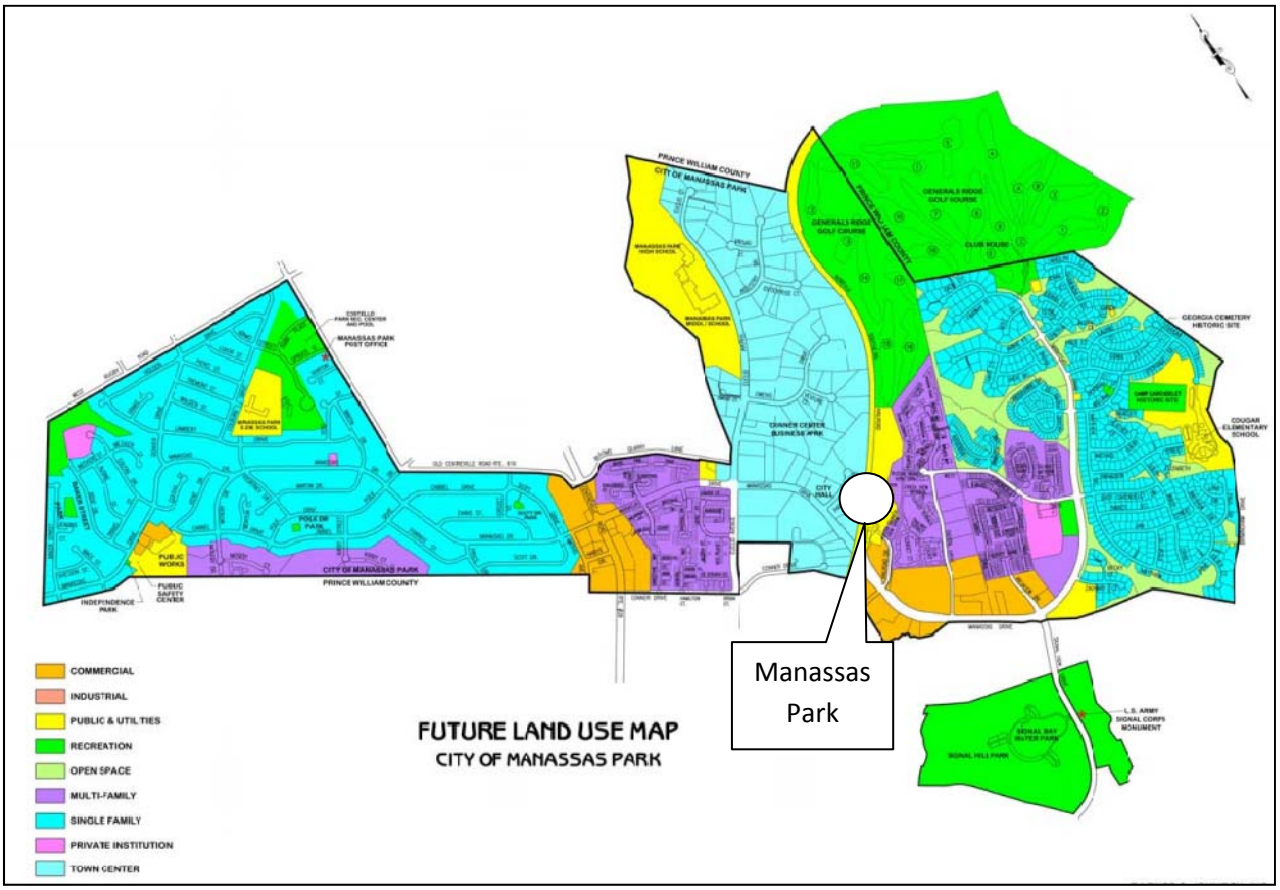
Figure 3-37
City of Manassas Existing and Future Land Use Map



CITY OF MANASSAS PARK COMPREHENSIVE PLAN

The current City of Manassas Park Comprehensive Plan was adopted in 2007. The plan notes that the vast majority of land in Manassas Park has already been developed and most of it will not be redeveloped for many years. The plan focuses on the benefits associated with the future development of the mixed-use Park Center area comprised of residential, commercial and office construction around the existing VRE station. Figure 3-38 presents the Future Land Use Map from the city's current comprehensive plan, with added location for the VRE station.

Figure 3-38
City of Manassas Park Future Land Use Map

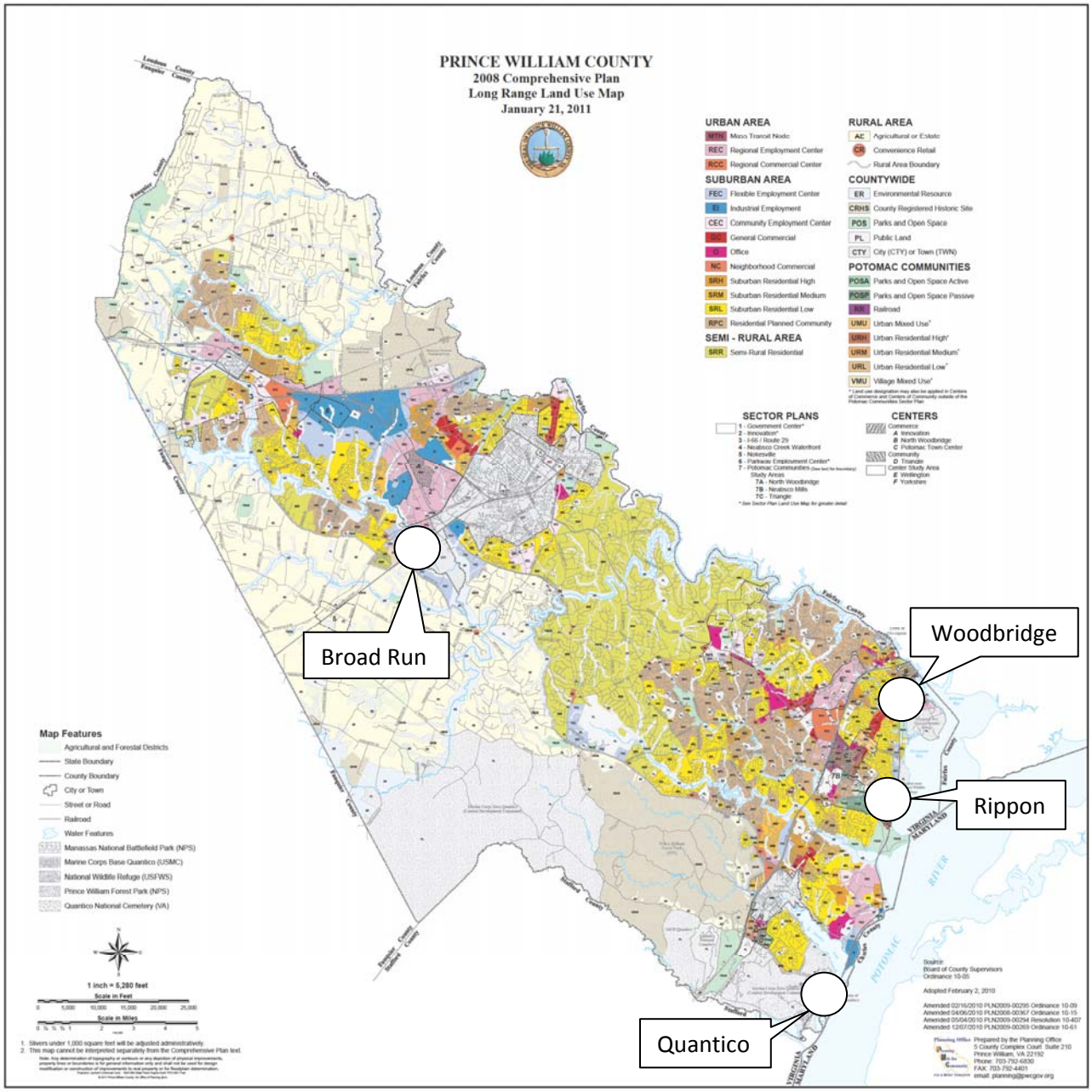


PRINCE WILLIAM COUNTY COMPREHENSIVE PLAN

The 2008 Prince William County Comprehensive Plan recognizes that smart long-range land use planning can create sustainable transportation networks and encourage development that is environmentally and fiscally sound. Concentrating population, jobs, and infrastructure within vibrant, walkable, mixed-use centers served by transit will help ease road congestion by providing options for a range of transportation modes and ease development pressure on less developed or rural portions of Prince William County.

The plan specifically identifies "the Mass Transit Node," classified as the areas surrounding existing VRE commuter rail stations. The plan recognizes that projects in the mass transit node areas should be planned and developed in a comprehensive, coordinated manner, and that VRE stations need to be integrated as an amenity and focal point of the developments. Because of these policies, the four existing VRE stations in Prince William County should be receiving increased attention in the future; Transit-Oriented Development around existing VRE stations seems likely given the county's focus on the creation of compact, walkable communities centered around high quality train systems. Figure 3-39 presents the 2008 Comprehensive Plan Long Range Land Use map that also identifies the locations of the four VRE stations: Woodbridge, Rippon, Quantico and Broad Run.

Figure 3-39
Prince William County Long Range Land Use Map

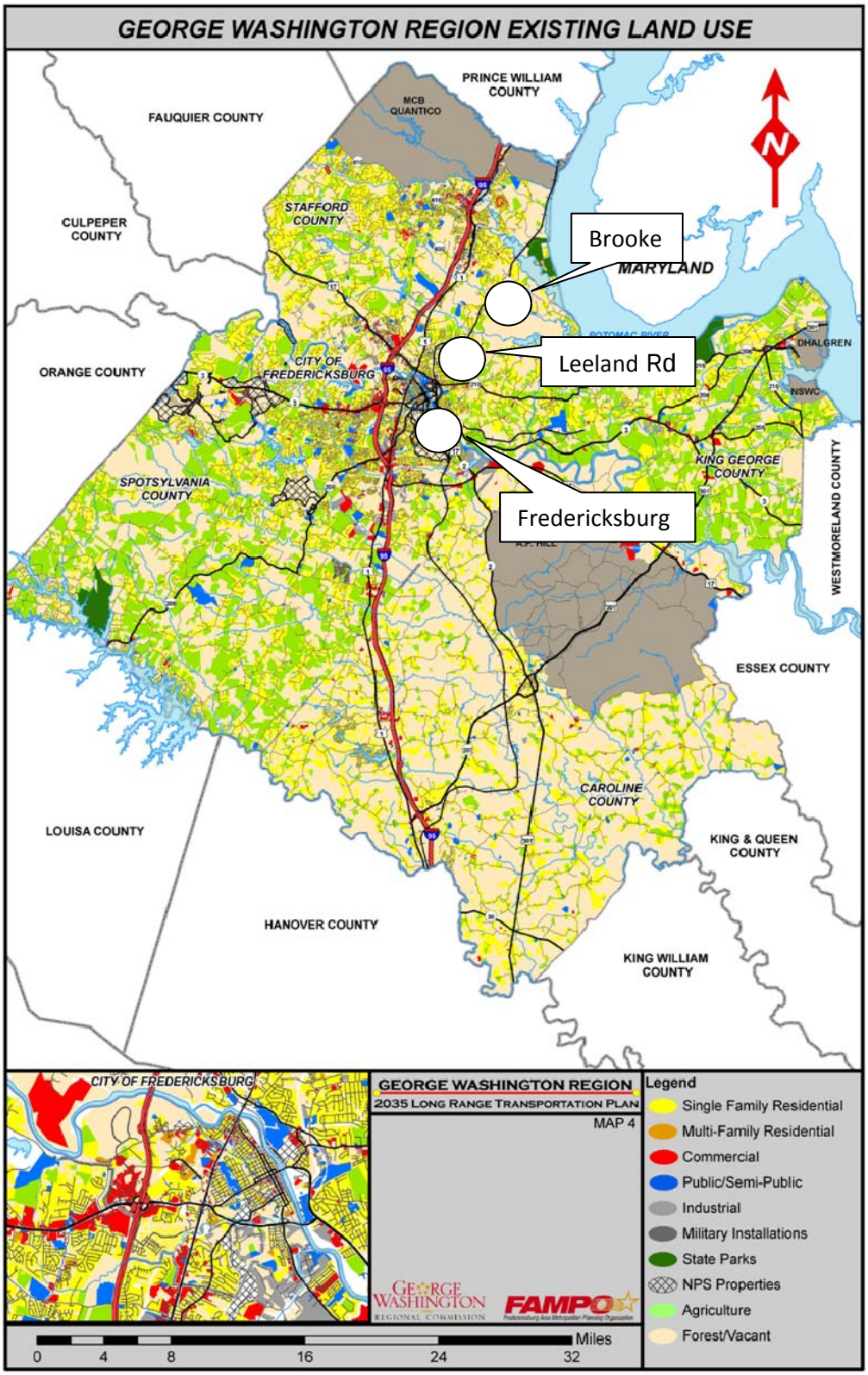


GEORGE WASHINGTON REGION 2035 LONG RANGE TRANSPORTATION PLAN

The George Washington Region 2035 Long Range Transportation Plan is a planning document prepared for the area served by the three southernmost VRE stops on the Fredericksburg line: Brooke, Leeland Road, and Fredericksburg. The document was prepared in 2009 by the George Washington Regional Commission / Fredericksburg Area MPO (FAMPO). The FAMPO region includes the City of Fredericksburg, Stafford, Spotsylvania, Caroline, and King George counties. The planning document includes an existing land use map for the FAMPO region as of 2006, as shown in Figure 3-40. The map also shows three VRE stations.

The plan identifies the George Washington Region as primarily an ex-urban area subject to significant development pressure from the Washington metropolitan area to the north and, to some extent, from the Richmond metropolitan area to the south. This growth in the regional population over the past several decades has far outpaced the growth of any other region in Virginia. The widely spread out nature of the region's development is a substantial obstacle to providing cost effective public transit, and hinders efforts to reduce auto use, such as carpooling, bicycling, and walking. The plan suggests that more sustainable growth solutions, focused on integrating land use and transportation, will need to be sought in the future. VRE, with three existing stations in the George Washington Region and a future extension of its Fredericksburg line to Spotsylvania County, can enhance mobility choices for the area's residents, ease traffic congestion, especially in the I-95 corridor, and promote better integration of land use and transportation in the future.

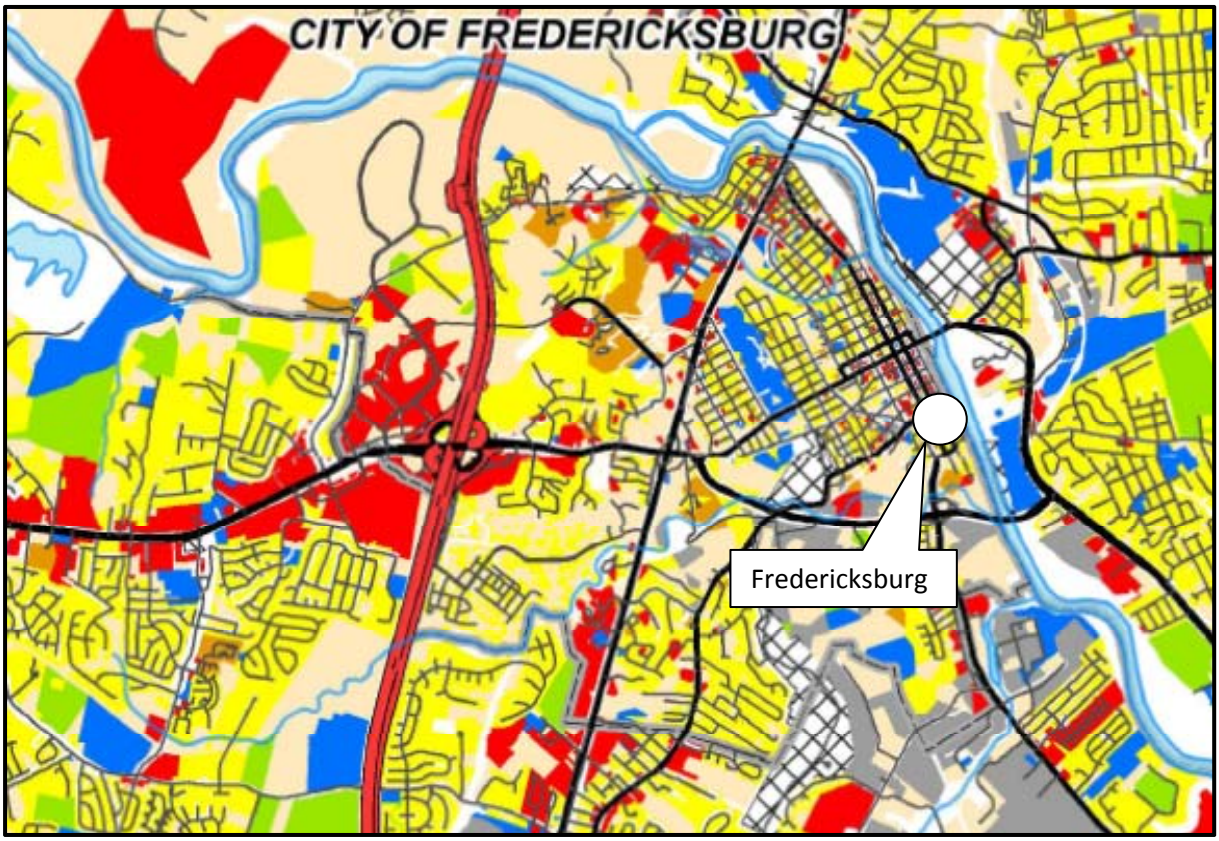
Figure 3-40
George Washington Region Long Range Land Use Map



CITY OF FREDERICKSBURG

The City of Fredericksburg's Comprehensive Plan was adopted in September 2007. The plan identifies major transportation corridors where development is and should continue to be focused: Lafayette Boulevard, Princess Ann Street, William Street, Jefferson Davis Highway, Blue & Gray Parkway, Fall Hill Avenue, Cowan Boulevard and Dixon Street. It also identifies a future parking structure to serve the VRE station. The existing VRE station is the final stop on the Fredericksburg line and attracts commuters not only from Fredericksburg but the surrounding counties as well. Transit-Oriented Development around the VRE station can prove to be a successful growth strategy in Fredericksburg. Figure 3-41 shows the existing land use for the City of Fredericksburg as shown in the 2035 Long Range Transportation Plan.

Figure 3-41
City of Fredericksburg Existing Land Use Map



STAFFORD COUNTY

The Stafford County 2030 Comprehensive Plan was adopted in 2010. The key points of the plan are:

1. The land uses within the urban services area have been generalized as urban, suburban, and business and industry.
2. Infill development in the established suburban and industrial areas is encouraged.
3. The majority of future residential and commercial development is being recommended along the I-95 and U.S. Route 1 corridors.
4. Establishment of seven urban development areas located in the vicinity of primary road networks, transportation hubs, and along the rail corridor to maximize the use of public transportation.
5. Business and industrial land uses are encouraged around established and developing business areas.
6. Lot sizes in agricultural and rural areas outside of the urban services area of at least three acres in size.

Figure 3-42 presents Stafford County's Existing Land Use Map and Figure 3-43 presents Stafford County's Future Land Use Map from its current Comprehensive Plan. VRE has two existing service stops in the county, all very popular with commuters. The establishment of urban development areas will intensify and diversify development along the I-95 and U.S. Route 1 corridors. Two of the identified urban service areas are located around the existing Brooke and Leeland Road VRE stations. Increased development will induce additional travel demand, including demand for VRE services.

Figure 3-42
Stafford County Existing Land Use Map

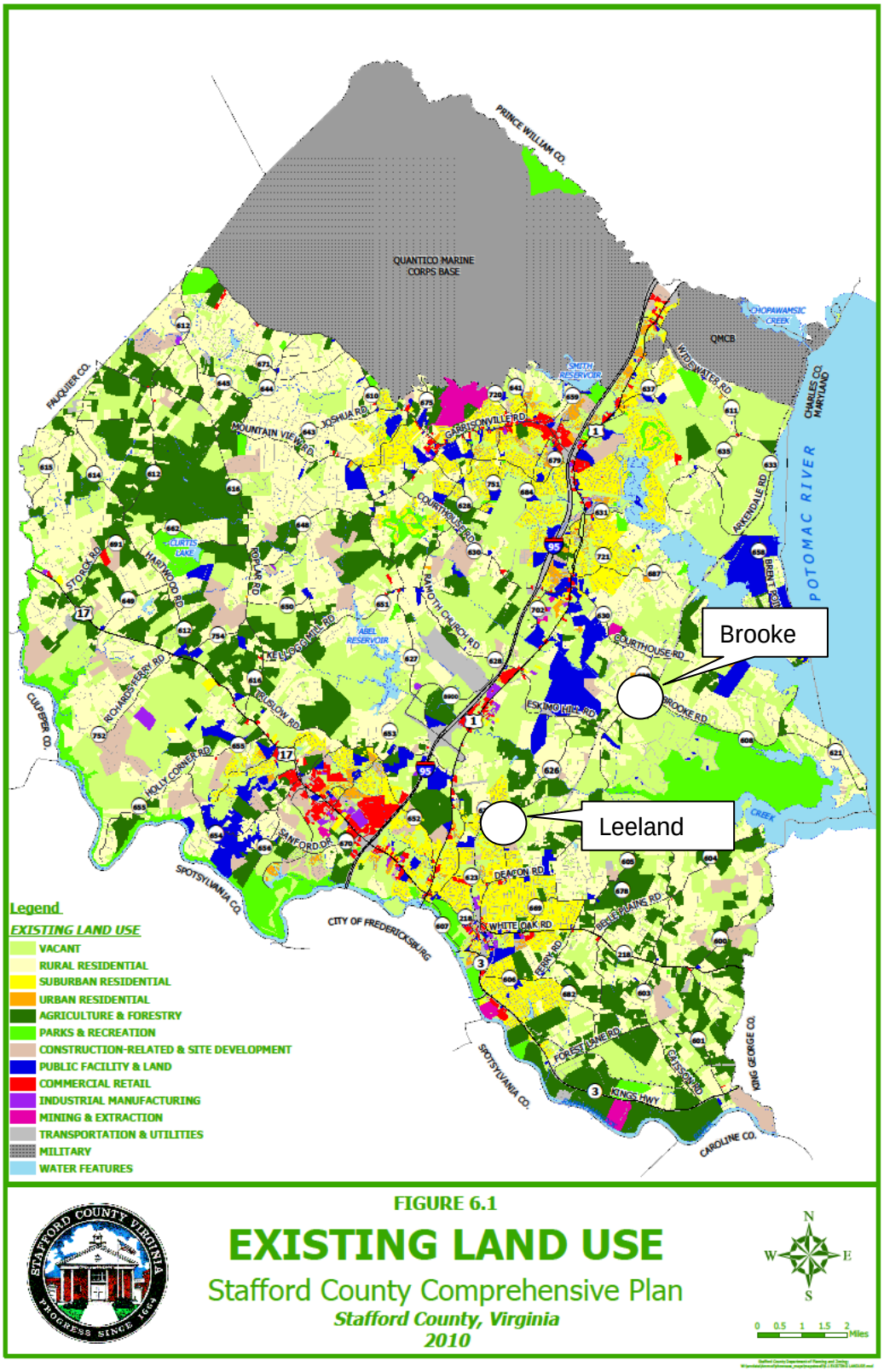
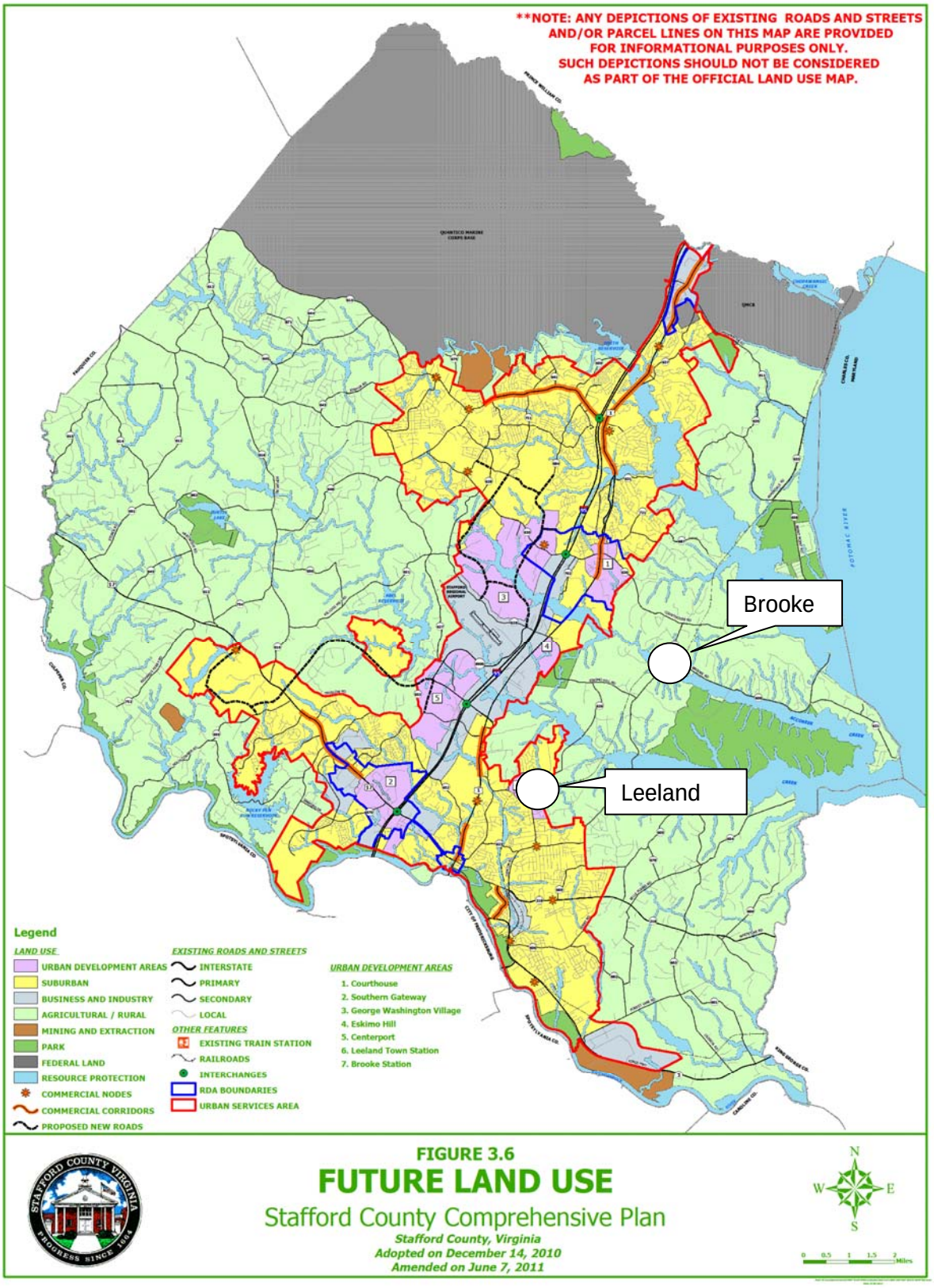


Figure 3-43
Stafford County Future Land Use Map



SPOTSYLVANIA COUNTY

In 2008, Spotsylvania completed a comprehensive plan that identifies urban development areas where development should be focused, including Courthouse Village Center, Thornburg, Towne Center Connector Road, South Massaponax and Crossroads. While none of these areas are currently served by VRE, the proposed extension of the Fredericksburg line into Spotsylvania County (see Figure 3-30) would bring VRE services to Spotsylvania County residents. Figure 3-44 shows the existing land use for Spotsylvania County as defined by the George Washington Region 2035 Long Range Transportation Plan, while Figure 3-45 shows the future land use for Spotsylvania County as defined by its 2008 Comprehensive Plan.

Figure 3-44
Spotsylvania County Existing Land Use Map

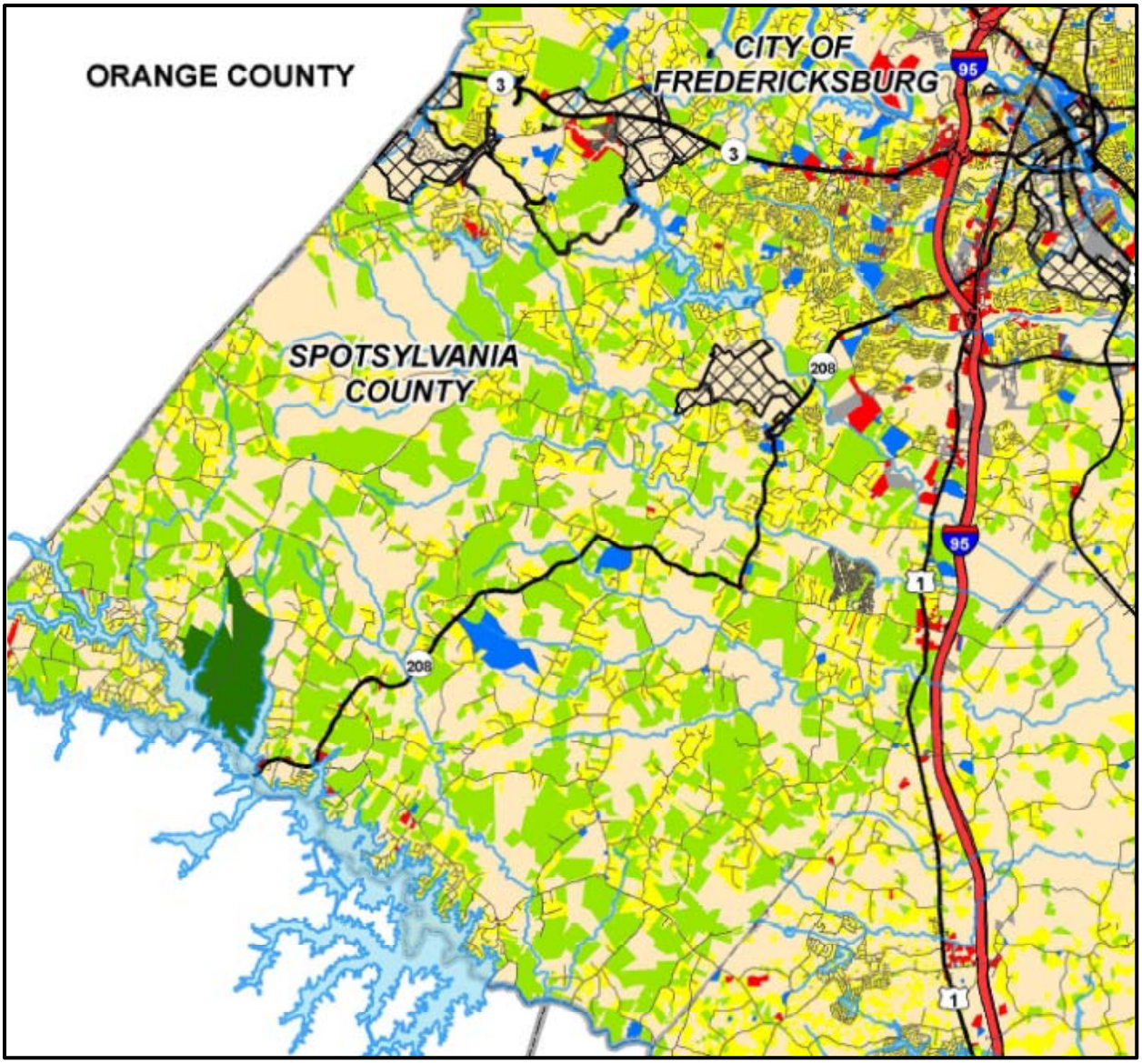
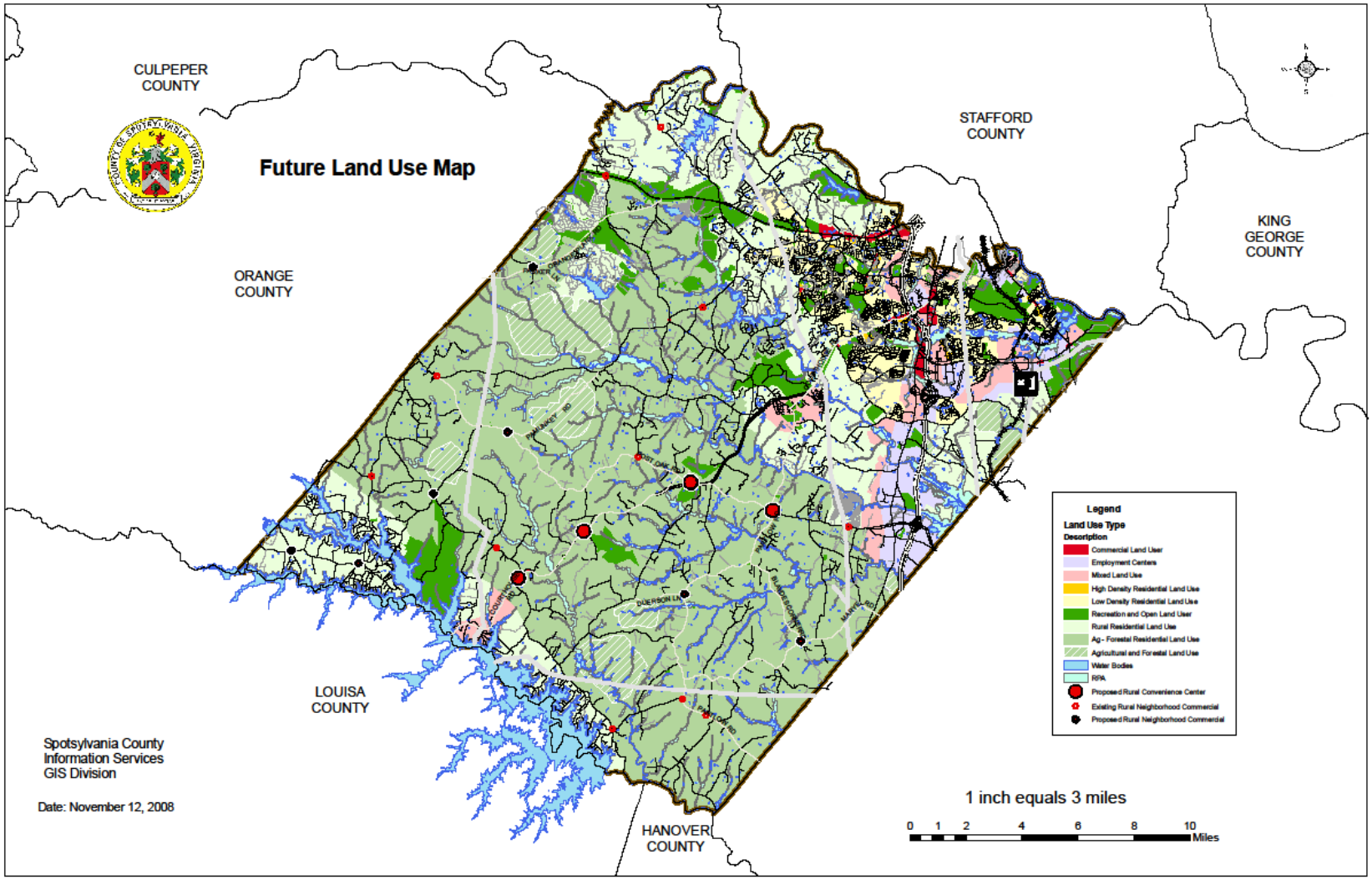


Figure 3-45
Spotsylvania County Future Land Use Map



CAROLINE COUNTY

Caroline County's existing land use is predominantly low density single family and vacant land. The Caroline County Comprehensive Plan adopted in January 2010 does not identify any significant land use changes. Bowling Green, Carmel Church and Ladysmith are listed as the primary development centers with secondary village centers located at Port Royal and Dawn. The proposed extension of VRE's Fredericksburg line into Spotsylvania County would offer the residents of Caroline County a much more convenient access to VRE services and the Washington, D.C. area. Figure 3-46 shows the existing land use for Caroline County as defined by the George Washington Region 2035 Long Range Transportation Plan, while Figure 3-47 shows the future land use for Caroline County as defined by its 2010 Comprehensive Plan. Since VRE has no existing or proposed service stops in Caroline County, these plans have no direct relevance to VRE.

Figure 3-46
Caroline County Existing Land Use Map

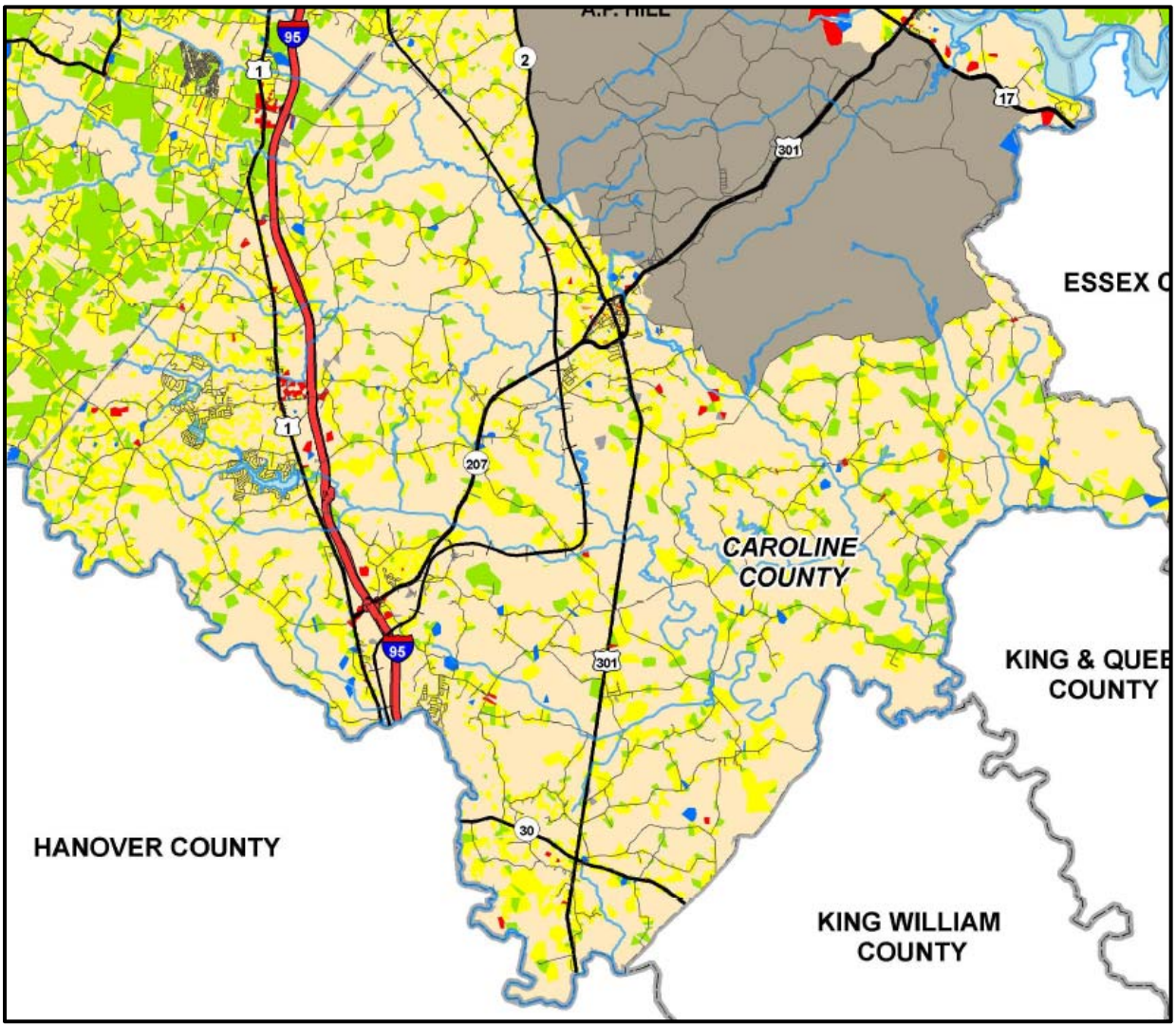
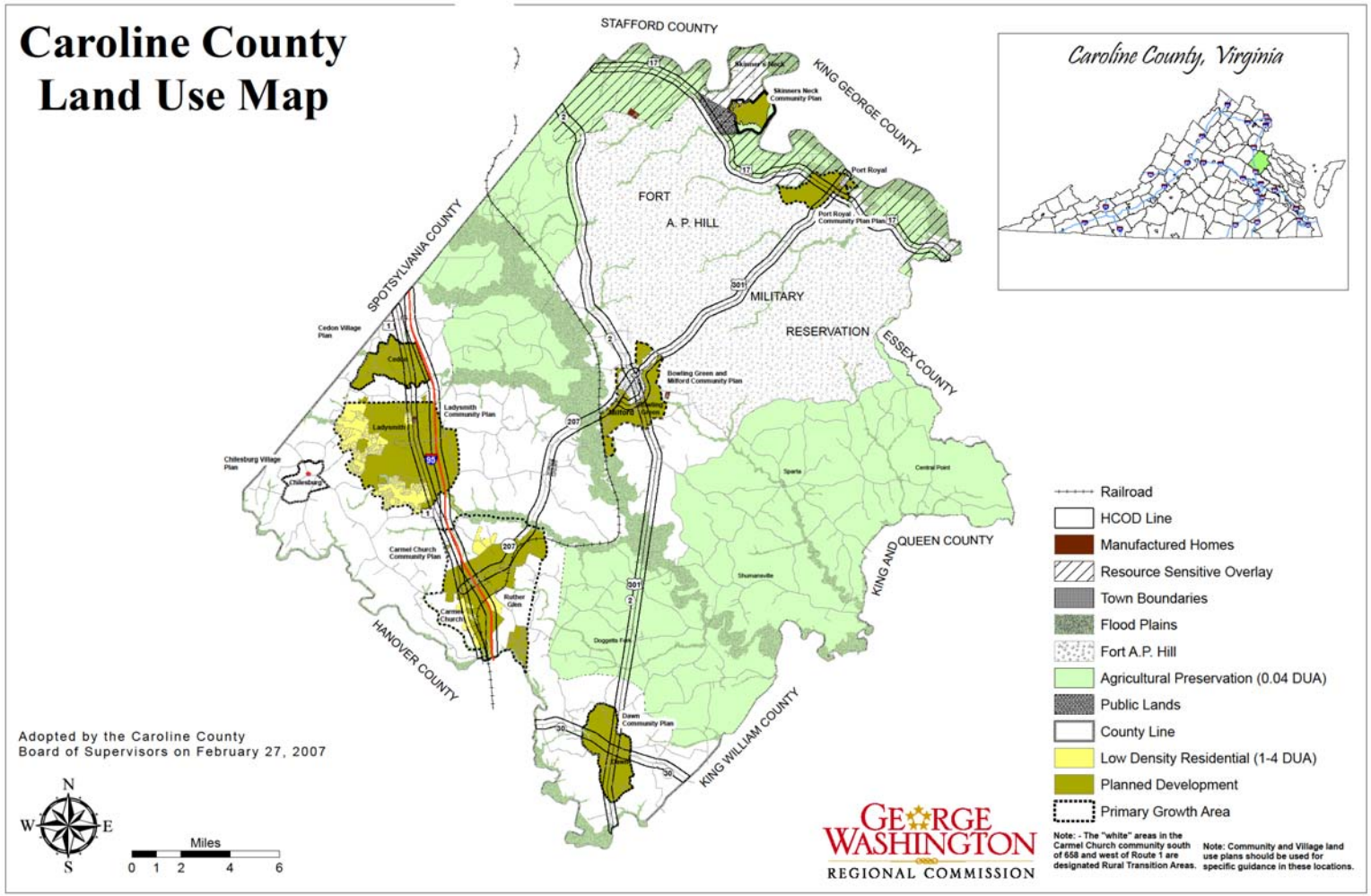


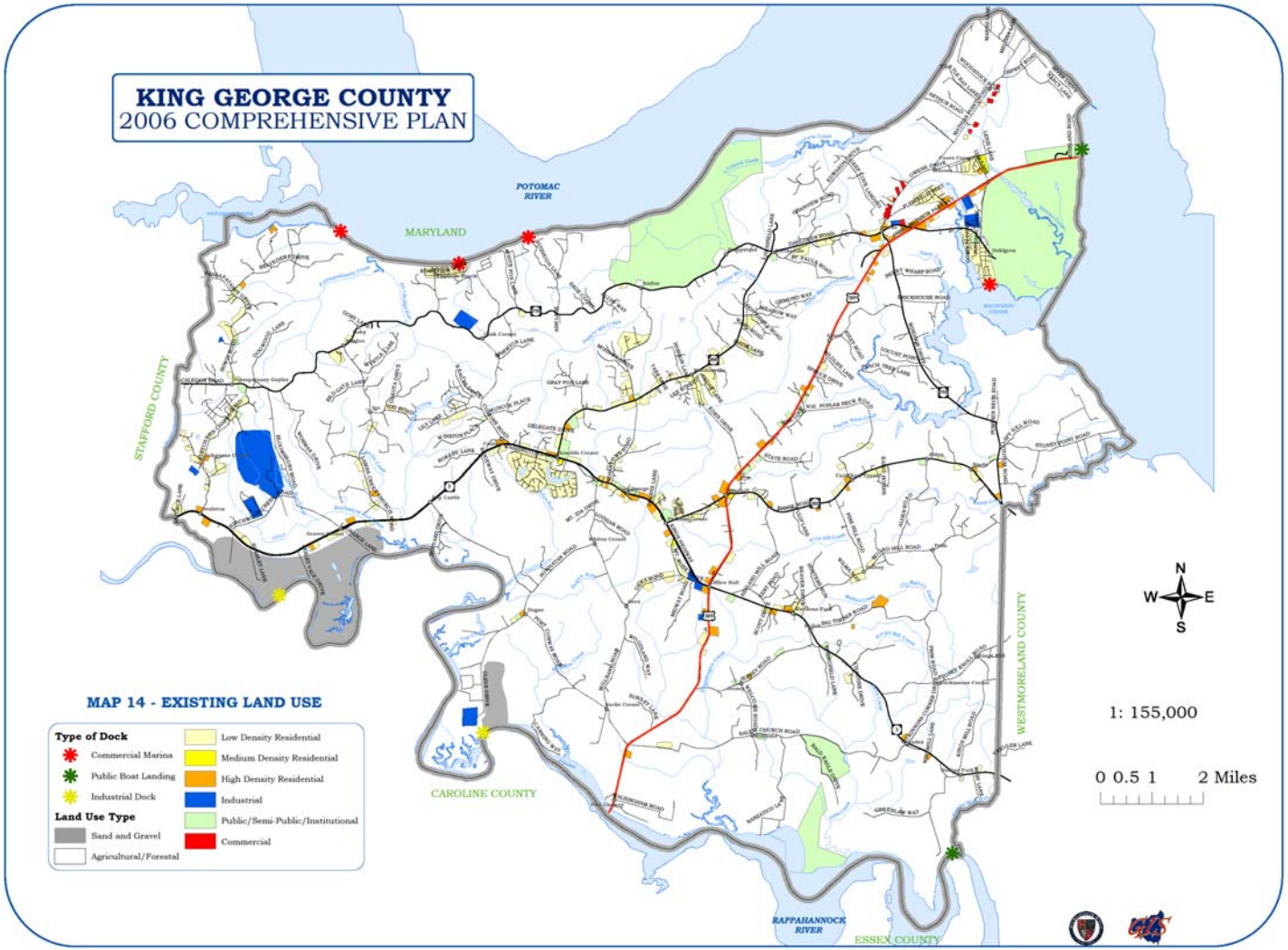
Figure 3-47
Caroline County Future Land Use Map



KING GEORGE COUNTY

King George County land use is made up of agricultural and low density residential areas. Small areas of commercial development are located along Route 3, Dahlgren and Fairview Beach, all of which are served by two FRED routes with limited service. King George County completed its comprehensive plan in 2006 and identified major planning areas as Courthouse, Dahlgren, Route 3 West, Fairview Beach, Hop Yard, Claudel and Oakland Park. While there are no existing VRE services within the county's borders, many residents travel to VRE stations in Stafford County and Fredericksburg, as evidenced by the results of VRE riders' trip origins analysis. Figure 3-48 shows the existing land use for King George County as identified in the 2006 Comprehensive Plan. However, since VRE has no existing or proposed service stops in King George County, the plan has no direct relevance to VRE.

Figure 3-48
King George County Existing Land Use Map



Land Use Summary – Conclusion

VRE is bound to be impacted by the policies outlined in the reviewed comprehensive plans. The agency could also potentially serve as a catalyst for land use changes that favor sustainable development, as noted in some plans. While VRE may not have a great ability to directly influence land use patterns, despite the encouraging rhetoric in the plans and given its organizational structure independent of local jurisdictions, the rail infrastructure itself is a critical transportation asset .

Many of the described land use plans view transit, and VRE specifically where its service is available, as means to encourage mixed-use, medium to high density development directly around the stations. Yet the older land use patterns of medium to high density, mixed-use development found around VRE stations in Washington, D.C., Alexandria and Arlington County are not likely to be repeated around VRE stations located in, for instance, Spotsylvania County. VRE can still impact land use changes and support policies aimed at encouraging better integration of land use and transportation around its outlying, more suburban stations by changing the length of the trip, the frequency of service, or the capacity of the stations, including effective management of its parking supply. Direct investment in station amenities, such as the recent renovation of VRE Fredericksburg station can, at the very least, lead to VRE facilities being perceived as a local or regional amenity.

Although the land use policies outlined in the plans tend to favor and encourage walkable, compact, mixed-use development near VRE stations. However, because the VRE commuter rail network is primarily oriented towards bringing commuters into Washington, D.C., the ease of access to VRE stations and ample availability of parking could perhaps be more important to commuters while the type of land uses surrounding VRE stations is given a second degree of priority. This greater emphasis on large park and ride lots and regional accessibility can be expected to be more dominant in the southernmost areas served by the Fredericksburg line and westernmost areas served by the Manassas line. Many VRE passengers travel to those stations not only from within their respective counties, but also from the surrounding counties. On the other hand, it is worth noting that any substantial increases in housing and employment opportunities around the outlying VRE stations can lead to an increase in demand for transit services not only from but also to those areas. Although VRE currently does not provide any outbound service in the morning due to its focus on bringing commuters into Washington, D.C., if the land use policies in the reviewed comprehensive plans offer any clues to the unpredictable future, it is that VRE must remain flexible enough to quickly adopt to changing demand for its services, to a large extent attributable to changing land use patterns.

3.7 Title VI Program

Title VI provides that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." (42 U.S.C. Section 2000d). Since 1972, the Federal Transit Administration (FTA) has required applicants for and recipients and sub-recipients of Federal assistance to certify compliance with the requirements of Title VI as part of the grant approval process.

PRTC's Title VI program covers both the bus system and VRE. It is updated every three years and includes the following elements:

- Several public outreach activities between May 2006 to September 2008 by PRTC and VRE, the majority of which were public hearings related to fare increases or yearly budget approvals.
- In 2005, PRTC embarked on a long range strategic plan for bus service. The plan was adopted in October 2007.
- The 2008 Language Assistance Plan.
- PRTC has documented internal procedures for handling and processing Title VI Complaints. Three complaints were registered and investigated in 2008-09; none were deemed to be Title VI violations.
- PRTC uses various media to make public notifications in both English and Spanish.

Since PRTC provides service to a geographic area with a population of more than 200,000 people, the Title VI report also includes the following in order to comply with 49 U.S.C. Chapter 53.

- Demographic and service profile maps and charts, and recent PRTC and VRE Customer Surveys.
- System-wide Service Standards.
- Two fare increase evaluations for PRTC bus system - one that was implemented on April 2, 2007 and the other that was implemented on December 15, 2008.
- Customer Satisfaction Surveys for PRTC done three times a year and for VRE done annually.

PRTC's most recent Title VI submittal is attached in Appendix E and is also available at PRTC's offices.

3.8 Triennial Review

The triennial review is one of the FTA's management tools for examining grantee performance and adherence to current FTA requirements and policies. It was mandated by Congress in 1982. Every three years, the review examines how recipients of Urbanized Area Formula Program funds meet statutory and administrative requirements, especially those that are included in the Annual Certifications and Assurances that grantees submit. The review also gives FTA an opportunity to provide technical assistance on the latest FTA requirements and aids FTA in reporting to the Secretary, Congress, other oversight agencies, and the transit community on the Urbanized Area Formula Program.

VRE is not a legal entity under Virginia law and, therefore, is not an FTA grantee. PRTC is the grantee for FTA funds on behalf of VRE.

A Triennial Review of PRTC was completed in August 2008. The 2008 report and the corrective actions letter are attached in Appendix F. Table 3-14 shows the 23 review areas and the findings. Deficiencies were found in 2 review areas: Maintenance; and Planning/Program of Projects. PRTC undertook corrective actions subsequent to this report and provided a letter to FTA documenting the completion of these actions. The FY 2008 Triennial Review for PRTC was closed on December 22, 2008. A full copy of FTA's draft FY 2008 Triennial Review report, the PRTC letter listing corrective actions, and the close-out letter are available at PRTC's offices.

Table 3-14
Summary of Findings of the FY 2008 Triennial Review

Review Area	Finding	Deficiency	Corrective Action	Response Days/Date
1. Legal	ND			
2. Financial	ND			
3. Technical	ND			
4. Satisfactory Continuing Control	ND			
5. Maintenance	D	07 – Late facility/ equipment preventive maintenance	Either change the preventive maintenance inspection intervals for the fueling system or implement procedures to ensure that the system is inspected timely. Submit the new plan or the procedures to the regional office. (This deficiency pertains to PRTC bus maintenance)	12/6/08

Review Area	Finding	Deficiency	Corrective Action	Response Days/Date
6. Procurement	ND			
7. Disadvantaged Business Enterprise	ND			
8. Buy America	ND			
9. Suspension/ Debarment	ND			
10. Lobbying	ND			
11. Planning/ Program of Projects	D	04 – Public notice deficiencies	Develop and implement procedures to ensure that TPB includes a statement in future TIP public notices that the TIP public involvement process serves as the Section 5307 public involvement process or to carry out a separate public involvement process for annual Section 5307 program of projects, including publication of legal notices for the draft and final programs of projects. Submit a copy of the procedures and the next public notice to the FTA Region III office.	12/6/08
12. Title VI	ND			
13. Public Comment for Fare and Service Changes	ND			
14. Half Fare	ND			
15. ADA	ND			
16. Charter Bus	ND			
17. School Bus	ND			

Review Area	Finding	Deficiency	Corrective Action	Response Days/Date
18. National Transit Database	ND			
19. Safety and Security	ND			
20. Drug-Free Workplace	ND			
21. Drug and Alcohol Program	ND			
22. Equal Employment Opportunity	ND			
23. ITS Architecture	ND			

Findings: ND = No Deficiencies; D = Deficient; AC = Advisory Comment; NA = Not Applicable; NR = Not Reviewed

3.9 ITS Program

ITS is a wide-ranging set of technology applications that are intended to add information and communications technology to transportation infrastructure and vehicles, to improve the efficiency, effectiveness, and safety of transportation systems. Benefits of implementing ITS technology include improved customer service and satisfaction, better on-time performance, and reduced capital and operating costs.

The Virginia Department of Rail and Public Transportation (DRPT) has taken the lead to coordinate and promote the implementation of ITS technology among transit operators in Virginia to provide an improved return on investment, greater deployment efficiency, a higher level of functionality through system interaction and consistency of service delivery among transit operators.

Based on the ITS survey conducted for DRPT's ITS Strategic Plan, dated August 2009, VRE currently has the following ITS infrastructure:

- Automatic Vehicle Location (AVL) and/or Computer Aided Dispatch (CAD): VRE uses TRIPS software, a custom application developed for VRE, on all VRE locomotives.
- Maintenance and Yard Management Systems: VRE uses MicroMain for all commuter rail equipment.
- Driver Assignment and Workforce Management Systems: Keolis is the contractor that operates VRE trains (engineers and conductors). Keolis utilizes their own system for assigning personnel.
- Automated Stop Announcement/Message Signs: Audio is available in all passenger coaches. Announcements are made through a central audio system in each passenger cab car. Message signs integral to Sumitomo passenger cabs/coaches. There are message signs in approximately 78% of fleet.
- Vehicle "Black Box" Monitoring System: Pulse systems are installed in 100% of their locomotives and Bach-Simpson systems are installed in all cab cars.
- In-Station/Stop Security Cameras and Emergency Alarms: Indigo Vision cameras are installed in 5 stations, and the camera feed is provided in the VRE Communications Center. Emergency alarms are installed at 4 stations and the call buttons are linked to an answering service. There is no direct connection to 911.
- Next Bus/Train Display/Annunciation: Video displays are provided at stations, and station announcements are manually activated by VRE staff.
- Real Time Information Available On-Line and through Personal Communication Devices: VRE uses Rail Time, a custom application utilizing TRIPS data and Microsoft MapPoint. Persons with internet access via PDA can access Rail Time on device via the VRE web site.
- Interactive Voice Response (IVR): VRE uses Interaction Client for the internal phone system.

The ITS survey also documented the following future plans for VRE:

- Voice Transmission System: VRE plans to implement 2-way VHF radio communications system (complete).
- VRE is currently expanding station cameras to an additional 4 locations (for a total of 10 stations), both Virginia yards and the yard warehouse.

- VRE is evaluating options to bring smart card payment technology to the VRE fare collection system that is compatible with the WMATA SmarTrip technology and/or allows access to the WMATA SmartBenefits program.
- Multimodal Real-Time Traveler Info for I-95 and I-395 Corridors: VRE will partner in this project with VDOT, Transurban, and PRTC. Project timeline includes planning in the near-term (1-2 years), and deployment/ oversight in the mid-term (2-6 years). Project costs: $20,000 (planning) and $50,000 (deployment/oversight).
- VRE will coordinate with DRPT for future use of Google products for trip planning. The WMATA Trip Planner currently includes VRE trains.

VRE's ITS program is summarized in DRPT's ITS Strategic Plan in the following sections:

- Program Description – This section indicates the existing technology deployed, and proposed technology deployments in the next 6 years. Technologies deployed by transit operators of similar primary service type (i.e. rail) are also indicated.
- Action Plan – shows the planned technology projects with details on budget and estimated timeline.
- Participants / Resource Sharing – shows a list of stakeholders that will need to be engaged to undertake the Action Plan defined above.

As shown in Figure 3-49, VRE's projected deployment of ITS is as follows:

- While the WMATA trip planner includes VRE trains, a VRE trip planner will be developed in the next 1-2 years. VRE is currently taking a different approach to partner with third party application developers who wish to develop mobile/smart phone trip-planning applications.
- Wayside security projects including additional security cameras are proposed to be deployed over the next 1-3 years, including the Burke, Quantico and Woodbridge stations.

Figure 3-49
VRE's ITS Program

Transit Operator: Virginia Railway Express

Program Description

	On-Board Equipment						Central System Equipment								Wayside Equipment		
	CAD/ AVL	APC	AVA	TSP	AFC	On-Board Cam	IVR	RT Web	Trip Plan	Info Mobile Device	Sched & Run Cut	Maint Mgmt	Driver Mgmt	Yard Mgmt	Info Displ	Sec Cam	Sec Alarm Button
Existing Deployment	●	○	●	○	◐	○	●	●	●	●	○	●	○	○	●	◐	◐
Projected Deployment (next 6 years)	●	○	●	○	◐	○	●	●	●	●	○	●	○	○	●	●	●
Typical Industry Deployment Path	●	◐	●	○	◐	●	●	●	●	◐	●	◐	◐	○	●	●	◐

Notes: AVA – audio in 100% of coaches but message signs in approx. 65%. Trip planner is WMATA's Internet-based trip planner. Security cameras at 5 of 18 stations.

Action Plan

Project	Budget *(for near-term projects – if known)*	Date		
		1-2 yrs	2-6 yrs	6+ yrs
Trip Planner – VRE solution		✓		
Additional cameras at stations			✓	
Total	$100,000			

Participants / Resource Sharing

City of Alexandria – DASH

City of Fairfax – CUE

Fairfax Connector

WMATA

Danville Transit

Barriers

DRPT Virginia Department of Rail and Public Transportation

VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION

INTELLIGENT TRANSPORTATION SYSTEMS PLAN

Notes: Passenger Rail; validated by Christine Hoeffner 2009-05-26 and April Maguigad in workshop 2009-06-11

Source: DRPT ITS Strategic Plan, August 2009

4.0 Service Expansion Project Descriptions

This chapter identifies unconstrained service and facility needs for the VRE Commuter Rail Network. VRE Commuter Rail Network needs are identified based on the evaluation conducted in previous chapters of this TDP, meetings with VRE staff, and programmed projects from the 2004 VRE Strategic Plan (Strategic Plan). The 2004 VRE Strategic Plan identifies operating and capital improvement projects through year 2025. The plan identifies core network needs, such as stations, rolling stock, rail infrastructure, and train dispatching/operational control, and potential network expansion needs.

This chapter of the TDP includes both projects programmed for inclusion in the six-year TDP timeframe and those that are outside that timeframe. The projected operating and capital funding requirements for the projects planned for implementation between 2013 and 2018 and the proposed implementation schedules are defined in greater detail in Chapters 5 and 6 of this TDP. Key findings that have been taken into consideration in identifying transit service and facility unconstrained needs are as follows:

- VRE's ridership has increased steadily, with an increase of almost 23 percent in total annual ridership in the past five years.
- Train occupancy is approaching capacity on morning and evening trips on both the Manassas line and Fredericksburg line. As of September 2011, four AM and five PM trains operate at over 100% capacity during midweek when ridership is heaviest with 200+ standees on some trains. Another three trains operate at 90% capacity or more.
- Population within the VRE service area is projected to grow by 17.4 percent between 2011 and 2025, and total employment is projected to increase by 20.0 percent. Much of the population growth is projected to occur in the southernmost counties of the service area where there is an abundance of vacant land. The projected growth in population is anticipated to create increased demand for longer and more frequent trains and station parking at the existing and proposed stations.
- Between 2011 and 2025, all areas in the VRE service area are projected to increase in population density, along with the areas around the I-66 corridor and areas around the three southernmost VRE stations along the Fredericksburg line: Brooke, Leeland Road, and Fredericksburg.
- VRE carries more passengers per capita than its peers, despite the fact that VRE has fewer revenue hours per capita than most of its peers. VRE's productivity in terms of passenger-trips per revenue-hour is 19 percent higher than the peer average, and VRE serves 29 percent more passenger-trips per revenue-mile than its peers. This is likely the result of employer-sponsored commuting benefits in the DC region increasing the demand for VRE service as well as increased traffic congestion along the travel corridors served by VRE.
- VRE's principal travel market comprises trips from the origin catchment areas in Northern Virginia to the downtown central business district (CBD) destination zones, identified as Union Station and L'Enfant VRE stations in Washington D.C., Crystal City in Arlington, and Alexandria in the City of Alexandria.
- Demand for parking at existing stations is one of VRE's most pressing capital needs, with demand exceeding capacity as of September 2011 at the Manassas Park and Rolling Road

stations on the Manassas line, and demand nearing capacity (≥90%) at the Fredericksburg, Leeland Road and Brooke stations on the Fredericksburg line, and at the Broad Run station on the Manassas line.

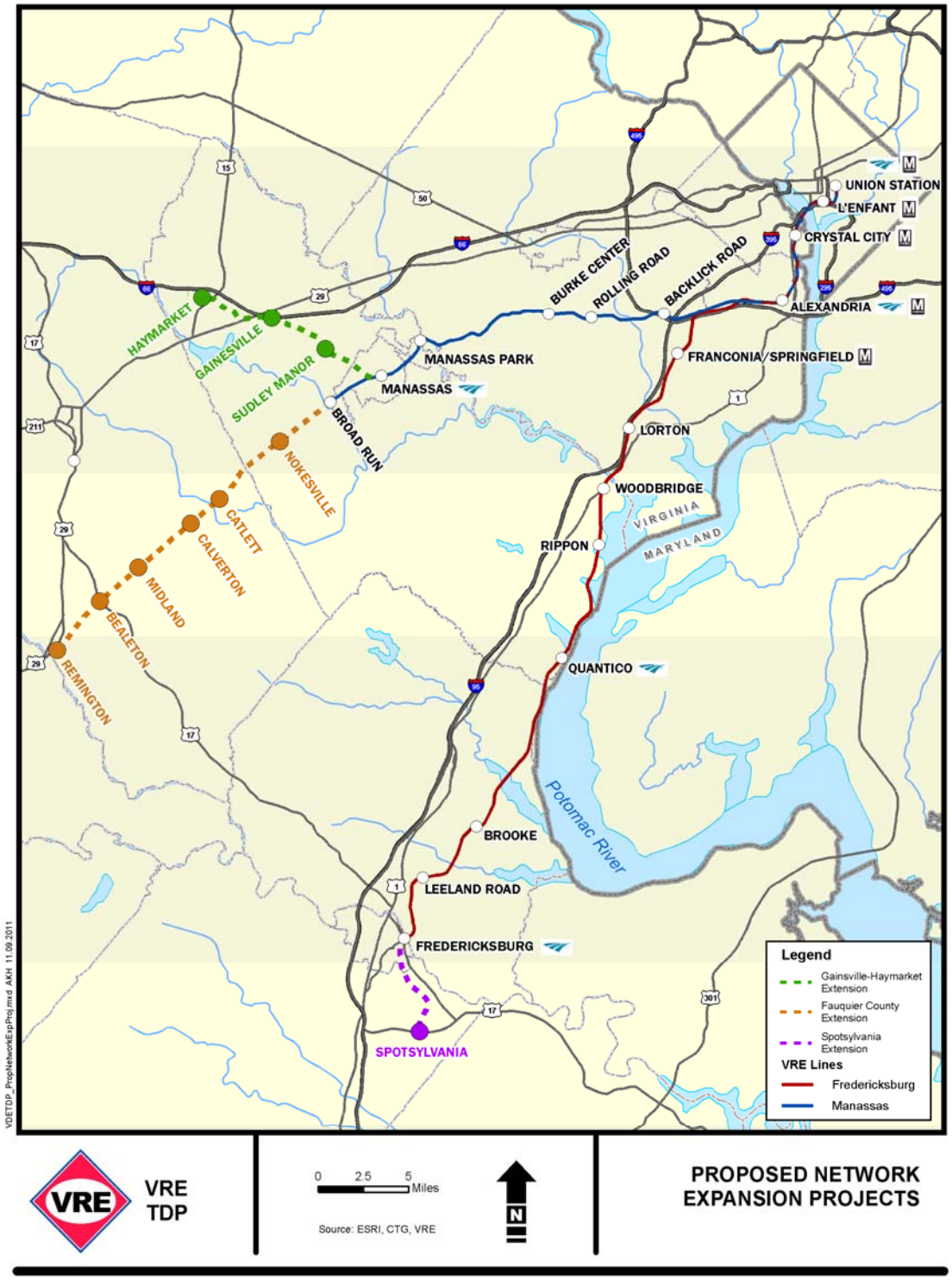
- VRE's steady increase in ridership warrants longer passenger trains to accommodate the growing number of passengers. Although VRE has increased the frequency of the trains on its lines over the years, many trains now operate under capacity conditions. Increasing maximum train lengths that VRE operates to eight or more cars to address demand will also accelerate the need to lengthen station platforms to achieve maximum operating efficiency when serving most stations.
- As VRE's fleet ages, continuous investment in life-cycle maintenance, and ultimately replacement vehicles, will be needed.
- VRE is challenged with mid-day storage capacity in Washington, D.C., and layover yard capacity. However, if VRE expands beyond 14 train sets per day, capacities at all three layover yards would need to be expanded or alternative storage strategies implemented.
- Local land use plans in the VRE service area reveal a diminishing supply of vacant land, and a focus on smart growth with concentrations of higher density, mixed-use development near transit stations. However, since the VRE commuter rail network is primarily oriented towards bringing commuters into Washington, D.C., the ease of access to VRE stations and ample availability of parking could be more important to commuters, with the type of land uses surrounding VRE stations given a second degree of priority.

Based on these findings, the following VRE network needs have been identified for consideration for inclusion in this TDP. Projects have been categorized into the following categories: Network Expansion and Track Infrastructure, Rolling Stock, Maintenance and Yard Facilities, Passenger Stations and Parking, and Other Operations/Capital Improvements. All costs are in 2011 dollars unless otherwise noted. It is important to note that this list represents potential TDP improvements, unconstrained by budget and not prioritized. Recommended improvements for the TDP six-year time period are identified in Chapter 5.

4.1 Network Expansion and Track Infrastructure

This section identifies network service expansion projects and track expansion projects identified for the six-year TDP timeframe as well as long range projects that may fall outside of the six-year schedule, but are priority projects for VRE as they plan for the future. Included in this list of projects are service extensions from the Fredericksburg line to Spotsylvania County and the Manassas line to Gainesville/Haymarket, as shown in Figure 4-1. Longer range service expansion projects are also described, such as an extension of the Manassas line into Fauquier County, and run-through service to Maryland. Finally, this section identifies other track infrastructure projects programmed for the six-year TDP timeframe and beyond.

Figure 4-1
Proposed Network Expansion Projects



Note: Station sites identified for extensions depict general locations for potential stations and will be refined as each extension is advanced through the planning and design process.

Gainesville-Haymarket Extension

VRE completed the VRE Gainesville-Haymarket Alternatives Analysis Report in June 2009. This 11-mile extension of the Manassas Line would operate along the Norfolk Southern (NS) B Line from just west of the existing Manassas station to the Gainesville and Haymarket area of Prince William County, as shown in Figure 4-2.

Figure 4-2
Gainesville/Haymarket Study Corridor (Source: VRE Feasibility and Alternatives Analysis Report)

The Alternatives Analysis estimates a Gainesville-Haymarket extension could generate an additional 1,000 to 3,600 daily trips, and recommends that the project proceed to the next phase. In addition to a baseline alternative that increases feeder bus service to the VRE Broad Run station, the AA recommends proceeding with Alternatives 1B and 1C, as shown in Figures 4-3 and 4-4. Both Alternative 1B and 1C extend VRE service to Gainesville and/or Haymarket along the B Line. Peak period service on the extension is interspersed with existing VRE service originating at Broad Run to expand Manassas Line frequencies to Washington, DC Alternative 1C also includes the operation of additional, "shuttle" service throughout the day between Gainesville-Haymarket and the Alexandria station. Benefits of the extension include added capacity and choice along the I-66 corridor and service enhancements to the existing Manassas line. The Gainesville-Haymarket extension would require the addition of signal systems, new second, and in some areas, third mainline tracks, and commuter stations with parking. Although construction of this extension would likely occur outside of the six-year TDP timeframe, this TDP does identify a need to continue to pursue the extension to Gainesville and Haymarket. Estimated costs for stations and rail infrastructure range from $129.9M with a Gainesville terminus to $179.2 with a Haymarket terminus. Excluded from those costs are rolling stock and train storage facilities required to support the extension and discussed separately in this chapter.

Figure 4-3
Proposed Gainesville/Haymarket Alternative IB (Source: VRE AA)

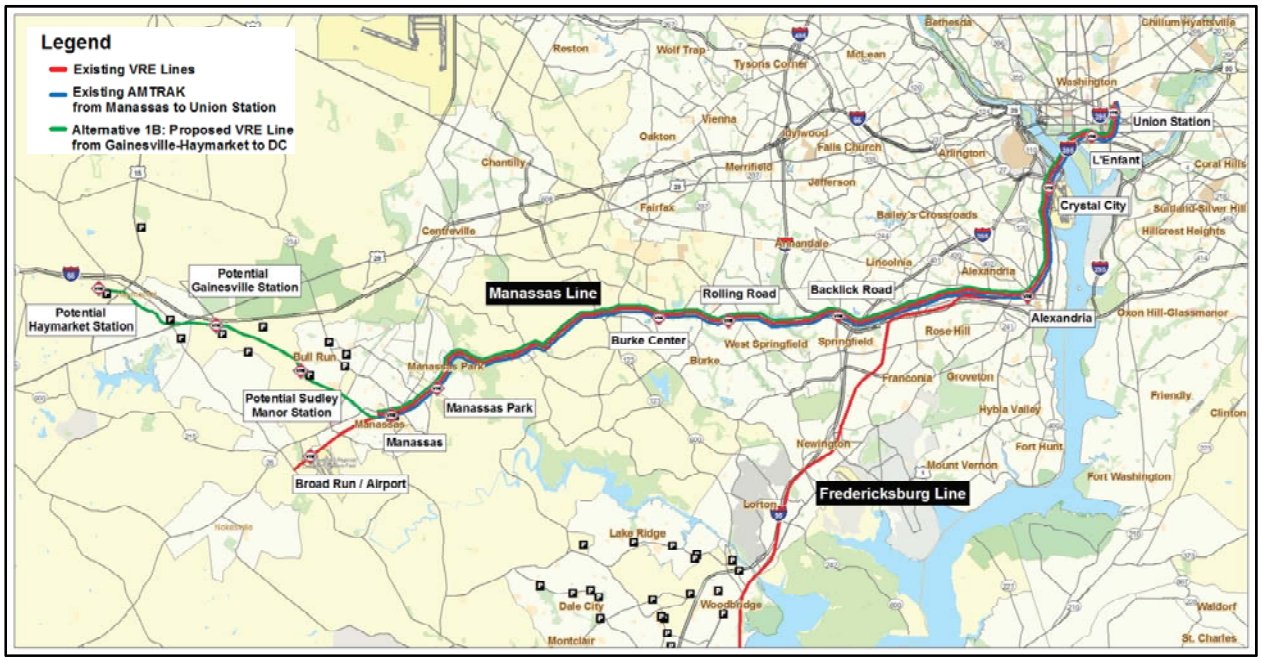
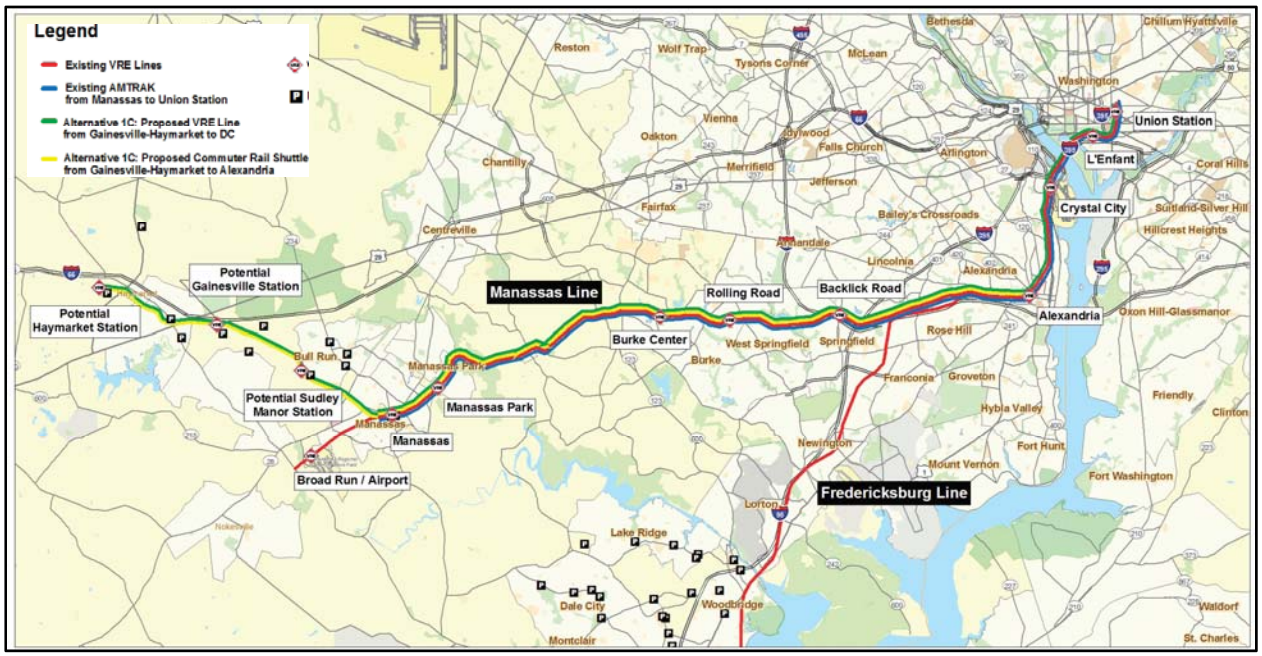


Figure 4-4
Proposed Gainesville/Haymarket Alternative IC (Source: VRE AA)

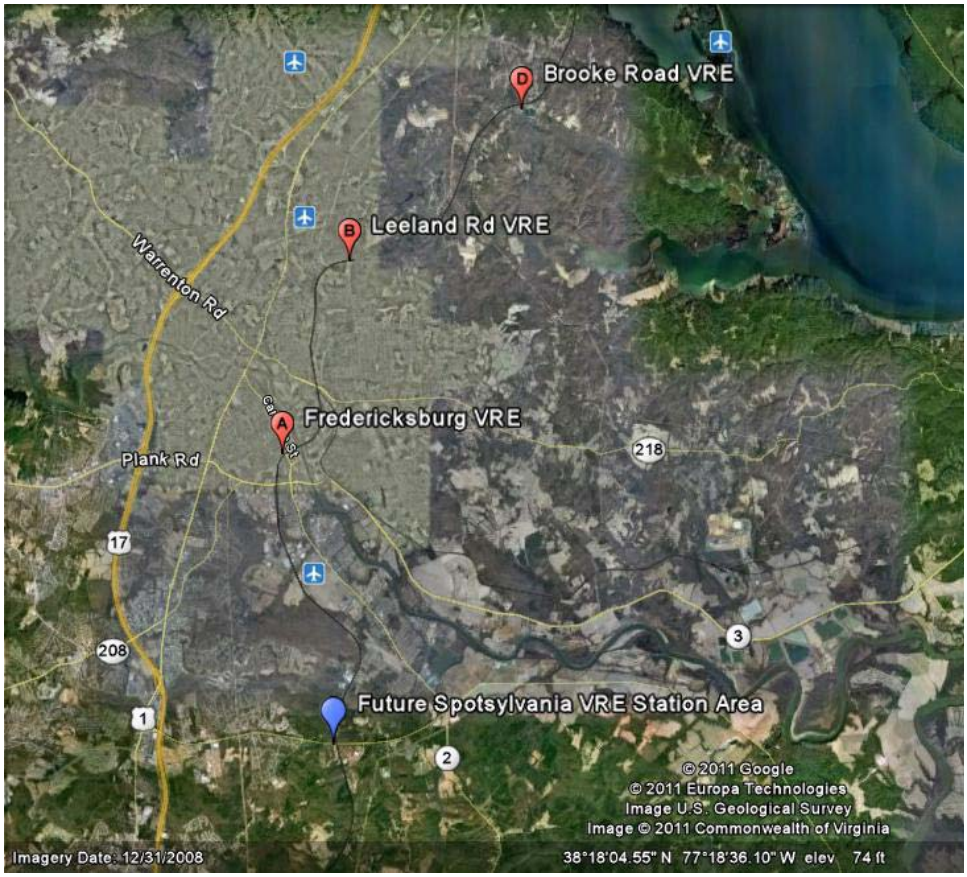


Spotsylvania County Extension

The Strategic Plan identified a service extension to Spotsylvania County that has the potential to attract 1,000+ daily boardings at a Spotsylvania station. Spotsylvania County joined VRE as a participating jurisdiction in 2010. Planning is underway by the county for a proposed station in the vicinity of the Crossroads Yard at Mills Road (US 17), as shown in Figure 4-5. The county is responsible for funding the station platform and associated parking as part of the agreement the County entered into with VRE upon becoming a member jurisdiction.

VRE is responsible for constructing approximately 2.5 miles of third main track on the Fredericksburg Line between Hamilton and Crossroads interlockings. This capacity improvement is a prerequisite for the provision of revenue service to a Spotsylvania County station. The third track project is in final design and is funded for construction in FY 12 and 13 at a cost of $20.3M.

Figure 4-5
Proposed VRE Service Extension into Spotsylvania County (Source: Google Earth)



Cherry Hill Third Track (Third Track, Powell's Creek to Arkendale)

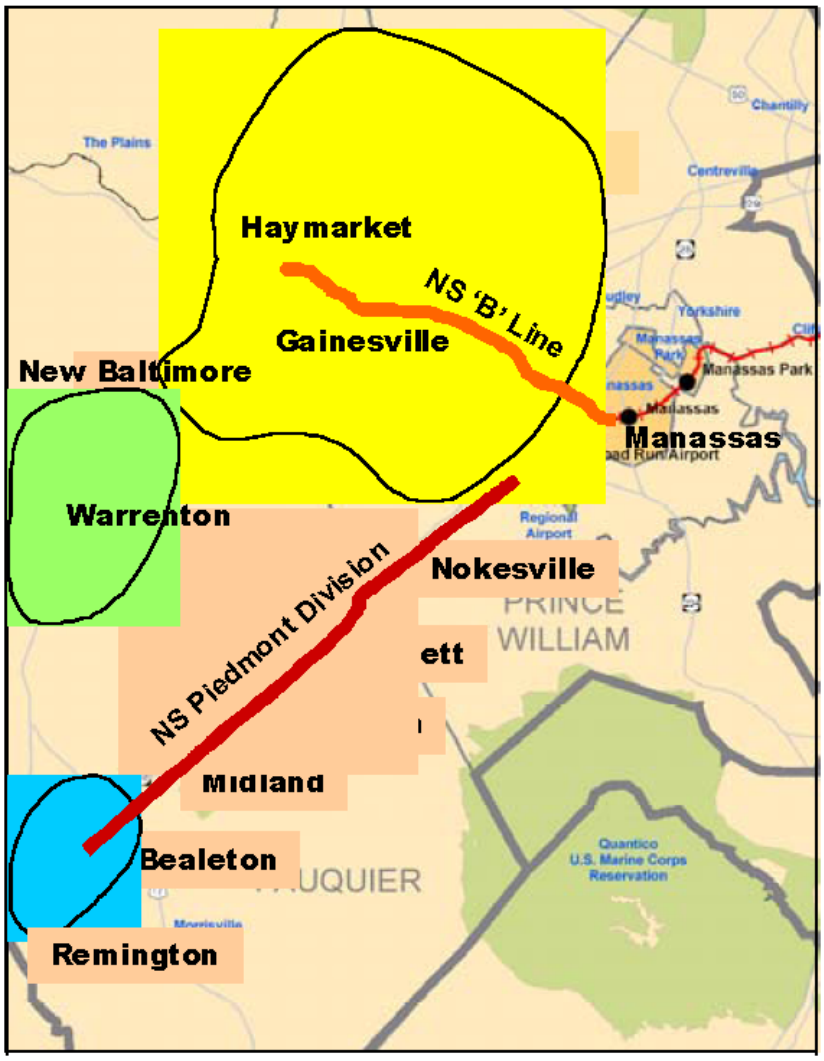
While the Strategic Plan recommends a station in the Cherry Hill area of Prince William County, as described later in this Chapter, it is not likely to occur during the timeframe of this TDP. However, VRE is continuing with plans for a third track from Powell's Creek to Arkendale, as shown in Figure 4-6. This improvement will include a switch and infrastructure improvements to increase rail capacity and is a prerequisite for operating revenue service from a future Cherry Hill Station. An Environmental Assessment and Preliminary Design for the addition of approximately 11.4 miles of mainline third track within the CSX line between Aquia Creek and Powell's Creek is complete. Final design for the third track segment is pending although a start date has not been identified. The total cost for this project is estimated at $79.9M.

Figure 4-6
Cherry Hill Site (Source: VRE)

Fauquier County Extension

The Strategic Plan identifies a potential commuter market along the NS Piedmont Mainline from the current Broad Run station terminus to either Bealeton (17 mile extension) or further to Remington (an additional 3 mile extension) in Fauquier County, as shown in Figure 4-7. This region is 45 miles from Washington DC and although the corridor is primarily rural in nature, residential and employment is concentrated in Bealeton and Remington. Although anticipated demand is not as strong as the proposed Gainesville/Haymarket extension, Bealeton and Remington anticipate future growth in residential and employment. With a strong commuter base, this market may warrant future expansion of the Manassas line. The Strategic Plan estimates ridership could be in the range of 1,100 to 2,000 daily trips from stations in Remington, Bealeton, and a Park and Ride station near the Warrenton/New Baltimore area. This extension would require Fauquier County to join VRE as a participating jurisdiction. Thus, this TDP identifies the Fauquier County extension as a long-range need, which would likely occur outside of the timeframe of this TDP.

Figure 4-7
Potential Fauquier County Commuter Markets (Source: Strategic Plan)



Run-Through Service to Maryland

The Strategic Plan identifies run-through service to Maryland as a project that would have strong ridership potential for both VRE and MARC. This project would allow the eventual continuation of Fredericksburg and/or Manassas Line trains through Union Station in Washington DC to Maryland with similar coordination of MARC trains traveling southbound. The plan estimates integrating the two commuter rail services and running commuter rail trains through Union Station to the far sides of the region could generate 3,000 additional daily trips for VRE and 10,000 to 20,000 daily trips for MARC. In addition to increased ridership for both VRE and MARC, benefits of run-through service identified in the strategic plan include the alleviation of mid-day storage constraints discussed later in this chapter, potential VRE access to a MARC maintenance facility in Baltimore, mitigation of Metrorail's Red Line capacity constraints, reducing long distance commute trips on the Beltway and river crossings, and improved airport access to both BWI and Reagan National. Several of the station improvement projects described later in this chapter are directly related to the capital investment needed as prerequisites to providing the run-through service. The nine prerequisites to run-through service identified in the strategic plan include:

1. L'Enfant freight bypass track (complete)
2. L'Enfant Station island platform
3. Third Track and interlocking reconfiguration at Crystal City (complete)
4. CSX Alexandria Extension improvements
5. Additional VRE rolling stock
6. Modified operating agreements
7. Crystal City Station reconfiguration
8. Washington Union Station – Platform and Concourse Improvements
9. Washington Union Station – Improve Pedestrian Connections to Metrorail.

Additional improvements will also be needed after the service is implemented; however, these improvements would likely occur outside of the six-year TDP timeframe. The listed prerequisites are derived from a conceptual-level analysis of run-through service; additional, detailed study and design is needed to further define the prerequisites and to refine their cost estimates as well as full service costs. Thus, this TDP identifies the need for VRE to continue to pursue the potential for run-through service and possible funding alternatives, however it is acknowledged that this project falls beyond the 6-year timeframe of the TDP.

Additional Track Infrastructure – Long Range

The Strategic Plan also calls for additional third main track segments between Aquia Creek and Dahlgren Junction (approximately 8.7 miles) and between Ravensworth and Colchester (approximately 6.7 miles). Both are in the longer range vision of VRE, and outside of the six-year TDP timeframe. The estimated cost for the Aquia Creek-Dahlgren Junction segment is $54.1M while the Ravensworth to Colchester segment is anticipated to cost $46.1M.

Additional infrastructure expansion will eventually be needed at other critical points along the CSX corridor to provide a continuous third main track between Fredericksburg and Washington, DC and support future expansion of VRE capacity, as well as other passenger rail service (i.e., intercity rail, high-speed rail) in that corridor. This includes additional track capacity on key river crossings such as the Long Bridge across the Potomac River, the Occoquan River bridge, and the Neabsco, Powell's and Aquia Creek bridges.

4.2 Rolling Stock

As described in Chapter 3, full-day fleet utilization is challenging given the nature of the VRE services, which is focused on meeting peak demand loads. The total locomotive fleet is projected to remain constant over the next couple of years, but the number of passenger coaches is projected to decrease slightly beginning in 2015, due to the expected sale of the remaining Legacy Gallery coaches. Thus, this TDP identifies the need to replace and rehabilitate existing railtrucks and passenger coaches as needed, and to continue to expand rolling stock where appropriate. Programmed needs during the timeframe of this TDP are identified as follows.

10-Year Railtruck Overhaul

Between 2006 and 2008, VRE acquired 71 Sumitomo passenger coaches, also referred to as "Gallery IV" coaches. During the timeframe of this TDP, the railtrucks on these units will be reaching the 10-year overhaul threshold. Thus, this TDP identifies the need to rehabilitate these railtrucks. The total cost of the rehabilitation project is estimated at $12.8M, programmed in FY 2017 and 2018.

Figure 4-8: Replacement Railtrucks

Additional Rolling Stock

VRE recently received a delivery of 20 new locomotives that have completely replaced the existing VRE locomotive fleet. VRE is planning to follow-up this purchase with up to 50 new passenger coaches. The first 15 coaches purchased will replace the 20 Pullman "Legacy Gallery" passenger coaches currently remaining in VRE's fleet that are between 35 and 40 years old and in need of a major rehabilitation. Additional rolling stock will be needed for service expansion plans described at the beginning of this chapter. Funding for 15 passenger coaches has been programmed for FYs 2012 through 2015. The procurement for the new coaches includes an option to purchase additional vehicles (up to a total purchase of 50 vehicles) as funding is identified.

Figure 4-9 New VRE Locomotive

Legacy Gallery Car Rehab

Should the purchase of additional rolling stock, as described above, be deferred, VRE would need to rebuild the existing 20 Pullman "Legacy Gallery" passenger coaches. Rehabilitation needs include interior components as well as mechanical components (i.e., braking, railtrucks, etc.). The costs and funding sources for this project have not yet been identified, as this initiative would only be needed if the purchase of additional rolling stock is deferred.

Figure 4-10 Pullman "Legacy Gallery" Passenger Coach

4.3 Maintenance and Storage Yard Facility Improvements

VRE has seen a steady growth in ridership since its inception. Capacity constraints for vehicle storage has resulted as both service and the VRE fleet have expanded to meet demand. This section identifies storage yard and maintenance facility improvement needs during the six-year TDP timeframe, as well as longer range needs.

Midday Storage

As described in Chapter 3 of this TDP and in the Strategic Plan, midday storage capacity in Washington DC is constrained based on available capacity at Amtrak's Washington Union Terminal (WUT) yards where VRE equipment is stored. Storage for both the Manassas and Fredericksburg line trains located at Amtrak's Ivy City complex is at capacity; thus, one Manassas Line train is forced to deadhead to the Broad Run Yard each morning and back to Union Station in the afternoon. Since storage capacity is critical to meeting the demand for an increase in VRE traffic or proposed service expansion, this TDP identifies short-range and long-range needs for midday storage capacity.

<u>Expand Midday Storage (long-range)</u>

The L'Enfant Station siding is a short-term solution to the midday storage shortage in Washington D.C. Presently, Ivy City can accommodate layover of 11 VRE trainsets, based on the current VRE consist lineup, and the L'Enfant storage track will accommodate up to two trainsets for mid-day storage. Any VRE service extension would also have potential fleet storage implications. Thus, a permanent long-term solution to expand midday storage capacity in or near Union Station is needed. Alternatively, VRE would need to develop operating plans that provide for the storage of equipment outside of Washington, DC, either at the outlying VRE yards or other locations in Virginia. The strategic plan identifies several potential site locations that could fulfill the long-term need for train storage in Washington, DC, as well as to provide a small maintenance facility to service VRE equipment during the midday layover period. Although no sites have been identified, numerous factors, such as land acquisition, potential operational impacts (for both VRE and other train operations) and construction cost must all be considered. This project is also being coordinated with the WUT Master Plan currently under development by Amtrak that will address long-term needs at Union Station and the WUT yards complex. The midday storage project is estimated to cost $40M and is assumed to be constructed by FY2020. While the completion o fthe L'Enfant storage track is funded in FY 2013, a long-term storage solution is currently unfunded and construction would likely occur outside of the six-year TDP timeframe; however, this TDP identifies a need for VRE to continue to pursue a long-term solution for midday storage.

Expand Overnight/Yard Storage (long-range)

Similar to the midday storage capacity, the current overnight storage facilities at Crossroads Yard and Broad Run Yard are near capacity and unable to support any significant service or fleet expansion. The Crossroads and Broad Run yards each have enough room for one additional trainset plus spare equipment. Thus, any expansion of VRE beyond 14 trainsets per day will require expanding both layover yard storage capacities.

The Strategic Plan identifies the need for a phased program of capital investment at outlying yards to accommodate future needs. Specifically, the strategic plan recommends storage at all yards for VRE

train consists of up to ten-cars in lengths with sufficient storage for the numbers of trainsets (between 16 and 19 trainsets) required for service at 20-minute headways, with zone express service offering improved running times from the fast-growing outer portions of the VRE service area.

This TDP identifies a need for VRE to increase storage tracks at Crossroads Yard and at Broad Run Yard, to alleviate the pressure of overnight trainset storage. Alternatively, VRE would need to consider the construction of additional storage capacity at other outlying locations such as a facility along the NS B Line should VRE service be extended to Gainesville/Haymarket.

Crossroads Yard

The Strategic Plan identifies the need to increase the number of trainsets from six to nine by 2025. Extension of existing tracks at Crossroads Yard is problematic, due to topography and nearby land uses; thus, VRE may need to look into acquiring additional property for this expansion. This project is currently unfunded, and would likely occur outside of the six-year TDP timeframe with completion estimated to occur by FY2020. The Crossroads Yard expansion is estimated to cost $20.7M.

Broad Run Yard/Gainesville-Haymarket Yard

As described in the service expansion section of this chapter, should VRE expand service to Gainesville or Haymarket, a site for train storage large enough to accommodate overnight storage of up to eight 10-car trainsets would be needed. The Strategic Plan identifies two scenarios, the first scenario includes the construction of a new yard along the B Line, and the second includes the expansion of the Broad Run Yard. Should VRE opt to relocate some or all overnight storage functions to a new facility near Haymarket, the existing Broad Run yard could be used for other purposes, such as an expanded maintenance facility. Should VRE opt to continue to use the Broad Run Yard for overnight storage, that scenario would require trains serving a Gainesville Haymarket extension to deadhead from Broad Run to their starting point in Gainesville or Haymarket.

Because both scenarios have different near-term and long-term capital investment implications, this TDP identifies the need to identify and acquire additional yard storage capacity at either Broad Run or along the NS B Line. This project is currently unfunded, and is assumed to be completed by FY2020, which is outside of the six-year TDP timeframe. Construction of the necessary additional storage capacity at or near the Broad Run yard is estimated to cost $20.7M. A storage yard along the B Line to accommodate trains originating along the Gainesville-Haymarket extension is estimated to cost $7.2M.

Heavy Maintenance Repair Facility

VRE owns overnight storage / maintenance yards at the termini of both of its lines. Both the Crossroads and Broad Run facilities perform daily maintenance and overnight storage of locomotives and passenger rail cars. Although the facilities each include service and inspection (S&I) buildings, neither can handle heavy repairs for locomotives or coaches. Thus, some maintenance functions such as the replacement of traction motors and wheels, are sent off-site and performed by contracted vendors. With this arrangement, VRE equipment is out of service for an extended period of time, which can negatively affect the service reliability and result in higher equipment maintenance and repair costs. Thus, VRE would like to establish heavy repair functions at its own facility where it can better monitor repairs and transition units in and out of the fleet.

Consistent with the Strategic Plan, VRE has constructed S&I buildings at both the Crossroads Yard (completed in 2008), as shown in Figure 4-11, and the Broad Run Yard (completed in FY2010) to accommodate routine inspections and light maintenance. This TDP identifies the need for a heavy maintenance facility to allow VRE to control and conduct all maintenance functions, both light and heavy, in their own facilities. The total cost for this facility is estimated at $35M with funding programmed in FYs 2015, 2016, and 2017.

Figure 4-11
Crossroads Yard & Maintenance Facility (Source: VRE)

4.4 Passenger Facilities - Stations and Parking

As described in Chapter 3 of this TDP, a steady increase in VRE ridership has increased pressure on existing stations and parking. Demand for parking is nearing or exceeding capacity at many stations. Additionally, the increase in ridership warrants longer passenger trains to accommodate the growing number of passengers. Most of the VRE stations have an approximately 400 foot long passenger-boarding platform designed to handle trains of up to six cars in length, although at some stations only five of the bi-level gallery coaches currently operated will fit at the platform. VRE's goal is to lengthen shorter platforms to at least 600 feet, in the short term, and ultimately to approximately 800 feet to accommodate consists up to 10 cars in length throughout the system. The following station and parking improvements are identified as needs during the six-year TDP timeframe and as priorities for the long range.

Cherry Hill Station – New Station

The Strategic Plan identifies a new station where ridership potential exists at the Cherry Hill area of Prince William County. The Cherry Hill Station is an infill or mid-line station located between the Rippon and Quantico Stations on the Fredericksburg line. The site for the station is part of a master planned, mixed use community known as Harbor Station. The station and parking have been proffered as part of the Prince William County development approval process although the original developer lost the property to foreclosure and a new developer has recently acquired it. The timeframe for the buildout of the community and the VRE station is unclear at this time but unlikely to occur within the timeframe of this TDP.

Alexandria Station Improvements

Alexandria Station makes up 10.7 percent of the trip destinations on the Manassas line and 13.4 percent of the trip destinations on the Fredericksburg line. As shown in Figure 4-12, most VRE trips arrive on the westerly side of the railroad right-of-way, with a majority of the destinations on the eastern side of the station. Passengers leaving the station must use a circuitous route along the King Street or Duke Street sidewalks to access most employment destinations, Old Town Alexandria and the Metrorail station. In addition, the eastern station platform is not long enough to accommodate boarding at all cars of a train, which increases station dwell time when that platform is in service. While the existing pedestrian underpass is used to access trains arriving at the eastern platform, it is not ADA-compliant. Passengers unable to navigate the stairs to/from the underpass must use an at-grade crossing between the two platforms, which is undesirable from a safety standpoint and also affects station dwell time.

Figure 4-12
Alexandria VRE Station (Source: Google Earth)

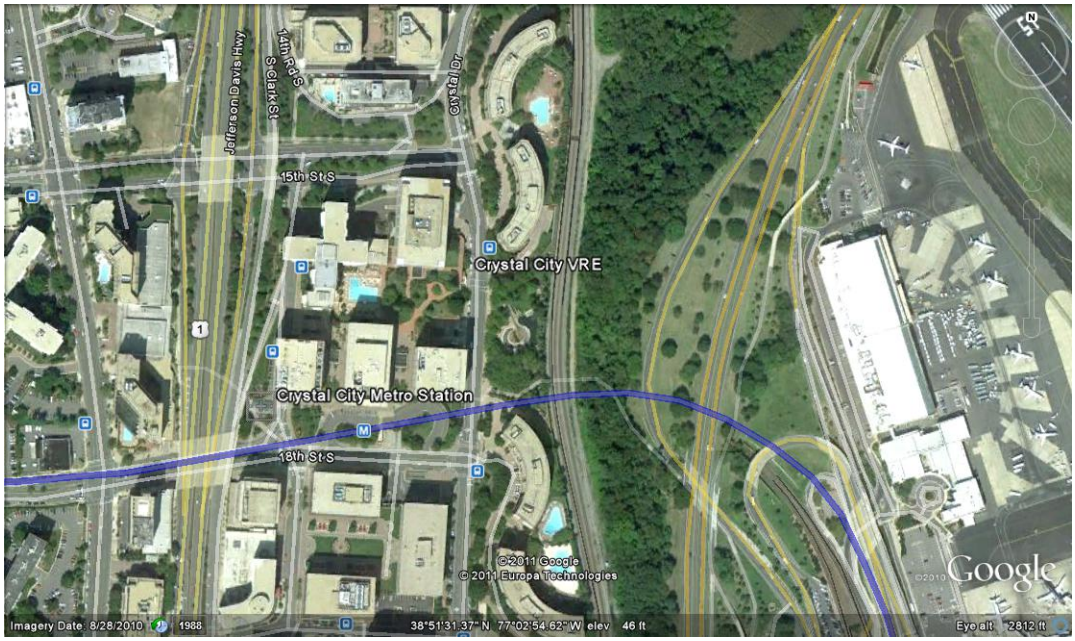
Consistent with the Strategic Plan, this TDP identifies a need to construct an ADA-compliant pedestrian access point between the station platforms and to Metrorail and to expand the eastern platform to improve operational efficiency and pedestrian safety at the Alexandria VRE station. The new pedestrian

underpass would descend from each of the two rail station platforms to an underground concourse that would tie directly into the southern portion of the Metrorail station mezzanine, within the free zone. From this point, there would be direct access up to the Metrorail platform or out to the bus bays and street. This improvement also includes lengthening the east side platform to accommodate full-length VRE trains. This project is currently in the conceptual design phase and is being funded through the VDOT Highway-Rail Grade Crossing Safety Program. Cost for the project is estimated at $10.4M.

Crystal City Station Improvements

As one of VRE's busiest stations, Crystal City Station is one of the most congested for pedestrians. As discussed in Chapter 3 of this TDP, 22.9 percent of all passengers on the Fredericksburg Line and 21.2 percent of all Manassas Line passengers travel to Crystal City Station. The existing VRE station is located west of Reagan National Airport and east of the Crystal City employment area, as shown in Figure 4-13. The Strategic Plan identifies a long-range need to enlarge, re-construct or develop a new station. Benefits of a new station include better service to employment districts, improved pedestrian pathways, convenient transfers, improved access to Reagan National Airport and accommodating MARC run-through service. Since construction of a new station would be outside of the six-year TDP timeframe, for the purpose of this TDP, passenger improvement needs outlined in this initiative include the reconstruction of the platform to accommodate bi-directional loading and various improvements to passenger and pedestrian circulation at the existing station. One option is to construct a center island platform to provide access to two passenger tracks with better pedestrian and local transit connections. Reconstruction of this station is a prerequisite for Maryland run-through service. Cost for this project is estimated at $62.1M. It is anticipated that this project would be completed concurrent with the start-up of run-through service with MARC, as described in the network expansion projects section of this chapter.

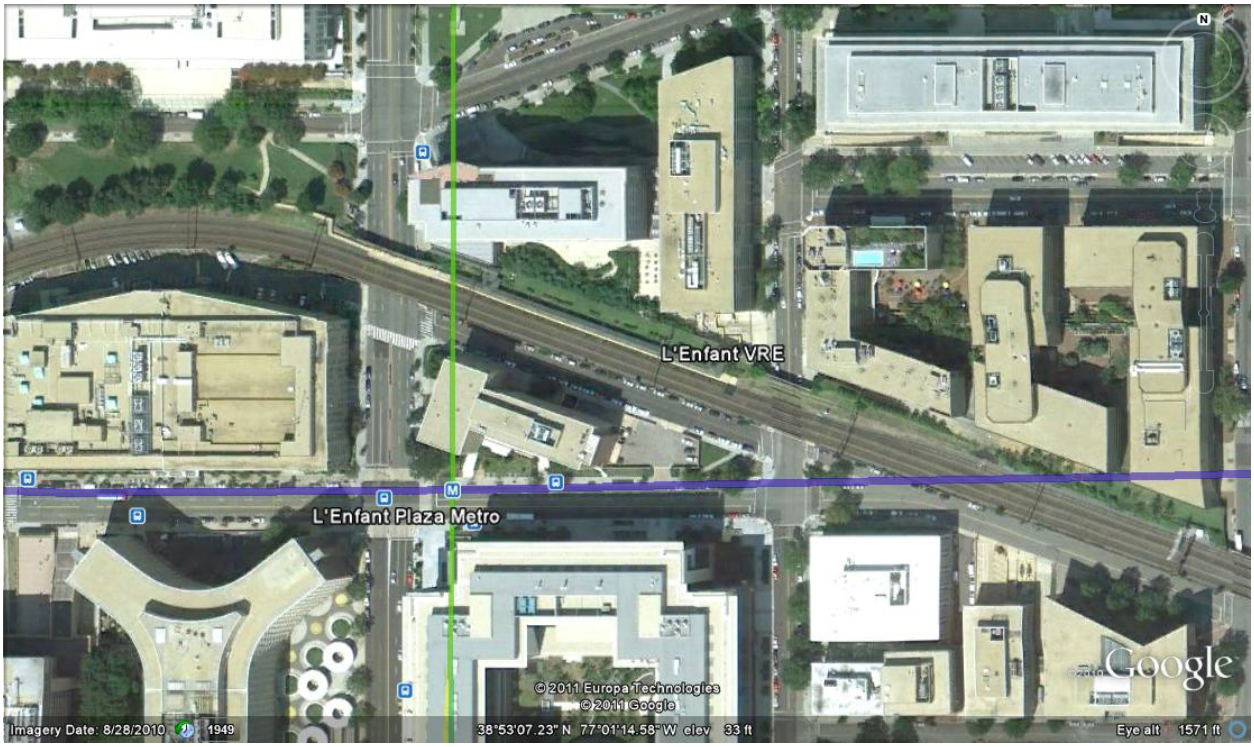
Figure 4-13
Crystal City Station (Source: Google Earth)



L'Enfant Station Improvements

L'Enfant Station is VRE's busiest station, and as such, one of the most congested for pedestrians. As discussed in Chapter 3, 34.8 percent of the passengers on the Fredericksburg Line and 37.3 percent of trips on the Manassas Line are traveling to L'Enfant Station. The station is located within walking distance of numerous federal agencies and employment centers and one block from the L'Enfant Plaza Metrorail station, with easy transfers to downtown Washington DC as shown in Figure 4-14. Consistent with the Strategic Plan, this TDP identifies the need to make improvements to the L'Enfant Station to facilitate pedestrian activity and to accommodate future MARC run-through service. Improvements outlined in this initiative include the reconstruction of the station platform and various improvements to passenger and pedestrian circulation. A center-island platform could serve two tracks, which would allow trains operating in both directions to stop at this station. Other improvements to pedestrian access would include primary street access at Sixth Street, secondary access at Seventh Street, and improved passenger connections to Metrorail via a below ground tunnel with escalators, elevators and pedestrian capacity to accommodate up to two full trainloads of passengers. Cost for this project is estimated at $82.8M. It is anticipated that this project would be completed concurrent with the start-up of run-through service with MARC.

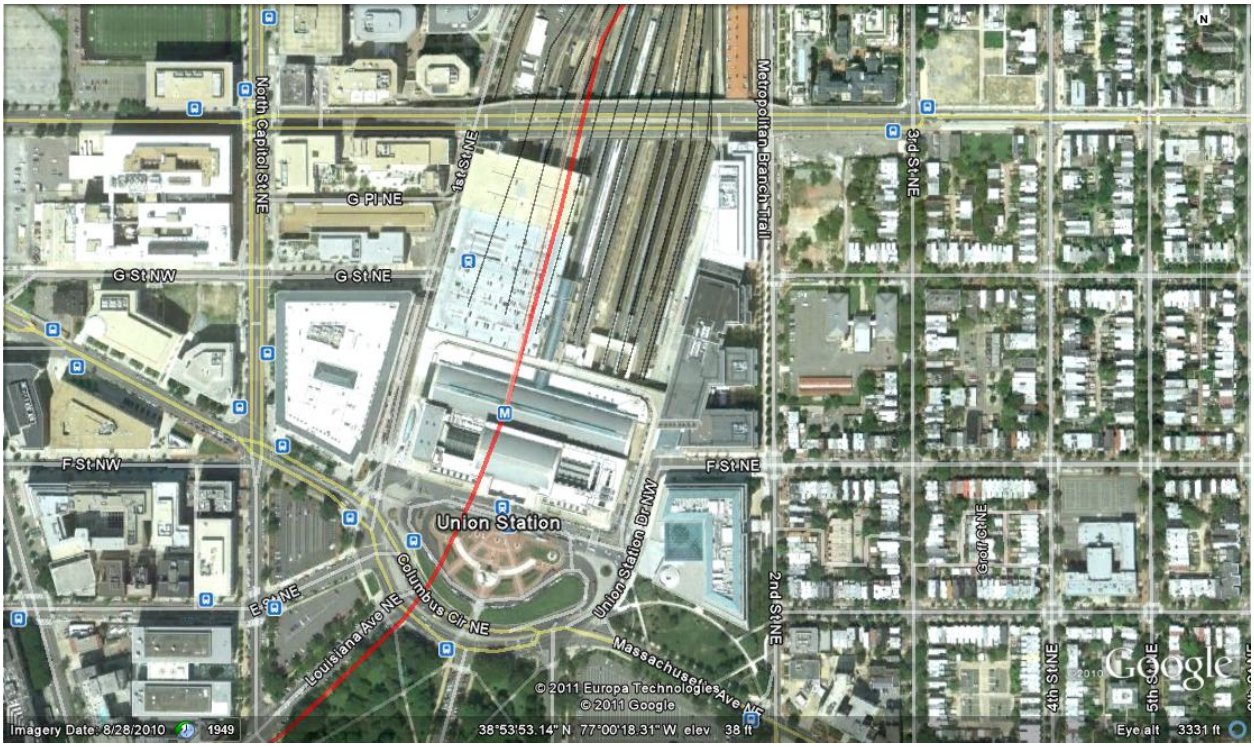
Figure 4-14
L'Enfant Plaza VRE (Source: Google Earth)



Washington Union Station Improvements

Union Station is a shared facility and one of the oldest in the VRE system, as shown in Figure 4-15. Chapter 3 of this TDP reveals that 23.5 percent of all passengers on the Fredericksburg line and 27.6 percent of all passengers on the Manassas line travel to Union Station. Union Station is also a major transfer point to connect with the Metrorail Red Line, MARC and Amtrak. With employment areas in Crystal City nearing build out, employment is projected to grow in Washington DC. Future growth in all transit modes accessing Union Station and this projected employment growth – including a new development, Burnham Place, proposed for the airspace above the Union Station tracks – will all increase pressure on this station. Thus, this TDP identifies a need to make improvements to the lower level of Union Station to support low-platform boarding consistent with the recommendations in the strategic plan. Specific design needs have not been identified, as improvements are contingent on the completion of the WUT Master Plan and the Burnham Place development. The estimated cost for this project is $10.4M.

Figure 4-15
Union Station (Source: Google Earth)



Suburban Station Platform Improvements

VRE's Strategic Plan gave top priority to continued development of the core VRE network in order to build up capacity in existing station facilities, available parking, and railroad infrastructure. A primary element of station capacity is the platform. With the steady increase in ridership, VRE has expanded their trainset consists to up to 8 cars on some trips, with a goal of expanding all consists to a minimum 8 cars in length. However, most of the platforms in the system are unable to accommodate the longer trainsets. Most of the VRE stations have a 400-foot± long passenger-boarding platform, designed to handle trains of up to six cars in length, although some are only capable of handling five bi-level gallery coaches. Thus, passengers from the outer ends of the trainsets must pass through to the adjacent coach to board and alight the train. VRE is proceeding initially to lengthen platforms to approximately 600 feet to accommodate 8 car consists with a long term goal to lengthen all platforms to approximately 800 feet to handle consists up to 10 cars long. Platform extensions have been completed or are near completion at the Manassas Park, Burke Centre and Broad Run (Figure 4-16) stations on the Manassas line, with extensions programmed in the VRE capital improvement plan for the Rolling Road and Lorton stations. This initiative expands all of the noncompliant platforms in the VRE system, lengthening them to accommodate 8 to 10-car trainsets, including the L'Enfant and Crystal City stations should the reconstruction projects discussed in the previous sections not proceed. The total cost for this project is estimated at $18.2M to extend platforms to 800 feet at all core network stations (including L'Enfant and Crystal City stations).

Figure 4-16
Broad Run Station Platform (Source: VRE)

In addition to lengthening platforms, the Strategic Plan includes a program to add second, off-side platforms to VRE stations to improve operational flexibility and performance by allowing stations to be serviced from either side of the tracks. The initial priority is to add second platforms on the Fredericksburg Line to maximize efficiency of operations in tandem with the implementation of the third mainline track between Fredericksburg and Washington, DC.

A second platform was added to the Woodbridge station in 2010. A project to add a second platform to the Lorton station is programmed for funding in FY10-17 at a total cost of $10.7M (which also includes lengthening the existing Lorton platform). A project to add a second platform at the Rippon station and to lengthen the existing platform is partially funded for $6.1M in FY15-17 and has a total cost of $10.9M. The total project cost for the remaining stations is estimated at $62.9M.

Suburban Station Parking

As discussed in Chapter 3, meeting growing parking demand at the existing stations is one of VRE's most pressing capital needs. Demand throughout the system can fluctuate based on nearby development, road construction projects and the price of gasoline. While some of these variables can be foreseen,

others are more volatile. VRE understands that is must be nimble and is often forced to react to sudden increases in parking demand. Consistent with VRE's Strategic Plan, this TDP identifies a need for proactive systemwide parking expansions to increase overall parking capacity to as many as 13,000 parking spaces by 2025. This expansion is programmed at an estimated cost of $71.8M.

Broad Run Station Parking

As the terminal Manassas line station, demand for parking at the Broad Run has increased concurrent with ridership growth. While there are currently 1,065 spaces at the station, long-term demand is projected to be for as many as 2,000+ spaces. Design of additional parking is fully funded; preliminary engineering and NEPA are currently underway. Construction of additional parking, anticipated to include a parking structure, is unfunded. The total project cost is estimated at $21.4M.

4.5 Other Operational Improvements

In addition to network expansion, and facility, track and rolling stock improvements, this TDP identifies other capital investment needs to improve VRE operations. These include a Fare Collection System and Positive Train Control System as described in this section.

Fare Collection System

VRE currently uses ticket vending machines located at each of its stations, as shown in Figure 4-17. Tickets are validated by the same machines and then verified onboard the trains by fare inspectors (conductors). The current system is over 10 years old and lacks many of the newer features that facilitate reciprocal use between VRE and other transit modes and providers in the region, such as SmarTrip Cards. This TDP identifies the need for VRE to upgrade the current fare collection system. This upgrade should include the replacement of outdated equipment that will bring the system up to date and allow VRE to participate seamlessly with the region's other transit providers. These upgrades are anticipated to cost $4.9M with $1.8M programmed in FY 2013.

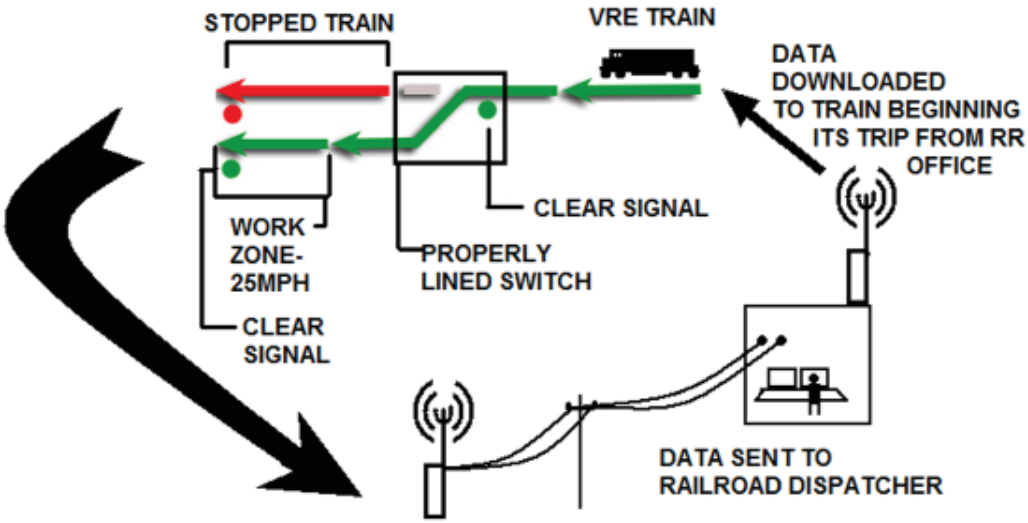
Figure 4-17
VRE Ticket Vending Machine

Positive Train Control

As part of the Rail Safety Improvement Act of 2008, most freight railroads and passenger railroads must implement an advanced train control and collision avoidance system, Positive Train Control (PTC), by December 2015. VRE currently operates under a cab signal system along the CSX tracks. This means the dispatcher sends signals to the trains, to which the engineer must adhere, and cab signals provide further protection by stopping the train if a signal is not adhered to or posted speeds are overrun. Since VRE is included in the Rail Safety Improvement Act of 2008, this TDP identifies the need for VRE to implement a Positive Train Control system, as identified in their PTC Implementation Plan, by the 2015 Deadline.

Positive Train Control (PTC), as shown in Figure 4-18, is a safety system which overlaps the current signal system and dispatchers' instructions. The PTC safety system includes some of the features of a cab signal system, but it can also detect other issues and stop the train as needed. The system will be designed to detect when a switch is misaligned, and will prevent a train from going through the switch. The system will also allow dispatchers to enter information about maintenance of way workers who may be present along the tracks, and will prevent a train from entering work space without the proper authority. The total cost for this enhancement is unfunded in the TDP and is estimated to be $6M.

Figure 4-18
Positive Train Control (Source: VRE)



4.6 Funding Requirements

Potential cost estimates for the programmed and long range VRE commuter rail network needs are summarized in Table 4-1. These cost estimates originate from the VRE annual budget, the Strategic Plan, and/or other studies as referenced within this chapter. It is important to note that cost estimates for some long range projects that fall outside the TDP timeframe are not included, as further study and analysis is needed. Costs are in 2011 dollars, unless otherwise noted throughout the chapter.

Table 4-1
Summary of Long-range VRE Network Improvement Needs (in Millions)

Six-Year TDP and Long-Range Network Needs		Estimated Long Range Cost
Network Expansion and Track Infrastructure	**FY**	**Cost ($M)**
Fauquier County Expansion	Long-Range	TBD
Gainesville-Haymarket Extension[1]	Long-Range	$129.9-$179.2
Run-Through Service to Maryland (Full Service)	Long-Range	TBD
Run-Through Service to Maryland (Start Up Service)	Long-Range	TBD
Third Track, Aquia Creek to Dahlgren Junction	Long-Range	$54.1
Third Track, Cherry Hill	TBD	$79.9
Third Track, Hamilton to Crossroads	FY2013	$20.0
Third Track, Ravensworth to Cochester	Long-Range	$46.1
Rolling Stock	**FY**	**Cost ($M)**
10-Year Rail Truck Overhaul[2]	FY 2017-2018	$12.8
Additional Rolling Stock[3]	FY 2012-2015	$145
Legacy Gallery Car Rehab	TBD	TBD
Maintenance Facilities/Storage Yards	**FY**	**Cost ($M)**
Expand Broad Run Yard/Haymarket Yard[4]	FY2020	$7.2-$20.7
Expand Crossroads Yard	FY2020	$20.7
Expand Midday Storage (Long Range)	FY2020	$40.0
Heavy Maintenance Repair Facility	FY2013-2017	$35.0
Passenger Facilities- Stations	**FY**	**Cost ($M)**
Alexandria Station Improvements	Long Range	$10.4
Cherry Hill Station - New Station[5]	Long Range	$9.9 to $40.1
Crystal City Station Improvements	Long Range	$62.1
L'Enfant Station Improvements	Long Range	$82.8
Suburban Station Platform Improvements[6]	FY2025	$101.2
Washington Union Station Improvements	Long Range	$10.4
Passenger Facilities - Parking	**FY**	**Cost ($M)**
Broad Run Station Parking	TBD	$21.4
Systemwide Station Parking Expansion[7]	FY2025	$48.6
Other Operational Improvements	**FY**	**Cost ($M)**
Fare Collection System	FY2013	$4.9
Positive Train Control System	TBD	$6.0
Total Estimated Long Range Needs		**$956.4-$1,028.7**

Notes:

1. Costs do not include a Haymarket/B Line storage yard, shown under Maintenance Facilities/Storage Yards, or additional rolling stock required to operate the service, shown under Rolling Stock.

2. FY17 is the initial year for the 10 year overhaul; total costs for all 71 cars estimated at $12.8M

3. Total cost for 50 railcars ($43.7M funded)

4. Since the specific location and size of additional Manassas Line yard facilities is not known, this cost estimate includes a range of costs from a low option to supplement Broad Run storage with a yard in the Haymarket area at $7.2 M to full expansion at Broad Run at $20.7M.

5. The estimated cost for the Cherry Hill station platform and parking is $9.9M (single platform + 500 parking spaces) to $40.1M (dual platform + 1200 parking spaces). VRE has not tracked cost in its CIP since the station is proffered by the developer.

6. The following funds have been allocated by NVTA for platform improvements FY12-17) but are not included in VRE CIP: Rolling Rd platform extension $2M federal FY12; Lorton platform extension + 2nd platform $10.7M federal FY10-17; Rippon platform extension + 2nd platform $6.1M federal FY15-17, $4.8 unfunded

7. $48.6 is total system parking expansion less $1.2M Brooke, $1M Leeland and $21.4M Broad Run.
All three projects are funded with regional CMAQ/RSTP and are not included in VRE CIP.

5.0 Operations Plan

While Chapter 4 identified unconstrained service and facility needs for the VRE Commuter Rail Network, this chapter identifies the cost-feasible transit service improvements that are recommended for inclusion in the TDP time period (FY 2013 through FY 2018). The VRE commuter rail system is generally in a capital replacement, upgrade and expansion mode in response to its continued success. As a result, proposed operating enhancements are limited within the six-year timeframe of this TDP. Recommended service improvements presented in this chapter are financially constrained, based on anticipated funding availability during the TDP time period. Chapter 6 details the TDP Capital Improvement Plan and Chapter 7 establishes the Financial Plan for the VRE Six-Year TDP.

5.1 Existing VRE Operations

In order to understand future operating plans needs it is first important to understand existing operations deficiencies. VRE operates a total of 32 trains each weekday (30 revenue trains and 2 non-revenue trains), primarily inbound to Washington, DC during the morning peak period and outbound from Washington in the afternoon peak, requiring 12 different equipment sets of varying length. Tables 5-1 and 5-2 depict service trip departures and train consist sizing (passenger cars per train) and recent passenger utilization (VRE June 2011 Ridership) for the weekday operating schedule for the Fredericksburg and Manassas Lines. The length of these train consists are configured to provide the required capacity to meet VRE's average daily seat occupancy and safety measures (measures noted in Chapter 2). VRE's ridership has increased steadily, with an increase of almost 23 percent in total annual ridership in the past five years. Train occupancy is approaching or exceeding capacity on morning and evening trips on both the Manassas line and Fredericksburg line.

As of June 2011, The Fredericksburg Line is experiencing the greatest capacity constraints with two AM and three PM trains operating at over 100% capacity for average ridership days and four AM and four PM trains that operate over 100% capacity under maximum ridership demand days. These train occupancy rates suggest the need to expand some of the six-car consist trains to eight-car trains. Specifically, the northbound AM departures at 5:40 a.m. (train #304) and at 6:30 a.m. (train #308) have average ridership that exceeds capacity and would be candidates for expansion to eight cars. Additionally, Southbound PM departures at 3:35 p.m. (train #303), at 4:10 p.m. (train #305) and at 5:15 p.m. (train #309) have average ridership that exceeds capacity and would be candidates for expansion to eight cars. While not over capacity, it is important to note that the 5:15 a.m. northbound departure (train #302) would also be a beneficiary to the proposed consist expansion as southbound train #303 is operated by the same trainset.

The opportunity also exists to expand the first and last northbound AM trains on the Fredericksburg Line (trains #300 and #312) from five and four cars, respectively, to six cars each. While those trains and their southbound PM counterparts (trains #313 and #301) are not over capacity, the expansions would provide additional capacity for riders who may choose to shift from a more crowded train as well as align all VRE consists at either six or eight cars in length. Adding seats to existing trains is the most cost-effective means of expanding system capacity.

The Manassas Line does not exhibit as many capacity exceptions, however the Northbound AM departure at 7:20 a.m. (train #330) and the Southbound PM departure at 3:45 p.m. (train #327) have average ridership that exceeds capacity and would be candidates for expansion to eight cars.

Table 5-1
VRE Train Consist Sizing & Utilization for Fredericksburg Line (June 2011)

Time Period	Train #	Departure Time	Rail Cars and Seats/Train	June 2011 Ridership (Avg./Max.)	Train Occupancy (Avg./Max.)
AM Northbound	300	5:05	5 (645 seats)	601 / 658	93% / 102%
	302	5:15	6 (798 seats)	661 / 789	83% / 99%
	304	5:40	6 (819 seats)	919 / 951	112% / 116%
	306	6:05	8 (1,107 seats)	867 / 1,178	78% / 106%
	308	6:30	6 (819 seats)	903 / 1,103	110% / 135%
	310	7:15	6 (873 seats)	629 / 759	72% / 87%
	312	7:40	4 (522 seats)	429 / 585	82% / 112%
PM Southbound	301	12:55	4 (522 seats)	194 / 370	37% / 71%
	303	3:35	6 (798 seats)	1,138 / 1,414	143% / 177%
	305	4:10	6 (819 seats)	995 / 1,080	121% / 132%
	307	4:40	8 (1,107 seats)	991 / 1,309	90% / 118%
	309	5:15	6 (819 seats)	922 / 1,041	113% / 127%
	311	6:00	6 (873 seats)	586 / 718	67% / 82%
	313	6:40	5 (645 seats)	237 / 385	37% / 60%

Table 5-2
VRE Train Consist Sizing & Utilization for Manassas Line (June 2011)

Time Period	Train #	Departure Time	Rail Cars and Seats/Train	June 2011 Ridership (Avg./Max.)	Train Occupancy (Avg./Max.)
AM Northbound	322	5:05	6 (819 seats)	551 / 734	67% / 90%
	324	5:45	6 (873 seats)	736 / 853	84% / 98%
	326	6:15	8 (1,095 seats)	868 / 1,013	79% / 93%
	328	6:40	8 (1,107 seats)	1,051 / 1,209	95% / 109%
	330	7:20	6 (819 seats)	885 / 956	108% / 1117%
	332	7:50	6 (819 seats)	651 / 780	79% / 95%
PM Northbound	336	2:45	8 (1,107 seats)	11 / 21	1% / 1%
	338	5:10	6 (819 seats)	7 / 8	1% / 1%
AM Southbound	321	6:25	6 (819 seats)	4 / 10	1% / 1%
PM Southbound	325	1:15	8 (1,107 seats)	200 / 351	18% / 32%
	327	3:45	6 (819 seats)	917 / 1,025	112% / 134%
	329	4:25	8 (1,107 seats)	1,023 / 1,224	92% / 111%
	331	5:05	8 (1,095 seats)	952 / 1,213	87% / 111%
	333	5:30	6 (819 seats)	649 / 769	79% / 94%
	335	6:10	6 (873 seats)	461 / 585	53% / 67%
	337	6:50	6 (819 seats)	177 / 209	22% / 26%

5.2 Transit Service Initiative Recommendations

The transit service improvements identified in this "TDP Operations Plan" are designed to support the goals and performance measures put forth in Chapter 2 of this TDP. Service improvements are minimal as the focus of investment is heavily oriented towards capital in the six year timeframe of this TDP. Nevertheless, VRE has identified three service improvements, 1) extension of service a little later on the Manassas Line with a connecting bus service on the Fredericksburg Line, 2) extension of the Fredericksburg Line to Spotsylvania County, and 3) train consist size adjustments to provide additional capacity on existing service trips. Implementation of the last two items on this list are unknown at this time and are dependent on funding availability and advancement of the facilities required to implement these service improvements. These improvements are currently listed as "Unknown Implementation Year"; they are, however, anticipated to occur within the timeframe of this TDP. As details are confirmed, these operating improvement plans will be assigned to a specific year and noted in future TDP annual updates.

The following sections list proposed initiatives by projected year of implementation.

FY 2013 Transit Service Initiatives

None

FY 2014 Transit Service Initiatives

None

FY 2015 Transit Service Initiatives

Additional Southbound Early Evening Trip – An early evening trip leaving Union Station between 7:10 and 7:40 p.m. is being planned for July 2014. The train would operate southbound service to all Manassas Line stops. However, at Backlick Station, passengers bound for destinations further south on the Fredericksburg Line would be able to board a bus which would complete their trip. All Fredericksburg Line stops south of Backlick Station would be served by the bus. An additional trainset is required to operate the service. For positioning purposes, this trainset would likely be dispatched from Broad Run Yard in the late afternoon and operate in non-revenue service to Union Station. Operating costs associated with this additional trainset include: fuel, crew and railroad access fees paid to Norfolk-Southern and CSX. The gross annual cost for the additional southbound early evening Manassas Line trip is projected to be $1,170,000 ($2011). The operating cost for the Fredericksburg Line bus bridge is projected to be $200,000 annually ($2011).

FY 2016 Transit Service Initiatives

None

FY 2017 Transit Service Initiatives

None

FY 2018 Transit Service Initiatives

None

Unknown Implementation Year

Spotsylvania County Extension – Construction of a third track between the Hamilton and Crossroads interlocking is currently in final design with construction planned for FY13. This completion of the third track project will allow for the construction and operation of a station in the vicinity of Mills Avenue (US 17) near the Crossroads Maintenance Yard in Spotsylvania County. While the third track is expected to be completed within FY13, it is unknown when Spotsylvania County will build the station and associated parking. Once the station is brought online, operating costs will have minimal impact on the current Fredericksburg Line costs, if the consist configuration currently operated by VRE is retained, as all trains currently travel past the proposed station in non-revenue service between Crossroads Yard and Fredericksburg Station. If VRE ridership continues to increase prior to the opening of the Spotsylvania station, there is a concern that new riders boarding at the station would consume any available on-board capacity, resulting in standing room conditions for riders boarding at mid-line stations (i.e., Quantico, Rippon, Woodbridge). When the Spotsylvania station is completed and ready to begin revenue service, VRE capacity will be reviewed to determine the potential impact of the new station and whether any service improvements are warranted to support the new station.

With the implementation date uncertain, dependent on the construction of Crossroads Station and parking, it is important that all stakeholders are cognizant of the potential for this station to come to fruition during the TDP's six-year time horizon.

Train Consist Expansion / Capacity Increase – Continued evaluation of capacity to demand to determine appropriate expansion of train consist sizing to meet increasing demand. Possible train expansion based on June 2011 ridership data are noted above. The primary operating cost impact associated with expanding existing six car consists to eight cars is the additional crew cost as a third conductor would be required at an estimated annual cost of $200,000 per train ($2011). Fuel costs would also increase slightly, due to the longer/heavier equipment load.

6.0 Capital Improvement Program

This chapter of the TDP describes capital improvement programs required to carry out the operations and services set forth in the TDP service and facility recommendations presented in Chapter 4. VRE TDP Capital Improvement Plan (VRE TDP CIP) recommendations for FY2013 through FY2018 are consistent with the VRE Long Range FY2012-2018 Capital Plan, the outcome of the VRE annual budget development process that identifies operating and capital projects over a six year period, and the Virginia Department of Rail and Public Transportation Six-Year Improvement Program (SYIP). Capital improvement projects presented in this program are categorized into four types:

1. Rolling stock (fleet) replacement/rehabilitation and expansion
2. Network expansion and track infrastructure
3. Maintenance facilities / storage yards improvements
4. Station /platform improvements

The proposed implementation schedule of the VRE TDP CIP is summarized below, with specifics discussed in more detail in subsequent sections. The identified priority capital improvements are financially feasible within the six year timeframe of the TDP. Chapter 4 of this TDP identifies a list of unconstrained capital investment projects for VRE, including long range projects that are beyond the horizon year of this six-year TDP. Recommendations for the TDP are identified by fiscal year below under each type of capital improvement. All cost estimates are in 2011 dollar figures. It should be noted that annual expenditures of $50,000 or less are excluded from the list.

VRE TDP FY2013-FY2018 Capital Improvement Plan:

FY 2013:

- Rolling Stock – initial 15 car purchase, $5.5 million (Total estimated project cost: $60.1 million for 21 cars, including $22.5 million allocated prior to FY2013.).
- Third Track, Hamilton to Crossroads (Spotsylvania County) - $8.2 million (Total estimated project cost: $20.3 million, including $12.1 million allocated prior to FY2013.) – project to be completed in FY2013.
- Heavy Maintenance Repair Facility - $100,000 (Total estimated project cost: $35.0 million).
- Midday Storage, Washington Union Terminal/Washington, DC - $500,000 for the L'Enfant station track project (Total estimated project cost: $40.0 million) – L'Enfant track project to be completed in FY2013.
- Fare Collection System - $1.8 million (Total estimated project cost: $4.9 million, including $3.1 million allocated prior to FY2013) – project to be completed in FY2013.
- Facilities Infrastructure Renewal - $500,000.

FY 2014:

- Rolling Stock – initial 15 car purchase, $6.8 million (Total estimated project cost: $60.1 million, including $22.5 million allocated prior to FY2013).
- Heavy Maintenance Repair Facility - $1.1 million (Total estimated project cost: $35.0 million).
- Facilities Infrastructure Renewal - $500,000.

FY 2015:

- Rolling Stock – initial 15 car purchase, $4.8 million (Total estimated project cost: $60.1 million, including $22.5 million allocated prior to FY2013.).
- Heavy Maintenance Repair Facility - $3.5 million (Total estimated project cost: $35.0 million).
- Facilities Infrastructure Renewal - $100,000.

FY 2016:

- Rolling Stock – additional 6 railcars: $0.8 million (Total estimated project cost: $60.1 million, including $22.5 million allocated prior to FY2013).
- Heavy Maintenance Repair Facility - $7.4 million (Total estimated project cost: $35.0 million).
- Facilities Infrastructure Renewal - $200,000.

FY 2017:

- Rolling Stock – additional 6 railcars: $1.7 million (Total estimated project cost: $60.1 million, including $22.5 million allocated prior to FY2013).
- 10-Year Rail truck Overhaul - $1.5 million (Total estimated project cost: $12.8 million).
- Heavy Maintenance Repair Facility - $5.1 million (Total estimated project cost: $35.0 million).

FY 2018:

- Rolling Stock – additional 6 railcars: $1.6 million (Total estimated project cost: $60.1 million, including $22.5 million allocated prior to FY2013).
- 10-Year Rail truck Overhaul - $6.4 million (Total estimated project cost: $12.8 million).
- Facilities Infrastructure Renewal - $300,000.

FY 2013-2018:

- Rolling Stock – additional 21 railcars: $21.2 million (Total estimated project cost: $60.1 million, including $22.5 million allocated prior to FY2013).
- Third Track, Hamilton to Crossroads (Spotsylvania County) - $8.2 million (Total estimated project cost: $20.3 million, including $12.1 million allocated prior to FY2013).
- Heavy Maintenance Repair Facility - $17.2 million (Total estimated project cost: $35.0 million).
- 10-Year Rail truck Overhaul - $7.9 million (Total estimated project cost: $12.8 million).
- Midday Storage, Washington Union Terminal/Washington, DC - $500,000 (Total estimated project cost: $40.0 million).
- Fare Collection System - $1.8 million (Total estimated project cost: $4.9 million, including $3.1 million allocated prior to FY2013).
- Facilities Infrastructure Renewal - $1.6 million.

6.1 Rolling Stock Replacement and Expansion Program

This section identifies existing rolling stock replacement and expansion policies and the proposed rolling stock replacement/rehabilitation and fleet expansion schedule for FY2013 through FY2018. The existing rolling stock replacement and expansion policies are outlined in VRE's *Fleet Management Plan*. Its latest edition, dated June 2011, outlines the practices and procedures by which the agency established its revenue fleet size requirements and operational spare ratio, and system expansion and the resultant fleet expansion requirements based on projected ridership growth. *The Fleet Management Plan* is reviewed and revised as part of the VRE Strategic Plan and whenever fleet changes might be deemed necessary. The policies outlined in the plan adhere to Federal Transit Administration (FTA) requirements. The 2011 edition of the *Fleet Management Plan* includes fleet requirements through FY2018, which corresponds to the agency's budget and capital improvement cycles and is the final year of this TDP.

The VRE TDP CIP rolling stock replacement/rehabilitation/expansion schedule includes the following elements (also shown in Table 6-1 and 6-2):

- Rolling stock replacement and expansion: As VRE's fleet ages, continuous investment in life-cycle maintenance, and ultimately replacement vehicles, is a necessary capital investment. Since full-day fleet utilization is challenging given the VRE's focus on meeting peak demand loads, the recommended rolling stock replacement and expansion approach focuses on identification of the need to replace and rehabilitate existing rail trucks and passenger coaches, and quantification of the rolling stock expansion needs where appropriate.

  The total project cost for the 21 coaches included in the six-year CIP is $60.1 million, and the funded amount for the 21 cars is $43.7 million, including funding allocated prior to FY2013. The funding plan includes $3.6 million allocated for the Railroad Rehabilitation & Improvement Financing (RRIF) Loan Program. Rolling stock funding for 15 fleet replacement passenger coaches has been programmed for FY2013-15 at a total cost of $17.1 million, with $22.5 million allocated prior to FY2013. Funding of $4.1 million for an additional six passenger coaches has been programmed for FY2016-18.

  The procurement of up to 50 additional coaches was authorized in May 2011 – full funding for all 50 coaches needed to meet long-term service needs has not been identified. The total project cost for the additional 50 rolling stock/coaches is estimated at $145 million.

- 10-Year Railtruck Overhaul: the 71 Sumitomo passenger coaches are reaching the 10-year rehabilitation threshold at the end of the CIP period. The rehabilitation is scheduled to begin in FY2017. The total cost of the rehabilitation project is estimated at $12.8 million with FY2013-18 funded total of $7.9 million.

- Rehabilitation of the Legacy Gallery coaches: this project includes responding to requests for minor upgrades and safety mandates from the Federal Railroad Administration (FRA), repair and maintenance of rolling stock systems such as heating or air conditioning systems, and Legacy gallery car rehabilitation, should full funding of the additional rolling stock/coach replacement project be deferred. If such purchase is deferred, VRE will need to rebuild the existing 20

Pullman "Legacy Gallery" passenger coaches. The costs and funding sources for this project have not yet been identified.

Table 6-1

Projected Rolling Stock Replacement/Rehabilitation/Expansion Schedule: FY2013-2018

Equipment Type	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Locomotives:						
Locomotives in Service	12	12	13	13	13	13
Protect Locomotives	3	3	3	3	3	3
Spares	5	5	4	4	4	4
Total Locomotive Fleet	**20**	**20**	**20**	**20**	**20**	**20**
Passenger Coaches:						
Coaches in Service	75	75	79	79	79	79
Spares	16	16	7	7	7	7
Total Coach Fleet	**91**	**91**	**86**	**86**	**86**	**86**

Source: Fleet Management Plan

Assumptions:

-Two locomotives and six coaches are out of service at any one time for regular servicing/maintenance

-The procurement of up to 50 additional coaches was authorized in May 2011 – the table assumes purchase of 15 of the 50 coaches and disposal of the 20 Legacy Gallery coaches.

Table 6-2

Projected Rolling Stock Replacement/Rehabilitation/Expansion Cost: FY2013-2018 (in millions)

Capital Project	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2013-2018
Rolling Stock:							
Rolling Stock 15 railcars [1]	$5.5	$6.8	$4.8				$17.1
Rolling Stock – 6 additional railcars				$0.8	$1.7	$1.6	$4.1
10-year Railtruck Overhaul	*	*	*	*	$1.5	$6.4	$7.9
Legacy Gallery Car Rehab[2]	*	*	*	*	*	*	-
Total Cost	***$5.5***	***$6.8***	***$4.8***	***$0.8***	***$3.2***	***$8.08***	***$29.1***

Source: Fleet Management Plan; VRE Capital Costs Investment Strategy

Notes:

[1] Excludes $22.5 million programmed for rolling stock in FY2012 and earlier years. Total cost for 21 coaches = $60.1 million; $60.1 in Rolling Stock equates to 21 railcars (approx. $2.9 million each). Rolling Stock FY2013-2015 total $17.1 million for 15 railcars, including $3.6 million in RRIF. Rolling Stock FY2016-2018 total $4.1 for 6 railcars. Total project cost (for 50 coaches) is $145 million.

[2] Project would only be needed if funding for the 21 new coaches is deferred.

*$50,000 or less annually

Projects are shown at 100% cost; federal reimbursement is 80%, unless otherwise noted.

Estimated project cost includes prior year funding for construction as well as planning/design.

6.2 Network Expansion and Track infrastructure

This section describes network expansion capital projects and track expansion projects identified for the TDP timeframe, as shown in Table 6-3. They include one third-track expansion project (described in more detail in Chapter 4):

- Third Track, Hamilton to Crossroads: approximately 2.5 miles of third main track on the Fredericksburg Line between the Hamilton and Crossroads interlockings for service extension to Spotsylvania County. The project is in final design and is scheduled for construction in FY2012 and FY2013 at a total cost of $20.3 million, with $8.2 million programmed for FY2013, with $4.0 in federal funding and $4.2 million in state and local funding. Prior to FY2013, $5.9 million in federal funding and $6.2 million in state / local funding is programmed, for a total of $12.1 million.

Table 6-3

Projected Network Expansion and Track Infrastructure Projects: FY2013-2018 (in millions)

Capital Project	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2013-2018
Third Track, Hamilton to Crossroads (Spotsylvania): Federal	$4.0						$4.0
Third Track, Hamilton to Crossroads (Spotsylvania): State/Local	$4.2						$4.2
Total Cost[1]	***$8.2***						***$8.2***

Source: VRE Capital Costs Investment Strategy

[1] Excludes $5.9 million in federal funding and $6.2 million in state / local funding programmed prior to FY2013 (total of $12.1 million). Total project cost: $20.3 million.

Projects are shown at 100% cost; federal reimbursement is 80%, unless otherwise noted.

Estimated project cost includes prior year funding for construction as well as planning/design.

6.3 Maintenance and Storage Yard Facility Improvements

Storage yard and maintenance facility improvements (shown in Table 6-4) include heavy maintenance repair facility and midday storage short-term solution (described in more detail in Chapter 4):

- Heavy Maintenance Repair Facility: as noted in Chapter 4, VRE needs to establish its own heavy maintenance repair facility, to allow the agency to control and conduct all maintenance functions independently. The total cost for this facility is estimated at $35.0 million, with $17.2 million is programmed for FYs 2013 through 2017.
- Midday storage - Washington Union Terminal/Washington, DC: this TDP includes a short-term solution to the midday storage shortage need that faces VRE at Amtrak's Washington Union Terminal (WUT) yards. The L'Enfant storage track will accommodate up to two trainsets for mid-day storage and is addressed in this TDP. The design and construction of switch and signal improvements to make the track operational is underway, at a total programmed cost of $500,000 in FY2013. A long-term solution to address the midday storage need has an estimated $40.0 million price tag and is not funded.

Table 6-4

Projected Maintenance and Storage Yard Facility Projects: FY2013-2018 (in millions)

Capital Project	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2013-2018
Heavy Maintenance Repair Facility	$0.1	$1.1	$3.5	$7.4	$5.1		$17.2
Midday Storage (L'Enfant Station Track)	$0.5						$0.5
Total Cost	***$0.6***	***$1.1***	***$3.5***	***$7.4***	***$5.1***		***$17.7***

Source: VRE Capital Costs Investment Strategy

[1] Estimated total long-term project cost: $40.0 million.

Projects are shown at 100% cost; federal reimbursement is 80%, unless otherwise noted.

Estimated project cost includes prior year funding for construction as well as planning/design.

6.4 Station / Platform Capital Improvements

In addition to network expansion, and facility, track, and rolling stock improvements, VRE requires station / platform capital investment to improve operations (shown in Table 6-5). These projects include installation of a new Fare Collection System and Facilities Infrastructure Renewal activities (described in detail in Chapter 4):

- Fare Collection System: the TDP recommends an upgrade from current ticket vending machines to modern equipment that would facilitate reciprocal use between VRE and other transit services and providers in the region (such as WMATA SmarTrip Cards). The total cost for this capital improvement is estimated at $4.9 million, with $1.8 in funding programmed in FY2013 (in addition to $3.1 million allocated for the project prior to FY2013).
- Facilities Infrastructure Renewal: as VRE's stations age, they have needs for periodic repairs and/or maintenance, ranging from minor repairs to major facility rehabilitation. This project includes station painting, windscreen installation, and elevator, roof and stair repairs at various stations. The total cost for this capital improvement is estimated at $1.6 million.

Table 6-5
Projected Station / Platform Capital Projects: FY2013-2018 (in millions)

Capital Project	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2013-2018
Fare Collection System[1]	$1.8						$1.8
Facilities Infrastructure Renewal	$0.5	$0.5	$0.1	$0.2	*	$0.3	$1.6
Total Cost	***$2.3***	***$0.5***	***$0.1***	***$0.2***	*****	***$0.3***	***$3.4***

Source: VRE Capital Costs Investment Strategy
[1] Excludes $3.1 million programmed prior to FY2013. Total project cost: $4.9 million.
*$50,000 or less annually
Projects are shown at 100% cost; federal reimbursement is 80%, unless otherwise noted.
Estimated project cost includes prior year funding for construction as well as planning/design.

In addition to the Fare Collection System and Facilities Infrastructure Renewal projects, the station / platform projects described below are identified in the *VRE Strategic Plan*. They are allocated through the Northern Virginia Transportation Authority (NVTA) regional Congestion Mitigation and Air Quality (CMAQ) program, as part of local jurisdiction regional allocations, rather than through the VRE budget. They are not included in the VRE budget until the time they are appropriated, at which time they are included as a separate "earmark" line item. Due to the nature of these projects they are not considered part of the official VRE TDP CIP but are listed here for informational purposes.

The VRE projects eligible for funding through the CMAQ program in the FY2013-18 timeframe include station / platform improvements at the following locations (as shown in Table 6-6):

- Broad Run parking deck. Meeting growing parking demand at the existing stations will continue to be one of VRE's most pressing capital needs. Broad Run parking deck is a structured parking

project with an estimated cost of $21.4 million, and CMAQ funded total of $4.8 (allocated entirely for FY2018). This project's funding prior to FY2013 totals $3.4 million.

- Lorton platform extension and second platform, with an estimated project cost of $10.6 million, and CMAQ funded total of $7.9 million (allocated from FY2013 through FY2017). This project's funding prior to FY2013 totals $2.7 million.
- Rippon platform extension and second platform, with an estimated project cost of $10.9 million, and CMAQ funded total of $6.1 million (allocated from FY2015 through FY2017).

With a total projected CMAQ funding of $18.8 million allocated to VRE in the FY2013-17 timeframe, VDOT provides the local matches for the CMAQ funds, provided that the projects utilize the funds within established timelines. For the CMAQ program, VRE has 12 months to obligate and 36 months to expend the funds.

Table 6-6

Projected Station / Platform CMAQ Funded Capital Projects: FY2013-2018 (in millions)

Capital Project	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2013-2018
VRE Broad Run Parking Deck	-	-	-	-	-	$4.8	$4.8
VRE Lorton Platforms	$2.0	$2.0	$1.5	$1.9	$0.5	-	$7.9
VRE Rippon Platforms	-	-	$2.1	$2.0	$2.0	-	$6.1
Total Cost	***$2.0***	***$2.0***	***$3.6***	***$3.9***	***$2.5***	***$4.8***	***$18.8***

Source: CMAQ/RSTP Allocations for Northern Virginia, FY2013-2018

6.5 Summary of Capital Improvement Program

Table 6-7 summarizes VRE TDP CIP. The cost estimates originate from the VRE annual budget and the Strategic Plan. The capital improvement projects that are programmed for FY2012 are excluded from the summary, as are projects scheduled for implementation beyond FY2018. Projects that are funded through the flowing grants: Enhancement Grant, Construction Management, Grant and Project Management, as well as Debt Service are excluded from the table due to their primarily administrative or operating purposes. Projects eligible for the CMAQ program funding are discussed in Section 6.4, but are not part of the VRE TDP CIP and not included in Table 6-7. All costs are in 2011 dollars.

As shown in Table 6-7, the FY2013-2018 funded VRE TDP CIP total is estimated at $58.4 million; this figure increases by $37.7 million to $96.1 million when capital improvement costs prior to FY2013 are included, and to $174.7 million when total estimated project cost, including unfunded projects or portions of thereof, are included.

As shown in Figure 6-1, 29 percent of the funded VRE TDP CIP is programmed for FY2013, followed by 15 percent in FY2014, and the remaining 56 percent allocated evenly from FY2015 through FY2018. When project costs prior to FY2013 are included, the respective percentage for each FY decreases since the allocated cost for VRE TDP CIP projects prior to FY2103 is estimated at $37.7 million (as shown in Figure 6-2). The VRE TDP CIP estimated year-by-year cost allocation is shown in Figure 6-3.

In terms of the estimated cost as a percentage of the total by project type, rolling stock replacement and expansion take the lead, with $51.6 million (54 percent) of the total, followed by network expansion and track infrastructure improvements at $20.3 million (21 percent), maintenance facilities / storage yards at $17.7 million (18 percent), and station / platform improvement at $6.5 million (7 percent), as shown in Figure 6-4. These cost estimates exclude capital expenditures prior to FY2013.

Table 6-7

Summary of VRE Capital Improvement Program: FY 2013-2018 (in $ millions)

VRE Six-Year TDP Capital Improvement Program Cost			Estimated Cost (in $ millions)						
	Estimated Project Cost	Prior to FY2013	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	Funded Total
Rolling Stock Replacement and Expansion:									
Rolling Stock 15 Railcars (Federal)	60.1	5.7	1.9	6.8	4.8				19.2
Rolling Stock 15 Railcars, Other Funding (State/Local)		16.8	3.6						20.4
Rolling Stock additional 6 Railcars						0.8	1.7	1.6	4.1
10 Year Railtruck Overhaul	12.8		*	*	*	*	1.5	6.4	7.9
Rolling Stock Mods (Legacy Car Rehab)	N/A		*	*	*	*	*	*	-
Total Rolling Stock Replacement and Expansion	**72.9**	**22.5**	**5.5**	**6.8**	**4.8**	**0.8**	**3.2**	**8.0**	**51.6**
Network Expansion and Track Infrastructure:									
Third Track, Spotsylvania: Federal	20.3	5.9	4.0						9.9
Third Track, Spotsylvania: Other funding: State/Local		6.2	4.2						10.4
Total Network Expansion and Track Infrastructure	**20.3**	**12.1**	**8.2**						**20.3**
Maintenance Facilities/Storage Yards:									
Heavy Maintenance Repair Facility	35.0		0.1	1.1	3.5	7.4	5.1		17.2
L-Enfant Station Midday Storage	40.0		0.5						0.5
Total Maintenance Facilities/Storage Yards	**75.0**		**0.6**	**1.1**	**3.5**	**7.4**	**5.1**		**17.7**
Station/Platform Improvements:									
Fare Collection System	4.9	3.1	1.8						4.9
Facilities Infrastructure Renewal	1.6		0.5	0.5	0.1	0.2	*	0.3	1.6
Subtotal Station/Platform Improvements	**6.5**	**3.1**	**2.3**	**0.5**	**0.1**	**0.2**		**0.3**	**6.5**
Total Estimated FY2013-18 Capital Improvement Program Cost	**174.7**	**37.7**	**16.6**	**8.4**	**8.4**	**8.4**	**8.3**	**8.3**	**96.1**

* $50k or less

Projects are shown at 100% cost; federal reimbursement is 80%, unless otherwise noted. Estimated project cost includes prior year funding for construction as well as planning/design.

$60.1 in Rolling Stock equates to 21 railcars (approx. $2.9 million each).

Rolling Stock FY2012-2015 total $39.6 million for 15 railcars, including $3.6 million in RRIF; FY2016-2018 total $4.1 million for 6 railcars.

Figure 6-1
VRE Capital Improvement Program: by Implementation Year (FY2013-18)

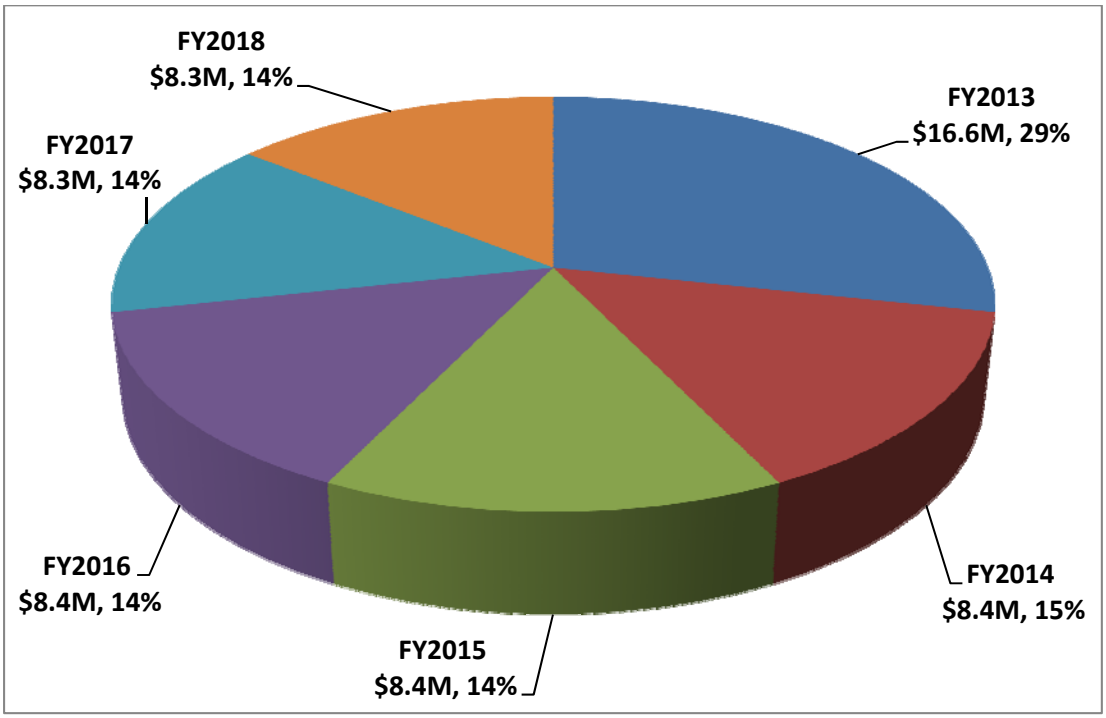
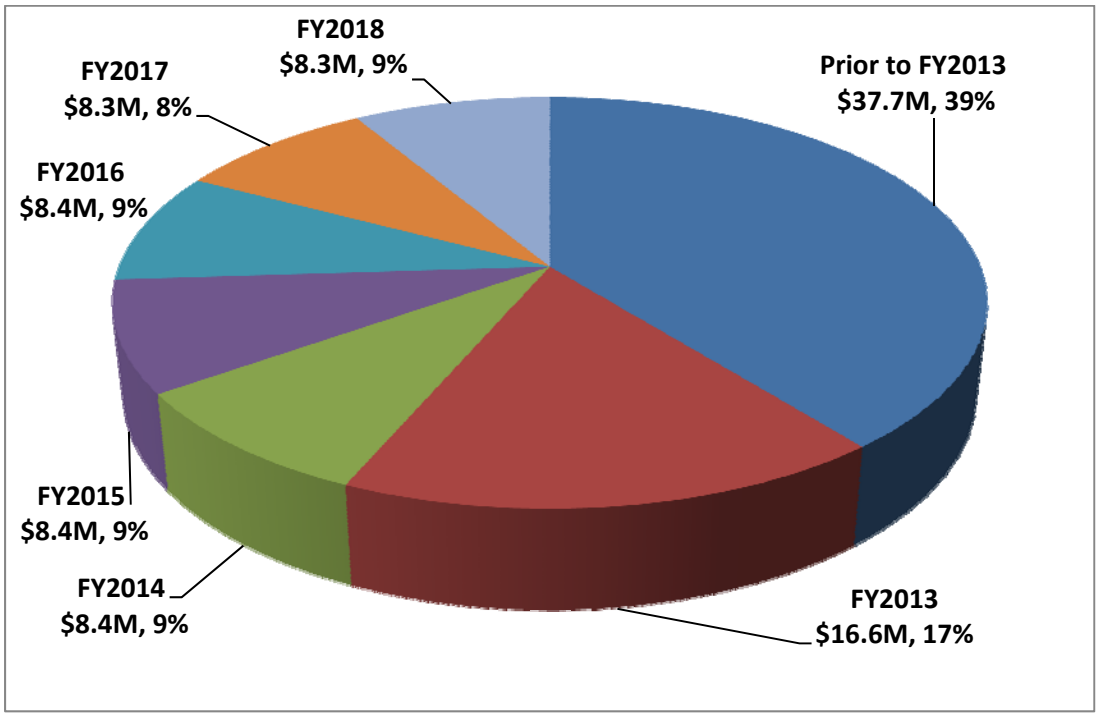


Figure 6-2
VRE Capital Improvement Program: by Implementation Year (FY2013-18)



Note: Includes project cost estimates prior to FY2013

Figure 6-3
VRE Capital Improvement Program: by Implementation Year (FY2013-18)

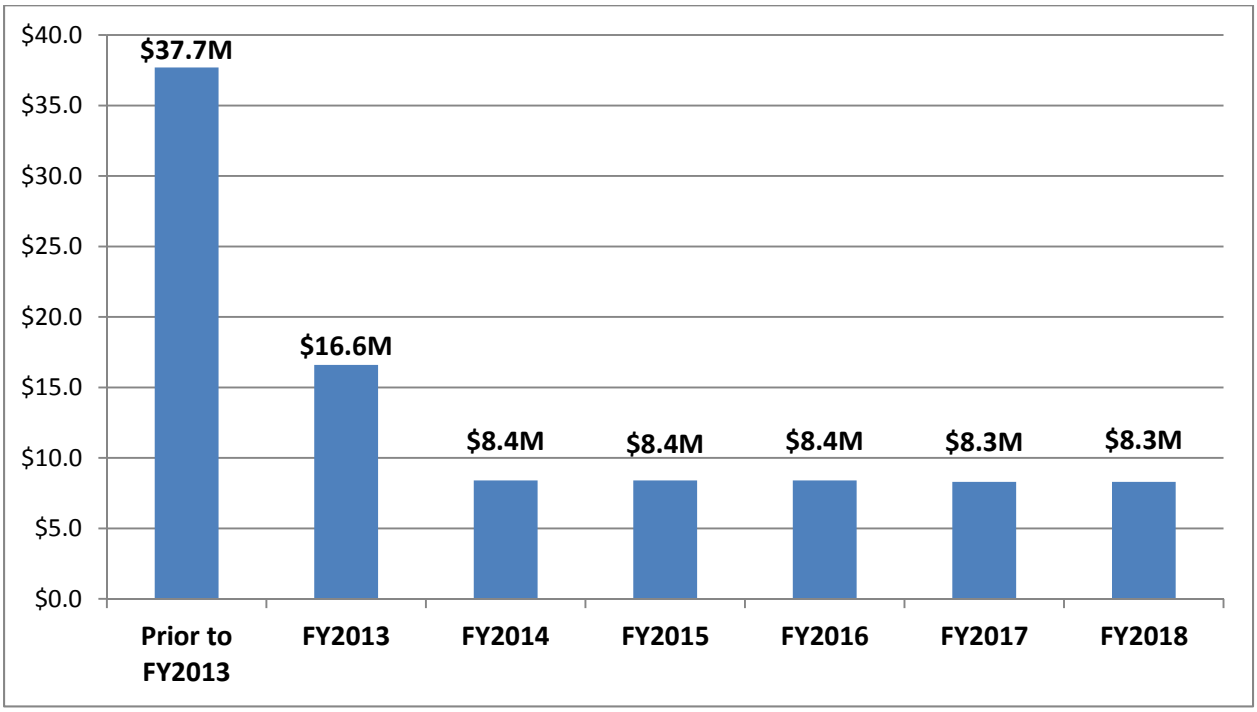
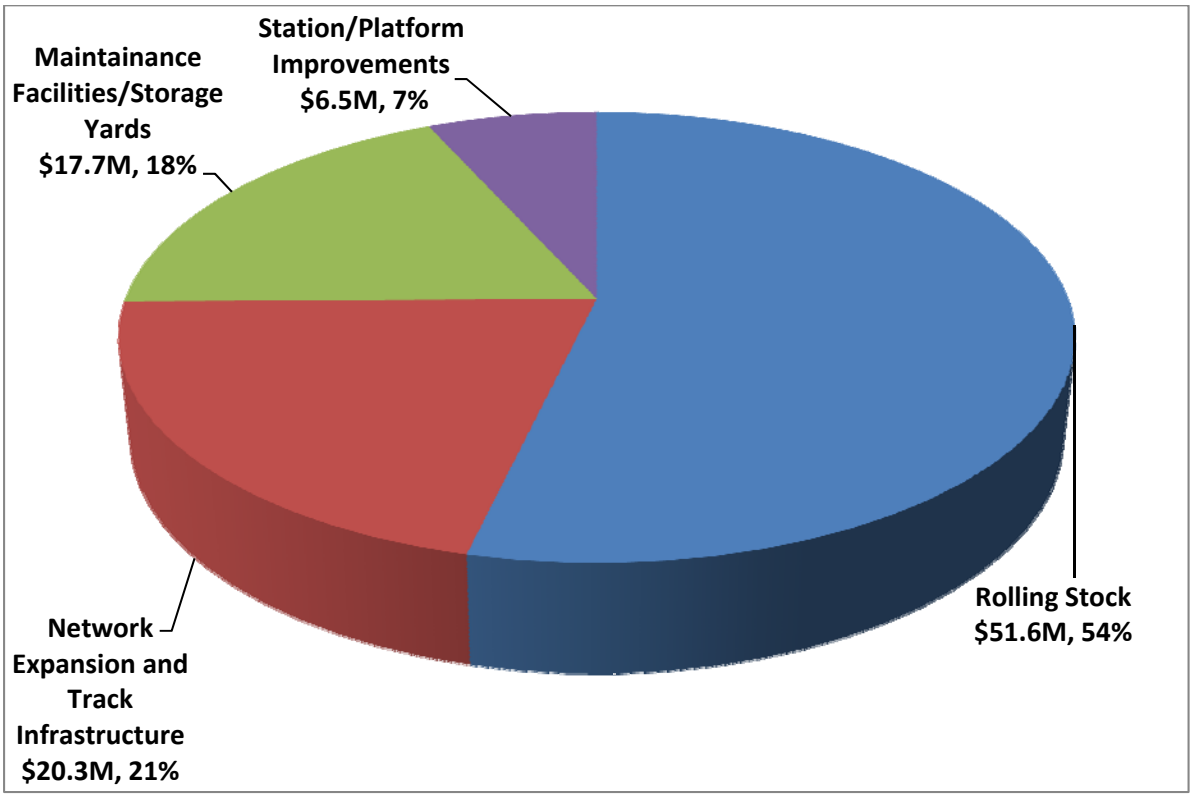


Figure 6-4
VRE Capital Improvement Program: by Project Type (FY2013-18)



7.0 FINANCIAL PLAN

The financial plan is a principal objective of the TDP. It is in this chapter that an agency demonstrates its ability to provide a sustainable level of transit service over the TDP time period, including the rehabilitation and replacement of capital assets. This chapter identifies potential funding sources, annual operating and maintenance costs, funding requirements and funding sources for annual operating and maintenance costs, and funding requirements and funding sources for capital assets. It is based upon the VRE Operating and Capital Budget and Capital Improvement Program (CIP) which is adopted annually by the VRE Operations Board. Assumptions underlying the budget, and the information presented in the TDP Financial Plan, are discussed in detail in the VRE FY 2013 budget documents as adopted on December 16, 2011.

7.1 Existing VRE Costs and Funding Sources

VRE's FY 2013 budget is $79.81 million for operating and $8.89 million for capital for a total of $88.7 million. This reflects a $1,016,386 increase when compared to the FY 2012 budget adopted in December 2010. Revenues for VRE are projected from the following sources:

Table 7-1
VRE FY 2013 Projected Revenue Sources

Revenue Source	FY 2013 Budget Amount	% of Total
Fare Revenue	$ 34,500,000	38.89%
Federal Subsidy	$ 24,719,436	27.87%
Jurisdictional Subsidy	$ 16,428,799	18.52%
State Subsidy	$ 12,868,026	14.51%
Miscellaneous Revenue	$ 126,000	0.14%
Interest Income	$ 60,300	0.07%
Total Revenue	**$ 88,702,561**	

Source: VRE FY13 Budget, December 1, 2011

As noted above, passenger fares are the highest revenue source at nearly 39%. This is followed by Federal Grants at almost 28% and Local jurisdictions' contributions for more than 18%. State Grants is the next largest source at more than 14%. The revenue sources are then rounded out by miscellaneous revenues (<1%) and interest income (<1%).

Some of the revenues from jurisdictional, State and Federal sources have been identified for specific capital projects; thus, they cannot be used for operating expenses. Table 7-2 identifies the operating and capital allocation between funding sources.

Table 7-2
VRE FY 2013 Revenue Sources and Allocation

Revenue Source	FY 2013 Operating Allocation	% of Total Source Allocation	FY 2013 Capital Allocation	% of Total Source Allocation	FY 2013 Total Allocation
Fare Revenue	$ 34,500,000	100.0%	$ -	0.0%	$ 34,500,000
Federal Subsidy	$ 17,609,036	71.2%	$ 7,110,400	28.8%	$ 24,719,436
Jurisdictional Subsidy	$ 15,808,999	96.2%	$ 619,800	3.8%	$ 16,428,799
State Subsidy	$ 11,710,226	91.0%	$ 1,157,800	9.0%	$ 12,868,026
Miscellaneous Revenue	$ 126,000	100.0%	$ -	0.0%	$ 126,000
Interest Income	$ 60,300	100.0%	$ -	0.0%	$ 60,300
Total Revenue	**$ 79,814,561**	**90.0%**	**$ 8,888,000**	**10.0%**	**$ 88,702,561**

Source: VRE FY13 Budget, December 1, 2011

Federal, State and jurisdictional subsidies are the only funding sources for capital expenditures. Of these, nearly 29% of Federal, 9% of State and 4% of jurisdictional contributions are dedicated to capital. The remaining revenues are dedicated to operating expenses. Of all revenues received, 90% are allocated to operating expenses with 10% of the total going toward capital projects.

7.2 Six-Year Financial Forecast (Operating & Maintenance)

During the six-year timeframe of this TDP, VRE anticipates two additional in-service trains to be added in FY 2015. As described in Chapters 4 and 5 of this TDP, this expansion will involve additional trips on the Manassas Line with a complementary bus bridge to complete corresponding trips on the Fredericksburg Line.

VRE presently uses distance-based zone fares ranging from $2.90 to $10.30 per trip. Fares are assumed to be reviewed and adjusted incrementally every two years throughout the TDP time period. Despite these programmed fare adjustments, ridership is still projected to increase on average 2.7% annually throughout the six-year TDP timeframe. Likewise, farebox revenues are expected to increase approximately 5% with the projected fare adjustments and ridership growth. Table 7-3 outlines the projected service levels from FY 2013 through FY 2018 including train counts, ridership and average fares.

Table 7-3
Projected Service Levels

Description	FY13	FY14	FY15	FY16	FY17	FY18
Number of Trains	32	32	34	34	34	34
Manassas Line	18	18	20	20	20	20
Fredericksburg Line	14	14	14	14	14	14
Average Daily Ridership	19,000	19,400	19,900	20,100	20,200	20,300
Average Fare Price	7.29	7.29	7.58	7.58	7.89	7.89
Potential Operating Ratio	76%	75%	76%	74%	75%	73%

Source: VRE FY13 Six-Year Financial Forecast, December 8, 2011

VRE's operating expenses are expected to increase in pace with inflation. However, the amounts dedicated to reserves, insurance and debt services drop significantly starting in FY 2014 and continue to drop in FY 2015. These reductions help offset the increases in general operating, operating contracts, fuel and track leases as shown in Table 7-4.

Table 7-4
Projected Operating Expenses

Description	FY13	FY14	FY15	FY16	FY17	FY18
Net Operating Expenses	$ 17,827,110	$ 18,202,418	$ 18,671,552	$ 18,859,206	$ 18,953,033	$ 19,046,860
Reserves and Insurance	$ 6,383,645	$ 4,856,255	$ 4,300,000	$ 4,500,000	$ 4,500,000	$ 4,500,000
Amtrak	$ 4,097,000	$ 4,342,820	$ 4,603,389	$ 4,879,593	$ 5,172,368	$ 5,482,710
Keolis	$ 18,008,591	$ 18,728,934	$ 20,119,253	$ 20,924,023	$ 21,760,984	$ 22,631,423
Fuel	$ 5,550,000	$ 5,883,000	$ 6,448,340	$ 6,835,241	$ 7,245,355	$ 7,680,077
Track Lease Expense	$ 14,000,000	$ 14,560,000	$ 15,529,288	$ 16,150,460	$ 16,796,478	$ 17,468,337
Debt Service	$ 13,898,215	$ 14,298,890	$ 7,388,972	$ 7,386,386	$ 7,383,800	$ 7,381,214
Other (Bad Debt/Admin)	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Total Operating Costs	**$ 79,814,561**	**$ 80,922,317**	**$ 77,110,795**	**$ 79,584,909**	**$ 81,862,019**	**$ 84,240,621**

Source: VRE FY13 Six-Year Financial Forecast, December 8, 2011

As mentioned earlier, fare revenues are expected to increase during the six-year TDP time period. During this time Federal Access Lease funding is also expected to increase by nearly 25%. On the other hand, State Capital Grants, which include debt service payments, are expected to decline by nearly two-thirds over the six-year timeframe. Other Federal Operating Revenues also see a modest decrease. The remaining funding sources are expected to remain at their 2013 levels as shown in Table 7-5. Note that any surplus operating revenues are assumed to be forwarded to fund capital projects.

Table 7-5
Projected Operating Revenues

Description	FY13	FY14	FY15	FY16	FY17	FY18
Fare Revenue	$ 34,500,000	$ 35,367,787	$ 37,730,501	$ 38,109,702	$ 39,831,275	$ 40,028,459
Interest Income	$ 60,300	$ 60,300	$ 60,300	$ 60,300	$ 60,300	$ 60,300
Other Income	$ 126,000	$ 126,000	$ 126,000	$ 126,000	$ 126,000	$ 126,000
State Operating Grant	$ 6,125,013	$ 6,125,013	$ 6,125,013	$ 6,125,013	$ 6,125,013	$ 6,125,013
State Capital Grant	$ 5,585,212	$ 4,504,396	$ 1,787,864	$ 1,836,664	$ 1,887,064	$ 1,939,064
Federal Grants:						
Access Lease Funding – SSTP	$ 11,200,000	$ 11,648,000	$ 12,423,431	$ 12,920,368	$ 13,437,183	$ 13,974,670
Federal Operating Funds (Debt service & loans)	$ 5,446,636	$ 5,766,636	$ 5,766,636	$ 5,766,636	$ 5,766,636	$ 5,766,636
Other Federal Revenues	$ 962,400	$ 952,776	$ 943,248	$ 933,816	$ 924,478	$ 915,233
Local Subsidy	$ 16,428,799	$ 16,428,799	$ 16,428,799	$ 16,428,799	$ 16,428,799	$ 16,428,799
Total Operating Revenues	**$ 80,434,360**	**$ 80,979,707**	**$ 81,391,792**	**$ 82,307,298**	**$ 84,586,748**	**$ 85,364,174**
Surplus to be used for Capital	*$ 619,799*	*$ 57,390*	*$ 4,280,997*	*$ 2,722,389*	*$ 2,724,729*	*$ 1,123,553*

Note: State Capital Grant include payments towards debt service.
Source: VRE FY13 Six-Year Financial Forecast, December 8, 2011

7.3 Six-Year Financial Forecast (Capital)

The base capital program as described in Chapter 6 of this TDP ranges between $8.4 and $8.9 million annually. It is assumed that Federal Grants will cover 80% of the cost of each capital project. The remaining match is expected to be paid through a combination of state and local funds as shown in Table 7-6.

In FY 2013, the base capital program is projected to be fully funded with no surplus or deficit as shown in Table 7-7. However, the FY 2014 capital program is short by approximately $0.75 million. This deficit is corrected in subsequent years with capital surpluses ranging from $0.25 million to $3.5 million per year.

Table 7-6
Projected Capital Program

Description	FY13	FY14	FY15	FY16	FY17	FY18
Capital Cost Base Program	**$ 8,888,000**	**$ 8,463,000**	**$ 8,430,000**	**$ 8,398,000**	**$ 8,366,000**	**$ 8,403,000**
Federal Grants:	80%	80%	80%	80%	80%	80%
Federal funding - 80% of base program	$ 7,110,400	$ 6,770,400	$ 6,744,000	$ 6,718,400	$ 6,692,800	$ 6,722,400
Matching Funds						
State Capital Grants - non-federal costs	$ 1,157,800	$ 871,520	$ 883,440	$ 899,040	$ 901,840	$ 801,200
Net local subsidy available for capital match	$ 619,800	$ 57,391	$ 4,280,996	$ 2,722,389	$ 2,724,728	$ 1,123,552
Total Sources of Funding for Capital Program	**$ 8,888,000**	**$ 7,699,311**	**$ 11,908,436**	**$ 10,339,829**	**$ 10,319,368**	**$ 8,647,152**

Source: VRE FY13 Six-Year Financial Forecast, December 8, 2011

Table 7-7
Deficit/Surplus Projection

Description	FY13	FY14	FY15	FY16	FY17	FY18
Additional required for operations/base program	$ -	$ (763,689)	$ 3,478,436	$ 1,941,829	$ 1,953,368	$ 244,152
Cumulative Total to Fully Fund Operations and Capital	$ -	$ (763,689)	$ 2,714,747	$ 4,656,576	$ 6,609,944	$ 6,854,097

Note: Negative variance is deficit, positive is surplus
Source: VRE FY13 Six-Year Financial Forecast, December 8, 2011

8.0 TDP MONITORING AND EVALUATION

This TDP has presented a comprehensive evaluation of the Virginia Railway Express service and cost characteristics. Key elements that have been addressed in this TDP include:

- An overview of VRE including its history, organizational and governing structure, existing service characteristics, vehicle fleet, facilities, stations and amenities, transit security program and public outreach efforts;
- Documentation of VRE goals, objectives and potential performance standards that are to guide further development of VRE services;
- A detailed evaluation of ridership and line performance, with identification of system strengths and weaknesses;
- A demographic analysis of population and employment within the VRE catchment area;
- A peer agency review that compares VRE service and financial characteristics to other similar-sized commuter rail systems;
- An inventory of station parking capacities and utilization rates;
- An inventory of revenue vehicles (locomotives and passenger coaches), capacities and utilization rates;
- Descriptions of potential service and capital improvements, for consideration in the TDP;
- Planned service improvements and capital improvements for inclusion in the TDP, identified by year of implementation/procurement; and
- Funding requirements and potential funding sources for recommended service improvements, vehicle purchases and other capital facility-related improvements.

This analysis has been based on an extensive analysis of VRE service that has included the following work efforts:

- Review of the VRE Strategic Plan and Capital Improvement Plan;
- Monthly and quarterly line-level ridership analysis using data provided by VRE;
- Review of Comprehensive Plans for VRE member jurisdictions as well as those in areas with potential future expansion;
- Detailed analysis of development patterns and trends, review of previous planning efforts and current operating policies, and consideration of local service requests; and
- Interviews and work sessions with VRE management.

This TDP reflects the continued efforts toward future service improvements for VRE. It will be important to coordinate closely with other transportation and land use planning efforts, to continue to monitor service performance, and to provide DRPT with annual updates regarding implementation of TDP service and facility improvements. Implementation of service recommendations presented in this TDP will require close coordination with Northern Virginia Transportation Commission, Potomac and Rappahannock Transportation Commission and the respective member jurisdictions.

8.1 Service Performance Monitoring

VRE has been very proactive in the area of service performance monitoring and makes every effort to make this process as transparent as possible. The following performance measures are updated monthly and made available through the VRE website (www.vre.org).

- Monthly Ridership
- Parking Lot Utilization
- On-Time Performance
- Ridership Growth
- Line Capacity

In addition, VRE has an extensive public outreach program as outlined in Chapter 1 that provides ample opportunities for customers to express their satisfaction as well as identify areas for improvement.

8.2 Annual TDP Monitoring

The DRPT will require submittal of an annual letter that provides updates to the contents of this TDP. Recommended contents of this "TDP Update" letter include:

- A summary of ridership trends for the past 12 months.
- A description of TDP goals and objectives that have been advanced over the past 12 months.
- A list of improvements (service and facility) that have been implemented in the past 12 months, including identification of those that were noted in this TDP.
- An update to the TDP's list of recommended service and facility improvements (e.g., identify service improvements that are being shifted to a new year, being eliminated, and/or being added). This update of recommended improvements should be extended one more fiscal year to maintain a six-year planning period.
- A summary of current year costs and funding sources.
- Updates to the financial plan tables presented in Chapter 7 of this TDP. These tables should be extended one more fiscal year to maintain a six-year planning period.

VIRGINIA RAILWAY EXPRESS

FLEET MANAGEMENT PLAN

June 2011

Revision History

REVISION	EFFECTIVE DATE	DESCRIPTION OF CHANGES
	July 5, 2005	
A	May 17, 2006	Revised thru pg 8
B	March 2007	Various revisions to reflect current operations and future (2008-2013) service and ridership projections
C	June 30, 2008	Various revisions to reflect current operations and future (2009-2014) service and ridership projections
D	May 9, 2011	Various revisions to reflect current operations, fleet composition, and future (2013-2018) service and ridership projections
E	June 20, 2011	Various revisions to reflect current operations and fleet composition

2

VIRGINIA RAILWAY EXPRESS

Fleet Management Plan

This document is a statement of the practices and procedures by which the Virginia Railway Express (VRE) has established its revenue fleet size requirements and operational spares ratio. It includes a discussion of projected ridership growth and system expansion and the resultant fleet requirements.

The VRE has been in operation since 1992. As VRE entered its second decade of operations, it placed a strong focus on fleet renewal and keeping its older equipment operational. Between 2007 and 2010, the benefits of those fleet renewal efforts were realized and VRE took delivery of 71 new passenger coaches. It continues with the addition of new locomotives to the VRE fleet. A total of 20 locomotives will be added to the VRE fleet, to replace the existing equipment, by September 2011.

This plan is a dynamic document and is reviewed and revised periodically as part of the VRE Strategic Plan and, as needed, in response to major changes in operations or fleet inventory. It has been prepared pursuant to Federal Transit Administration (FTA) Circulars 5010.1D and 9030.1D and includes VRE's current fleet requirements as well as those through fiscal year (FY) 2018, which corresponds to VRE's budget and capital improvement plan cycles.

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1.0 VRE SYSTEM OVERVIEW

The Virginia Railway Express (VRE) operates 30 revenue trains a day (plus 2 non-revenue trains) on a 90-mile system connecting Washington, DC with Fredericksburg and Manassas, Virginia as a tenant on the existing railroad infrastructure of CSX Transportation (CSXT), Norfolk Southern (NS), and Amtrak. The VRE schedule as of May 2011 is shown in Figure 1.1. VRE contracts with Keolis Rail Services America to operate and maintain the trains. VRE trains are dispatched by the host railroad (e.g., CSXT, NS or Amtrak) and supported by a real time GPS-based train tracking system, all which is monitored by VRE and Keolis staff at the central communications center at VRE headquarters.

The Fredericksburg Line runs from Fredericksburg, VA north to Washington, DC, roughly in the same corridor as Interstate 95 (I-95) and U.S. Route 1. The Manassas Line runs east from Manassas, VA to Washington, DC, following a route roughly parallel to Interstate 66 (I-66). The two lines converge just south of Alexandria, VA and share stops in Alexandria, Crystal City, L'Enfant Plaza, with a final stop at Union Station in Washington, DC.

There are 18 stations in the system, located in eight Virginia political jurisdictions plus the District of Columbia, as shown in Figure 1.2. Union Station, Alexandria, Quantico, Fredericksburg and Manassas stations pre-date the establishment of VRE and are owned by others; the remaining VRE stations are all owned by VRE and were built for commuter rail use. Five of the VRE stations are adjacent to Washington Metropolitan Area Transit Authority (WMATA) Metrorail stations: Union Station, L'Enfant, Crystal City, Alexandria/King Street, and Franconia-Springfield. Union Station, Alexandria, L'Enfant, Woodbridge, Quantico, Fredericksburg, Burke Centre and Manassas are joint use stations with Amtrak (Washington Union Station is also served by MARC commuter trains).

VRE owns rail yards at the two southern termini of its system – Broad Run in Prince William County and Crossroads in Spotsylvania County just south of Fredericksburg – for overnight storage, inspection and maintenance of equipment. It also leases storage space from Amtrak for mid-day storage at the Ivy City Coach Yards located north of Union Station in Washington, D.C.

The VRE's principal market is journey-to-work or commuter travel from the northern Virginia suburbs to the Washington-Arlington-Alexandria urban core. Some tourist and "day-tripper" passengers also ride the trains. VRE service is concentrated during weekday rush hours and is strongly focused on the peak direction of travel – inbound towards Washington in the morning and outbound in the afternoon. Ridership is relatively evenly split between the two branch lines, with the Fredericksburg Line carrying slightly more riders. Annual ridership increased nearly 100% between fiscal years (FY) 2000-2010 to a high of 4 million trips in FY2010. Ridership has continued to grow throughout FY2011, achieving record high ridership levels, and average daily ridership (ADR) is 18,125 trips/day as of April 2011.

Figure 1.1: VRE Schedule

Fredericksburg Line

NORTH

Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	300	302 S	304	306 S	308	*AMT 86	310 S	312 S	*AMT 174	*AMT 84	*AMT 94
Fredericksburg	5:05a	5:15a	5:40a	6:05a	6:30a	7:00a	7:15a	7:40a	8:00a	8:58a	12:04p
Leeland Road	5:12	5:22	5:47	6:12	6:37	--	7:22	7:47	--	--	--
Brooke	5:18	5:28	5:53	6:18	6:43	--	7:28	7:53	--	--	--
Quantico	--	5:40	6:05	6:30	6:55	7:19	7:40	8:05	8:21	9:17	12:24
Rippon	--	5:49	6:14	6:39	7:04	--	7:49	8:14	--	--	--
Woodbridge	5:40	5:56	6:21	6:46	7:11	7:30	7:56	8:20	8:33	--	--
Lorton	--	6:03	6:28	6:53	7:18	--	8:03	8:27	--	--	--
Franconia/Spfld (L)	--	6:11	6:36	7:00	7:26	--	8:11	8:35	--	--	--
Alexandria (L)	6:07	6:24	6:49	7:12	7:38	7:47	8:23	8:47	9:02	9:50	1:00
Crystal City (L)	6:15	6:34	6:58	7:21	7:48	--	8:32	8:55	--	--	--
L'Enfant (L)	6:23	6:44	7:06	7:29	7:56	8:03	8:40	9:02	9:20	--	--
Union Station	6:29a	6:52a	7:14a	7:37a	8:04a	8:15a	8:47a	9:09a	9:30a	10:15	1:35p

SOUTH

Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	301 S	*AMT 95	303 S	*AMT 125	305	307 S	309	*AMT 93/83	311 S	313	*AMT 85/87
Union Station	12:55p	2:30p	3:35p	3:55p	4:10p	4:40p	5:15p	5:50p	6:00p	6:40p	7:00p
L'Enfant	1:01	--	3:43	4:01	4:18	4:48	5:23	5:56	6:08	6:47	--
Crystal City	1:07	--	3:50	--	4:25	4:55	5:30	--	6:15	6:53	--
Alexandria	1:15	2:45	3:57	4:13	4:32	5:03	5:38	6:07	6:22	7:00	7:15
Franconia/Spfld	1:25	--	4:08	--	4:43	5:14	5:49	--	6:33	7:11	--
Lorton	1:32	--	4:15	--	4:50	5:21	5:56	--	6:40	7:18	--
Woodbridge	1:40	3:03	4:23	4:32	4:57	5:29	6:03	--	6:47	7:25	7:32
Rippon	1:45	--	4:28	-	5:02	5:35	6:09	--	6:52	7:30	--
Quantico	1:54	3:17	4:38	4:47	5:12	5:45	6:19	6:36	7:02	7:39	7:46
Brooke (L)	2:12	--	4:52	--	5:25	6:00	6:32	--	7:15	7:52	--
Leeland Road (L)	2:20	--	5:01	--	5:34	6:11	6:40	--	7:23	8:00	--
Fredericksburg	2:26p	3:39p	5:09p	5:18p	5:42p	6:19p	6:47p	6:58p	7:30p	8:08p	8:10p

(S) = Special schedules for holidays and snow days
(L) = Indicates train may depart when station work is completed regardless of scheduled time.
(*AMT) = Restrictions apply. See Amtrak Cross-Honor Agreement

Figure 1.1: VRE Schedule (continued)

Manassas Line

NORTH

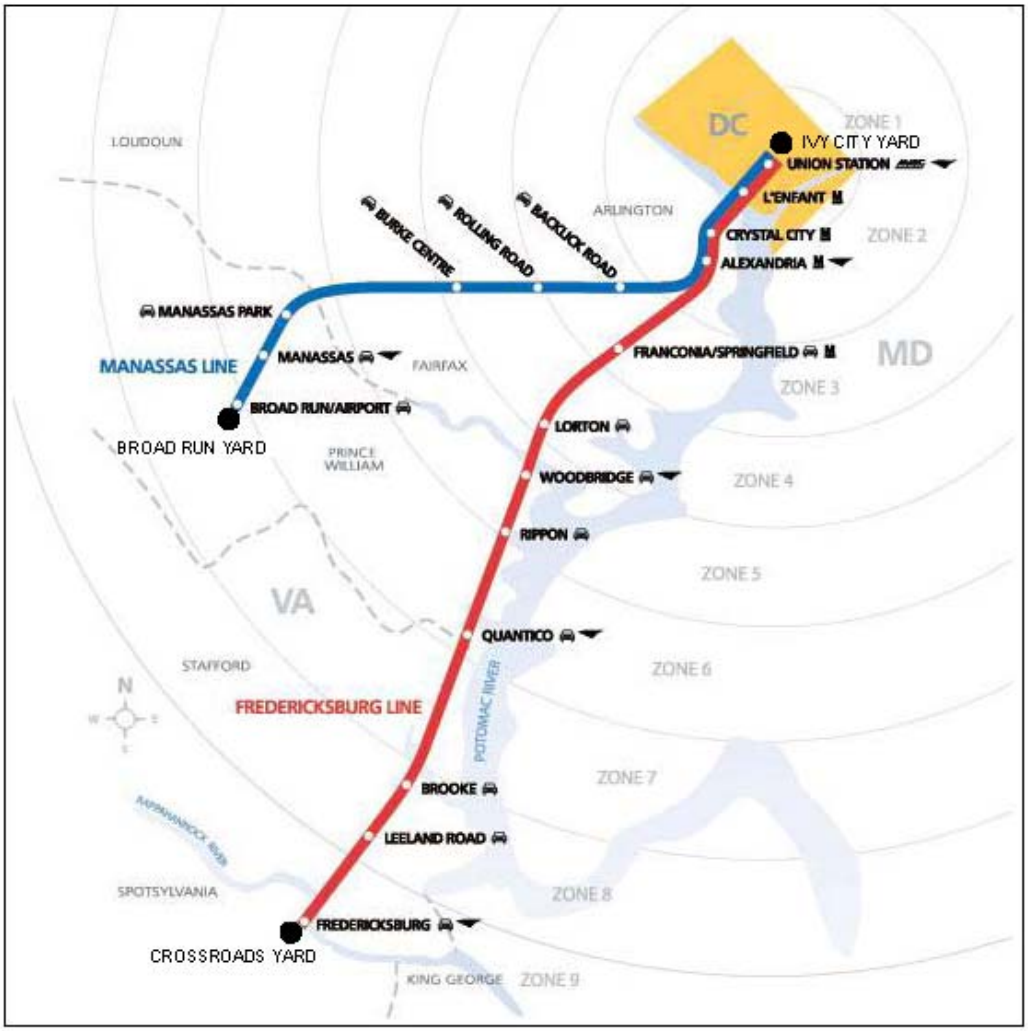
Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	322	324 S	326	328 S	330 S	332 S	*AMT 176	336	338
Broad Run Airport	5:05a	5:45a	6:15a	6:40a	7:20a	7:50a	--	2:45p	5:10p
Manassas	5:11	5:51	6:21	6:47	7:26	7:56	**10:19a**	2:51	5:16
Manassas Park	5:16	5:56	6:26	6:53	7:31	8:01	--	2:56	--
Burke Centre	5:28	6:08	6:38	7:05	7:43	8:13	**10:36**	3:08	--
Rolling Road	5:33	6:13	6:43	7:11	7:48	8:18	--	--	--
Backlick Road	5:40	6:20	6:50	7:18	7:55	8:25	--	--	--
Alexandria (L)	5:52	6:34	7:02	7:28	8:08	8:37	**11:05**	3:30	5:52
Crystal City (L)	6:01	6:43	7:13	7:41	8:18	8:48	--	--	--
L'Enfant (L)	6:10	6:53	7:23	7:49	8:26	8:58	**11:14**	--	--
Union Station	6:18a	7:00a	7:30a	7:55a	8:35a	9:05a	**11:20a**	3:55p	6:25p

SOUTH

Days of Operation	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F	M-F
	321	325 S	327 S	329	*AMT 171	331 S	333	335 S	337
Union Station	6:25a	1:15p	3:45p	4:25p	**4:50p**	5:05p	5:30p	6:10p	6:50p
L'Enfant	--	1:21	3:51	4:31	**4:56**	5:11	5:36	6:16	6:56
Crystal City	--	1:26	3:57	4:37	--	5:17	5:42	6:21	7:01
Alexandria	6:42	1:33	4:04	4:44	**5:11**	5:25	5:49	6:28	7:08
Backlick Road	--	1:44	4:15	4:55	--	5:37	6:00	6:39	7:19
Rolling Road (L)	--	1:51	4:22	5:02	--	5:46	6:07	6:46	7:26
Burke Centre (L)	-	1:56	4:27	5:07	**5:30**	5:51	6:13	6:52	7:31
Manassas Park (L)	--	2:11	4:42	5:22	--	6:07	6:28	7:07	7:46
Manassas (L)	7:30	2:19	4:50	5:30	**5:49**	6:15	6:36	7:15	7:54
Broad Run Airport (L)	7:40a	2:28p	5:00p	5:39p	--	6:24p	6:45p	7:24p	8:03p

(S) = Special schedules for holidays and snow days
(L) = Indicates train may depart when station work is completed regardless of scheduled time.
(*AMT) = Restrictions apply. See Amtrak Cross-Honor Agreement

Figure 1.2: VRE System Map



8

2.0 VRE REVENUE FLEET AND SUPPORTING FACILITIES

The VRE revenue fleet is currently in flux; as of April 2011 it includes 128 vehicles. VRE is midway through the procurement of 20 new MP36 locomotives. By September 2011, VRE will have all the new MP36 locomotives in service and all existing locomotives will be retired. VRE is also in the process of retiring some of its oldest passenger coaches. The resulting fleet size once the current vehicle procurement and sales are complete is 111 vehicles.

2.1 Locomotive Fleet

The VRE locomotive fleet is shown in Table 2.1. VRE leases the three F40 locomotives; it owns the remaining locomotives. All VRE locomotives provide electricity to the trains for lighting, HVAC, automated doors, and communications. Except where noted in this plan, any VRE locomotive can operate with any combination of VRE trailer and cab cars. Combining different types of cars, however, requires special communication connections between cars and/or cars and locomotives so car-types are seldom mixed.

Table 2.1: VRE Locomotive Fleet

Manufacturer	Model	Built/Rebuilt	HP	Road Nos.	Total
GM-EMD-MK	GP39-2C	1968/1991	2300	V01-V10	10
GM-EMD-MK	GP40-2C	1968/1994-95	3000	V20-V24	5
GM-EMD	F40PH	1972/1985	3600	V34 –V36	3
MotivePower	MP36PH-3CT2R	2010-2011	3600	V50-V58	9

Note: Locomotive inventory as of April 2011.

Once all 20 MP36 locomotives are received, the GP39/40 and F40 locomotives will be retired from service. VRE has found buyers for 13 of the locomotives and is actively seeking buyers for the remaining locomotives.

Locomotives V01 through V10 were the original motive power for VRE and are currently being phased out as new MP36 locomotives are brought on-line. These locomotives have 12 cylinder GM 645E3 prime mover engines and separate head-end power (HEP) diesel generators for lighting, HVAC, and communications throughout the train. They were manufactured in 1968 and rebuilt in 1991 prior to being put into VRE service.

Locomotives V20 through V24 were also manufactured in 1968. They were rebuilt in the early 1990's and are in better overall condition than the GP39s. These locomotives have 12 cylinder GM 645E3 prime mover engines and separate HEP diesel generators for lighting, HVAC, and communications throughout the train.

The HEP gen-sets on all of the GP-39 and GP-40 locomotives are all 425 KW and were rebuilt in 2004. An exhaust stack replacement program for all HEP's was completed in 2005.

Locomotives V34 through V36 were manufactured in 1972 and rebuilt in 1985. VRE acquired them in 2006 and 2007. All F-40 locomotives have power take-off HEP's which generate more capacity than the small block, 800KW diesel HEP's that are in the GP-39's and GP-40's, but still only produce approximately 2300 HP to the rail for pulling power, so are little different than the GP-39s in that regard.

In order to accommodate growing ridership, VRE train consists (i.e., the rolling stock which makes up a train) will need to be lengthened to six to eight cars. The MP36 locomotives will accommodate train consists up to 10 cars in length. The HEP's on all GP-type locomotives are at their maximum capacity when asked to supply 480V electricity to an 8-car set.

2.2 Passenger Coach Fleet

VRE currently owns 101 bi-level passenger coaches, shown in Table 2.2.

Between 2007 and 2010 VRE took delivery of 71 new coaches purchased from the Sumitomo Corporation of America. The Sumitomo coaches, referred to as "Gallery IV" coaches, are supplemented by 20 Pullman gallery-style coaches acquired from Chicago's Metra commuter rail system between 2001 and 2004. The majority of the Pullman coaches, referred to as "Legacy Gallery" coaches, were given a mechanical and cosmetic overhaul prior to being put into VRE service.

The capacity of VRE's overnight storage facilities limits the number of passenger coaches that can be held in the VRE fleet. As such, VRE has sold 20 of its legacy Gallery coaches. The sale of an additional 10 legacy Gallery coaches is in the process of being finalized. VRE will continue to utilize the remaining 20 legacy Gallery coaches in service. The majority of those coaches are anticipated to be reliably serviceable through 2013.

Table 2.2: VRE Passenger Coach Fleet

Manufacturer	Trailer or Cab	Year Built/ Rebuilt	Seating Capacity	Boarding Level	VRE Nos.	Total
Sumitomo	Cab	2006-2007	123	Low platform only	V710-V730	21
Sumitomo	Trailer (w/ toilet)	2007-2008	132	Low platform only	V800-819	20
Sumitomo	Trailer (w/out toilet)	2007-2008	144	Low platform only	V850-V879	30
Pullman	Trailer	1956/2002-2003	150	Low platform only	V405, V408, V412-413, V415, V421-V430	15
Pullman	Trailer	1961-1968/ 1996-2006	150	Low platform only	V431-V440, V447, V449, V454-V456	15
Total						101

Note: Passenger coach inventory as of April 2011; includes 10 Pullman "legacy Gallery" coaches for which a sale is pending.

2.3 VRE Yards

VRE yards include the Broad Run and Crossroads facilities located at the end of the Manassas and Fredericksburg Lines respectively. Mid-day storage of VRE trains is located at Amtrak's Ivy City maintenance complex about a mile north of Washington Union Station, where VRE leases storage space.

Periodic inspections, preventative maintenance and minor repair of VRE locomotives are performed at the Broad Run and Crossroads yards. Those facilities cannot handle heavy repairs for locomotives. If needed, locomotives are sent to off-site facilities to complete the work.

Various contractors perform preventative maintenance, repairs and inspections of passenger coaches, overnight cleaning, fuel the locomotives, dump toilet retention tanks, and periodic exterior hand washing and detailed interior cleaning of all of VRE's fleet at the Broad Run and Crossroads yards. Light cleaning (e.g., trash removal) of the coaches is conducted at Ivy City between the morning and evening service peaks.

A service and inspection (S&I) building, including a maintenance pit, is located at both the Broad Run and Crossroads yards. A car wash is located at the Crossroads yard with additional storage tracks. A similar project is in design for the Broad Run yard. Although light to medium repairs and field modifications are performed on VRE's fleet, neither of these facilities is equipped for major overhaul or repair work.

2.3.1 VRE Coach Yard, Washington, DC

The VRE coach yard used for mid-day storage is located within Amtrak's Ivy City maintenance complex. The yard is a major locomotive shop and storage complex for Amtrak's intercity, long-distance and Acela train service; MARC commuter service; and VRE. Locomotives generally remain coupled to their train sets and receive inspections and servicing in the VRE layover yards. A stand-by or protect locomotive are also kept at Ivy City.

VRE currently operates 12 daily train consists made up of 12 locomotives and 75 passenger coaches (87 total units). The Ivy City coach yard used by VRE has a total capacity of 88 units (see Table 2.3). However, only 78 units are able to be stored under VRE's current consist configuration. VRE parks 11 train consists at Ivy City each weekday. The train consist used for Manassas Line Train 326 deadheads back to Broad Run from Union Station after its morning run where it is stored during the mid-day. In the afternoon the consist deadheads back to Union Station where it resumes evening service as Train 331.

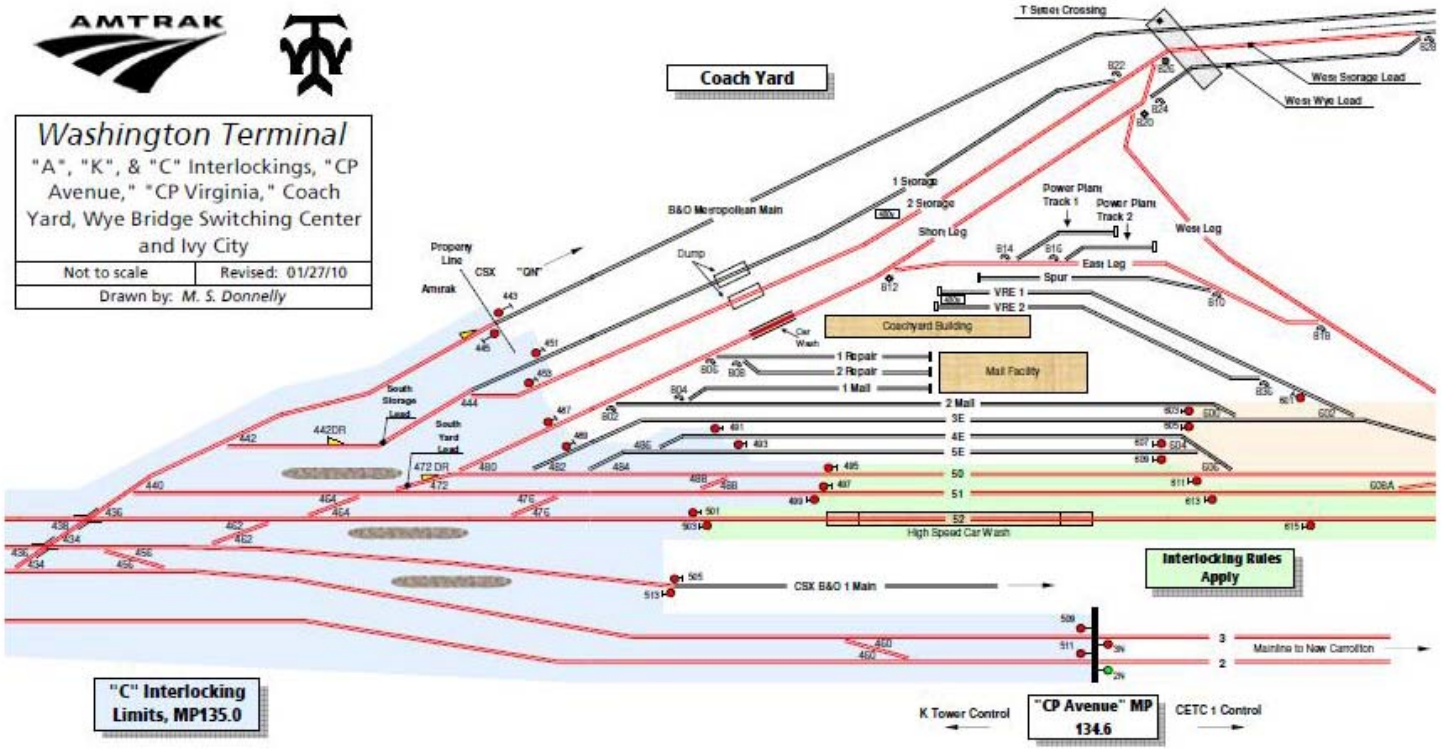
VRE has an agreement with CSXT to lease land within the railroad right-of-way north of the L'Enfant station for train storage and to provide for emergency evacuation of the District of Columbia, if necessary. When completed in late 2011, the L'Enfant storage track will accommodate up to 2 6-car VRE consists (up to 14 units).

Table 2.3: Ivy City Coach Yard Storage Capacity and Utilization

Track No.	Storage Capacity			Approximate Length (Feet)
	(Coaches)	(Locomotives)	(Total Units)	
VRE 1	6	1	7	580
VRE 2	6	1	7	580
1 Repair	4	1	5	410
2 Repair	4	1	5	420
1 Mail	6	1	7	600
2 Mail	12	2	14	1,235
VRE 3E	15	2	17	1,460
VRE 4E	11	2	13	1,125
VRE 5E	11	2	13	1,125
Totals	75	13	88	

Note: Storage configuration and track length from VRE Rail Operations Department.

Figure 2.1: Ivy City VRE Coach Yard



2.3.2 Broad Run Yard

The Broad Run yard is located adjacent to the Broad Run Station in Prince William County, Virginia. The Broad Run passenger station is located between the NS mainline switch and the yard and longer trains trail onto the yard lead track when stopped at the station.

The Broad Run yard consists of 7 stub-end tracks with crushed stone driveways between tracks 1-2, 3-4, 5-6, and 7-8 to allow fuel trucks to reach each locomotive and septic trucks to reach all cars, as shown in Figure 2.2. A 10,500 square foot service and inspection (S&I) building is located in the northwest corner of the yard. Track 2 extends into the building. Plans are underway to add a train washer on a dedicated track off the yard lead.

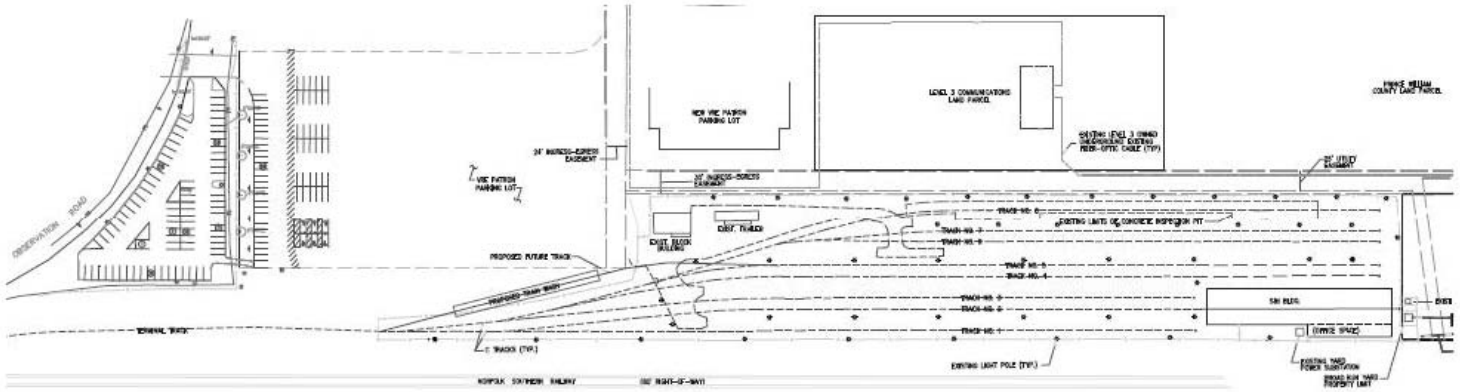
All tracks have 480-volt connections for layover power to the locomotive and train as well as drip pans at the end-of-track to catch spilled and dripping fuel and oil, which is channeled to an oil-water separator system. There is a six car inspection pit and four thirty-five ton car jacks on Track 8. There are fresh water stands throughout the yards. The yard also includes a permanent building and temporary trailer to house train crews and factory representatives for new equipment. A leased warehouse for spare coach parts and materials is located nearby, approximately a quarter mile from the Broad Run yard; however, plans are underway to relocate the warehouse to the Crossroads yard.

As of April 2011, five daily operating train sets layover each night at Broad Run plus spare cars that are ready for service and a protect locomotive. The typical layover configuration for operating train sets (locomotive + passenger coaches) is one train set per track. Storage capacity is 73 total units as of April 2011.

2.3.3 Crossroads Yard

The Crossroads yard is located in an industrial area approximately 6.4 miles south of the Fredericksburg station on the CSXT mainline. The yard includes 8 stub-end storage tracks (see Figure 2.3) with crushed stone driveways between the tracks for fueling locomotives and to allow septic trucks to reach all cars. A 10,700 square foot S&I building is located on Track 1, which extends through the building. A 3,600 square foot train washer is located at the western edge of the yard on Track 0, which bypasses the S&I building to connect with Track 1 to the south.

Figure 2.2: Broad Run Yard



VRE STORAGE CAPACITY (BROAD RUN YARD)	
TRACK NO.	TRACK LENGTH (LF)
TERMINAL	835
1	896
2	1303
3	911
4	1075
5	947
6	732
7	782
8	1287

PLAN

HORIZONTAL

SCALE IN FEET

LEGEND

- ℄ PROPOSED TRACK
- ℄ EXISTING TRACK
- EDGE OF PAVEMENT
- EDGE OF EASEMENT
- EDGE OF PROPERTY
- CHAIN LINK FENCE

VIRGINIA RAILWAY EXPRESS

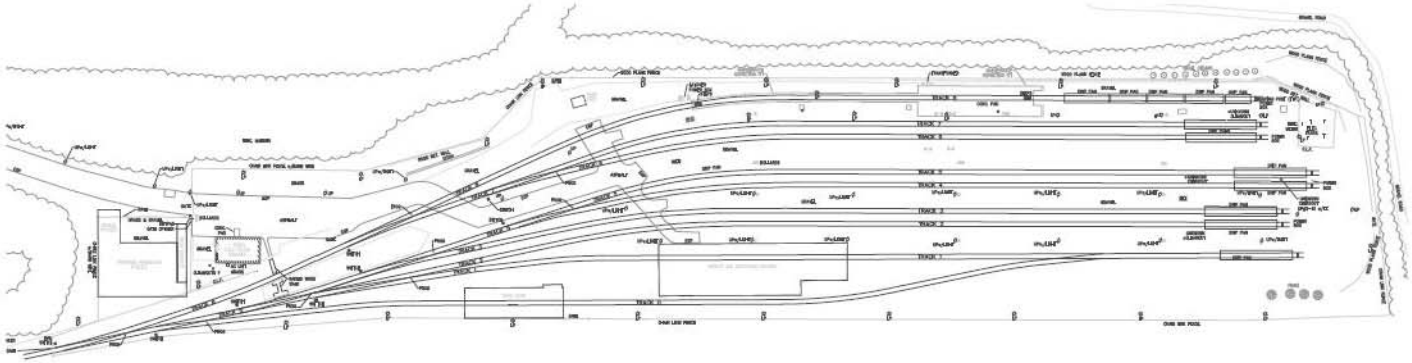
SCALE: AS SHOWN | DATE: APRIL 2010

APPENDIX 2

BROAD RUN YARD & TERMINAL TRACK

Note: Existing conditions as of September 2010

Figure 2.3: Crossroads Yard



PLAN

0 25' 50' 100'

SCALE IN FEET

VRE STORAGE CAPACITY (CROSSROADS YARD)	
TRACK NO.	TRACK LENGTH (LF)
0	1181
1	958
2	1051
3	916
4	790
5	1296
6	763
7	929
8	1327

VIRGINIA RAILWAY EXPRESS

SCALE: AS SHOWN | DATE: APRIL 2010

APPENDIX 2

CROSSROADS YARD

Note: Existing conditions as of September 2010.

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Similar to the Broad Run yard, all tracks have 480-volt connections for layover power and drip pans at the end-of-track connected to an oil-water separator system. There is a four-car inspection pit between the rails in track 8 and four car jacks that are used for 180 day car inspections. There are fresh water stands throughout the yard. The yard also includes a concrete block building that houses train crews and small mechanical and cleaning forces. Plans are underway to construct a 8,000 square foot warehouse for spare equipment parts and materials at the Crossroads yard. The warehouse will be located at the northern end of the yard and is expected to be completed by the end of 2011.

Currently, seven daily operating consists layover at Crossroads plus spare cars that are ready for service and a protect locomotive. Storage capacity is 81 total units as of April 2011.

3.0 OPERATING POLICY

The VRE is committed to providing a high quality transportation service that is safer than any alternative and that is so reliable that customers do not expect any possibility of failure. The trains are comfortable and clean. Speed and frequency are controlled by the host railroads, but VRE continually strives for higher on-time performance (OTP) and additional train slots to provide more service.

A VRE train consist operates in "push-pull" service with a cab car or coach at one end and a locomotive at the other end. Anywhere from three to seven trailer cars are located between the cab car and the locomotive. The cab cars are passenger coaches with an operator's cab located at one end, so that the train does not have to be turned around at each end of the line. Trailer cars are simply passenger coaches without operator's cabs. In actual operation, a cab car may be used as a trailer. It is also possible to place a locomotive at each end of the train when no cab cars are available.

The VRE schedules its train service to meet current inbound commuter demand with maximum practical use of its equipment fleet and mid-day layover capacity. Except for one turn on the Manassas line, the narrow demand window for northbound service does not allow for reverse moves so that a consist can make two inbound morning commuter runs. The same situation applies for southbound evening service. Reverse move trains and mid-day trains are very lightly patronized and there are no equipment ramifications for these trains. Due to space limitations at the Ivy City Coach Yard it is difficult to change the train make-up during the day to leave any coaches behind to save fuel or equipment wear-and-tear, so full consists are used for the off-peak and reverse trains, except when cabs or trailers are changed out for repairs.

VRE assigns coaches to trains to match seats with demand. Scheduled train consists vary from four to eight passenger coaches, depending on the expected passenger load (i.e., longer consists are used on those trains with the heaviest ridership). The official VRE load factor standard is that all VRE rolling-stock has been designed to accommodate up to 150% of full seating capacity, for peak operating times. While maximum load factors allow for up to 150% capacity, VRE strives to provide each rider a seat and minimize standees where possible.

It is VRE's goal to lengthen shorter consists currently in service to six cars. Having standard size consists will enable greater operational flexibility in assigning train sets from the yards and provide additional seating capacity as ridership grows. Mid-day storage constraints have prevented this from taking place; one 5-car and one 4-car consist remains in operation on the Fredericksburg Line.

4.0 PEAK REQUIREMENTS

VRE service operates Monday through Friday and is concentrated on the peak period/peak direction of travel; 25 of the 30 daily VRE revenue trains run in the peak period/peak direction. There are seven trains on the Fredericksburg line and six trains on the Manassas line in the morning peak, between 5:00 and 9:30 AM, and six return trains on each line in the evening, between 3:30 and 8:15 PM. There is one reverse peak Manassas Line train in the morning peak and one in the evening peak. There are three mid-day revenue trains; one southbound train on the Fredericksburg Line and one train in each direction on the Manassas Line. There is also one roundtrip non-revenue train on the Manassas Line to store a train set at the Broad Run yard during the day.

VRE peak headways are generally between 30 and 45 minutes for each line. The amount of time between any two particular trains is based on how those trains fit into the overall schedule. In addition to commuter rail trains on each line, VRE shares the tracks with freight and Amtrak trains. VRE works with the railroads who own the tracks to find the best schedule possible.

VRE schedules peak service based upon the operating windows and slots allowed in the operating contract that exists between VRE and its host railroads and an analysis of train ridership. The operating contracts affect the ability of VRE to add service at will and/or expand its operating territory. Each VRE consist is made-up to provide enough seats to meet peak demand based on historical ridership.

The typical VRE consist assignment is indicated in Table 4.1. The typical assignments of equipment to trains plus typical spares and maintenance/servicing offsets are shown in Table 4.2.

Table 4.1: Typical Consist Assignments

Train Pair	Total Number of Seats	Midweek Ridership	Coach Assignment							
			1	2	3	4	5	6	7	8
Fredericksburg Line										
300/313	645	527/274	GC	G	G	G	G			
302/303	798	769/1049	GC	G	G	G	G	G		
304/309	819	910/1107	GC	G	G	G	G	G		
306/307	1095	939/1186	GC	G	G	G	G	G	G	G
308/305	819	941/1017	GC	G	G	G	G	G		
310/311	908	635/6112	GC	LG	LG	LG	LG	LG		
312/301	522	490/149	GC	G	G	G				
Manassas Line										
322/321/ 332/333	819	604/3/671/707	GC	G	G	G	G	G		
324/335	908	847/474	GC	LG	LG	LG	LG	LG		
326/323/ 320/331	1107	867/0/0/1015	GC	G	G	G	G	G	G	G
328/325/ 336/329	1107	1026/172/9/ 1107	GC	G	G	G	G	G	G	G
330/327/ 338/337	819	835/890/8/240	GC	G	G	G	G	G		

Legend: GC= Gallery IV cab; G= Gallery IV trailer; GP=Legacy Gallery coach
Note: Average mid-week ridership is for April 2011. Train consist lineup is as of May 2011. Trains 323/320 are non-revenue trains.

Table 4.2: Typical Daily Peak Equipment Utilization

Equipment	In Service	Protect Equipment	Spares	Total
Locomotives	12	3	5	20
Gallery IV Cab	15	2	4	21
Gallery IV/Legacy Coach	60		10	70
Total Units	87	5	19	111

Note: Equipment utilization assumes fleet consists of 20 MP36 locomotives and excludes the 10 legacy gallery coaches for which a sale is pending.

5.0 MAINTENANCE AND OVERHAUL PROGRAM

VRE's maintenance contractor, Keolis, handles nearly all of the planning for equipment maintenance, following VRE's normal maintenance policies. Keolis schedules maintenance to correspond with its Rolling Stock Maintenance program which addresses federal inspection requirements and manufacturer's warranty requirements. The federal schedules and minimum inspections, servicing, and replacements are contained in the Code of Federal Regulations (CFR) Part 49, Sections 229 (Locomotives), 238 (Passenger Equipment) and 239 (Passenger Trains).

5.1 Daily Inspections and Servicing

Locomotives and coaches must receive daily attention. Parts 229 and 238 require a daily safety inspection, which is performed by Keolis during layovers at Broad Run and Crossroads. Brake tests are performed before leaving any terminal and a general inspection is made of every train each day, inside and out.

Keolis provides a thorough cleaning of each coach interior during each weekday and. Locomotives are fueled at Broad Run and Crossroads as needed. All equipment is scheduled for the carwash at Crossroads at least once every two weeks and all equipment is power washed during the winter months. Each coach is receives a heavy cleaning twice per year. .

All of these daily inspections and servicing activities are performed during layovers and do not affect equipment availability.

5.2 Locomotive and Passenger Coach Scheduled Maintenance

Locomotives must have preventative maintenance and inspections performed every 92 days, with every fourth such inspection ("annual") being more comprehensive as well as a four-year air brake maintenance. All regular maintenance of locomotives not federally mandated (e.g., oil and filter changes, replace fuel injectors, etc.) is performed at these 92-day intervals. The 92-day inspections take approximately 2 working days and annual inspections take 5 working days. Thus each locomotive is scheduled to be out of service for 11 working days per year. At this time, these working days are Monday through Friday, not including holidays.

A requirement for passenger coaches in Section 238 is the "184 Day Inspection". There are also annual and four-year inspection requirements. This is analogous to the 92-day locomotive inspection. All coach inspections and repairs are performed by Keolis. Inspections are performed on full train sets on weekends, when possible, to avoid the need for removing any cars from service. If a repair need is discovered that cannot be performed with the coach in line, the affected coach is removed from service and, if a replacement coach is available, it is added back into the consist. If a spare coach is not immediately available, the consist is shorted until the spare can be injected into the consist. Other spontaneous repairs are made during layovers and the affected coach continues to protect the schedule.

5.3 Locomotive and Passenger Coach Overhauls

All Pullman gallery coaches were re-qualified between 2002 and 2005. Eighteen coaches that had 40 year old trucks went through a Level II truck rebuild program that included magna-fluxing and associated crack repairs. All other Pullman coaches received similar servicing no longer than 12 years ago. VRE anticipates replacing all Pullman gallery coaches by the end of 2013.

5.4 Maintenance Facilities

In order to create a more independent maintenance program, VRE added an S&I building, including a locomotive inspection pit, universal jacking pads and an overhead crane, at each Virginia yard capable of holding a locomotive and one car. Since June 2010, all maintenance and running repairs have been performed at VRE maintenance facilities.

6.0 SYSTEM AND SERVICE EXPANSIONS

6.1 Existing Ridership

Most VRE passengers are "choice" riders, meaning that they use the service because they choose to rather than because they must. Ridership has grown steadily from an opening level of 2,500 daily riders in July 1992 to 18,125 daily riders as of April 2011.

Historical growth in VRE riders has been driven by population growth, particularly at the outer edges of the VRE service area, and worsening traffic congestion in the I-95 and I-66 corridors leading to Washington, DC. Service has been expanded over time, as well, from an initial 16 trains per day to the current 30 revenue trains per day.

While a drop in ridership levels was experienced from 2005-2007, attributed primarily to a decline in on-time performance (OTP) due to ongoing railroad construction activities and the imposition of heat restrictions/slow orders in summer months, ridership levels began to rebound in late 2007. Cumulative year-to-date daily ridership as of April 2011 is 29% higher than in 2007. Factors contributing to the most recent growth spurt in VRE ridership include improvements in OTP and increasing gas prices. Traffic congestion on the principal highways serving Washington D.C. and surrounding business districts, suburban residential development and population growth in the suburban and exurban communities served by VRE, and the widespread use of the federal transit subsidy program (SmartBenefits) are also contributing factors to ridership growth.

6.2 Future Ridership

The VRE Strategic Plan, completed in 2004, documented the need for ongoing investment in the existing core VRE network and expansion beyond the current service boundary to accommodate anticipated regional growth and travel demand. The plan outlines varying scenarios for long-term VRE ridership based on historical ridership trends and the Metropolitan Washington Council of Governments (MWCOG) projections of future regional population and job growth, as shown in Table 6.1: Each scenario is also linked to varying levels of investment in the VRE core network and investment in system expansion.

Table 6.1: Projected VRE Ridership (ADR in Trips/Day)

Scenario	2010	2015	2020	2025
Low/Constrained	16,350	18,200	21,150	22,500
Medium/Targeted	19,900	24,000	26,500	29,000
High/Aggressive	21,700	27,800	31,300	34,900

6.3 System and Service Expansion

While the Strategic Plan ridership projections are based on market analysis of potential ridership growth if facilities and equipment are available, in practice future service levels are determined by political decisions by the VRE governing boards, the Commonwealth of Virginia, and the federal government, who determine funding levels for operations and capital improvements, and business decisions by the railroads that own the VRE routes, who control access.

The VRE service area is defined in the VRE Master Agreement between the Northern Virginia Transportation Commission (NVTC) and the Potomac and Rappahannock Transportation Commission (PRTC), the two multi-jurisdictional agencies that operate the VRE. VRE membership expanded in 2010 with the addition of Spotsylvania County. The VRE service area will also expand to include a Spotsylvania County VRE station, estimated to be complete in 2013. Once complete, it will become the end-of-line station for all trains on the Fredericksburg Line.

VRE service frequency is dictated by agreements with the host railroads and authorized by the VRE Operations Board and the two Commission Boards. In 2002, VRE entered into a memorandum of understanding (MOU) with CSXT and the Virginia Department of Rail and Public Transportation (DRPT) and committed to build a third mainline track and related rail infrastructure improvements in the CSXT rail corridor between Fredericksburg and Washington, DC. As specific improvements defined in the MOU are completed, the available train capacity for the VRE incrementally increases from 32 to a maximum 40 trains/day. Expansion of service beyond 40 trains/day or the boundaries of the existing VRE service area, as envisioned in the VRE Strategic Plan, requires agreement from the VRE Operations Board, Commission Boards, the affected jurisdiction(s), and the host railroads.

VRE's short-term service plan through FY18 includes increasing the number of daily trains through the addition of a later evening (e.g., after 7:00 PM) peak Manassas Line train from Union Station to Broad Run, with a bus connection from the Backlick Rd. station to Fredericksburg Line stations in FY15. It is assumed the additional train will be a four-car consist. The peak equipment requirements for planned service through FY18 are indicated in Table 6.2.

Table 6.2: Peak Fleet Requirements (2011-2018)

	2011	2012	2013	2014	2015	2016	2017	2018
Peak Capacity	21,646	21,646	21,646	22,194	22,194	22,194	22,194	22,194
Daily Trains (Revenue/Non-revenue)	30/32	30/32	30/32	30/32	32/34	32/34	32/34	32/34
Locomotives	12	12	12	12	13	13	13	13
Coaches	75	75	75	75	79	79	79	79

In the longer term, the VRE has initiated planning to extend operations on the Manassas Line, within the existing service area, from the City of Manassas to the Gainesville-Haymarket area of western Prince William County on a NS branch line. Preliminary plans envision an initial schedule of three trains/day expanding to six trains/day over time.

6.4 Infrastructure Expansion

In addition to the various operating agreements, VRE service is heavily influenced by equipment, station and layover yard capacities. Planning for growth must coordinate fleet expansion with layover yard capacity to hold and maintain the fleet and station capacity (parking and platform length) to handle the additional passengers.

6.4.1 Layover Yards

Layover yard capacity is crucial to meeting any growth in VRE traffic. VRE leases sufficient track space in Ivy City to layover 11 train sets, based on the existing consist make-up. The L'Enfant storage track will accommodate up to two additional 6-car train sets for mid-day storage. The Crossroads and Broad Run yards each have enough room for one additional train set today.

Expanding VRE beyond 13 train sets per day will require expanding all three layover yard capacities. Room will be needed in Washington, DC for additional train sets. The VRE is investigating additional storage options for mid-day storage. Increasing the number of operating train sets beyond 13 will also require additional overnight storage capacity in the Virginia yards. VRE is also investigating expansion opportunities at the Crossroads and Broad Run facilities.

The proposed service extension to the Gainesville-Haymarket area also has fleet storage implications. Preliminary planning efforts include the identification of a site(s) for overnight train storage.

The addition of the S&I facilities at each outlying yard enabled the migration of locomotive servicing activities from Ivy City to the Virginia yards which improved overall maintenance efficiency and capacity to support VRE fleet expansion. In the mid- to

long-term, the need for an intermediate maintenance facility at one of the Virginia yards, housing a drop table and wheel true machine, is anticipated. Current plans are for maintenance activities to continue to be done at the Crossroads and Broad Run yards, including servicing of equipment used on a future Gainesville-Haymarket extension.

6.4.2 Station Facilities

The majority of stations in the system were built specifically to serve the VRE and have a 400 foot long passenger-boarding platform. The exceptions are Fredericksburg, Quantico, Manassas, Alexandria and Washington Union Station which pre-date the inception of VRE service and vary between 600 to 1,000 feet in length.

The 400-foot platforms were designed to accommodate trains of up to six cars in length pulling the single-level passenger coaches originally used by the VRE. With the switch to the bi-level gallery coaches, the 400-foot platforms can only accommodate loading of five cars at the platform. By controlling which car doors open, and making announcements for passengers to move up "X" cars to disembark, longer trains can use all stations on the system.

VRE has initiated a program to lengthen shorter platforms to 600-680 feet, depending on site conditions, with a goal of accommodating 8-car consists throughout the system. Platforms will be extended at stations on both lines as funding is available. Platform extensions have been completed at the Manassas Park and Burke Centre stations. Extensions are programmed in the VRE capital improvements plan for the Broad Run, Rolling Road and Lorton stations.

In addition to lengthening platforms, the VRE also plans to add second platforms capable of accommodating an 8-car consist to existing single-platform stations. Currently, the Fredericksburg, Quantico, Woodbridge, Franconia-Springfield, Manassas and Alexandria stations have dual platforms. With two platforms, a VRE train could be routed around freight traffic or other bottlenecks and board/discharge passengers from either side of the tracks, thereby allowing for greater service reliability and efficiency.

7.0 FLEET PROCUREMENT

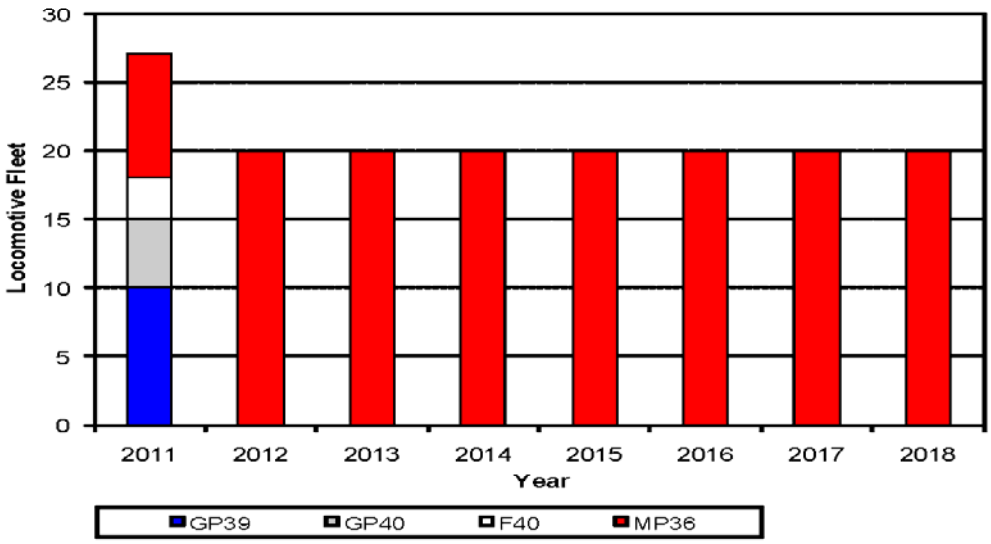
7.1 Locomotive Procurements

The VRE locomotive fleet, as of April 2011, consists of 18 locomotives with an average age of 42 years, plus 9 of the 20 new MP36 locomotives that are part of an ongoing locomotive procurement initiated in 2008. VRE will take delivery of the remaining 11 MP36 locomotives, at a rate of about two a month, by September 2011. Once all the new locomotives are delivered, VRE will begin retiring the 18 existing locomotives. Buyers have been identified for 13 of those units. Three of the locomotives will be returned to the lessor.

The end-state fleet of 20 locomotives is sufficient to run the 13 train sets planned to be in operation through 2018, plus the three protect locomotives and a spare allowance of four locomotives. The new units are also capable of pulling train consists up to 10 cars in length, which is VRE's maximum projected consist size. The planned VRE locomotive fleet is shown in Figure 7.1.

To accommodate the 40-train scenarios envisioned in the VRE Strategic Plan, including service on a Gainesville-Haymarket extension, a minimum of three additional locomotives will need to be added to the fleet.

Figure 7.1: Existing and Programmed VRE Locomotive Fleet (2011-2018)



7.2 Coach Procurements

VRE undertook a major procurement of new passenger coaches in 2005. A total of 71 gallery-style coaches were acquired from the Sumitomo Corporation of America. VRE took delivery of those new Gallery IV coaches between 2006 and 2010. The Gallery IV procurement established the bi-level gallery coach as the standard for VRE operations and maintenance.

As the Gallery IV coaches were delivered, and to free up storage space at its yards, VRE retired 49 of its oldest coaches, as indicated in Table 7.1. The sale of an additional 10 Pullman Legacy Gallery coaches is in the process of being completed.

Table 7.1: Passenger Coach Disposition

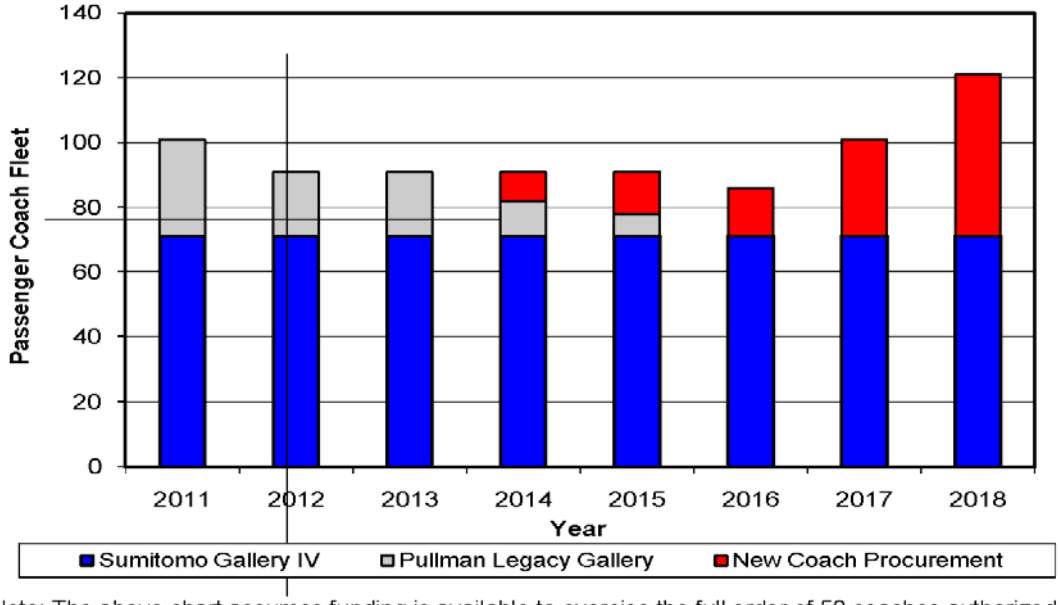
Manufacturer/Type	Quantity	Buyer
Mafersa single level coach	12	Connecticut Department of Transportation, private buyer
Budd café cars	4	West Virginia Historical Society
Kawasaki bi-level coach	13	Maryland Transit Administration
Pullman Legacy Gallery coach	20	Chicago Metra, Nashville Regional Transit Authority, private buyer

The Legacy Gallery coaches that will remain in the VRE fleet at the end of 2011 will require additional, significant maintenance investment to be serviceable beyond 2013, including overhaul of major mechanical components (e.g., air conditioning units, door motors) and interior/exterior rehabilitation (e.g., recovering seats, window replacement, repainting).

In order to avoid investing increasingly scarce funds in the overhaul of the 40+ year old coaches, the procurement of 50 new coaches is recommended to meet current and future passenger coach needs. The VRE Operations Board approved the procurement of additional passenger coaches in May 2011. The procurement will be modeled on the 2005 Gallery IV coach buy which included an initial order of 11 coaches and an option for 50 additional coaches as funding became available (that option was later increased to 60 additional coaches). The planned procurement is for initial orders of 15 coaches between FY12 and FY15 with an option for up to 35 additional coaches as funding becomes available.

The VRE fleet with the planned coach procurement includes the equipment shown in Figure 7.2. The fleet depicted in Figure 7.2 will have the seating capacity listed in Table 7.2.

Figure 7.2: Existing and Programmed VRE Coach Fleet (2011-2018)



Note: The above chart assumes funding is available to exercise the full order of 50 coaches authorized in the current procurement.

Table 7.1: Number of Available Passenger Seats (2011-2018)

Type of Coach	2011	2012	2013	2014	2015	2016	2017	2018
Sumitomo Gallery IV	9,543	9,543	9,543	9,543	9,543	9,543	9,543	9,543
Pullman Legacy Gallery	4,500	3,000	3,000	2,250	1,500	0	0	0
New Procurement	0	0	0	750	1,500	2,970	4,920	6,765
Number of Coaches	101	91	91	91	86	86	96	121
Total Seats	14,043	12,543	12,543	12,489	11,715	11,703	13,038	16,308

Note: The above table assumes a mix of cab cars and trailers (with toilets)

8.0 SPARE RATIO JUSTIFICATION

VRE makes as full use of its equipment as is practical given the skewed nature of transportation demand and the limitations VRE's route owners place on train scheduling. The existing equipment utilization, based on planned operations through 2018, is shown in Table 8.1.

Table 8.1: Equipment Utilization

	2011	2012	2013	2014	2015	2016	2017	2018
Locomotives								
Locomotives in Service	12	12	12	12	13	13	13	13
Protect Locomotives	3	3	3	3	3	3	3	3
Spares	5	5	5	5	4	4	4	4
Total Locomotive Fleet	20	20	20	20	20	20	20	20
Passenger Coaches								
Coaches in Service	75	75	75	75	79	79	79	79
Spares	16	16	16	16	7	7	7	7
Total Coach Fleet	91	91	91	91	86	86	86	86

Note: The above chart assumes 2 locomotives and 6 coaches are out of service at any one time for regular servicing/maintenance. It also assumes the VRE fleet includes 20 MP36 locomotives and excludes the 10 legacy gallery coaches for which a sale is pending.
The VRE Operations Board authorized the procurement of up to 50 additional passenger coaches in May 2011. Funding has been identified for 15 new coaches to replace the remaining 20 Legacy gallery coaches. Funding for the balance of the 50 car order has not been identified; the above table reflects only the initial 15 coach purchase.

The VRE's ideal spare equipment policy would provide for one complete consist at each of the three layover yards, with the same seat capacity as the third largest train that runs out of that layover yard, plus 10% of the assigned equipment (i.e., equipment in service plus protect equipment) for scheduled and unscheduled maintenance and repairs, rounded up to the next whole number to ensure fleet reliability. However, space limitations at the Ivy City yard preclude storage of an additional full spare consist and only a protect locomotive is stored at that yard. Taking that limitation into account, the ideal number of spares, based on planned operations through 2018, is shown in Table 8.2.

Table 8.2: Spare Equipment

	2011	2012	2013	2014	2015	2016	2017	2018
Locomotives								
Locomotives in Service	12	12	12	12	13	13	13	13
Ideal Spares	5	5	5	5	5	5	5	5
Actual Spares	8	8	8	8	7	7	7	7
Passenger Coaches								
Coaches in Service	75	75	75	75	79	79	79	79
Ideal Spares	19	19	19	19	20	20	20	20
Actual Spares	26	16	16	16	7	7	7	7

Note: Ideal spares includes protect equipment and shop spares.

In reality, VRE's spare ratio varies from the ideal, as shown in Table 8.2. . VRE utilizes protect locomotives in the 3 yard locations to protect VRE service. These locomotives are worked up daily, same as locomotives on actual trains. Locomotive maintenance is performed at both Crossroads and Broad Run and one (1) locomotive each could be out of service at each location, for maintenance or repairs, on any given day.

Coach spares are currently slightly greater than the ideal. In 2011 VRE will sell 10 of the 30 legacy cars. Even with this reduction, the spare ratio for Legacy cars are higher than the target 10% primarily due to higher shop dwell time when repairs are made. That situation reverses in the future when additional trains are added. VRE is in the process of issuing a procurement to replace the 20 remaining Legacy cars by 2014, because these cars will be at the end of their useful life. The target 10% ideal spare ratios should apply at that time because of the increased reliability from the new cars.

VIRGINIA RAILWAY EXPRESS
COMMUTER RAIL SYSTEM SAFETY PROGRAM PLAN

April 13, 2011

VRE COMMUTER RAIL SYSTEM SAFETY PROGRAM PLAN
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1. CHIEF EXECUTIVE OFFICER'S POLICY STATEMENT AND AUTHORITY OF SSPP

POLICY STATEMENT

The Virginia Railway Express (VRE) is committed to providing safe, reliable, efficient and convenient transportation in the region it serves. The Manager of Safety and Security is responsible for the daily oversight, identification and control of operating and workplace hazards to ensure the highest degree of safety for VRE customers, VRE employees, contractor employees, VRE and railroad property and the people and property of the community in which the VRE operates.

The VRE is mandated to develop, implement and administer a comprehensive and coordinated System Safety Program, which includes responsibility for monitoring the compliance of all operations and support activities, and for reinforcing safe work practices aimed at identifying risks and reducing accidents. All VRE employees and the appropriate contractors are therefore charged with safety of the VRE, its passengers, employees, property and the general public.

VRE's Chief Executive Officer is empowered and authorized to design, implement and administer a comprehensive, integrated and coordinated system safety program. This will include a specific plan for the identification, prevention, control, and resolution of any unsafe conditions during design, construction, testing, operations, and maintenance of the VRE system.

Where the VRE determines an immediate and serious hazard exists, the Chief Executive Officer or the Manager of Safety and Security has the authority and responsibility to order hazardous conditions corrected or managed/minimized or hazardous practices halted. Accordingly, the Manager of Safety and Security is empowered to order the cessation of unsafe activities or operations which are deemed to be creating an immediate and serious hazard within the system. The Manager of Safety and Security or his or her agent is also empowered to conduct unannounced inspections aimed at identifying and eliminating unsafe practices, operations, and conditions not corrected by immediate management/supervision.

A comprehensive System Safety Program is critical to the fulfillment of the VRE's commitment to keep safety as first priority. This program shall receive the full support and compliance of all VRE personnel whose support or participation is required. All directors, managers and supervisors are responsible and accountable for the implementation of the System Safety Program Plan in their respective areas.

The Authority for preparation and implementation of this Commuter Rail System Safety Program Plan (SSPP) is vested in the Manager of Safety and Security in consultation with the Chief Executive Officer.

Chief Executive Officer, VRE

4-26-2011

Date

SSPP Program Plan Document History

Date	Revision	Description of Change
2-9-09	None	Supersedes all previous versions
4-25-11	Revision 1	Supersedes all previous versions

Appendix C

VIRGINIA RAILWAY EXPRESS
PEER REVIEW
TECHNICAL MEMORANDUM

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1.0 OVERVIEW OF PEER ANALYSIS PROCESS

A peer analysis provides the means to compare various performance characteristics of a transit agency to similar transit systems. Transit agencies report such information to the Federal Transit Administration (FTA), which records the information annually in the National Transit Database (NTD). Agencies have strict requirements regarding the manner in which cost and service characteristics are reported to the NTD. Thus, the NTD provides a consistent set of measurable data that can be used in a peer systems analysis.

While a peer analysis based on NTD data provides operational and financial information, it is important to keep in mind other aspects of service quality that are not reported in the NTD, such as passenger satisfaction, vehicle cleanliness and comfort, and schedule adherence. It is also worth noting that there may be unique operating and financial characteristics associated with a particular transit agency.

1.1 National Transit Database

The National Transit Database is the only comprehensive source of validated operating and financial information reported by transit systems nationwide. This database is updated annually by submissions from each transit system. The FTA reviews and confirms the accuracy of the information received and publishes a final report after all reporting transit systems successfully respond to comments and inquiries. The NTD is used by the FTA and other federal, state, and local agencies as a resource to help guide public investment decisions, shape public policy, and develop planning initiatives. The NTD reports various standard measures of performance that allow decision makers and other stakeholders to determine the efficiency and effectiveness of transit services on a local, regional and national basis. It is important to note that smaller systems (i.e., operating with fewer than nine peak vehicles) have the option of taking an exemption from NTD reporting.

1.2 Technical Memorandum Contents

Sections 2 through 6 of this technical memorandum present a peer review of transit systems that are similar in service areas size, population, and operation to the Virginia Railway Express (VRE) system:

- Section 2 describes the peer transit systems and the criteria for selection.
- Section 3 provides an overview of the peer system operating and capital budgets, ridership, service area and passenger fare characteristics compared with VRE.
- Section 4 contains a detailed comparison of specific service productivity measures. These productivity measures focus on vehicle utilization, service supply, service productivity, cost efficiency, and vehicle maintenance performance.
- Section 5 summarizes financial information, highlighting the revenue sources used by VRE and its peers to fund operating and maintenance (O&M) and capital requirements.
- Section 6 summarizes the key findings of the Peer Analysis.

2.0 PEER SELECTION

Peer systems were selected based on similarities in the number of annual revenue train miles and hours, annual ridership, annual operating budget, and total and peak vehicles. The following transit systems were identified as peers based on the application of the selection criteria:

- Maryland Transit Administration – NTD #3034
- Central Puget Sound Regional Transit Authority – NTD #0040
- South Florida Regional Transportation Authority – NTD #4077
- North County Transit District– NTD #9030
- Dallas Area Rapid Transit and Fort Worth Transportation Authority – NTD #6056 and 6007 *(Note: Data for DART & TRE systems is the sum of both systems, unless otherwise noted)*

Maryland Transit Administration – MTA (Baltimore, MA) – provides a number of services including local and commuter bus services, light rail, heavy rail and commuter rail. Only the commuter rail service called Maryland Area Regional Commuter (MARC) was used for this peer analysis. The service area for MARC Train Service includes Harford County, MD; Baltimore City, MD; Washington, D.C.; Brunswick, MD; Frederick, MD and Martinsburg, WV.

Central Puget Sound Regional Transit Authority – Sounder (Seattle, WA) – provides a number of services including bus, light rail, and commuter rail. Only the commuter rail service called Sounder Train was used for this peer analysis. Sounder trains travel between Tacoma and Seattle (making stops in Puyallup, Sumner, Auburn, Kent and Tukwila) and between Everett and Seattle (making stops in Mukilteo and Edmonds). Sounder regularly runs weekday mornings and afternoons only. Sounder also serves select major weekend events such as Mariners and Seahawks games.

South Florida Regional Transportation Authority – Tri-Rail (Miami, FL) – provides bus service and commuter rail. Only the commuter rail service called Tri-Rail was used for this peer analysis. Tri-Rail trains travel between Miami, Fort Lauderdale and Palm Beach. The service area includes several stops in Miami-Dade, Broward, and Palm Beach Counties.

North County Transit District – Coaster (San Diego, CA) – provides bus service, light rail and commuter rail. Only the commuter rail service called Coaster was used for this peer analysis. The Coaster commuter train runs north-south, serving eight stations between Oceanside and downtown San Diego. More than 20 trains run on weekdays, with additional service on the weekends.

Dallas Area Rapid Transit & Fort Worth Transportation Authority – DART & Trinity Railway Express (Dallas-Fort Worth-Arlington, TX) – These two agencies provide a range of services including bus, light rail and commuter rail. Only the commuter rail services were used for this peer analysis. The DART Rail system has 55 stations, located in downtown Dallas, South Dallas, South Oak Cliff, West Oak Cliff, the North Central Expressway Corridor to North Dallas, Richardson and Plano, the Northeast Corridor to Garland, the Northwest Corridor to Farmers Branch and Carrollton, and the Southeast Corridor to Pleasant Grove. The Trinity Railway Express (TRE) links downtown Fort Worth, downtown Dallas and DFW Airport. Scheduled train service is provided Monday through Saturday.

Table 2-1 displays the data used for peer selection as reported in the 2009 NTD (the most recent NTD information that is available).

Table 2-1: Comparison of Peer Transit System Characteristics

Transit Agency	Annual Revenue Train Hours	Annual Revenue Train Miles (millions)	Annual Ridership (millions)	Annual Operating Budget (millions)	Peak Vehicles	Fleet Vehicles
Maryland MTA	128,890	5.09	8.08	$109.1	132	153
Seattle Sounder	36,010	1.40	2.49	$34.0	56	69
South Florida Tri-Rail	87,315	2.95	4.22	$52.9	34	47
San Diego Coaster	33,348	1.35	1.50	$16.4	26	35
Dallas-Fort Worth DART & TRE	56,156	1.29	2.74	$24.3	36	54
Peer Average	68,344	2.42	3.81	$47.33	57	72
Peer High	128,890	5.09	8.08	$109.1	132	153
Peer Low	33,348	1.29	1.50	$16.4	26	35
VRE	59,257	1.87	3.87	$50.6	78	108

Table 2-1 shows the following about VRE's peer group, using a range of +/- 10 percent to define a significant difference:

- *Annual Revenue Train Hours* – One of the peer systems operated a similar number of hours, two operated fewer hours, and two operated more hours.
- *Annual Revenue Train Miles* – Three peers operated fewer miles, and two operated more miles.
- *Annual Ridership* – One peer system had similar ridership, three had lower ridership, and one had higher ridership.
- *Annual Budget* – One of the peer systems had a similar operating budget, three had smaller budgets, and one had a larger budget.
- *Peak Vehicles* – One peer system had a larger peak fleet than VRE's peak fleet, and the rest had smaller peak fleets.
- *Total Vehicles* – One peer system had a larger fleet than VRE's peak fleet, and the rest had smaller fleets.

3.0 PEER SYSTEM OVERVIEW

A general overview of peer system operating and capital expenses, ridership, service area and passenger fare characteristics was completed prior to conducting a detailed assessment of specific financial, ridership and service characteristics.

3.1 Annual Ridership

Annual ridership, as measured in passenger trips, reflects is the total number of boardings made by users of the transit system. A passenger trip is recorded every time a person boards a transit vehicle, including multiple transfers that may occur between the trip origin and the final destination.

As shown in Table 2-1, VRE's ridership (3.87 million) was almost the same as the peer average (3.81 million). Passenger trips for individual peer systems ranged between 8.08 million (MTA) and 1.5 million (Coaster).

3.2 Annual Operating and Capital Expenses

Table 3-1 summarizes the annual operating and capital expenses for the commuter rail service provided by peer systems in FY 2009.

Table 3-1: Comparison of FY 2009 Operating and Capital Budgets for Commuter Rail Service only (dollars in millions)

Transit Agency	Annual Operating Budget	Annual Capital Budget	Fare Revenue
Maryland MTA	$109.1	$100.1	35.2
Seattle Sounder	$34.0	$68.3	7.8
South Florida Tri-Rail	$52.9	$7.9	9.8
San Diego Coaster	$16.4	$6.6	7.0
Dallas-Fort Worth DART & TRE	$24.3	$63.8	2.9
Peer Average	$47.33	$49.34	12.54
Peer High	$109.1	$100.1	35.2
Peer Low	$16.4	$6.6	2.9
VRE	$50.6	$39.93	25.9

Key characteristics are as follows:

- VRE's FY 2009 operating budget of $50.6 million was 7 percent more than the peer average ($47.33 million). Coaster had the smallest operating budget of $16.4 million and MTA had the largest at $109 million.

- VRE's capital budget ($39.93 million) was 19 percent less than the peer average ($49.34 million). However, capital budgets varied vastly. Coaster had the smallest capital budget of $6.6 million, and MTA has the largest at $100.1 million.

- VRE's fare revenues ($25.9 million) were more than double the peer average ($12.54 million). DART & TRE combined fare revenues of $2.9 million were the lowest in the peer group, and MTA was the largest at $35.2 million.

Section 4.0 compares costs and ridership on a service level basis.

3.3 Service Area Characteristics

Although the NTD data is the best available source for this information, caution should be used when interpreting service area population and population-based measures. There are sometimes variations with regard to the way agencies report this information.

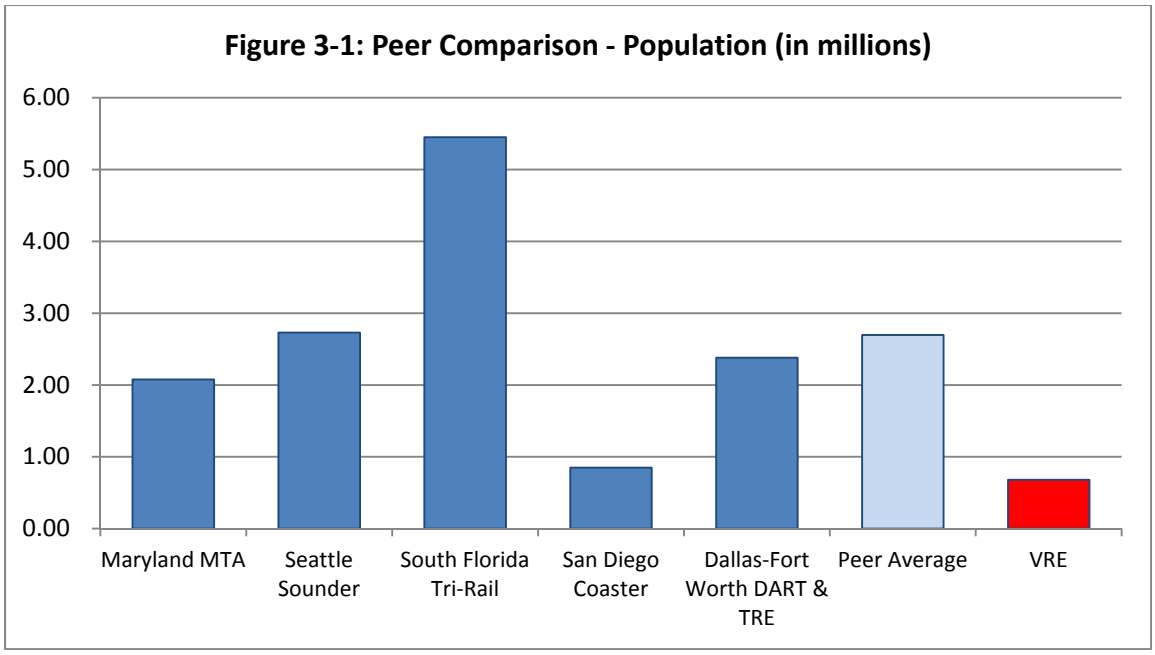
The peer systems reported service areas that ranged in size from 5,128 to 403 square miles, with an average of 1,820 square miles (Table 3-2). At 730 square miles, VRE's service area is 60 percent less than the peer average. Figures 3-1 and 3-2 summarize and compare the service area population and population density for VRE and the peer systems.

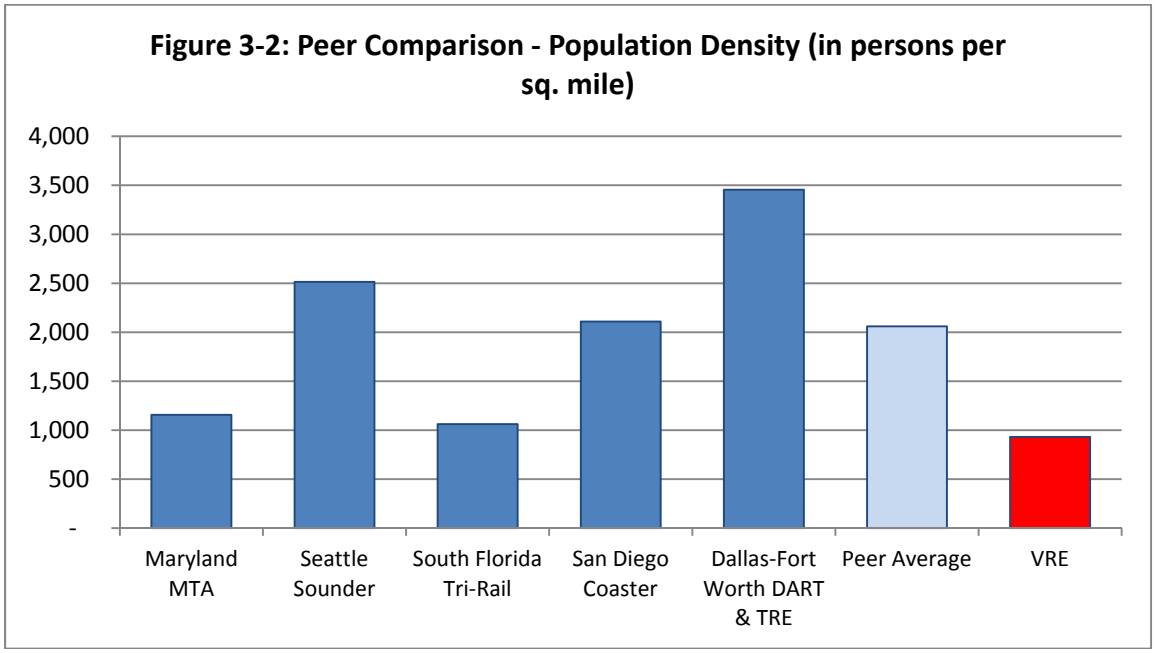
Table 3-2: Comparison of Service Area and Population of Peer Systems

Transit Agency	Service Area (sq. miles)	Population (in millions)	Population Density (persons/sq.mile)
Maryland MTA	1,795	2.08	1,157
Seattle Sounder	1,086	2.73	2,514
South Florida Tri-Rail	5,128	5.45	1,063
San Diego Coaster	403	0.85	2,109
Dallas-Fort Worth DART & TRE	689*	2.38*	3,454
Peer Average	1,820	2.70	2,059
Peer High	5,128	5.45	3,454
Peer Low	403	0.85	1,063
VRE	730	0.68	932

Note: Data for DART only

- VRE's service area population (0.68 million) is 75 percent less than the peer average service area population (2.70 million).
- The population density of VRE's service area (932 persons per square mile) was about 55 percent less than the peer average (2,059).





3.4 Services Provided

In 2011, the spans of service for commuter rail service provided by the peer systems were:

Maryland Transit Administration – MTA
4:35 a.m. to 11:29 p.m., Monday through Friday

Central Puget Sound Regional Transit Authority - Sounder
4:55 a.m. to 10:10 p.m., Monday through Friday
Special trains are run for Seahawks and Mariner games

South Florida Regional Transportation Authority – Tri-Rail
4:00 a.m. to 11:35 p.m., Monday through Friday
6:00 a.m. to 10:15 p.m., Weekends/Holidays

North County Transit District – Coaster
5:18 a.m. to 8:05 p.m., Monday through Thursday
5:18 a.m. to 11:46 p.m., Friday
8:30 a.m. to 11:46 p.m., Saturday
8:30 a.m. to 7:42 p.m., Sunday/Holiday
Special trains are run for Padres games

Dallas Area Rapid Transit and Fort Worth Transportation Authority – DART & TRE
3:48 a.m. to 1:13 a.m., Monday through Friday (DART)
3:18 a.m. to 1:45 a.m., Saturday and Sunday (DART)
4:58 a.m. to 11:35 p.m., Monday through Friday (TRE)
5:40 a.m. to 11:37 p.m., Saturday (TRE)

VRE provides commuter rail service from 5:05 a.m. to 8:10 p.m. on weekdays, with limited service on holidays.

3.5 Fare Structure

Fare structures also have been compared for the peer transit agencies, as presented in Table 3-3. Fare information was obtained in August 2011 from websites of transit agencies.

- Except DART & TRE, all single ride fares are based on the distance traveled. Since the systems vary considerably in the distance between end stations, the fares range widely too. The peer low is $2.50 and the peer high is $12.00. The peer average of $6.53 is based on the highest fares for each system. VRE fares range from $2.90 to $10.30 and are comparable to the peer systems.
- Except Tri-Rail and DART & TRE, monthly passes are also based on the distance traveled. The Tri-Rail and DART & TRE monthly passes cost $100, while the passes for other systems vary between $90 and $330. The peer average is $173.20 per month. VRE passes cost $96.70 to $285.50 and are comparable to the peer systems.

- All systems provide discounted fares to elderly/disabled and students/youth. The discount for seniors/disabled is usually 50% of the regular fare. Coaster only provides a discounted monthly pass for youth. DART & TRE offer a larger discount (about 75% of regular fare) to seniors/disabled as well as students/youth.

Table 3-3: Comparison of Fare Structure

Transit Agency	Regular Fare Single Ride	Regular Fare Monthly	Discounted Seniors/Disabled	Discounted Student
Maryland MTA	$4.00 - $12.00	$100 - $330	$2.00 - $6.00	$3.25 - $9.50
Seattle Sounder	$2.55 - $4.75	$90 - $171	$1.25 - $2.25	$2.00 - $3.50
South Florida Tri-Rail	$2.50 - $6.90	$100	$1.25 - $3.45	$1.25 - $3.45
San Diego Coaster	$4.00 - $5.50	$120 - $165	$2.00 - $2.75	Only monthly pass
Dallas-Fort Worth DART & TRE	$3.50	$100	$0.85	$0.85
Peer Average*	$6.53	$173.20	$3.06	$4.33
Peer High	$12.00	$330	$6.00	$9.50
Peer Low	$2.50	$90	$0.85	$0.85
VRE	$2.90 - $10.30	$96.70 - $285.50	$1.45 - $5.15	$1.45 - $5.15

Note: Peer Average is based on highest fares

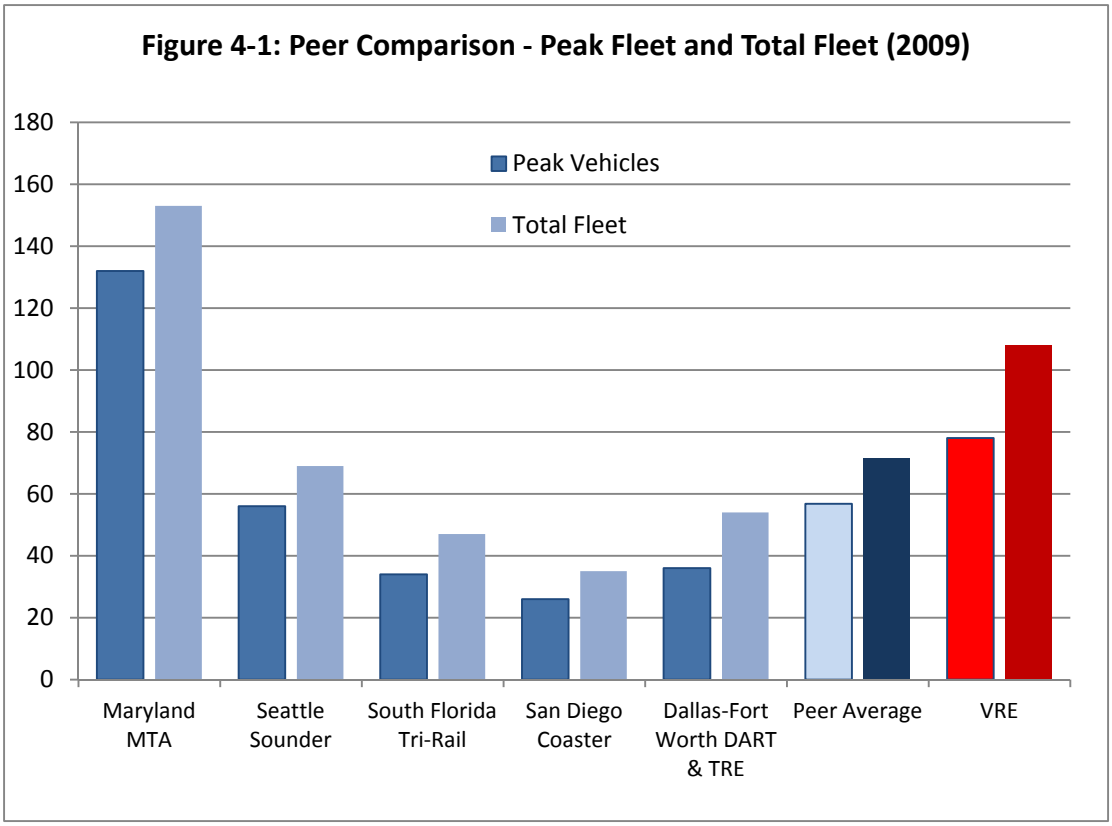
4.0 SERVICE PRODUCTIVITY COMPARISONS

This section presents a detailed comparison of specific service productivity measures. These productivity measures focus on: vehicle utilization, service supplied, ridership productivity, cost efficiency, and revenue vehicle maintenance performance. Unless stated otherwise, the data were obtained from the 2008 NTD for all systems.

4.1 Vehicle Utilization

The peer systems were compared on several indicators of vehicle utilization including size of the fleet available for revenue service, maximum number of vehicle in simultaneous scheduled service, and hours and miles of revenue service per peak vehicle.

- **Vehicles Available**: As shown on Figure 4-1, the peer system active fleets ranged from 35 (Coaster) to 153 (MTA). At 108, VRE's 2009 fleet was 1.5 times the peer average of 72.

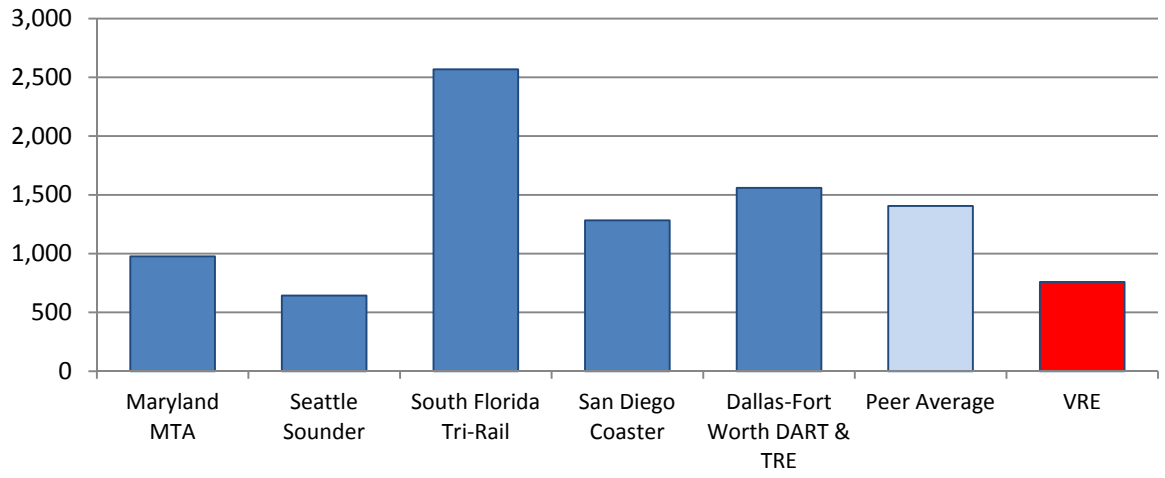


- **Peak Vehicles**: The number of vehicles operated in maximum service is shown Figure 4-1. Peer systems operated between 26 (Coaster) and 132 (MTA) vehicles during peak periods. At 78 peak vehicles, VRE's 2009 peak fleet was 1.4 times the peer average of 57.

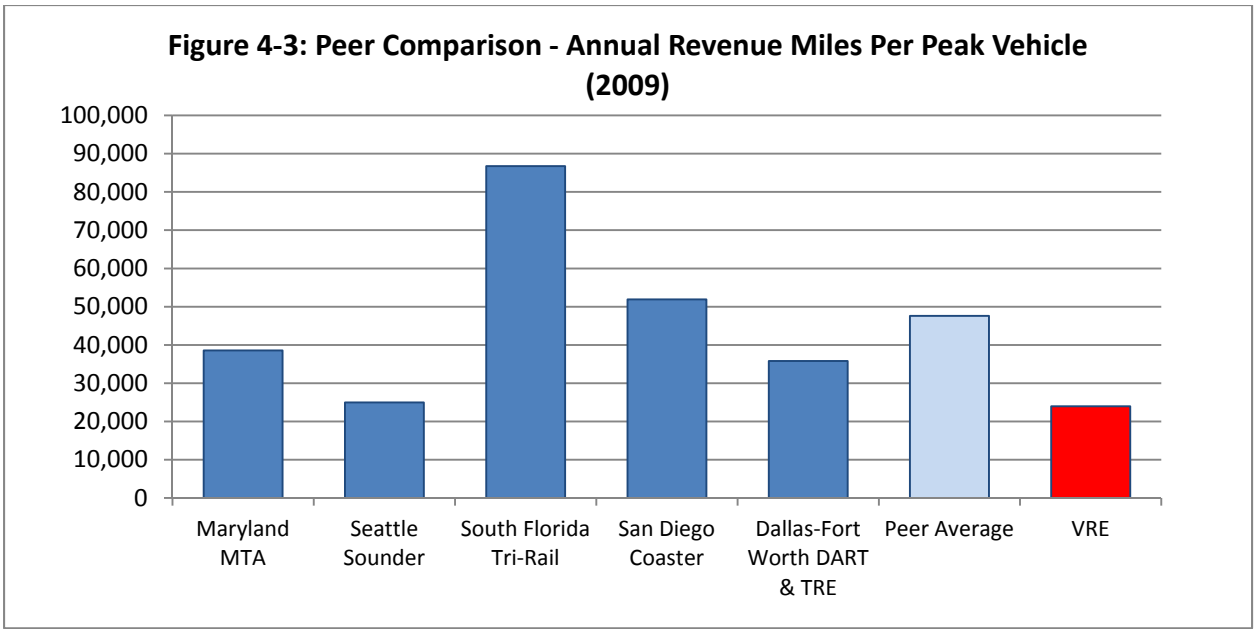
- **Spare Ratio**: Spare ratio is an indication of how a transit agency meets its need to balance the provision of sufficient vehicles to operate scheduled revenue service with the requirements of vehicle maintenance and overhaul programs. FTA's formula to calculate a spare ratio is: (Total Active Fleet – Peak Vehicle Requirement) / Peak Vehicle Requirement. Accordingly, peer spare ratios range from 16 percent (MTA) to 50 percent (DART & TRE). At 38 percent, VRE's spare ratio is almost 50 percent higher than the peer average of 26 percent. Spare ratios typically run higher during times of vehicle replacement or prior to the implementation of large service initiatives. Generally, FTA prefers spare ratios near 20 percent.

- **Annual Revenue-Hours per Peak Vehicle**: Figure 4-2 shows that the peer systems operated between 2,568 (Tri-Rail) and 653 (Sounder) revenue-hours per peak vehicle. At 760, VRE operated 46 percent fewer hours than the peer average of 1,406.

Figure 4-2: Peer Comparison - Annual Revenue Hours Per Peak Vehicle (2009)



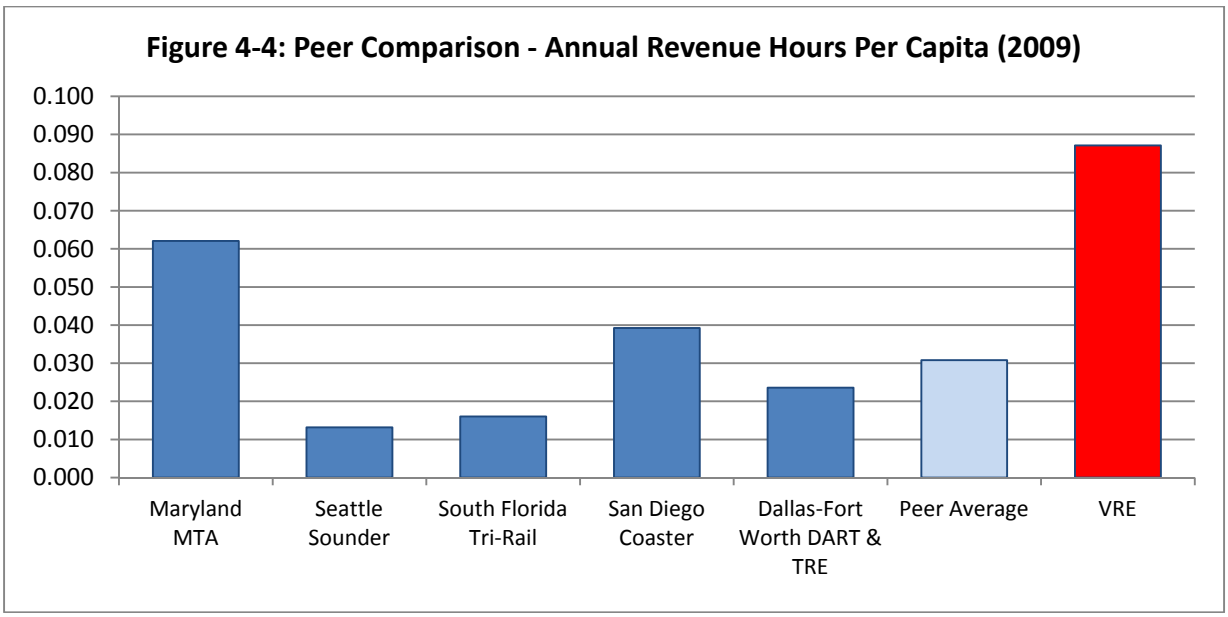
- **Annual Revenue-Miles per Peak Vehicle**: Figure 4-3 shows that the peer systems operated between 86,765 (Tri-Rail) and 25,000 (Sounder) revenue-miles per peak vehicle. At 23,974, VRE operated the second lowest miles of service per peak vehicle and half the peer average of 47,616.



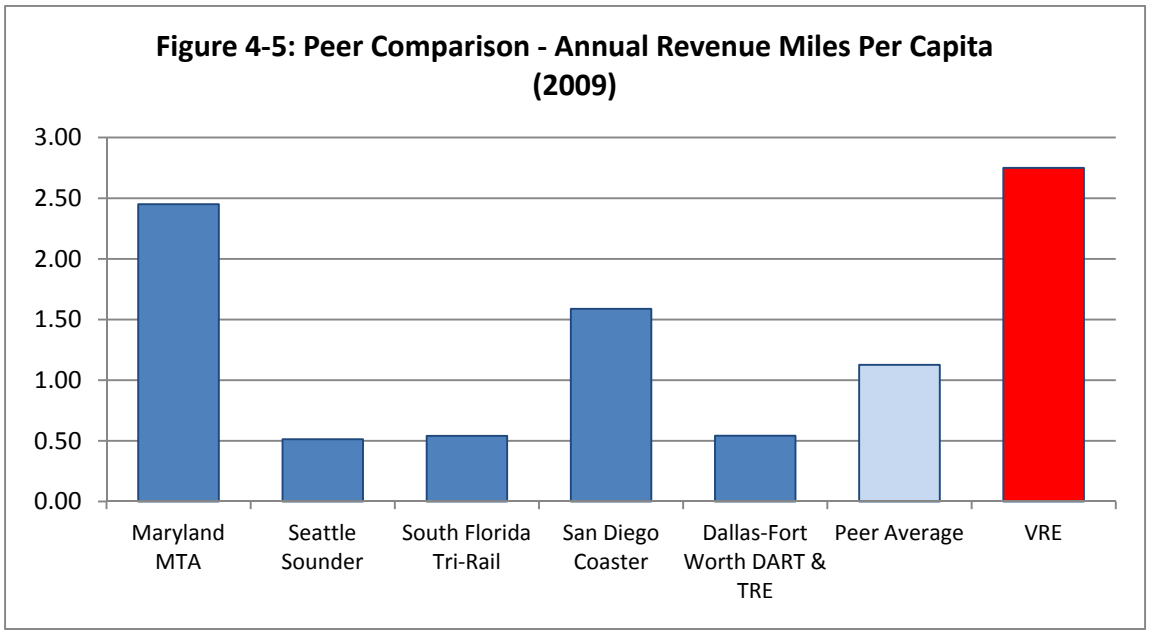
4.2 Service Supplied

This section compares the hours and miles of operation of the peer systems. The service area populations and the geographical extent of service supplied are taken into account during this comparison.

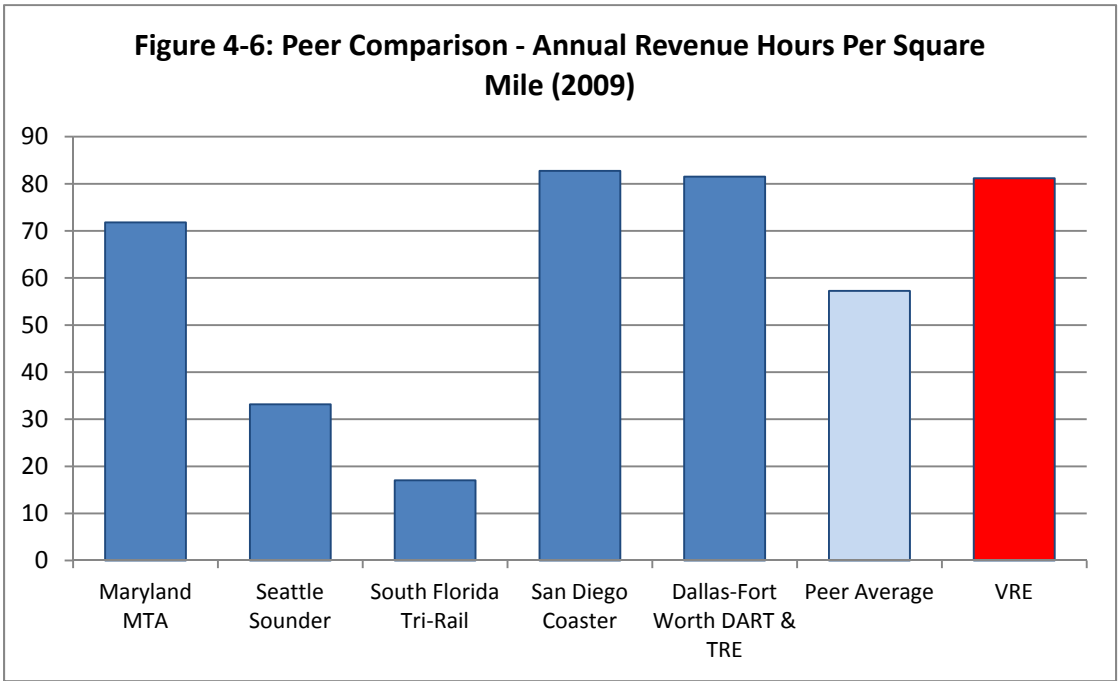
- **Transit Service per Capita**: This analysis looks at two measures of the amount of train service provided to the service area population – annual revenue-hours and annual revenue-miles per capita. Figure 4-4 shows that the annual revenue-hours per capita provided by peer systems range between 0.062 (MTA) and 0.013 (Sounder). VRE provides 0.087 service hours per capita annually which is almost three times the peer average (0.031).



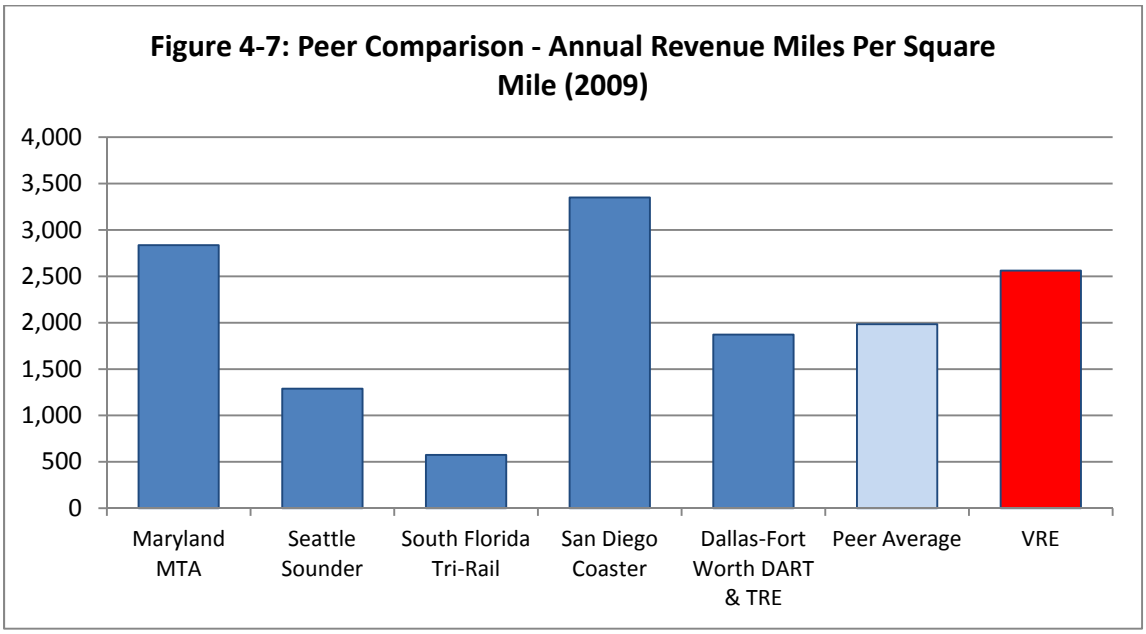
- Figure 4-5 shows that VRE operates 2.75 annual revenue-miles per capita while the peer systems range between 2.45 (MTA) and 0.51 (Sounder). VRE's annual revenue-miles per capita (2.75) are 2.4 times the peer average (1.13).



- **Service Area**: In Figure 4-6, the peer systems operated between 83 (Coaster) and 17 (Tri-Rail) annual revenue-hours per square mile. At 81 annual revenue-hours per square mile, VRE supplies 1.4 times the service compared to the peer average (57).



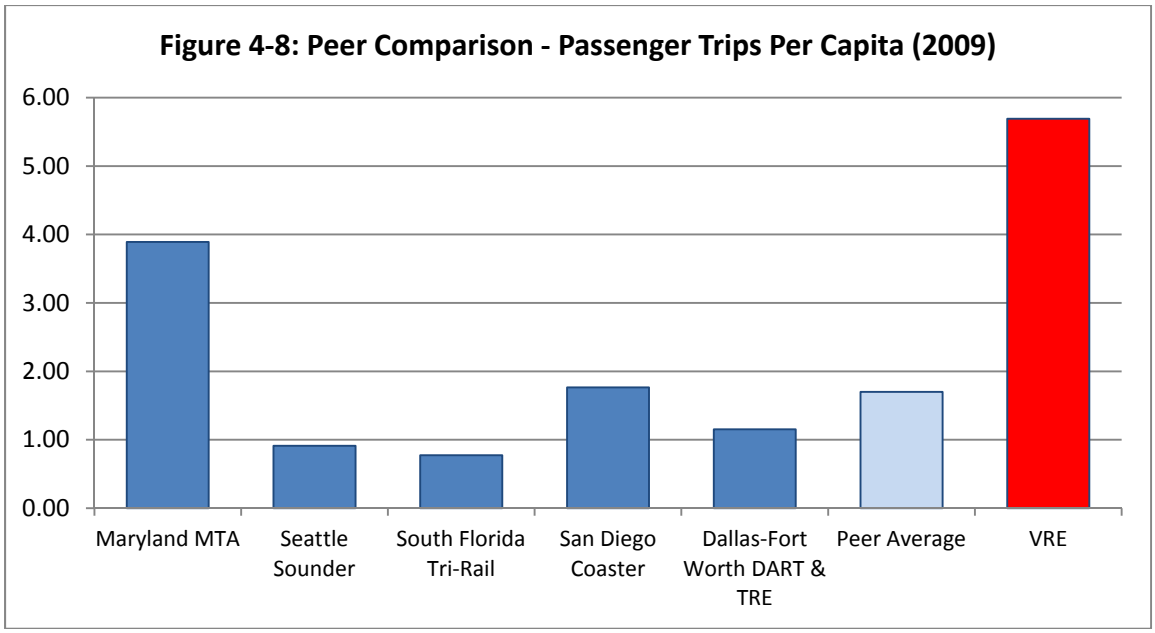
- Figure 4-7 shows that VRE operated 2,562 annual revenue-miles of service per square mile which is about 1.3 times the peer average (1,984). The peer systems that supplied the lowest and highest annual revenue-miles of service per square mile were Coaster (3,350) and Tri-Rail. (575).



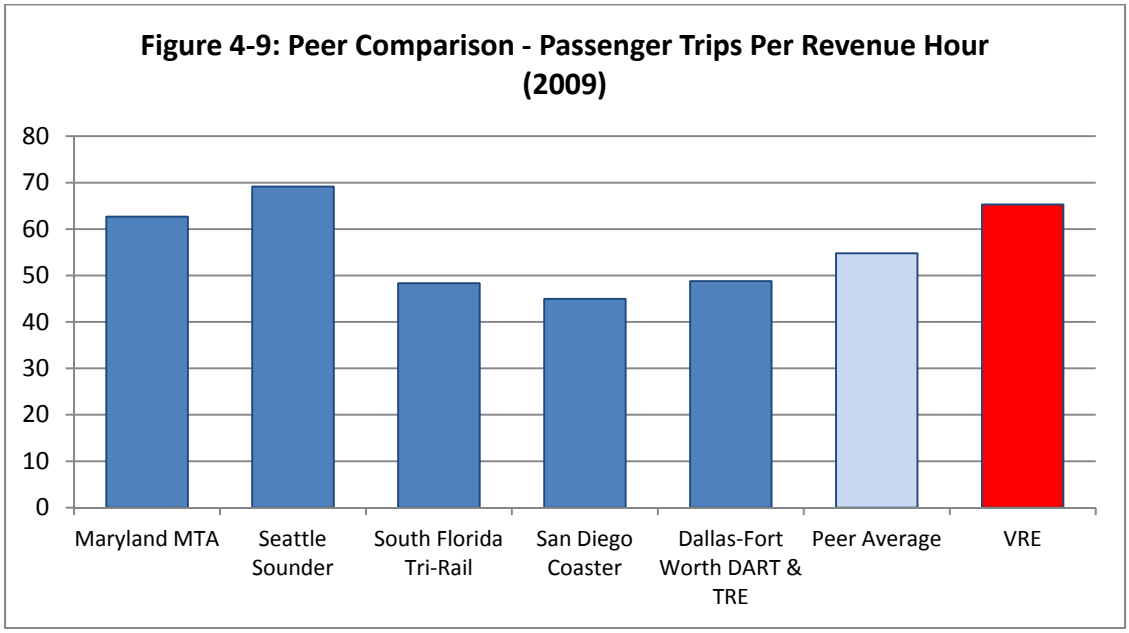
4.3 Ridership Productivity (Effectiveness)

Ridership productivity or effectiveness provides a way to evaluate how well a transit agency is able to attract passengers relative to the level of service operated. Three measures that reveal productivity are passenger trips per capita, per revenue-hour, and per revenue-mile.

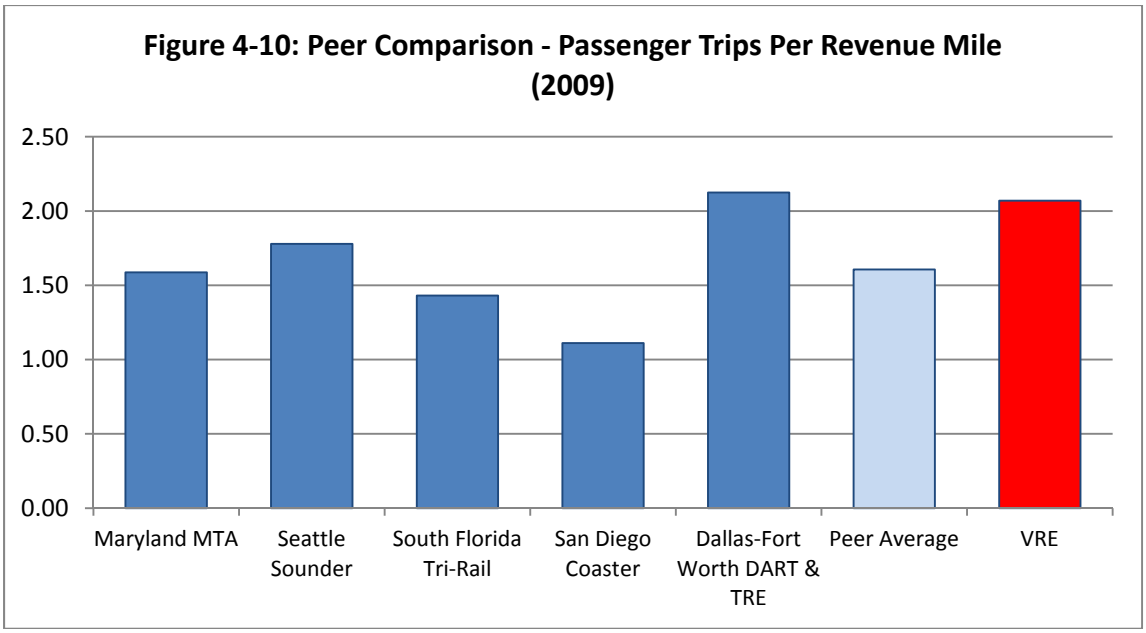
- **Passenger Trips per Capita**: As shown in Figure 4-8, the passenger trips per capita for VRE (5.69) are 3.35 times the peer average of 1.7. The maximum passenger trips per capita on a peer system are 3.89 (MTA) and the fewest are 0.77 (Tri-Rail).



- **Passenger Trips per Revenue-Hour**: Figure 4-9 shows that the peer systems generate between 69 (Sounder) and 45 (Coaster) passenger trips for every revenue-hour of bus service. VRE's productivity of 65 passengers per revenue-hour is 1.19 times the peer average of 55.



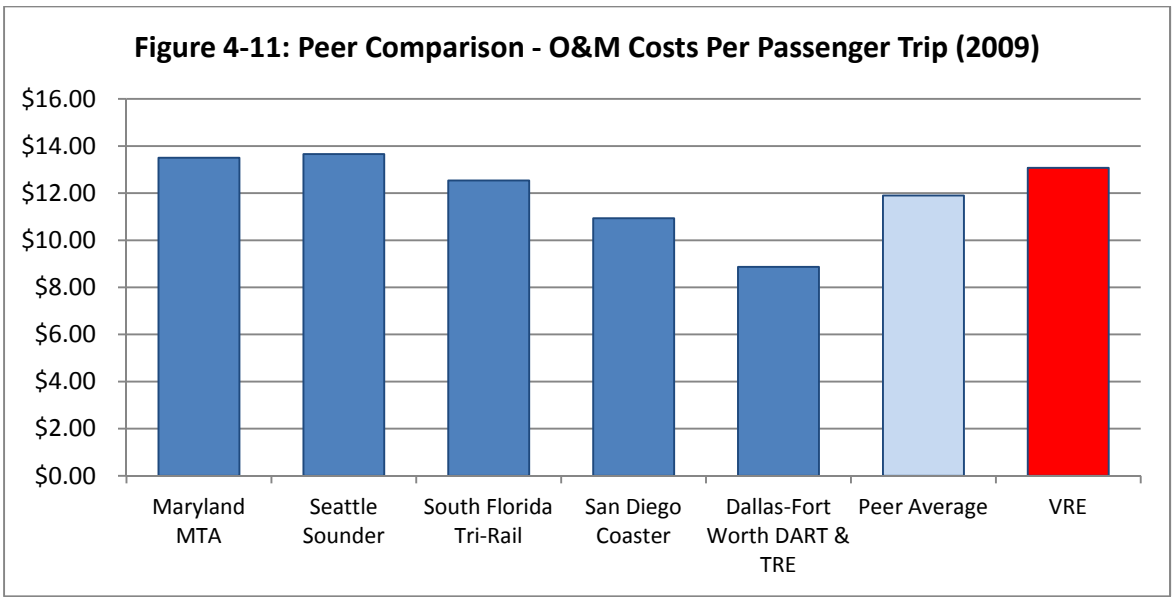
- **Passenger Trips per Revenue-Mile:** Figure 4-10 shows the peer systems generate between 2.12 (DART & TRE) and 1.11 (Coaster) passenger trips per revenue-mile of service. VRE serves 2.07 passengers per revenue-mile which is 1.3 times its peers at 1.61.



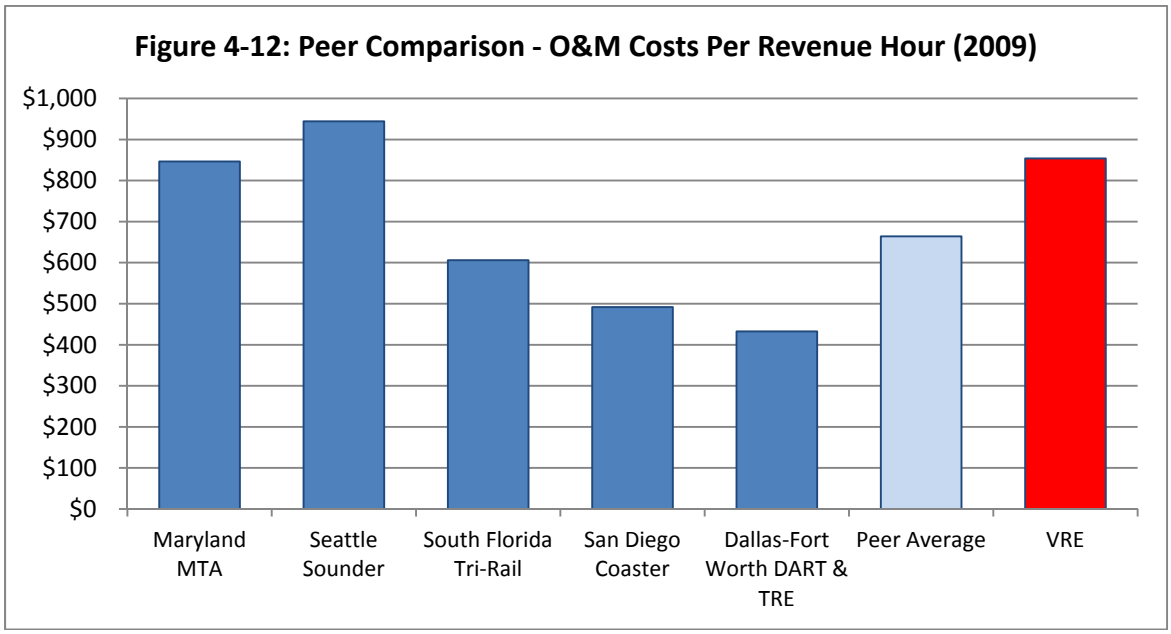
4.4 Cost Efficiency

Transit systems typically must balance the level of service they provide with the budget required to do so. Cost efficiency performance can be measured in several ways, including operating cost per passenger trip, per revenue-hour, and per revenue-mile.

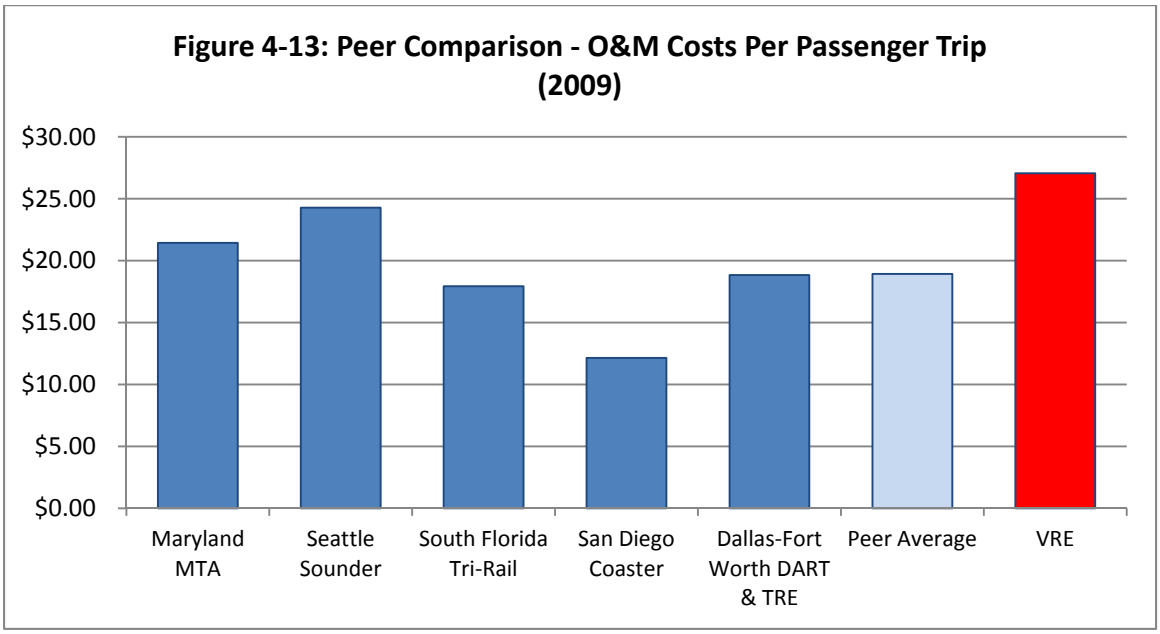
- **Operating Cost per Passenger Trip**: This performance measure provides an indication of how efficient a system is at balancing the cost of providing service with the number of patrons it serves. Peer system costs per passenger trip range from $13.65 (Sounder) to $8.87 (DART & TRE) with an average of $11.90. VRE's costs at $13.07 are slightly higher, or performance on this measure is slightly lower, than the peer average.



- **Operating Cost per Revenue-Hour**: Figure 4-12 shows the peer system costs per revenue-hour range from $944 (Sounder) to $433 (DART & TRE), averaging $664. VRE's cost of operations of $854 per revenue-hour is 1.3 times the peer average.



- **Operating Cost per Revenue-Mile**: Figure 4-13 shows that on this measure of efficiency, the peers range between $24.29 (Sounder) and $12.15 (Coaster), with a peer average of $18.93. Again, VRE is less efficient than the peer average, spending $27.06 for each revenue-mile of service. This is 1.43 times the peer average.



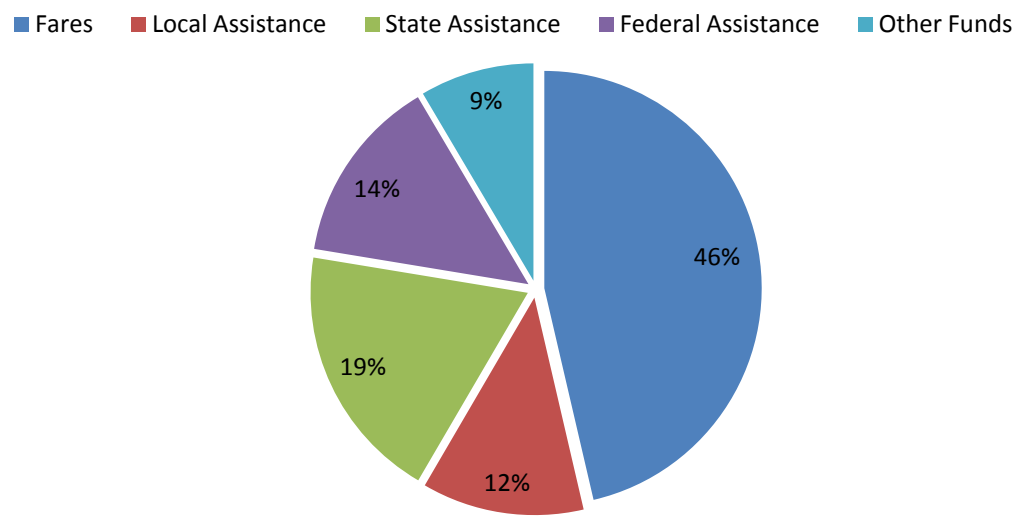
5.0 FINANCIAL ANALYSIS

The subsections below highlight the revenue sources used by VRE and its peers to fund operating and maintenance (O&M) and capital requirements. Data utilized for the following analyses indicate the range of funding sources for commuter rail services provided by the agency for the 2009 NTD report year. While levels and sources of funding used for O&M tend to be relatively consistent from year to year, annual capital funding levels and sources can vary significantly, depending on the projects programmed and grant sources occurring in a particular year.

5.1 Funding Sources for O&M

The NTD categorizes sources of O&M funds as passenger fares; local, state and federal assistance; and other. Figure 5-1 illustrates VRE's key revenue sources for report year 2009. VRE relied most heavily on fares for almost half the O&M budget (46 percent). The remainder of the budget was funded through local, state, federal and other sources.

Figure 5-1: VRE Sources for O&M Funding (2009)



Farebox Revenues for O&M: Most transit agencies collect fares for the services they provide. The extent to which fares cover O&M costs is referred to as the farebox recovery rate. Figure 5-2 shows the recovery rate for the peer systems. Farebox recovery rates of peer systems ranged from 12 percent (DART & TRE) to 43 percent (Coaster). VRE's farebox recovery rate (46 percent) was 20 percent more than the peer average of 26 percent.

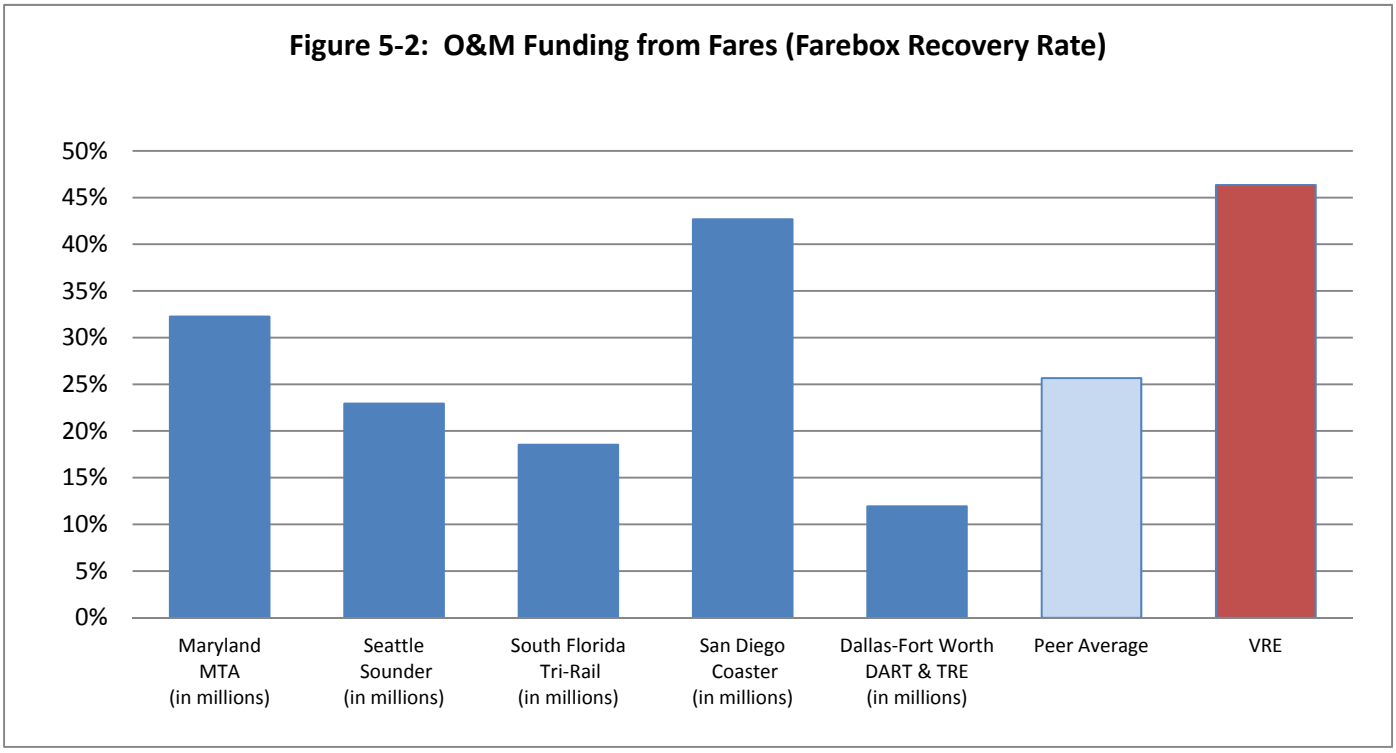


Figure 5-2: O&M Funding from Fares (Farebox Recovery Rate)
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Maryland MTA (in millions)
Seattle Sounder (in millions)
South Florida Tri-Rail (in millions)
San Diego Coaster (in millions)
Dallas-Fort Worth DART & TRE (in millions)
Peer Average
VRE

6.0 KEY FINDINGS OF PEER REVIEW

This review has compared the VRE system to five peer transit systems with respect to operational and financial characteristics and performance. The Federal Transit Administration's NTD was the primary source of data for these systems, with the most recently available data (2009) used in the analysis. While no two train systems are alike, the following commuter rail systems were selected as peers to VRE:

- Maryland Transit Administration – NTD #3034
- Central Puget Sound Regional Transit Authority – NTD #0040
- South Florida Regional Transportation Authority – NTD #4077
- North County Transit District– NTD #9030
- Dallas Area Rapid Transit and Fort Worth Transportation Authority – NTD #6056 and 6007 *(Note: Data for DART & TRE systems is the sum of both systems, unless otherwise noted)*

In general, VRE's service area was smaller, service characteristics and operating budget were similar, but fare revenue was higher than the peer system averages, as summarized in Table 6-1.

Table 6-1: VRE and Peer-Average Characteristics

Characteristic	Peer Average	VRE
Service Area		
Square Miles	1,820	703
Population (millions)	2.70	0.68
Population Density	2,059	932
Service		
Peak Vehicles	57	78
Passenger Trips (millions)	3.81	3.87
Revenue-Miles (millions)	2.42	1.87
Revenue-Hours	68,344	59,257
Financial		
Annual Operating Cost (millions)	$ 47.34	$ 50.60
Fare Revenue (millions)	$ 12.54	$ 25.91

Key findings of the peer review were as follows, although it should be noted when making comparisons that all peers except Sounder operate a greater number of daily trains than VRE including midday, reverse flow and weekend service:

- ***Vehicle Utilization:*** VRE's revenue-miles and revenue-hours per peak vehicles were about half the peer average, respectively. All the peers except MTA exhibited higher spare ratios than the FTA guidelines of 20 percent spares.

- ***Service Supplied:*** In comparison to its peers, VRE operates more service hours and miles per capita, and more service hours and revenue-miles per square mile than the peer averages.

- ***Ridership Productivity:*** The passenger trips per capita for VRE are much higher than the peer average. VRE's productivity in terms of passenger-trips per revenue-hour is 19 percent higher than the peer average. VRE serves 29 percent more passenger-trips per revenue-mile than its peers. The high incidence of employer-sponsored commuting benefits in the DC region has a significant impact on these measures.

- ***Cost Efficiency:*** VRE was less cost efficient than the peer average on a operating cost per passenger trip, operating cost per revenue-hour, and operating cost per revenue-mile basis.

- ***Farebox Revenues:*** VRE's farebox recovery rate was 20 percent more than the peer average.

- ***O&M Funds:*** VRE's FY2009 operating budget was similar to the peer average. VRE derived a significant share of its operating revenue from fares (46 percent).

- ***Capital Funds:*** VRE's capital budget was 19 percent less than the peer average.

Appendix D

VIRGINIA RAILWAY EXPRESS
STATION AMENITIES AND OWNERSHIP RESPONSIBILITIES

Appendix B: VRE Stations and Amenities Ownership Responsibilities

Station	Facility Name	Owner	Pavement	Draining	Lights	Landscape	Snow Removal
Fredericksburg	**Station**	CSX	City of Fredericksburg				
	LOT A	Tommy Mitchell					
	LOT B	City of Fredericksburg					
	LOT C	Wack Company					
	LOT D	Joe Wilson					
	LOT E	Albertine					
	LOT F	Timbernest LLC					
	LOT G	VRE					
	LOT H	New City Fellowship					
Leeland Road	**Station**	VRE					
	Main Lot	Stafford County	VDOT		VRE		VDOT
	Gravel Lot	Stafford County					
Brooke	**Station**	VRE					
	Parking	VDOT			VRE		VDOT
Quantico	**Station**	CSX	VRE				
	Main Lot (original)	PWC	VRE				
	Navy Lot	Navy	PWC				
	South Lot	VRE					
Rippon	**Station**	VRE					
	Elevator	VRE	N/A				
	Main Lot	PWC	VDOT		VRE		VDOT

Station	Facility Name	Owner	Pavement	Draining	Lights	Landscape	Snow Removal
	North Lot	KP Big Crest Lane LLC	VRE				
Woodbridge	**Station**	PWC	VRE				
	Second Platform	VRE (CSX property)	VRE				
	Parking Garage	PWC	VRE/VDOT (Access Rd)	VRE			
	Surface Lot	VRE					
Lorton	**Station**	VRE					
	Parking Lots	Fairfax County				VRE	Fairfax County
Franconia/ Springfield	**Station**	VRE					
	Parking	WMATA	No VRE Parking (Metro garage only)				
	Second Platform & Elevator East	VRE					
	Elevator - West	METRO (VRE MAINTAINS)	VRE				
Broad Run/Airport	**Station**	VRE					
	Main Lot	PWC	VDOT		VRE		VDOT
	PRTC Lot	PRTC	VRE				
	Expansion Lot & Barn Lot	PWC	VRE				
	Airport Lot	City of Manassas	VRE				
	Piper Lane Access Rd	PWC	VDOT				
Manassas City	**Station**	City of Manassas					
	West & North	VRE					

Station	Facility Name	Owner	Pavement	Draining	Lights	Landscape	Snow Removal
	Platforms						
	Lot C, D, F	City of Manassas					
Manassas Park	**Station**	VRE					
	Main Lot	City of Manassas Park	VRE				
	North Lot	VRE	VRE				
Burke Centre	**Station**	VRE	VRE				
	Parking/Garage	Fairfax County					
Rolling Road	**Station**	VRE					
	Parking Lot	Fairfax County					
Backlick Road	**Station**	VRE					
	Parking	Fairfax County					
Alexandria	**Station - West Side**	City of Alexandria	Amtrak				
	East Platform	VRE	N/A	VRE		N/A	VRE
	Parking	N/A	City of Alexandria				
Crystal City	**Station**	VRE					
L'Enfant	**Station**	VRE					
Union Station	**Station**	AMTRAK					

Source: VRE

Appendix E

POTOMAC AND RAPPAHANNOCK TRANSPORTATION COMMISSION TITLE VI PROGRAM (PROVISIONS PERTINENT TO VRE)

Potomac and Rappahannock Transportation Commission Title VI Program

FTA requires recipients to report certain general information to determine compliance with Title VI. The collection and reporting of this program information constitutes the recipient's Title VI Program. To ensure compliance with 49 CFR Section 21.9(b), FTA requires that all recipients document their compliance by submitting a Title VI Program to FTA's regional civil rights officer once every three years.

The contents of the submission should include the following information:

A. A summary of public outreach and involvement activities undertaken since the last submission.
B. A copy of the agency's plan for providing language assistance.
C. A copy of the agency procedures for tracking and investigating Title VI complaints.
D. A list of any Title VI investigations, complaints, or lawsuits filed with the agency.
E. A copy of the agency's notice to the public that it complies with Title VI and instructions to the public on how to file a complaint.

Following is the Potomac and Rappahannock Transportation Commission's Title VI Program submittal.

A. PUBLIC OUTREACH

The Potomac and Rappahannock Transportation Commission and VRE held several outreach activities as listed below, the majority were public hearings related to fare increases or yearly budget approvals.

PRTC

May 9, 2006	Public Hearing on Proposed FY07 Budget and Federal Grant Applications
June 7, 2006	Public Hearing on Proposed Fare Increase Related to SmarTrip (never implemented)
December 13, 2006	Community Involvement for PRTC Long Range Bus Plan Preparation
February 27, 2007	Public Hearing on Proposed Fare Increase
May 16, 2007	Public Hearing on Proposed FY2008 Budget and Grant Applications
September 10, 2007	Public Hearing on Long Range Bus Service Plan
May 28, 2008	Public Hearing on Proposed FY09 Budget and Federal Grant Applications
September 2, 3, 10, and 11, 2008	Public Hearing on Proposed Fare Increase

VRE

February 2005	Several Public Hearings on Proposed Fare Increase for FY2006
February 2006	Several Public Hearings on Proposed Fare Increase for FY2007
February 2008	Several Public Hearings on Proposed Fare Increase for FY2009
September 2008	Several Public Hearings on Proposed Mid-year Fare Increase for FY2009 and Proposed Fare Increase for FY2010

In 2005 PRTC embarked on a Long Range Strategic Plan and held several public hearings related to this effort, plus started the planning process with focus group meetings of various stakeholders (OmniLink

and OmniRide customers, regional business and education leaders, social and human services agencies, Prince William County staff from different agencies, PRTC and First Transit staff, and elected officials). The summary of Stakeholder Interviews is attached for reference (Attachment I). The Community Input session and Public Hearing were advertised in the local papers, on PRTC's Website, on PRTC buses, (all in English and Spanish). Also, the local cable channel carried a blurb and the Rider's Express carried a notice. A summary of the Long Range Bus Plan process, the efforts taken to involve the public and the comments received are Attachment II.

PRTC has further refined its public outreach process so that for the proposed FY2009 mid-year fare increase there were several public hearings in September 2008 on both sides of the County to give as much opportunity to all of our riders for input. There was the usual notification to the papers, posting of notices on the webpage and on buses, Rider's Express, etc., but for these public hearings there was an additional notification added. The Civil Rights Coordinator got permission from the Prince William County School Board to post notices in schools with a high percentage of ESOL students. Those notices, the permission letter and a summary of the public hearings are Attachment III.

VRE holds public hearings for fare increases in each of their sponsoring jurisdictions and in Washington DC. There is usually a month of hearings held at various times of the day to allow the riders as much access a possible. VRE post notices of the hearings on their website, their e-mail notification system, a seat drop on all the trains, and in local newspapers. Attachment IV is a representative package of the VRE public hearing process and just happens to be for the latest fare increase.

B. LANGUAGE ASSISTANCE PLAN

Attachment V is PRTC 's Language Assistance Plan.

C. TITLE VI COMPLAINT INVESTIGATION AND TRACKING PROCEDURES

Attachment VI is PRTC's internal procedures for handling and processing Title VI Complaints.

D. TITLE VI INVESTIGATIONS, COMPLAINTS, AND LAWSUITS

PRTC/VRE have had two Title VI investigations (one is still in process). Attachment VII is the Investigation, Complaints and Lawsuits Log.

E. AGENCY NOTICE TO THE PUBLIC

Attachment VIII includes examples of PRTC's notification to the public, which includes the webpage (the same notice is posted in the Transfer Center at the PRTC administration building), a flyer that will periodically be posted on the buses in both English and Spanish, and all schedules, both English and Spanish (samples are included). VRE's notification from their web page is also attached and language (per attached e-mail) will be included in the VRE Rider's Guide (which is being reprinted at the moment).

There are additional requirements for recipients that provide service to geographic areas with a population of 200,000 or more people in order to comply with 49 CFR U.S.C. 5307. These requirements are:

F. Requirement to Collect Demographic Data
G. Requirement to Set System-wide Service Standards
H. Requirement to Set System-wide Service Policies
I. Requirement to Evaluate Service and Fare Changes
J. Requirement to Monitor Transit Service

F. DEMOGRAPHIC DATA

The demographic and service profile maps and charts are provided in Attachment IX. Also included, as Attachment X, are the recent PRTC and VRE Customer Surveys.

G. SYSTEM-WIDE SERVICE STANDARDS

Attachment XI outlines the System-wide Service Standards.

H. SYSTEM-WIDE SERVICE POLICIES

Attachment XII outlines the System-wide Service Policies.

I. EVALUATION OF SERVICE AND FARE CHANGES

Attachment XIII contains two fare increase evaluations for PRTC; one evaluation for a fare increase that was implemented on April 2, 2007 and the other for a fare increase that was implemented on December 15, 2008.

J. MONITORING TRANSIT SERVICES

PRTC and VRE use Customer Satisfaction Survey's to monitor service, which for VRE are done annually and for PRTC are done three times a year.

From PRTC's 2006 On-Board Passenger survey (already provided in Attachment X) we know the income and racial profile of the passengers of OmniLink and OmniRide services which are outlined in Table One and Table Two below.

Table One: Income Profile of PRTC's Bus Customers		
Household Income	OmniRide	OmniLink
$100,000 +	43%	19%
$75-99,999	22%	15%
$50-74,999	23%	26%
$35-49,999	6%	11%
$20-34,999	4%	10%
$10-19,999	1%	12%
Under $10,000	1%	6%

Table Two: Racial Profile of PRTC's Bus Customers		
Race	OmniLink	OmniRide
White	22%	52%
African American	51%	34%
Hispanic	20%	7%
Asian	3%	5%
Other	4%	2%

Among OmniLink passengers there is a higher incidence of minority and low-income individuals than OmniRide passengers. Therefore the responses to seven satisfaction measures where compared for both these services. The results of that comparison are Attachment XIV.

The results of the September 2007 satisfaction survey show that Overall Quality of Service for both OmniRide and OmniLink were about the same, 76% and 75% respectively. Since then the Overall Quality of Service for OmniRide has trended up slightly while for OmniLink it has fallen significantly, mainly due to a drop in On-time Performance. While management believes the decrease in On-time Performance is attributable to the increase in deviations, a group has been formed of First Transit and PRTC staff to investigate and make a recommendation on this issue. The Title VI Coordinator is part of this group.

Language Assistance Plan

Potomac and Rappahannock Transportation Commission

2008

PRTC

Potomac and Rappahannock
Transportation Commission

Potomac and Rappahannock Transportation Commission (PRTC)
Language Assistance Implementation Plan

An assessment of the universe of limited – English proficient populations serves as a basis for the Language Assistance Implementation Plan, as required by Department of Transportation (DOT) from recipients who receive Federal assistance. The first factor in this assessment includes examining the number or proportion of LEP persons eligible or likely to come in contact with your service or programs. For the purposes of this analysis, Census data was reviewed for PRTC's immediate service area - Prince William County and the Cities of Manassas and Manassas Park and data was obtained from the Prince William County and City of Manassas Public School Systems.

Background – Identifying Eligible Service Population

Census Data

Spoken Language at Home

According to the 2000 Census, English is the only language spoken at home (among persons 5 years and older) by an estimated 84 percent of residents in Prince William County, 82 percent in the City of Manassas and 80 percent in the City of Manassas Park. The Census also estimated that Spanish was spoken at home in higher proportions in the City of Manassas (14%) and Manassas Park (14%) when compared to the County (9.%). Although the Federal Transit Administration (FTA) does not specify thresholds for translating materials, the Department of Justice recommends that agencies translate materials if the effected non-English population exceeds 5 percent of the total population [Federal Register: January 16, 2001 (Volume 66, Number 10)].

As Tables 1, 2 and 3 (one for each service area jurisdiction) show, Spanish speakers compromised up to 9% or 14% of the population while Asian and Pacific Islander, Indo-European and "other languages" spoken at home falls below the 5 percent threshold. An assessment of the universe of limited – English proficient populations serves as a basis for the Language Assistance Implementation Plan, as required by Department of Transportation (DOT) from recipients who receive Federal assistance. The first factor in this assessment includes examining the number or proportion of LEP persons eligible or likely to come in contact with your service or programs. For the purposes of this analysis, Census data was reviewed for PRTC's immediate service area - Prince William County and the Cities of Manassas and Manassas Park and student participation data in English for Students of Other Languages (ESOL) programs was obtained from the Prince William County and the City of Manassas public school systems.

Table 1: Language Spoken at Home – 2000 Census – **Prince William County**

Language Spoken at Home	Ages 5-17		Ages 18 -64		Ages 65 +		Ages 5+	
	Total Number	Percentage	Total Number	Percentage	Total Number	Percentage	Total	Percentage
English	**52,508**	85.2%	**151,320**	82.9%	11,345	88%	215,173	84%
Spanish	**5,963**	9.7%	**16,761**	9.2%	522	4%	23,246	9%
Indo-European	**1,866**	3.0%	**7,324**	4.0%	663	5%	9,853	4%
Asian – Pacific Islander	**635**	1.0%	**4,907**	2.7%	303	2%	5,845	2%
Other	**685**	1.1%	**2,155**	1.2%	81	1%	2,921	1%
Total	**61,657**	100%	**182,467**	100%	12,914	100%	257,038	

Table 2: Language Spoken at Home – **City of Manassas**

Language Spoken at Home	Ages 5-17		Ages 18 -64		Ages 65 +		Ages 5 and over	
	Total Number	Percentage	Total Number	Percentage	Total Number	Percentage	Total Number	Percentage
English	1780	83%	5218	79%	410	87%	7408	80%
Spanish	293	14%	952	14%	16	3%	1261	14%
Indo-European	37	2%	178	3%	24	5%	239	3%
Asian – Pacific Islander	37	2%	243	4%	22	5%	302	3%
Other	6	0%	49	1%	0	0%	55	1%
Total	2153	100%	6640	100%	472	100%	9265	100%

Table 3: Language Spoken at Home – **City of Manassas Park**

Language Spoken at Home	Ages 5-17		Ages 18 -64		Ages 65+		Ages 5 and over	
	Total Number	Percentage	Total Number	Percentage	Total Number	Percentage	Total Number	Percentage
English	**6214**	85%	**18,180**	80%	**1712**	91.2%	26,106	82%
Spanish	**935**	13%	**3,417**	15%	**58**	3.1%	4,410	14%
Indo-European	**82**	1%	**525**	2%	**70**	3.7%	677	2%
Asian – Pacific Islander	**72**	1%	**577**	3%	**32**	1.7%	681	2%
Other	**9**	0%	**132**	1%	**6**	0.3%	147	0%
Total	**7312**	100%	**22,831**	100%	**1,878**	100%	32,021	

Limited English Proficient Population

The 2000 Census also provides a snapshot of the Limited English proficient (LEP) population through data on the ability to speak English – "very well, "well", "not well" and "not at all". Out of residents (over 18 years old) who speak Spanish at home, 32 percent reported speaking English "not well" or "not at alll" in Prince William County. At a fine grain level, the data showed higher concentrations of LEP residents, speaking "not well or not at all", living along the U.S. Route 1 in Prince William County and along the Business 234 and Route 28 corridor just outside the City of Manassas. In the Cities of Manassas and Manassas Park, the proportions of Spanish speaking residents who do not speak English well are much higher with 48 percent in Manassas and 51 percent in Manassas Park. In the City of Manassas, the concentration of LEP Spanish speaking population is on the southwest part of the City bordered by Center Street on the north and Grant Avenue on the west. The City of Manassas Park, which comprises of only two census tracts, had slightly higher proportions of limited English speaking populations west of Centreville Road (Route 28). Figures 1, 2 and 3 (Appendix 1) are overlays of PRTC's service with respect to the LEP (Spanish Speakers) population for Prince William County and the Cities of Manassas and Manassas Park.

Table 4: Ability to Speak English, Ages 18-64 – Prince William County

Language	Very Well/ Well	Percentage	Not Well/Not at All	Percentage
Spanish	**11416**	68%	**5345**	32%
Indo-European	**6754**	92%	**570**	8%
Asian – Pacific Islander	**4084**	83%	**823**	17%
Other	**2044**	95%	**111**	5%

Table 5: Ability to Speak English, Ages 18-64 – City of Manassas

Language	Very Well/ Well	Percentage	Not Well/Not at All	Percentage
Spanish	**1779**	52%	**1638**	48%
Indo-European	**489**	93%	**36**	7%
Asian – Pacific Islander	**466**	81%	**111**	19%
Other	**132**	100%	**0**	0%

Table 6: Ability to Speak English, Ages 18-64, City of Manassas Park

Language Spoken at Home	Very Well/ Well	Percentage	Not Well/Not at All	Percentage
Spanish	**463**	49%	**489**	51%
Indo-European	**143**	76%	**35**	20%
Asian – Pacific Islander	**223**	92%	**20**	8%
Other	**33**	67%	**16**	33%

Student Enrollment in English for Speakers of Other Languages (ESOL) Programs

While the U.S. Census provides a comprehensive snapshot of the demographic trends for the language spoken at home and the ability to speak English, it does not provide a current snapshot of the geographic concentrations of limited English speaking population in Prince William County, at a neighborhood level.

To this end, PRTC requested and reviewed ESOL student enrollment data from the Prince William County Public School System and City of Manassas Public School System for the academic year ending in June 2008. For this school year, the school system enrolled 69,213 students, out of which 13,180 students (or 19 percent) participated in the ESOL programs. According to the Prince William County school system ESOL statistics, the heavily concentrated ESOL participation, in comparison to the respective student body population, occurred near the City of Manassas and in the Dale City and Woodbridge sections of the County, as shown in Table 7a. Data from the City of Manassas Public School System revealed ESOL students compromised at least 43 percent of the student population in 3 out of 5 elementary schools, as shown in Table 7b.

Table 7a: ESOL Student Population (2007-2008) over 40 percent (PWC)

School	Location	Student Population	ESOL Enrollment	Percentage of ESOL
Loch Lomond ES	Manassas	335	202	60.3%
Yorkshire ES	Manassas	455	245	53.9%
West Gate ES	Manassas	616	326	52.9%
Bel Air ES	Dale City	555	287	51.7%
Neabsco ES	Woodbridge	750	375	50%
Forest Park HS	Dale City	153	73	47.7%
Occoquan ES	Woodbridge	535	249	46.5%
Sudley ES	Manassas	512	237	46%
Potomac View ES	Woodbridge	620	285	46%
Kilby ES	Woodbridge	318	146	46%
Sinclair ES	Manassas	665	297	45%
Belmont ES	Woodbridge	430	186	43%
Minnieville ES	Dale City	616	261	42%
Dale City ES	Dale City	563	237	42%
Featherstone ES	Woodbridge	464	195	42%

Source: Prince William County Public School System

Table 7b: ESOL Student Population – School Year 2007-2008

(City of Manassas Public Schools)

School	Location	Student Population	ESOL Enrollment	Percentage of ESOL
Baldwin ES	Manassas	505	256	51%
Jennie Dean ES	Manassas	642	278	43%
Weems ES	Manassas	677	291	43%
Haydon ES	Manassas	662	213	32%
Round ES	Manassas	572	179	31%
Mayfield School	Manassas	922	364	39%
Metz MS	Manassas	1519	305	20%
Osborne HS	Manassas	2041	322	16%

Source: City of Manassas Public System

Frequency of Contact by LEP Populations with PRTC Services

The next step in developing a language assistance implementation plan is to determine the frequency of contact with PRTC's services, programs, and activities by LEP populations. For this purpose, PRTC consulted the following data sources to determine the frequency of contact by LEP residents with PRTC services. These sources are:

- PRTC Spring 2006 On-Board Bus Survey
- PRTC Call Center Usage of Translation Services

PRTC Spring 2006 On-Board Survey

In 2006, PRTC conducted an on-board survey of passengers using the fixed route commuter service (OmniRide) and the flex-route neighborhood service (OmniLink). A closer inspection of the survey data revealed that passengers use OmniLink bus service to access a variety of activities such as shopping, school, social services, and medical appointments as compared to OmniRide and MetroDirect services (see Table 8).

While the On-Board survey does not inquire about English proficiency, it does inquire about ethnicity. PRTC examined the ethnic breakdown of riders by service to assess how frequently minority populations use our services and to understand the most common trip purposes among this segment of the population. As shown in Table 9, approximately 20% of the OmniLink riders classify themselves as Hispanic as opposed to 7% on OmniRide (Table 10).

Since the proportion of limited English proficient residents in the Cities of Manassas and Manassas Park is higher relative to Prince William County, PRTC requested and examined passenger survey data obtained from Manassas area local bus routes. As Table 11 shows, Hispanic riders in this area used local (OmniLink) services for shopping and doctor/medical visits in higher proportions than other surveyed non-Hispanic riders.

Table 8: Origin Activity/Purpose

Main Trip Purpose/Activity	Metro Direct	OmniLink	OmniRide (O)	OmniRide (D)
Work	67%	59%	99%	1%
Shopping	11%	11%	0%	0%
School K-12	0%	3%	0%	0%
College	4%	6%	1%	0%
Social Services	0%	3%	0%	0%
Social Recreation	5%	10%	0%	0%
Doctor or Medical	5%	6%	0%	0%
Home	5%	0%	0%	97%
Other	4%	3%	0%	2%
Total	100%	100%	100%	100%

Source: Spring 2006 On-Board Passenger Survey

Table 9: Ethnicity – OmniLink

Ethnicity	2006
White	22%
African American/Black	51%
Hispanic	20%
Asian	3%
Native American Indian	3%
Other	1%
Total	100%

Source: Spring 2006 On-Board Passenger Survey

Table 10: Ethnicity - OmniRide

Ethnicity	2006		
	Weekly OmniRide Usage		
	4 or Less Days	5 Days	Total
White	54%	52%	52%
African American/Black	33%	34%	34%
Hispanic	6%	7%	7%
Asian	6%	4%	5%
Native American Indian	2%	2%	2%
Other	0%	1%	1%
Total	100%	100%	100%

Source: Spring 2006 On-Board Passenger Survey

Table 11: OmniLink Manassas Area Survey Data – Trip Purpose by Ethnicity

Trip Purpose	Hispanic	Black	White	Other
Work	32%	20%	33%	15%
Shopping	46%	14%	25%	14%
Social/Recreational	27%	28%	37%	7%
Doctor/Medical Visit	41%	32%	21%	5%

Source: Spring 2006 On-Board Passenger Survey

PRTC Call Center Usage of Translation Services

The PRTC Customer Service center employs six (6) customer service advocates to handle incoming calls from customers. On an average month, the Customer service center handles about 12,000 calls. For calls that require translation assistance, PRTC Customer Service agents seek the services of Language Line Services, which provides over the phone translation in about 170 languages including Spanish.

During Fiscal Year 2008, the PRTC Customer service center received approximately 140,000 calls, out of which 49 calls required a third party Spanish speaking interpreter.

This means that the frequency of encounter by the PRTC customer advocate agents of persons that require language assistance is than one percent of all calls.

Table 11: Usage of Interpretation Services (FY 08)

Month	Language	Estimated Call Volume
July	Spanish	0
August	Spanish	17
September	Spanish	1
October	Spanish	0
November	Spanish	1
December	Spanish	0
January	Spanish	1
February	Spanish	2
March	Spanish	20
April	Spanish	1
May	Spanish	1
June	**Spanish**	5
FY08 Totals	**Spanish**	**49**

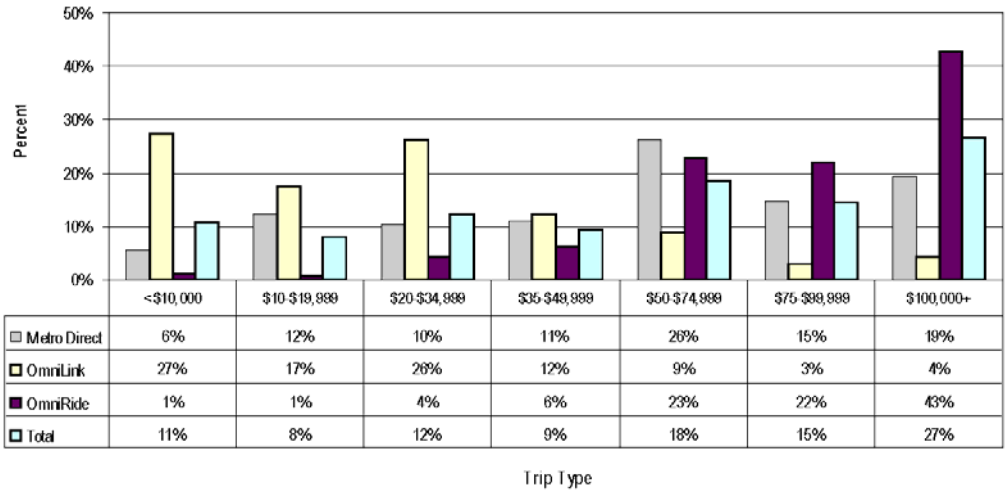
Source: PRTC Customer Service Department

The Importance of Your Program to LEP Persons

The third factor to consider in developing a Language Assistance Implementation Plan is to determine the importance of PRTC's programs, services, and activities to LEP populations. From the PRTC on-board survey of 2006 we know 70% of OmniLink riders have of household income of less than $35,000 (with 27% reporting a household income of less than $10,000), 64% of the same riders do not have a drivers license and if OmniLink was not available 22% could not have made the trip or would have taken a taxi (32%) or ridden with somebody else (24%).

Inability to access PRTC's services would have a severe impact on the quality of life of LEP persons.

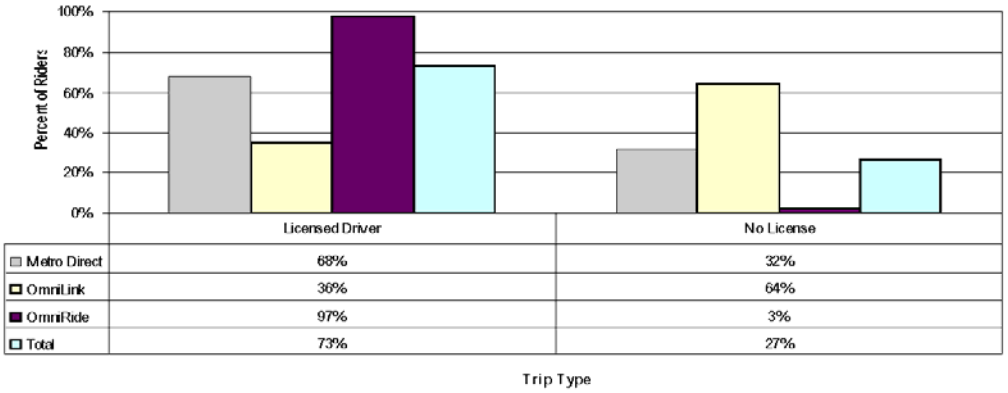
Table 12: Income of PRTC Riders



	<$10,000	$10-$19,999	$20-$34,999	$35-$49,999	$50-$74,999	$75-$99,999	$100,000+
Metro Direct	6%	12%	10%	11%	26%	15%	19%
OmniLink	27%	17%	26%	12%	9%	3%	4%
OmniRide	1%	1%	4%	6%	23%	22%	43%
Total	11%	8%	12%	9%	18%	15%	27%

Source: Spring 2006 On-Board Passenger Survey

Table 12: Licensed Driver vs. Non-Licensed Driver



	Licensed Driver	No License
Metro Direct	68%	32%
OmniLink	36%	64%
OmniRide	97%	3%
Total	73%	27%

Source: Spring 2006 On-Board Passenger Survey

Resources Available to the Recipient for Language Assistance Implementation Plan

The last factor in developing a Language Assistance Implementation Plan was to determine what PRTC was already doing and what it could do in the future in providing language assistance. PRTC Directors, as well as, the Executive Director met several times to determine what was being done in various areas of the organization and what could be improved with respect to access to our programs, services and activities for LEP populations. The attached schedule was developed that encompasses activities throughout the whole organization.

PRTC Language Assistance Implementation Plan Schedule

Capital Projects & Facilities

ITEM	NOW	FY10	FY11	FY12
Assess the LEP population in areas affected by construction. • Code businesses and residents who are LEP that border the project into database. • Develop an outreach plan targeting LEP residents and businesses in construction areas.		X		
Use of in-person interpreter services upon request for public meetings and important events (this will be included in public notification for meetings).	X			
Translate vital documents.	X	X		
Provide notice of right to language assistance, at no cost, on non-vital yet important outreach documents.			X	

Procurement

ITEM	NOW	FY10	FY11	FY12
Review contract language to ensure all contractors providing goods and services are in compliance with Title VI regulations (Title VI of the Civil Rights Act of 1964, "Nondiscrimination under Programs Receiving Federal Financial Assistance through the U.S. Department of Transportation").	X			

Marketing & Customer Services

ITEM	NOW	FY10	FY11	FY12
Provide telephone interpretation for basic transit questions and trip planning assistance in 20 languages through an Interpretation Service.	X			
Translate vital documents, including: • Schedules • Emergency Services Plan	X			
Place a notice of right to language assistance, at no cost, on important outreach documents and on PRTC's website.		X		
Provide information in multiple languages about PRTC's complaint process		X		
Create protocol for responding to foreign language correspondence and communication.		X		
Provide key transit information and online Trip Planner in Spanish on PRTC's website.	X			

ITEM	NOW	FY10	FY11	FY12
Place foreign-language ads in publications serving second language populations to demonstrate PRTC's commitment to full information; to share current significant, service-related announcements; to increase comfort levels regarding access to information in a native language.	X			
Provide group travel training to LEPs by working through an interpreter.		X		

Operations

ITEM	NOW	FY10	FY11	FY12
Provide training to operators, fare inspectors and other frontline employees in LEP policies and procedures		X		
Coordinate training with PRTC's Human Resources and Diversity & Transit Equity departments.		X		
Add a question to the O&D Survey to assess respondents' English proficiency and primary spoken language.	X			

Diversity & Transit Equity

ITEM	NOW	FY10	FY11	FY12
Identify areas within the service district that have high concentrations of LEP individuals.	X			
Identify routes serving areas with high concentrations of LEP individuals.	X			
Day-to-day administration of LEP program, ensuring compliance and correct implementation.	X	X	X	X
Conduct an evaluation of PRTC's LEP plan to gauge its effectiveness and determine if updates are needed every two years or some other interval. Transit Equity staff will lead the evaluation with the help of staff familiar with Title VI language access requirements and the LEP plan. The evaluation will: • determine the number of LEP individuals in PRTC's service district • assess whether existing language assistance services are meeting the needs of clients with LEP • assess whether staff members understand PRTC's LEP policies and procedures, how to carry them out, and whether language assistance resources and arrangements for those resources are still current and accessible • seek feedback from LEP communities, including customers and community organizations, about the effectiveness of PRTC's LEP plan				X

Additional Services

ITEM	NOW	FY10	FY11	FY12
Provide group travel training to LEPs by working through an interpreter.		X		
Establish partnerships and work closely with community organizations that serve LEP populations.	X			
Identify service changes affecting areas with high concentrations of LEP individuals and develop mitigation strategies.		X		
Create one-stop LEP info center for agency.		X		
Determine which PRTC documents meet the definition of "vital documents"; stay aware of new documents that may be considered "vital".	X			
Incorporate LEP plan information into the new employee orientation handbook.			X	
Develop a process for determining: • if a particular document needs to be translated • into which languages it should be translated.			X	
Establish an agency-wide workflow whereby all written translation requests are routed through and managed by one individual to ensure consistency.		X		

Appendix 1 - MAPS

Figure 1: Map of LEP Population (Spanish speakers) – Prince William County

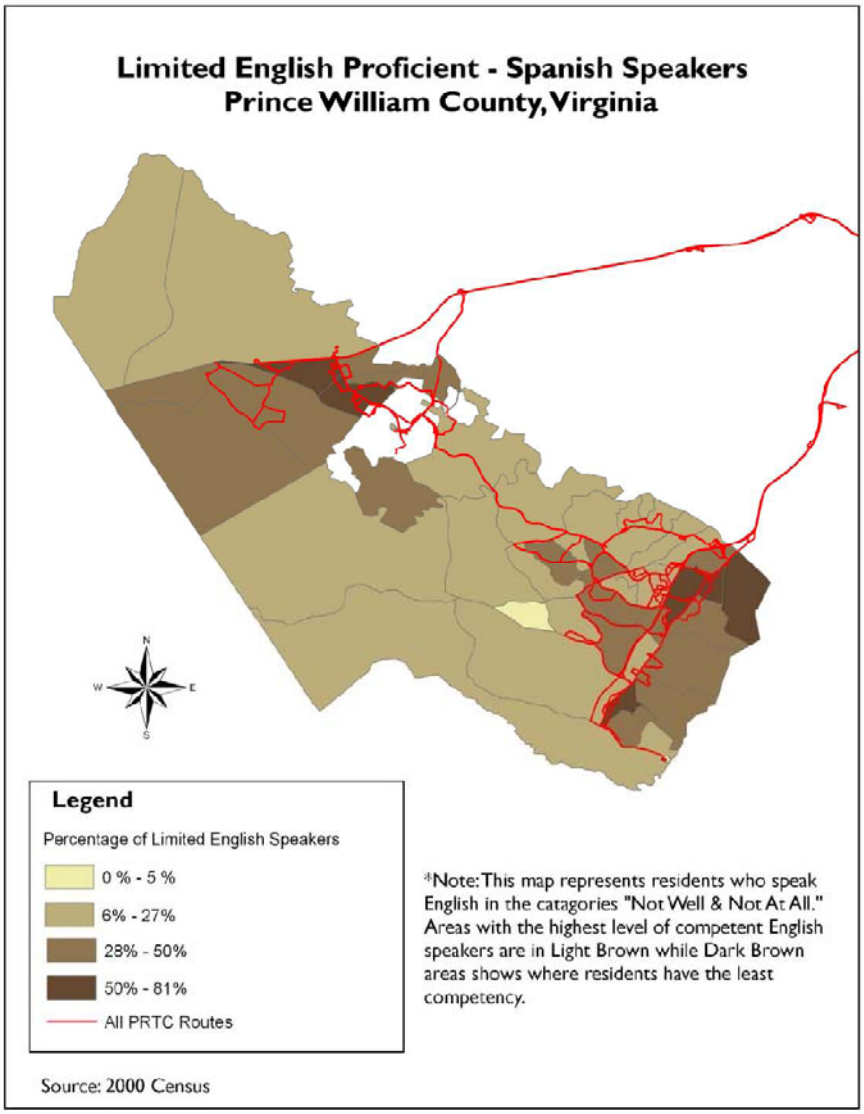


Figure 2: Map of LEP Population (Spanish speakers) – City of Manassas, VA

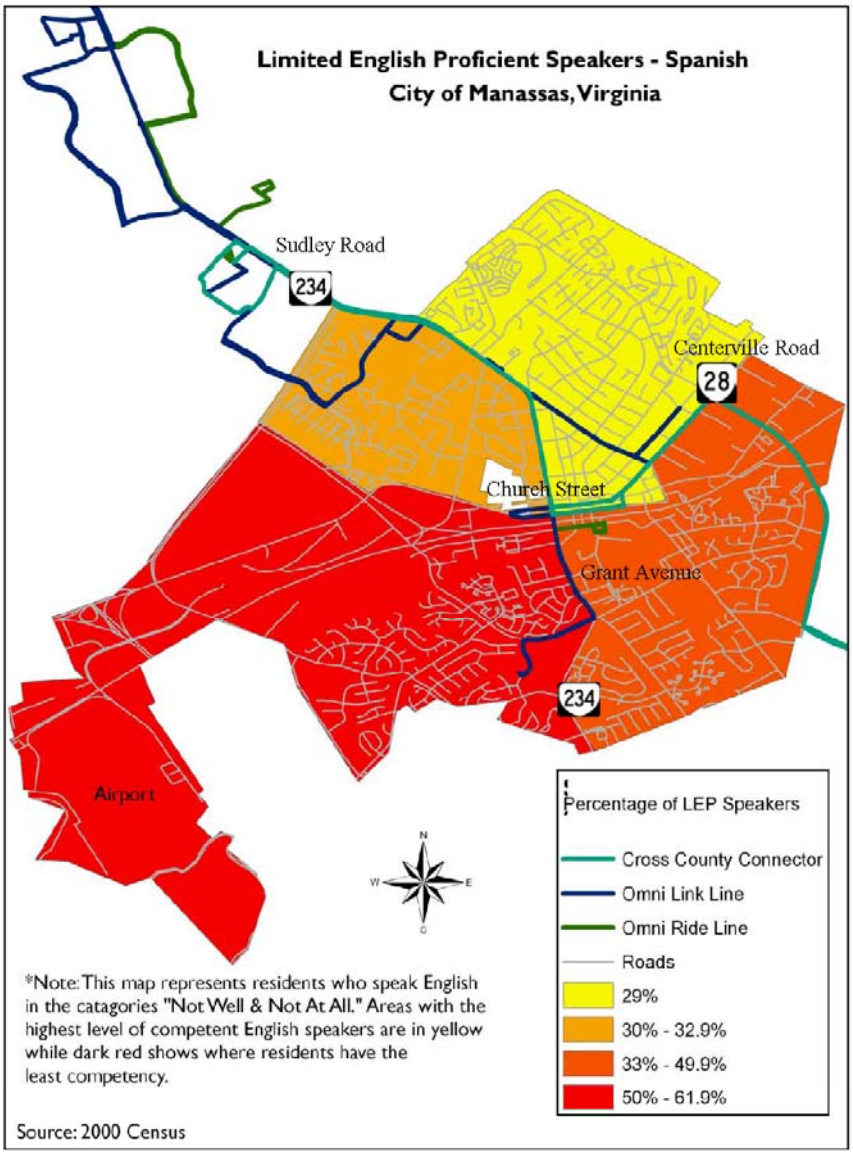


Figure 3: Map of LEP Population (Spanish speakers) – City of Manassas Park, VA

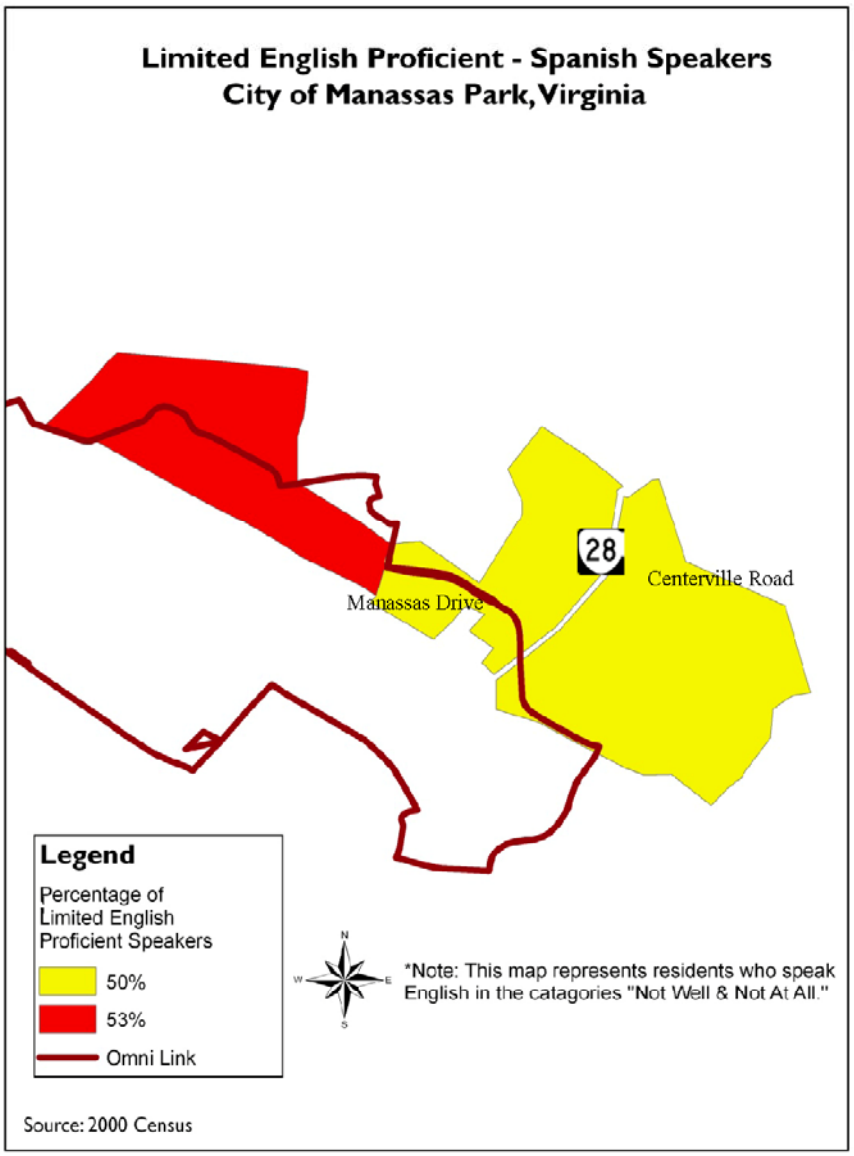
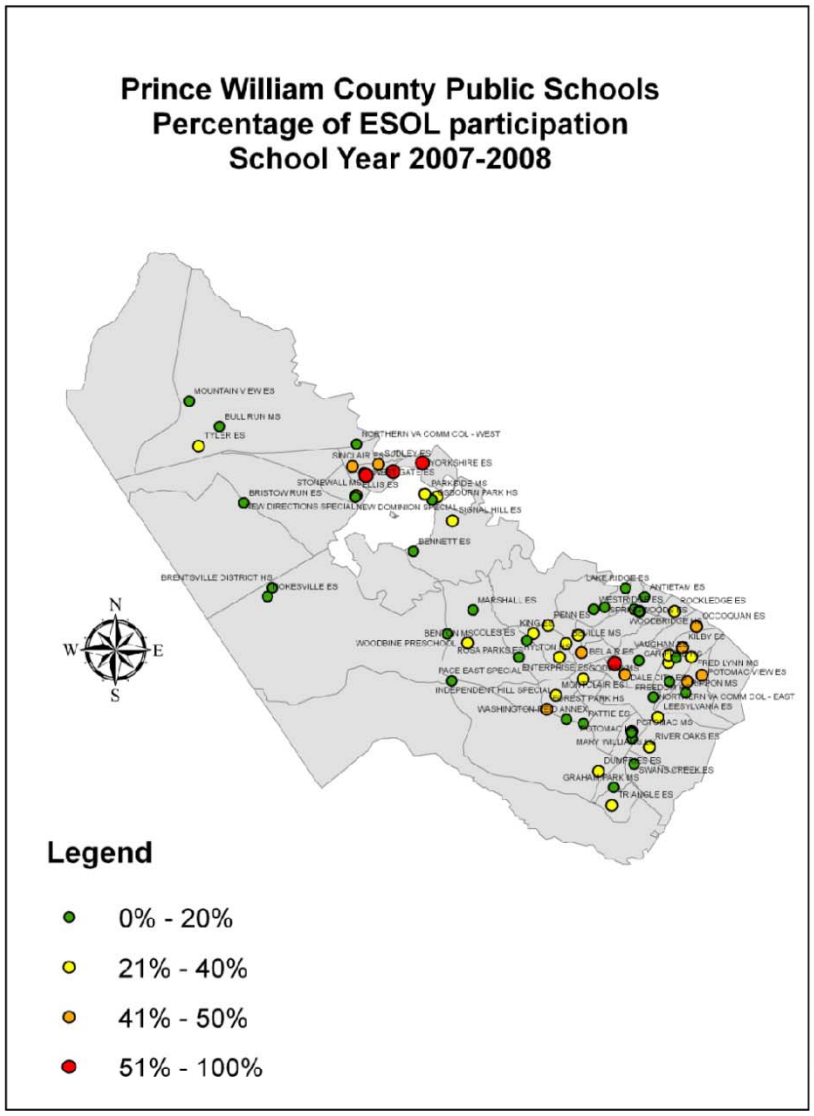


Figure 4: Map of ESOL Enrollment in Prince William County – School Year 2007-08



Source: Prince William County Public School System

Appendix 2 - BACKGROUND DATA

U.S. CENSUS, LANGUAGE AT HOME, PRINCE WILLIAM COUNTY, VA
ESOL PARTICIPATION IN PRINCE WILLIAM COUNTY, VA

Language Spoken at Home: Spanish
Prince William County

Census Tract	Very Well/ Well	Percentage	Not Well/Not at All	Percentage
9001	52	84%	10	16%
9002	700	73%	260	27%
9003	378	81%	88	19%
9004.03	204	88%	29	12%
9004.04	330	84%	65	16%
9004.05	361	63%	213	37%
9004.06	226	75%	76	25%
9005	283	38%	455	62%
9006	713	57%	542	43%
9007	417	69%	185	31%
9008	369	82%	81	18%
9009.01	226	57%	172	43%
9009.02	220	71%	92	29%
9009.03	24	100%	0	0%
9010.01	151	74%	54	26%
9010.05	135	96%	6	4%
9010.06	169	83%	34	17%
9010.07	268	79%	70	21%
9010.08	66	89%	8	11%
9011	305	97%	11	3%
9012.03	124	56%	96	44%
9012.08	127	85%	22	15%
9012.09	206	92%	17	8%
9012.1	332	85%	57	15%
9012.11	158	86%	25	14%
9012.12	204	88%	28	12%
9012.13	316	69%	140	31%
9012.14	413	92%	37	8%
9012.17	98	82%	22	18%
9012.18	239	89%	30	11%
9012.19	56	74%	20	26%
9012.2	188	84%	37	16%
9012.21	230	93%	16	7%
9012.22	112	92%	10	8%
9012.23	270	93%	19	7%
9013.01	99	79%	26	21%
9013.02	64	84%	12	16%
9014.03	186	37%	314	63%
9014.04	416	43%	560	57%
9014.05	99	54%	86	46%
9014.06	138	69%	62	31%
9015.01	135	80%	33	20%
9015.02	95	87%	14	13%
9016.01	133	69%	59	31%
9016.02	296	81%	71	19%
9017.01	549	43%	727	57%
9017.02	257	56%	201	44%
9019	279	65%	153	35%

Ability to Speak English – Census Tracts
Prince William County
Language Spoken at Home: Indo-European

Census Tract	Very Well/ Well	Percentage	Not Well/Not at All	Percentage
9001	52	100%	0	0%
9002	196	91%	19	9%
9003	259	96%	12	4%
9004.03	124	83%	25	17%
9004.04	170	97%	6	3%
9004.05	343	91%	33	9%
9004.06	279	97%	8	3%
9005	219	96%	10	4%
9006	324	93%	26	7%
9007	258	91%	24	9%
9008	171	94%	10	6%
9009.01	69	100%	0	0%
9009.02	156	96%	7	4%
9009.03	7	100%	0	0%
9010.01	47	92%	4	8%
9010.05	62	100%	0	0%
9010.06	225	94%	14	6%
9010.07	110	96%	5	4%
9010.08	27	100%	0	0%
9011	88	89%	11	11%
9012.03	119	100%	0	0%
9012.08	75	86%	12	14%
9012.09	174	85%	30	15%
9012.1	177	94%	11	6%
9012.11	47	92%	4	8%
9012.12	114	100%	0	0%
9012.13	200	79%	53	21%
9012.14	326	94%	21	6%
9012.17	169	80%	43	20%
9012.18	64	100%	0	0%
9012.19	100	95%	5	5%
9012.2	258	100%	0	0%
9012.21	84	100%	0	0%
9012.22	48	100%	0	0%
9012.23	168	95%	9	5%
9013.01	116	82%	26	18%
9013.02	148	100%	0	0%
9014.03	110	84%	21	16%
9014.04	321	98%	8	2%
9014.05	46	100%	0	0%
9014.06	127	100%	0	0%
9015.01	52	100%	0	0%
9015.02	39	83%	8	17%
9016.01	32	84%	6	16%
9016.02	126	67%	61	33%
9017.01	139	82%	31	18%
9017.02	74	100%	0	0%
9019	115	94%	7	6%

Ability to Speak English – Census Tracts
Prince William County
Language Spoken at Home: Asian and Pacific Islander Languages

Census Tract	Very Well/ Well	Percentage	Not Well/Not at All	Percentage
9001	0	0%	0	0%
9002	125	76%	39	24%
9003	77	75%	26	25%
9004.03	119	100%	0	0%
9004.04	84	94%	5	6%
9004.05	202	76%	63	24%
9004.06	66	100%	0	0%
9005	78	53%	70	47%
9006	77	66%	40	34%
9007	145	74%	51	26%
9008	136	89%	17	11%
9009.01	78	90%	9	10%
9009.02	57	81%	13	19%
9009.03	47	57%	35	43%
9010.01	71	66%	36	34%
9010.05	13	100%	0	0%
9010.06	102	88%	14	12%
9010.07	148	79%	39	21%
9010.08	36	100%	0	0%
9011	70	100%	0	0%
9012.03	66	100%	0	0%
9012.08	27	87%	4	13%
9012.09	200	100%	0	0%
9012.1	122	100%	0	0%
9012.11	70	74%	24	26%
9012.12	123	89%	15	11%
9012.13	105	78%	29	22%
9012.14	291	80%	74	20%
9012.17	19	100%	0	0%
9012.18	19	100%	0	0%
9012.19	29	100%	0	0%
9012.2	75	100%	0	0%
9012.21	100	78%	28	22%
9012.22	12	52%	11	48%
9012.23	99	85%	17	15%
9013.01	48	48%	52	52%
9013.02	39	100%	0	0%
9014.03	122	90%	14	10%
9014.04	177	91%	18	9%
9014.05	69	100%	0	0%
9014.06	86	100%	0	0%
9015.01	36	100%	0	0%
9015.02	49	100%	0	0%
9016.01	100	87%	15	13%
9016.02	94	87%	14	13%
9017.01	76	76%	24	24%
9017.02	35	100%	0	0%
9019	65	71%	27	29%

Ability to Speak English – Census Tracts
Prince William County
Language Spoken at Home: Other Languages

Census Tract	Very Well/ Well	Percentage	Not Well/Not at All	Percentage
9001	0	0%	0	0%
9002	44	100%	0	0%
9003	31	100%	0	0%
9004.03	45	90%	5	10%
9004.04	34	100%	0	0%
9004.05	204	100%	0	0%
9004.06	101	100%	0	0%
9005	28	70%	12	30%
9006	131	100%	0	0%
9007	71	100%	0	0%
9008	83	100%	0	0%
9009.01	40	100%	0	0%
9009.02	24	100%	0	0%
9009.03	7	100%	0	0%
9010.01	31	100%	0	0%
9010.05	8	100%	0	0%
9010.06	0	0%	0	0%
9010.07	83	100%	0	0%
9010.08	60	100%	0	0%
9011	18	67%	9	33%
9012.03	42	82%	9	18%
9012.08	26	100%	0	0%
9012.09	136	88%	18	12%
9012.1	68	100%	0	0%
9012.11	44	100%	0	0%
9012.12	29	100%	0	0%
9012.13	0	0%	0	0%
9012.14	103	82%	23	18%
9012.17	14	100%	0	0%
9012.18	0	0%	0	0%
9012.19	0	0%	0	0%
9012.2	97	100%	0	0%
9012.21	22	100%	0	0%
9012.22	23	100%	0	0%
9012.23	58	100%	0	0%
9013.01	27	100%	0	0%
9013.02	24	100%	0	0%
9014.03	47	100%	0	0%
9014.04	53	100%	0	0%
9014.05	0	0%	0	0%
9014.06	8	100%	0	0%
9015.01	10	100%	0	0%
9015.02	13	100%	0	0%
9016.01	0	0%	0	0%
9016.02	79	100%	0	0%
9017.01	47	71%	19	29%
9017.02	16	100%	0	0%
9019	15	48%	16	52%

Student Enrollment
English as Second Language (ESOL) Program
Prince William County Public Schools
School Year 2007-08

SCHOOL NAME	Total Student Body Enrollment	Number of ESOL Students	Percent ESOL
LOCH LOMOND ES	335	202	60%
YORKSHIRE ES	455	245	54%
WEST GATE ES	616	326	53%
BEL AIR ES	555	287	52%
NEABSCO ES	750	375	50%
FOREST PARK HS	153	73	48%
OCCOQUAN ES	535	249	47%
SUDLEY ES	512	237	46%
POTOMAC VIEW ES	620	285	46%
KILBY ES	318	146	46%
SINCLAIR ES	665	297	45%
BELMONT ES	430	186	43%
MINNIEVILLE ES	616	261	42%
DALE CITY ES	563	237	42%
FEATHERSTONE ES	464	195	42%
MULLEN ES	770	303	39%
KERRYDALE ES	520	203	39%
ELLIS ES	650	238	37%
VAUGHAN ES	579	211	36%
STONEWALL JACKSON HS	951	335	35%
DUMFRIES ES	434	144	33%
ENTERPRISE ES	580	192	33%
RIVER OAKS ES	630	203	32%
MARY WILLIAMS ES	730	221	30%
FRED LYNN MS	877	263	30%
TYLER ES	497	142	29%
OLD BRIDGE ES	600	170	28%
KING ES	618	173	28%
NEW DOMINION SPECIAL	70	19	27%
MARUMSCO HILLS ES	450	118	26%
PENN ES	580	151	26%
ROCKLEDGE ES	550	143	26%
TRIANGLE ES	520	134	26%
MCAULIFFE ES	622	159	26%
COLES ES	505	124	25%

BUCKLAND MILLS ES	663	150	23%
GODWIN MS	984	211	21%
MONTCLAIR ES	600	127	21%
PARKSIDE MS	1200	254	21%
SIGNAL HILL ES	915	190	21%
BEVILLE MS	1127	234	21%
LEESYLVANIA ES	855	173	20%
VICTORY ES	840	163	19%
ANTIETAM ES	550	105	19%
FREEDOM HS	1550	295	19%
BENNETT ES	800	151	19%
GLENKIRK ES	819	147	18%
PATTIE ES	676	114	17%
WOODBRIDGE MS	1093	183	17%
GAR-FIELD HS	2575	414	16%
BRISTOW RUN ES	1068	168	16%
STONEWALL MS	2100	279	13%
RIPPON MS	1210	150	12%
LAKE RIDGE ES	577	71	12%
SPRINGWOODS ES	640	70	11%
HENDERSON ES	530	55	10%
NEW DIRECTIONS SPECIAL	275	28	10%
POTOMAC HS	1500	142	9%
SAUNDERS MS	1137	105	9%
WOODBRIDGE HS	2500	222	9%
CEDAR POINT ES	985	84	9%
MARSHALL ES	760	64	8%
LAKE RIDGE MS	1180	98	8%
HYLTON HS	2450	183	7%
MARSTELLER MS	1600	118	7%
GRAHAM PARK MS	1244	83	7%
PORTER TRADITIONAL	628	41	7%
ALVEY ES	952	61	6%
WESTRIDGE ES	590	36	6%
OSBOURN PARK HS	2605	151	6%
BENTON MS	1100	52	5%
PENNINGTON TRADITIONAL	613	25	4%
BATTLEFIELD HS	2600	98	4%
BULL RUN MS	1717	64	4%
BRENTSVILLE DISTRICT HS	1533	47	3%

PRTC Title VI Complaint and Investigation Procedures

These procedures cover all complaints under Title VI of the Civil Rights Act of 1964, Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (1994), and Executive Order 13166 "Improving Access to Services for Person with Limited English Proficiency" (2000), for alleged discrimination in any program or activity administered by the Potomac and Rappahannock Transportation Commission (PRTC).

Any individual, group of individuals, or entity that believes they have been subjected to discrimination prohibited under Title VI and the related statutes may file a complaint, completing the attached complaint form (see link below) to the following address:

Title VI Coordinator
Potomac and Rappahannock Transportation Commission
14700 Potomac Mills Road
Woodbridge, VA 22192
703-580-6147

The following measures will be taken to resolve Title VI complaints:

1. A formal complaint must be filed within 180 days of the alleged occurrence. Complaints shall be in writing and signed by the individual or his/her representative (see link to complaint form), and will include the complainant's name, address and telephone number; name of alleged discriminating person, basis of complaint (race, color, national origin) and the date of the alleged act(s). A statement detailing the facts and circumstances of the alleged discrimination must accompany each complaint.

2. In the case where a complainant is unable or incapable of providing a written statement, a verbal complaint of discrimination may be made to the PRTC Title VI Coordinator. Under these circumstances, the complainant will be interviewed, and the PRTC Title VI Coordinator will assist the Complainant in converting the verbal allegations to writing.

3. When a complaint is received, the Title VI Coordinator will provide written acknowledgement to the Complainant, within ten (10) days by registered mail.

4. If a complaint is deemed incomplete, additional information will be requested, and the Complainant will be provided thirty (30) business days to submit the required information. Failure to do so may be considered good cause for a determination of no investigative merit.

5. Within fifteen (15) business days from receipt of a complete complaint, the PRTC will determine whether the complaint has sufficient merit to warrant investigation as a Title VI complaint and within five (5) days of this decision PRTC will notify the Complainant, by registered mail, that it will either pursue or not a Title VI investigation.
    a. If the decision is not to investigate as a Title VI complaint, the notification shall specifically state the reason for the decision.

6. If the complaint has investigative merit a complete investigation will be conducted, and an investigative report will be completed within sixty (60) days from receipt of the

complaint. The report will include a narrative description of the incident, summaries of all persons interviewed, a finding with recommendations for remedial steps as appropriate and necessary. The remedial steps, if any, will be implemented as soon as practicable.. The Complainant will receive a copy of the final report together with any remedial steps.

7. If no violation is found and the Complainant wishes to appeal the decision, he or she may appeal directly to the Executive Director of PRTC, 14700 Potomac Mills Road, Woodbridge, VA 22192.

8. Complaints may also be filed with the Federal Transit Administrations, Office of Civil Rights, no later than 180 days after the date of the alleged discrimination, at 1760 Market Street, Suite 500, Philadelphia, PA 19103, phone: (215) 565-7255.

9. The Title VI Coordinator shall maintain a log of Title VI complaints received from this process. The log shall include the date the complaint was filed; a summary of the allegations; the status of the complaint; and actions taken by PRTC in response to the complaint. Should PRTC receive a Title VI complaint in the form of a formal charge or lawsuit, the General Counsel shall be responsible for the investigation and maintaining a log as described above.

Title VI And Related Statutes Discrimination Complaint Form

Name:_____

Address:_____

City:_____ State:_____ Zip Code:_____

Home Telephone No: (_____) _____

Work Telephone No: (_____) _____

Were you discriminated against because of:

[ ] Race [ ] National Origin

[ ] Color

[ ] Other_____

Date of Alleged Incident:_____

Explain as clearly as possible what happened and how you were discriminated against. Indicate who was involved. Be sure to include the names and contact information of any witnesses. If more space is needed please use the back of the form.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ _____

Signature Date

Please mail this form to:

Title VI Coordinator
Potomac and Rappahannock Transportation Commission
14700 Potomac Mills Road
Woodbridge, VA 22192

POTOMAC AND RAPPAHANNOCK TRANSPORTATION COMMISSION (PRTC)
TITLE VI INVESTIGATION, COMPLAINT, AND LAWSUIT LOG

Date	Allegation	Method of Receipt (In Person, Phone, E-Mail)	Service (OmniRide, OmniLink, MetroDirect, VRE)	Name of Person(s)	Phone Number	E-Mail	TransTrack ID Number	Certified Letter (Sent Date)	Summary of Resolution	Appeal of Resolution (Y/N)
6/12/2008	Dale City Link driver treats Hispanic passengers unfairly	Phone Call, E-Mail transcribed from Mr. Harf	Dale City OmniLink (Local Service)	Mr. John Faircloth, Hispanic origin	703-580-0252	n/a	7283	6/26/2008	**Unsustained Complaint:** The investigation did not find any patterns of disparate treatment directed towards Hispanic passengers. However, the operator has received passenger complaints about alleged discourteous behavior on local and commuter bus services. First Transit (PRTC's contractor) counseled the operator and included a disciplinary notation in her personnel file. Copy of Report Sent to Mr. Faircloth on 1/6/09 via certified mail. Post office returned letter to PRTC because forwarding address was not provided to local post office.	N
11/24/2008	VRE train conductor issued fare evasion summons on the basis of race.	Written, Form Submitted to VRE by complainant	VRE - Train #328	Ms. Adrienne Choi, Asian American	703-581-5045	adrienne.choi@verizon.net	n/a	12/5/2008	**Unsustained Complaint**: The Title VI investigator did not find any patterns of unequal enforcement treatment by Mr. Tom Franta against minority passengers after conducting two "mystery" rides on Train # 328, consulting with VRE staff, reviewing summons records from VRE and the Alexandria (Virginia) General District Court, and speaking with the commuter identified on the compliant form.	N
5/21/2009	PRTC failed to honor deviation because her race and disability.	Written Letter	Manassas OmniLink	Ms. Pearl Staplefoote, African American	703-393-2370	n/a	9260	6/26/2008	**Unsustained Complaint:** The investigation revealed that PRTC could not honor her deviation on the outbound trip because it would have caused delayed arrival at the next timepoint; PRTC scheduled her deviation on the inbound trip in order to prevent Ms. Staplefoote from having to wait an additional hour.	N

SYSTEM MAP

NEW RIDER INFORMATION

REGISTER RIDEREXPRESS

WEATHER

CURRENT TRAFFIC

UPDATES/PRTC NEWS

Celebrate Try Transit Week 2008 -- September 22 - 25

Courtesy is Contagious - Cell Phones

Ridership Increase Could Mean Overcrowded Buses After Labor Day

Use SmarTrip, Save Money!

Courtesy is Contagious

more >>>

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Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. To that end, PRTC has adopted the policy and complaint process outlined below.

PRTC Title VI Policy

PRTC is committed to a policy of non-discrimination in the conduct of its business, including its Title VI responsibilities – the delivery of equitable and accessible transportation services. PRTC recognizes its responsibilities to the communities in which it operates and to the society it services. It is PRTC's policy to utilize its best efforts to assure that no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under its program of transit service delivery and related benefits.

Toward this end, PRTC embraces the following policy tenets / program:

A. No person or group of persons will be discriminated against with regard to fares, routing, scheduling or quality of transportation services that PRTC furnishes, on the basis of race, color, or national origin.

B. Frequency of service, age and quality of PRTC vehicles assigned to routes and location of routes will not be determined on the basis of race, color, or national origin.

C. The full and fair participation of all affected populations in transportation decision making shall be promoted.

D. Disproportionately high adverse impacts of programs and activities on minority and low income populations shall be identified and addressed as appropriate.

E. Meaningful access to programs and activities by persons with limited English proficiency shall be ensured.

The responsibility for carrying out PRTC's commitment to this program has been delegated to the PRTC Executive Director by the Commission. Title VI staff is responsible for the day-to-day operations of this Program and will receive and investigate Title VI complaints which come through the complaint process. However, all Directors, managers, supervisors, and employees share in the responsibility for making PRTC's Program a success.

PRTC Title VI Complaint and Investigation Procedures

These procedures cover all complaints under Title VI of the Civil Rights Act of 1964, Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (1994), and Executive Order 13166 "Improving Access to Services for Person with Limited English Proficiency" (2000), for alleged discrimination in any program or activity administered by the Potomac and Rappahannock Transportation Commission (PRTC).

Any individual, group of individuals, or entity that believes they have been subjected to discrimination prohibited under Title VI and the related statutes may file a complaint, completing the **attached complaint form** to the following address:

Title VI Coordinator
Potomac and Rappahannock Transportation Commission
14700 Potomac Mills Road
Woodbridge, VA 22192
703-580-6147

The following measures will be taken to resolve Title VI complaints:

1. A formal complaint must be filed within 180 days of the alleged occurrence. Complaints shall be in writing and signed by the individual or his/her representative (**link to complaint form**), and will include the complainant's name, address and telephone number; name of alleged discriminating person, basis of complaint (race, color, national origin) and the date of the alleged act(s). A statement detailing the facts and circumstances of the alleged discrimination must accompany each complaint.

2. In the case where a complainant is unable or incapable of providing a written statement, a verbal complaint of discrimination may be made to the PRTC Title VI Coordinator. Under these circumstances, the complainant will be interviewed, and the PRTC Title VI Coordinator will assist the Complainant in converting the verbal allegations to writing.

3. When a complaint is received, the Title VI Coordinator will provide written acknowledgement to the Complainant, within ten

(10) days by registered mail.

4. If a complaint is deemed incomplete, additional information will be requested, and the Complainant will be provided thirty (30) business days to submit the required information. Failure to do so may be considered good cause for a determination of no investigative merit.

5. Within fifteen (15) business days from receipt of a complete complaint, the PRTC will determine whether the complaint has sufficient merit to warrant investigation as a Title VI complaint and within five (5) days of this decision PRTC will notify the Complainant, by registered mail, that it will either pursue or not a Title VI investigation.
   a. If the decision is not to investigate as a Title VI complaint, the notification shall specifically state the reason for the decision.

6. If the complaint has investigative merit a complete investigation will be conducted, and an investigative report will be completed within sixty (60) days from receipt of the complaint. The report will include a narrative description of the incident, summaries of all persons interviewed, a finding with recommendations for remedial steps as appropriate and necessary. The remedial steps, if any, will be implemented as soon as practicable. The Complainant will receive a copy of the final report together with any remedial steps.

7. If no violation is found and the Complainant wishes to appeal the decision, he or she may appeal directly to the Executive Director of PRTC, 14700 Potomac Mills Road, Woodbridge, VA 22192.

8. Complaints may also be filed with the Federal Transit Administrations, Office of Civil Rights, no later than 180 days after the date of the alleged discrimination, at 1760 Market Street, Suite 500, Philadelphia, PA 19103, phone: (215) 565-7255.

9. The Title VI Coordinator shall maintain a log of Title VI complaints received from this process. The log shall include the date the complaint was filed; a summary of the allegations; the status of the complaint; and actions taken by PRTC in response to the complaint. Should PRTC receive a Title VI complaint in the form of a formal charge or lawsuit, the General Counsel shall be responsible for the investigation and maintaining a log as described above.

Download Complaint Form (PDF)

© 2008, PRTC

PRTC Title VI Policy & Complaint Procedures

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

To that end, PRTC's adopted Title VI policy and complaint process can be viewed at PRTCtransit.org.

(703) 730-6664 • Omni@OmniRide.com

Procedimientos de políticas y quejas por el incumplimiento del Título VI de PRTC

El Título VI de la Ley de Derechos Civiles de 1964 prohíbe la discriminación por motivo de raza, color o nacionalidad en los programas y las actividades que reciben ayuda financiera del gobierno federal.

Con este fin, el proceso de políticas y quejas por el incumplimiento del Título VI adoptado por PRTC puede observarse en PRTCtransit.org.

(703) 730-6664 • Omni@OmniRide.com

Política del Título VI de PRTC

PRTC se compromete a cumplir su política de no discriminación durante el desarrollo de sus actividades, incluyendo sus responsabilidades en relación al Título VI: la prestación equitativa y accesible de servicios de transporte. PRTC reconoce sus responsabilidades para con las comunidades en las que opera y para con la sociedad a la que presta servicios. Es política de PRTC hacer el mayor esfuerzo para garantizar que a ninguna persona se le niegue participar o recibir los beneficios, ni ser sujeta a discriminación en su programa de servicios de transporte y beneficios relacionados, por motivo de raza, color o nacionalidad.

Para tal fin, PRTC adopta los siguientes principios / programa:

A. No se discriminará a ninguna persona ni grupo en relación a tarifas, rutas, programación o calidad del servicio de transporte que provee PRTC, por motivo de raza, color o nacionalidad.

B. La frecuencia del servicio así como la antigüedad y calidad de los vehículos asignados por PRTC a las rutas y la ubicación de las rutas no se determinará tomando en cuenta la raza, el color o la nacionalidad de los usuarios.

C. Se promoverá la participación justa y total de toda la población afectada en la toma de decisiones en materia de transporte.

D. Se identificarán y solucionarán adecuadamente los impactos desproporcionadamente altos de los programas y las actividades sobre las poblaciones minoritarias y de bajos ingresos.

E. Se garantizará el acceso adecuado a los programas y las actividades por parte de las personas con limitado dominio del inglés.

La comisión ha delegado al Director Ejecutivo de PRTC la responsabilidad de hacer una realidad el compromiso de PRTC para con este programa. El personal encargado del cumplimiento del Título VI es responsable del funcionamiento diario de este programa, y recibirá e investigará las quejas por el incumplimiento del Título VI que surjan mediante el proceso de queja. Sin embargo, todos los directores, gerentes, supervisores y empleados comparten la responsabilidad de hacer que el Programa de PRTC sea un éxito.

PRTC Title VI Policy

PRTC is committed to a policy of non-discrimination in the conduct of its business, including its Title VI responsibilities – the delivery of equitable and accessible transportation services. PRTC recognizes its responsibilities to the communities in which it operates and to the society it services. It is PRTC's policy to utilize its best efforts to assure that no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under its program of transit service delivery and related benefits.

Toward this end, PRTC embraces the following policy tenets/program:

A. No person or group of persons will be discriminated against with regard to fares, routing, scheduling or quality of transportation services that PRTC furnishes, on the basis of race, color, or national origin.

B. Frequency of service, age and quality of PRTC vehicles assigned to routes and location of routes will not be determined on the basis of race, color, or national origin.

C. The full and fair participation of all affected populations in transportation decision making shall be promoted.

D. Disproportionately high adverse impacts of programs and activities on minority and low income populations shall be identified and addressed as appropriate.

E. Meaningful access to programs and activities by persons with limited English proficiency shall be ensured.

The responsibility for carrying out PRTC's commitment to this program has been delegated to the PRTC Executive Director by the Commission. Title VI staff is responsible for the day-to-day operations of this Program and will receive and investigate Title VI complaints which come through the complaint process. However, all Directors, managers, supervisors, and employees share in the responsibility for making PRTC's Program a success.

VRE Title VI Policy

VRE is committed to a policy of non-discrimination in the conduct of its business, including its Title VI responsibilities – the delivery of equitable and accessible transportation services. VRE recognizes its responsibilities to the communities in which it operates and to the society it services. It is VRE's policy to utilize its best efforts to assure that no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under its program of transit service delivery and related benefits.

Toward this end, VRE embraces the following policy tenets / program:

A. No person or group of persons will be discriminated against with regard to fares, routing, scheduling or quality of transportation services that VRE furnishes, on the basis of race, color, or national origin.

B. Frequency of service, age and quality of VRE vehicles assigned to routes and location of routes will not be determined on the basis of race, color, or national origin.

C. The full and fair participation of all affected populations in transportation decision making shall be promoted.

D. Disproportionately high adverse impacts of programs and activities on minority and low income populations shall be identified and addressed as appropriate.

E. Meaningful access to programs and activities by persons with limited English proficiency shall be ensured.

All complaints will be sent to VRE's Manager of Customer Communications, logged into the Title VI database, and forwarded to Title VI staff for investigation. The responsibility for day-to-day operations of this program, including the investigation of Title VI complaints, has been assigned to the Title VI staff of the Potomac and Rappahannock Transportation Commission (PRTC), a co-owner of the VRE. However, all VRE employees share in the responsibility for making VRE's program a success.

IMPORTANT NOTICE:

If you have a general complaint or concern, please fill out one of our Feedback Forms or email us. This form is for complaints based on the grounds of discrimination as outlined above ONLY.

Helpful Links:

Complaint and Investigation Procedures

Title VI and Related Statutes Discrimination Complaint Form

System Map

Printable Schedule

FREDERICKSBURG: Regular | Large
MANASSAS: Regular | Large

Pocket Size Schedule

Free for the Asking:
Have a complimentary pocket-size schedule card sent directly to you. Ask for Yours.

DALE CITY

To and From Chinn Center and PRTC Transit Center

	1 BUS STARTS at Chinn Center	2 Bus Leaves from Mapledale Plaza	3 Bus Leaves from Dale Blvd. & Minnieville Rd. (Center Plaza)	4 Bus Leaves from PRTC Transit Center	3 Bus Leaves from Dale Blvd. & Gerry Ln. (Glendale Shopping Ctr.)	2 Bus Leaves from Mapledale Plaza	1 BUS ENDS at Chinn Center
WEEKDAYS AND SATURDAY							
A.M.	5:38	5:53	6:00	6:25	6:43	6:49	7:07
	6:08	6:23	6:30	7:00	7:18	7:24	7:42
	6:37	6:53	7:00	7:30	7:48	7:54	8:12
	7:07	7:23	7:30	8:00	8:18	8:24	8:42
	7:42	7:58	8:05	8:45	9:03	9:09	9:27
	8:12	8:28	8:35	9:00*	—	—	—
	8:42	8:58	9:05	9:30	9:48	9:54	10:12
	9:27	9:42	9:49	10:15	10:33	10:39	10:57
	10:12	10:27	10:34	11:00	11:18	11:24	11:42
	10:57	11:12	11:19	11:45	12:03	12:09	12:27
	11:42	11:57	12:04	12:30	12:48	12:54	1:12
P.M.	12:27	12:42	12:49	1:15	1:33	1:39	1:57
	1:12	1:27	1:34	2:00	2:18	2:24	2:42
	1:57	2:12	2:19	2:45	3:05	3:11	3:27
	2:42	2:57	3:04	3:30	3:50	3:56	4:14
	3:27	3:42	3:49	4:15	4:35	4:41	4:57
	—	—	—	4:45	5:05	5:11	5:27
	4:22	4:37	4:44	5:15	5:35	5:41	5:59
	4:57	5:12	5:19	5:45	6:05	6:11	6:29
	5:27	5:42	5:49	6:25	6:45	6:51	7:09*
	6:07	6:22	6:29	6:55	7:13	7:19	7:37
	6:37	6:52	6:59	7:25	7:43	7:49	8:07
	7:37	7:52	7:59	8:25	8:43	8:49	9:07
	9:07	9:22	9:29	9:55	10:13	10:19	10:37

* Bus goes out of service after serving this stop

Shaded trips operate on Weekdays and Saturday.
Unshaded trips only operate on Weekdays.

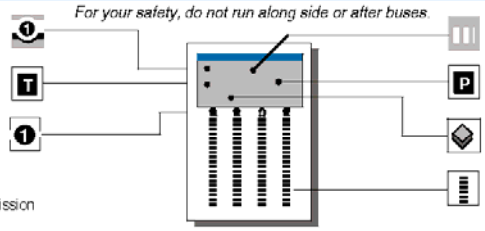
INSTRUCTIONS

The bus stops here at listed times. Look for the matching symbol below the map.

Transfer point. Shows where you may transfer to another bus.

The bus stops at each of the times listed below the symbol.

For your safety, do not run along side or after buses.



The bus loops here sometimes. Tip: Look for questions and answers below the map.

Indicates Commuter Lots available along the bus

Indicates points of interest along the route.

The timetable shows WHEN the bus stops. Times are always approximate and depend upon traffic and weather conditions. **Unshaded trips/times** operate on Weekdays only; **shaded trips** operate on Weekdays and Saturday.

© 2008, Potomac and Rappahannock Transportation Commission
Design by Smartmaps, Inc.

HOLIDAY SERVICE

No service on:
- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

OTHER PRTC SERVICES

Prince William-Metro Direct connects eastern Prince William with the Franconia-Springfield Metro Station, with stops at PRTC Transit Center, Potomac Mills Mall and Route 1 in Woodbridge.

Manassas Metro Direct connects Manassas with the West Falls Church Metro Station, with stops at Manassas Mall and Manassas VRE Station.

Linton Hall Metro Direct serves stops along the Linton Hall corridor, then travels express on I-66 to the West Falls Church Metro Station.

OmniRide™ commuter buses originate from points throughout eastern Prince William and the Manassas areas to destinations that include the Pentagon, Crystal City, Washington DC and nearby Metro stations.

Cross County Connector connects Eastern Prince William and the Manassas area, with transfers to local OmniLink buses and OmniRide commuter buses.

OmniMatch™ is a FREE ridematching service that matches you with a carpool or vanpool that best suits your commute needs.

Welcome Aboard!

What is OmniLink?

OmniLink is the local (demand responsive) bus service operated by the Potomac and Rappahannock Transportation Commission (PRTC). OmniLink serves Dale City, Dumfries, the Route 1 Corridor between the Woodbridge and Quantico VRE Stations, Woodbridge/Lake Ridge, Manassas and Manassas Park. OmniLink also provides Cross-County service between eastern Prince William County and the Manassas area.

Customer Service

The PRTC Customer Service Office is open Monday-Friday, 5:30 AM to 8:30 PM (except some holidays). Off-route trips are scheduled from 7:30 AM to 7:00 PM. To contact us:

- Call (703) 730-6664 or (888) 730-6664
- Email Omni@OmniRide.com
- Write to 14700 Potomac Mills Road, Woodbridge, VA 22192

Schedules and other service related information are available on the web at www.PRTCtransit.org. For the latest service updates by email, subscribe to our Rider Express email list at PRTCtransit.org.

Fares, Tokens, SmarTrip and Transfers

Exact cash fare, bus token or SmarTrip card is required; the driver does not carry cash.

Regular Fares

One-way Cash Fare	$ 1.10
One-way SmarTrip Fare	$ 1.10
10-pack of Tokens	$11.00
50-pack of Tokens	$55.00
Local Bus Day Pass—Cash Only (see below)	$ 2.50
Off-route Trip Surcharge—Cash Only (see below)	$ 1.00

Reduced Fares (MUST BE PAID WITH CASH or WMATA issued Senior (65+)/Disabled SmarTrip card)

One-way Fare	$ 0.55
25-pack of Tokens	$13.75
Local Bus Day Pass (see below)	$ 1.25
Off-route Trip Surcharge (see below)	EXEMPT

Free Fares

- With valid VRE ticket or pass to or from VRE Station ($1.00 OmniLink Off-route Trip Surcharge for pickup/drop off at station still applicable)
- Children 5 years and under (2 per paying adult; children 8 and under cannot ride unattended)

Transfer Options

Transfers good for 3 hours on the day issued. Please request when you board.

- With SmarTrip card—the electronic farebox will calculate and automatically deduct the correct fare from your SmarTrip card.
- Local bus to local bus—NO FREE transfers (except between Potomac Mills Mall and PRTC Transit Center), purchase Day Pass, pay separate fares on each bus or pay fare for entire trip on the first bus and request transfer.
- Local bus to/from OmniRide Commuter Bus—For cash fare, pay and request transfer.
- Local bus to/from Metro Direct—For cash fare, pay and request transfer.
- OmniRide to/from OmniRide—FREE with transfer.
- OmniRide or Metro Direct to/from other regional bus (e.g. Metrobus, Fairfax Connector)—FREE to other bus systems. Cost varies for return trip; call Customer Service to determine the cost of your trip.

OmniLink Tokens may be purchased with cash or personal check at PRTC Transit Center, 14700 Potomac Mills Rd. in Woodbridge, 703-730-6664, or Manassas City Hall, 9027 Center St. in Manassas, 703-257-8200.

Local Bus Day Pass may be purchased on buses. Passes are good for travel within Prince William, Manassas and Manassas Park all day on the date issued. DAY PASSES MUST BE PURCHASED WITH CASH.

Reduced Fare Eligibility is applicable to adults 60 years and older, persons with a disability, or persons presenting a valid Medicare card. Senior citizen verification may be required. Riders eligible for reduced fares on PRTC buses MUST PAY WITH CASH or WMATA issued Senior (65+)/Disabled SmarTrip card. Passengers meeting reduced fare eligibility may apply for a *Reduced Fare Eligibility Card* by contacting PRTC Customer Service.

Off-route Trip Surcharge applies to all pick ups and drop offs at locations not along the standard route, including on-demand stops. MUST BE PAID WITH CASH. Seniors and disabled with a *Reduced Fare Eligibility Card* are EXEMPT from the surcharge.

How Does OmniLink Work?

OmniLink was designed to meet the transportation needs of the entire community, including individuals who may have difficulty getting to established bus stops. Unlike a traditional public bus service that operates only along a designated route, with advanced notice, OmniLink buses can be rerouted to pick up and drop off passengers at locations up to 3/4 mile off the route when there is time available in the schedule. OmniLink service balances the amount of time available for off-route trips and ensuring that bus service is reliable for all customers. OmniLink buses stop only at posted OmniLink bus stops, on-demand stops (see below) and scheduled off-route pickup or drop-off locations. Drivers cannot make unscheduled route changes.

OmniLink For Commuters, Too!

Commuter parking lots and VRE train stations along OmniLink routes can be accessed by using OmniLink buses allowing passengers to transfer to and from OmniRide commuter buses and VRE trains (see map).

How To Use OmniLink

There are three easy ways to use OmniLink:

1) OmniLink Bus Stops. OmniLink bus stops are identified on the map and buses serve each stop on every trip. Each location has an OmniLink bus stop sign. This schedule lists departure times for several key stops (timepoints). If your stop is between two timepoints, use the timepoint for the stop before yours as a guide. Plan to arrive at your stop 5 minutes early.

2) On-Demand Bus Stops. In addition to the designated bus stops, there are some locations that are On-Demand Bus Stops. If you are riding to an on-demand bus stop, let the driver know you wish to get off there when you board. To be picked up from an on-demand bus stop, simply call the OmniLink office and the next available bus will be rerouted to pick you up. Please see the map for locations of on-demand stops.

3) Off-route Trips. If you cannot get to an OmniLink stop, or if your destination is not close enough to a bus stop, you may want to schedule an off-route trip. There is a surcharge for off-route trips (which does not apply to passengers eligible for reduced fares; see fare section for details). These trips are available on a first-come, first-serve basis and are limited. To determine if an off-route trip is possible, call Customer Service, from 7:30 AM to 7:00 PM, Monday through Friday, and a Customer Service Agent will try to route the bus closer to where you live or want to go—up to 3/4 mile off the route. Trips may be scheduled with as little as 2 hours notice, but for best results, reservations should be made 1 to 2 days in advance. You may be asked to get on or off the bus at a location that is within a few blocks of your origin or destination. Some locations are not accessible to OmniLink buses. If you are not at the pickup point, the bus will not wait. If you plan to make the same off-route trip regularly, you may be able to place a standing order, subject to availability, by calling Customer Service. Plan to arrive at your stop 5 minutes early.

How to Change or Cancel an Off-route Trip

If you need to cancel or change your reservation or standing order for an off-route OmniLink trip, please call the OmniLink office at least 2 hours before the scheduled trip. Canceling less than 2 hours before your scheduled pickup or not showing at the pickup location will be considered a missed trip. Passengers with 3 missed trips within 30 days will be denied the privilege of requesting reservations for 30 days.

Emergency Service Plan

Pick up a copy of the Emergency Service Plan brochure, which details procedures for snow and non-weather related emergencies. During extreme weather, buses may only operate bus stop-to-bus stop and may experience delays. Please call (703) 730-6664, check our web site at www.PRTCtransit.org, or listen to local news programs to verify that OmniLink is operating on a regular schedule. To receive e-mail service updates, subscribe to our Rider Express email list by visiting our web site.

Lost and Found

Items found on buses will be held at the PRTC Transit Center at 14700 Potomac Mills Road, Woodbridge, VA for 30 days. To inquire about a lost item, please call (703) 730-6664, or send email to Omni@OmniRide.com.

Priority Seating and Special Needs

All OmniLink buses are wheelchair accessible and priority seating is available. Hearing impaired individuals may contact OmniLink through the Virginia Relay Center—TDD at 711. For the comfort of all OmniLink passengers, no smoking, eating or drinking is allowed on OmniLink buses. Audio equipment may not be used without headphones.

Passenger Conduct

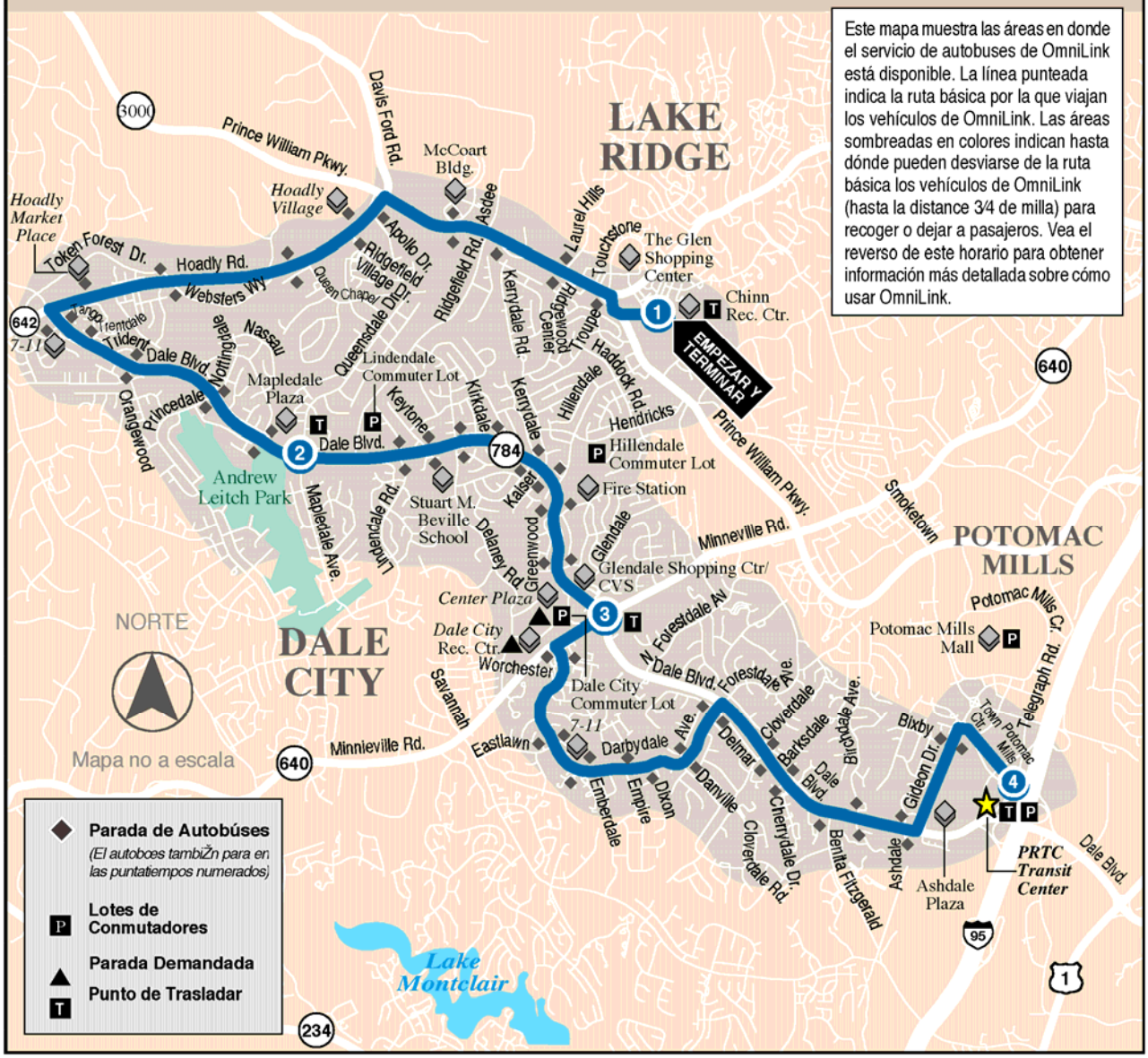
PRTC reserves the right to deny entry to, expel and/or temporarily or permanently ban any person from PRTC property and/or vehicles, who in the judgement of the PRTC management or its agent, is imperiling public safety or being a public nuisance. Actions that could imperil public safety or quality as a public nuisance include, but are not limited to, 1) verbal or physical intimidation; 2) disrespecting the rights of other PRTC patrons; 3) use of profanity; 4) lewd behavior; 5) refusal to pay a fare; and 6) defacing or otherwise damaging PRTC-owned assets.

Title VI Policy

In compliance with Title VI of the Civil Rights Act of 1964, it is PRTC's policy to use its best efforts to assure that no person shall be excluded from participation or denied the benefits of PRTC's services, on the grounds of race, color or national origin. To file a complaint, contact PRTC's Customer Service or visit the "Passenger Rights" page at PRTCtransit.org.

DALE CITY

Hasta y Desde Chinn Center y PRTC Transit Center



	1 AUTOBUS EMPIEZA en Chinn Center	2 Autobus Sale de Mapledale Plaza	3 Autobus Sale de Dale Blvd. y Minnieville Rd. (Center Plaza)	4 Autobus Sale de PRTC Transit Center	3 Autobus Sale de Dale Blvd. y Gerry Lane (Glendale Shopping Ctr.)	2 Autobus Sale de Mapledale Plaza	1 AUTOBUS TERMINA en Chinn Center
LUNES – SÁBADO							
De la Mañana	5:38	5:53	6:00	6:25	6:43	6:49	7:07
	6:08	6:23	6:30	7:00	7:18	7:24	7:42
	6:37	6:53	7:00	7:30	7:48	7:54	8:12
	7:07	7:23	7:30	8:00	8:18	8:24	8:42
	7:42	7:58	8:05	8:45	9:03	9:09	9:27
	8:12	8:28	8:35	9:00 *	–	–	–
	8:42	8:58	9:05	9:30	9:48	9:54	10:12
	9:27	9:42	9:49	10:15	10:33	10:39	10:57
	10:12	10:27	10:34	11:00	11:18	11:24	11:42
	10:57	11:12	11:19	11:45	12:03	12:09	12:27
	11:42	11:57	12:04	12:30	12:48	12:54	1:12
De la Tarde	12:27	12:42	12:49	1:15	1:33	1:39	1:57
	1:12	1:27	1:34	2:00	2:18	2:24	2:42
	1:57	2:12	2:19	2:45	3:05	3:11	3:27
	2:42	2:57	3:04	3:30	3:50	3:56	4:14
	3:27	3:42	3:49	4:15	4:35	4:41	4:57
	–	–	–	4:45	5:05	5:11	5:27
	4:22	4:37	4:44	5:15	5:35	5:41	5:59
	4:57	5:12	5:19	5:45	6:05	6:11	6:29
	5:27	5:42	5:49	6:25	6:45	6:51	7:09 *
	6:07	6:22	6:29	6:55	7:13	7:19	7:37
	6:37	6:52	6:59	7:25	7:43	7:49	8:07
	7:37	7:52	7:59	8:25	8:43	8:49	9:07
	9:07	9:22	9:29	9:55	10:13	10:19	10:37

* El autobús termina el servicio después de servir esta parada

Los viajes con colores oscuridos operan los S‡bados.
Los viajes no obscuridos operan solamente los cinco d'as de la semana (lunes por viernes).

INSTRUCCIONES

El autobús se para aqui en las horas indicadas. Busquen uds. el simbolo parecido a la hora debajo del mapa.

Punto de trasladar. Indica en donde se pueden trasladar a otro autobús. Los autobuses solamente esperarán a los pasajeros transbordando en las colocaciones de recoger a los pasajeros. En las colocaciones de dejar a los pasajeros, los autobuses dejarán a los pasajeros y salir inmediamente.

El autobús se para a cualquier hora indicada debajo del simbolo.

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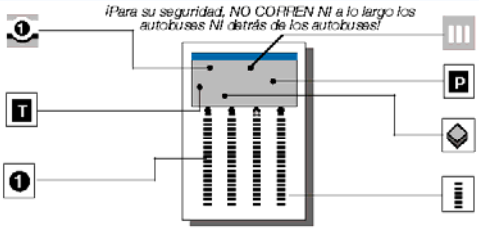
Design by Smartmaps, Inc.



El autobus da vuelta aqui a veces. Busquen uds. las preguntas y respuestas debajo del mapa.

Indica terreno de conmutadores. Aprovechables por la ruta del autobus.

Indica puntos de interés por la ruta.

El horario indica CUANDO el autobús se para. Las horas siempre están aproximadas y dependen del tráfico y las condiciones del tiempo. **Los viajes SIN colores oscuridos operan solamente** los cinco días de la semana, **los viajes oscuridos operan** los cinco días de la semana y el sábado.

SERVICIO DE LOS AUTOBUSES EN DIAS FESTIVALES

No hay servicio los días siguientes:
- Año Nuevo
- Día Memorial
- Día De Independencia
- Día De Labor
- Día De Dar Gracias
- Día De La Navidad.

OTROS SERVICIOS DE PRTC

PRTC ofrece, también, servicios dentro del County Prince William y las ciudades de Manassas y Manassas Park. Para mas información de cualquier de estos servicios, llamen a (703)730-6664 o visiten OmniRide. com.

Metro Direct ofrece tres rutas para juntarlos con las estaciones Metrorail cerca. **Prince William Metro Direct** hace conexión con eastern Prince William Metro Direct con el Franconia-Springfield Metro Station con paradas en PRTC Transit Center, Potomac Mills Mall y Route 1 en Woodbridge. **Manassas Metro Direct** hace conexion con Manassas con el West Falls Church Metro Station, con paradas en Manassas Mall y Manassas VRE Station. Y el **Linton Hall Metro Direct** sirve paradas por el Linton Hall Corridor, entonces viaja expreso en I-66 al West Falls Church Metro Station.

OmniRide™ los autobuses conmutadores origen de puntos por todas partes de las areas este de Prince William y Manassas rumbo a destinaciones que incluyen el Pentagon, Crystal City, el centro de Washington, el Washington Navy Yard y las cercanas estaciones Metro.

El Cross County Connector provee conexiones por todo el día entre (parte este) Eastern Prince William y la area Manassas con transbordos a autobuses OmniLink locales y con autobuses OmniLink conmutadores.

OmniMatch™ es un servicio GRATIS que les ofrece la oportunidad reunirse con otros conmutadores en coche o en un van; este les hace mas conveniente para su commute y también para sus horas de trabajo.

¡Bienvenidos—Abordo!

¿Qué es OmniLink?

OmniLink es el servicio **local** de autobuses (si está pedido, estará respondido) que opera la Comisión de Transporte de Potomac y Rappahannock (PRTC). OmniLink sirve Dale City, Dumfries, el corredor Ruta 1 entre las estacions Woodbridge y Quantico VRE, Woodbridge/Lake Ridge, Manassas y Manassas Park. OmniLink también provee servicio Cross County entre la parte este de Prince William County y la area Manassas.

Servicio de Clientes

La oficina de Servicio de Clientes está abierta desde las lunes por los viernes con horas desde las5:30 de las mañana hasta las8:30 de la noche (con excepción de algunos días de fiesta). Los viajes, afuera de las rutas regulares, están notados a las 7:30 de la mañana hasta las 7:00 de la noche. Para hacer contacto con nosotros:

- Llamen (703)730-6664 o (888)730-6664.
- Email: OmniRide@OmniRide.com
- Escribannos: 14700 Potomac Mills Road, Woodbridge, VA 22192.

Los horarios y otros servicios pertinentes están aprovechables en el web a www.OmniRide.com. **Para saber de los servicios mas corrientes pueden subscribir a nuestra lista email Rider Express en PRTCtransit.org.**

Tarifas, fichas (tokens), SmarTrip y transbordos

Es exigente que los clientes tengan la tarifa exacta al contado, billete de autobuses o tarjeta SmarTrip porque el conductor no lleva monedas.

Tarifa al contado de un viaje sencillo	**$1.10**
Tarifa de una vía SmarTrip	**$1.10**
Paquete de 10 fichas	**$11.00**
Paquete de 50 fichas	**$55.00**
Pasaje Local Bus Day – solamente al contado (Vea abajo)	**$2.50**
Sobrecarga para un viaje de afuera de la ruta regular—solamente al contado (Vea abajo)	**$1.00**

Tarifas Reducidas (ES MANDADO QUE PAGUEN AL CONTADO o tarjeta WMATA SmarTrip expedida para los deshabilitados o los de mayor edad (65+).

Viajes de una vía	**$0.55**
Paquete de 25 fichas	**$13.75**
Pasaje Local Bus Day (Vea abajo)	**$1.25**
Sobrecarga de un viaje afuera de la ruta regular (Vea abajo)	**GRATIS**

Tarifas Gratis

- Con un valido VRE boleto o entrada hasta o desde una estación VRE ($1.00 OmniLink, la sobrecarga para un viaje afuera de la ruta se aplica para recoger o entregar a la estación a los clientes que lo pidan).
- Los niños de la edad de 5 o menos (2 con adulto de tarifa pagada; los niños no pueden viajar sin estar acompanados)

Opciones de Transbordar

Los transbordos est?n validos por 3 horas en el d'a comprado. Por favor, que soliciten el transbordo, al abordar.

- **Usando una tarjeta SmartTrip**—La cajita eledrónica de tarifas calculará y deducirá automaticamente la tarifa correcta de su tarjeta SmarTrip.
- **Autobús local a autobús local**—No hay transbordos GRATIS (hay excepción entre Potomac Mills Mall y PRTC Transit Center); deben comprar un Day Pass o pagar tarifas en cualquier autobús, o pagar la tarifa para el viaje entero en el primer autobús cuando aborden y entonces piden un billete de transbordar.
- **Autobús local hasta o desde OmniRide autobús de Conmutadores**—Para tarifa al contado, se paga y pidan un billete de transbordar.
- **Autobús local hasta o desde Metro Direct**—Para tarifa al contado, se paga y pidan un billete de transbordar.
- **OmniRide hasta o desde OmniRide**—GRATIS con billete de transbordar.
- **OmniRide o Metro Direct desde o hasta otro autobús regional (ejemplo: Metrobus, Fairfax Connector)**—GRATIS con transbordo a otros sistemas de autobuses. El costo varía para el viaje de vuelta; llamen Customer Service (Servicio de Clientes) para determinar el costo del viaje.

Los Fichas OmniLink se pueden comprar por pagar en efectivo o cheque personal en el Transit Center PRTC, 14700 Potomac Mills Road en Woodbridge, 703-730-6664, o Manassas City Hall, 927 Center Street en Manassas, 703-257-8200.

El Local Bus Day Pass se pueden comprar en los autobuses. Las entradas se pueden usar para viajar dentro Prince William, Manassas y Manassas Park todo el día de la fecha comprada. TIENEN QUE PAGAR AL CONTADO LAS ENTRADAS DE DIA.

Requisitos Para Las Tarifas Reducidas se aplican a los adultos de 60 años o mayores, las personas descapacitadas o las personas que presenten una credencial de Medicare. Es posible que el conductor del autobús OmniLink se exige la prueba de que sea Senior Citizen. Los clientes elegibles por tarifas reducidas en los autobuses PRTC TIENEN QUE PAGAR AL CONTADO o con tarjeta SmarTrip expedido para los deshabilitados o los mayores(65+). Los pasajeros que sean elegibles para una tarjeta de tarifas reducidas pueden hacer aplicación para recibir una Tarjeta de Elegibilidad de Tarifas Reducidas por ponerse en contacto con PRTC Customer Service.

La Sobrecarga se aplica a todos los clientes recogidos y descaídos en colocaciones afuera de las rutas regulares, incluyendo paradas en demanda. ES MANDADO QUE PAGUEN AL CONTADO. Los mayores de edad y los descapicitados NO PAGAN la sobrecarga.

¿Cómo funciona OmniLink?

OmniLink fue diseñado para satisfacer las necesidades de transporte de toda la comunidad, incluidas las personas que pueden tener dificultad de llegar a las paradas establecidas del autobús. A diferencia de un servicio tradicional público de autobús que opera sólo a lo largo de una ruta designada, pero con notificación por adelantado, los autobuses de OmniLink pueden desviarse completamente para recoger y descaer pasajeros en ubicaciones hasta 3/4 de milla fuera de la ruta cuando el horario lo permite. El servicio OmniLink proporciona la cantidad de tiempo disponible para desvíos fuera de ruta a la vez que asegura que el servicio de autobús sea confiable para todos los clientes. Las autobuses OmniLink harán paradas solamente en las designadas paradas OmniLink, en las paradas a petición (vean abajo) y en los lugares programados para recoger o dejar pasajeros. Los conductores no se pueden desviar de la ruta si esto no está programado con anterioridad.

OmniLink también es para viajeros regulares!

Se pueden accesar. La area de estacionar y las estaciones de trenes VRE por las rutas OmniLink, usando los autobuses OmniLink que dejan de los pasajeros trasladar hasta y desde los autobuses conmutadores OmniRide y los trenes VRE. (Vea el mapa y la lista de paradas de autobús.)

Cómo utilizar OmniLink

Hay tres formas sencillas de usar OmniLink:

1. **Paradas de autobuses de OmniLink.** Las paradas del autobús OmniLink están identificadas en el mapa y se describen al dorso de esta guía. Los autobuses dan servicio en cada parada en cada viaje. En cada uno de estos lugares hay un símbolo que los identifica como paradas de OmniLink. El horario muestra las horas en que los autobuses pasan por ciertas paradas importantes (horas específicas). Si su parada se encuentra entre dos paradas que tienen horas específicas, guíese por la hora específica de la parada antes de a la suya. **Por favor llegue a la parada 5 minutos antes de la hora indicada.**
2. **Servicio de autobuses a petición.** Además de las paradas designadas, existen otros lugares en que los autobuses hagan paradas a petición. Los pasajeros que desean ir a alguno de estos lugares deben decírselo al conductor cuando entren al autobús. El conductor se desviará de la ruta para recoger al pasajero. Para que lo recojan en estos lugares, simplemente llame a la oficina OmniLink y el autobús siguiente saldrá de su ruta para recogerle. **Por favor consulte el mapa para averiguar cuáles son las paradas a petición.**
3. **Viajes Afuera de la Ruta.** Si usted no puede llegar a una parada OmniLink, o si su destinación no está bastante cerca de una parada, usted aún puede usar el OmniLink para reservar un viaje fuera de la ruta. Hay una cobra extra por viajes afuera de la ruta (que no aplica a los pasajeros eligible para tarifas reducidas; vean la sección de tarifas para detalles). Estos viajes están desponibles por orden de llegada (la primera llegada, la primera servida) y están limitados. Para determinar si hay posibilidad de un viaje fuera de ruta, llame al Servicio al cliente, desde las 7:30 a.m. hasta las 7:00 p.m., desde lunes a viernes. Un agente de Servicio al cliente tratará de dirigir al autobús lo más cerca posible de donde usted vive o desea ir – hasta 3/4 de milla fuera de la ruta. Los viajes pueden programarse con sólo 2 horas de aviso, pero para mejores resultados, las reservaciones deben hacerse con 1 ó 2 días de antemano. Puede programar un viaje con tan sólo 2 horas de antemano, **pero para obtener los mejores resultados,** debe hacer sus reservaciones con 1 ó 2 días de antemano. Es posible que pidan que ustedes entren en o salgan del autobus cerca de un sitio que esté cerca del fin de su viaje. Algunos sitios no están accesibles para los autobuses de OmniLink. Si no está en el punto de recoger, el autobús no lo esperará. Si esta planeando el mismo viaje de afuera de la Ruta con regularidad, es posible que pueda hacer un orden permanente, sujeto de la desponibilidad del viaje. Llame el Servicio de Clientes. **Por favor llegue a la parada 5 minutos antes de la hora indicada.**

Como se pueden cambiar o cancelar una reservación que sea afuera de la ruta regular.

Si necesita cancelar o cambiar su reservación o solicitud permanente para un viaje de Omnil ink, llame por favor a la oficina Omnil ink a lo menos 2 horas antes del viaje programado. Si cancela menos de 2 horas antes de la hora programada en que lo recogerán o si no llega en donde van a recogerlo, se considerará que faltó a la cita y perdió el viaje. **A los pasajeros que falten 3 veces dentro de un período de 30 días se les negará el privilegio de hacer reservaciones en cuanto a 30 días.**

Plan de servicios mientras que haya cualquier emergencia

Escoja una copia del folleto del Plan de Servicio Emergencia que da detalles de la actuación de emergencia cuando haya nevado u otra emergencia que no tiene nada de hacer con el tiempo. Cuando el clima sea extremo, es posible que los autobuses operen solamente parada a parada y es posible que haya demoras. Por favor llame al (703) 730-6664, visite nuestro sitio Web en www.PRTCtransit.org o escuche las noticias locales para asegurarse que OmniLink siga funcionando en su horario normal. Si desea recibir notificación por correo electrónico de las actualizaciones de servicio, visite nuestro sitio Web para subscriban ustedes a nuestra lista de Rider Express por visitar nuestro web-site.

Cosas perdidas

Cosas encontradas en los autobuses estarán retinidas en el PRTC Transit Center en 14700 Potomac Mills Road Woodbridge, VA por 30 días. Para informarse acerca de una cosa perdida, por favor, llamen (703) 730-6664 o envian un email a Omni@OmniRide.com.

Conducto de los Pasajeros

El PRTC reserva el derecho de negar entrada, y/o, expulsar temporaramente o permanente, a cualquier persona de la propiedad de PRTC y/o sus vehículos, a quienquiera, en el juicio de la gerencia o su agente, está poniendo en peligro la seguridad pública, o sea un fastidio público. Acciones que pueden poner en peligro la seguridad pública o estén consideradas como fastidios públicos incluyen, pero no están limitados a, 1) intimidación verbal o física; 2) desrespando los derechos de otros clientes de PRTC; 3) el uso de profanidad; 4) conducto lascivo; 5) el rehusar de pagar la tarifa; y 6) el desfigurar de la properidad de PRTC.

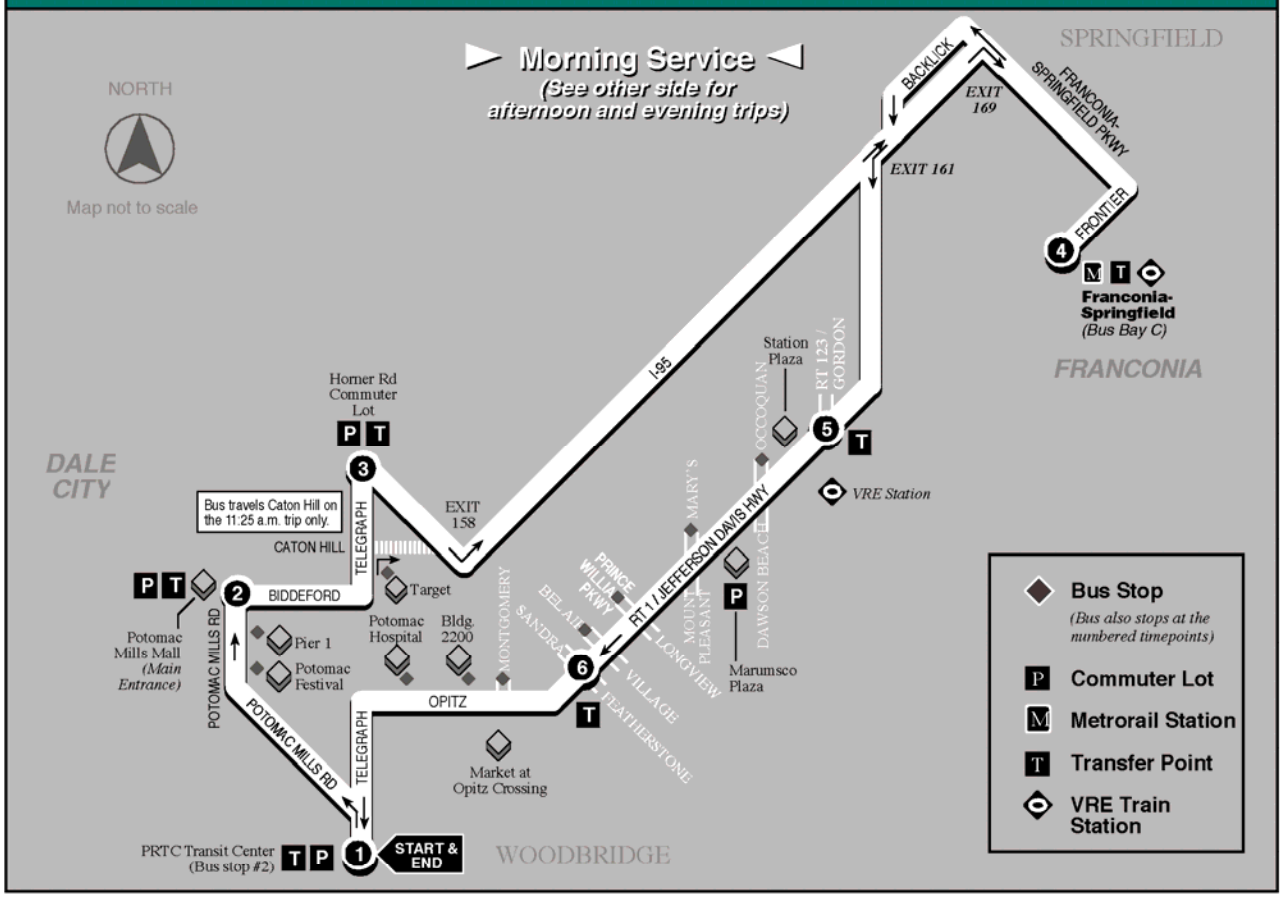
Asientos de Prioridad y Necesidades Especiales

Todos los autobuses de OmniLink están acesible a las sillas con ruedas y asientos de prioridad tambien están disponibles. Los individuos con problema de oir pueden ponerse en contacto con OmniLink por el Virginia Relay CenterTDD al número 711. Para el comodidad de todos los pasajeros de OmniLink, es porhibido el fumar, el comer, o el tomar (bebidas) en los autobuses de OmniLink. Equipo audio no se pueden usar sin audifono.

Título VI curso de acción

En cumplimiento con El ACTO DE LOS DERECHOS CIVILES de 1965, el curso de acción de PRTC es usar sus mejores esfuerzos para asegurar que no haya ninguna persona excluída en cuanto a la participación o el negar de los beneficios de los servicios de PRTC, por razones de raza, color o origen nacional. Para registrar una queja, deben ponerse en contacto con Servicios de Clientes PRTC o visitar la página "Derechos de Pasajeros" en PRTCtransit. org.

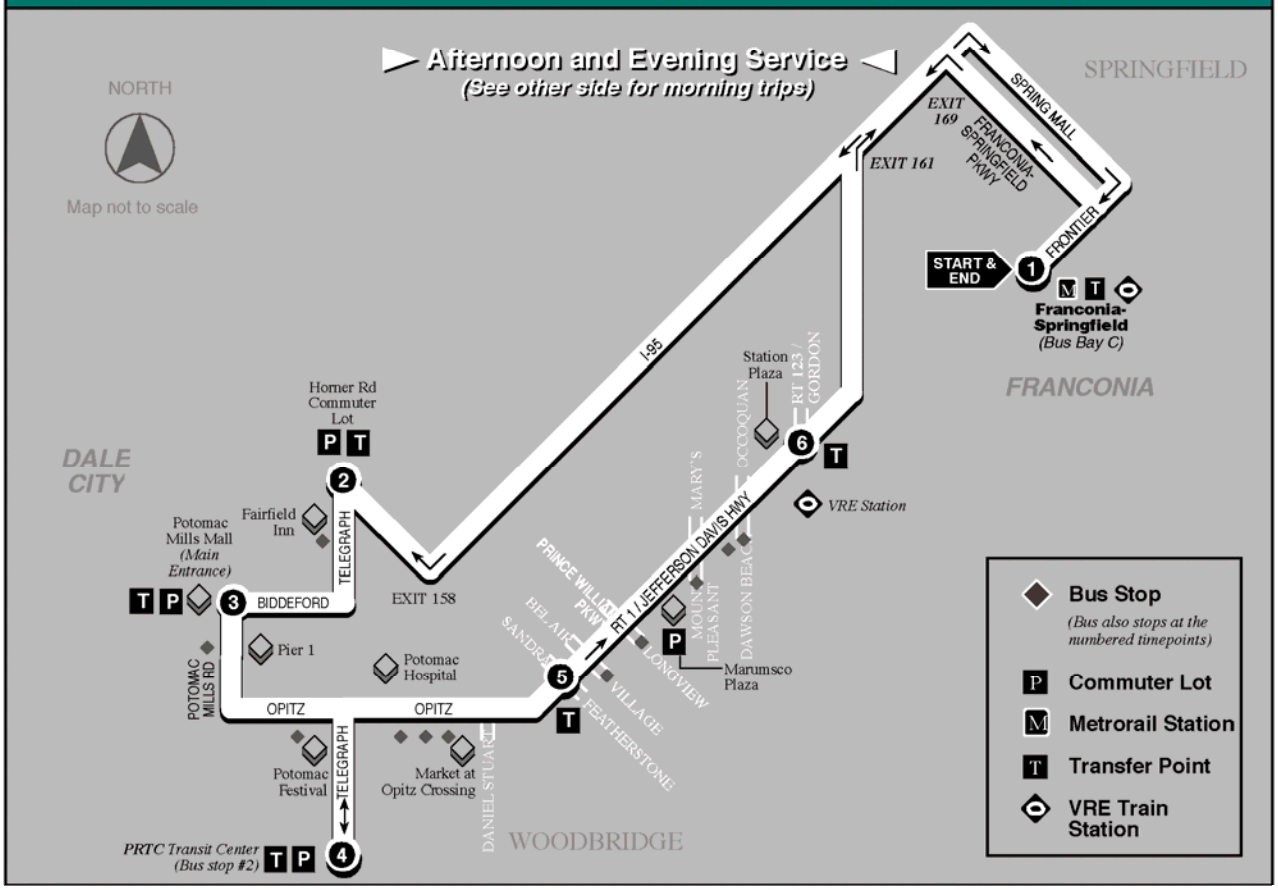
PRINCE WILLIAM-METRO DIRECT



	1 BUS STARTS at PRTC Transit Center	2 Bus Leaves from Potomac Mills (Main Entrance)	3 Bus Leaves from Horner Road Lot	4 Bus Arrives at Franconia-Springfield Metro Station	4 Bus Leaves from Franconia-Springfield Metro Station	5 Bus Leaves from Route 1 and Gordon	6 Bus Leaves from Route 1 and Sandra	1 BUS ENDS at PRTC Transit Center	This is a circular route. The bus continues to Franconia-Springfield Metro (See next trip).
WEEKDAY MORNING CIRCULAR SERVICE									
A.M.	5:10	5:16	5:26	5:45	5:50	6:02	6:08	6:20	
	5:50	5:56	6:06	6:25	6:30	6:42	6:48	7:00	
	6:25	6:31	6:41	7:00	7:05	7:17	7:23	7:35	
	7:05	7:11	7:21	7:40	7:45	7:57	8:03	8:15	
	7:40	7:46	7:56	8:15	8:20	8:32	8:38	8:50	
	8:20	8:26	8:36	8:55	9:00	9:12	9:18	9:30	
	8:55	9:01	9:11	9:30	9:35	9:47	9:53	10:05	
	9:35	9:41	9:51	10:10	—	—	—	—	
	10:10	10:16	10:26	10:45	10:50	11:02	11:08	11:20	
	11:25	11:31	—	12:00	—	(See other side for PM return trip)	—	—	

Shaded trips operate on Modified Holidays - see below.

PRINCE WILLIAM-METRO DIRECT



	1 BUS STARTS at Franconia-Springfield Metro Station	2 Bus Leaves from Horner Road Lot	3 Bus Leaves from Potomac Mills (Main Entrance)	4 Bus Arrives at PRTC Transit Center	4 Bus Leaves from PRTC Transit Center	5 Bus Leaves from Route 1 and Featherstone	6 Bus Leaves from Route 1 and Gordon	1 BUS ENDS at Franconia-Springfield Metro Station	This is a circular route. The bus continues to PRTC Transit Center (See next trip).
WEEKDAY AFTERNOON & EVENING CIRCULAR SERVICE									
P.M.	12:05	12:19	12:28	12:40	12:45	12:52	12:58	1:15	
	1:20	1:34	1:43	1:55	2:00	2:07	2:13	2:30	
	–	–	–	–	2:25	2:33	2:39	3:00	
	2:35	2:49	2:57	3:05	3:10	3:18	3:24	3:45	
	3:05	3:19	3:27	3:35	3:40	3:48	3:54	4:15	
	3:50	4:04	4:12	4:20	4:25	4:33	4:39	5:00	
	4:20	4:38	4:46	4:55	5:00	5:08	5:14	5:35	
	5:05	5:23	5:31	5:40	5:45	5:53	5:59	6:20	
	5:40	5:58	6:07	6:15	6:20	6:27	6:33	6:50	
	6:25	6:43	6:52	7:00	7:05	7:12	7:18	7:35	
	6:55	7:13	7:22	7:30	7:35	7:42	7:48	8:05	
	7:40	7:56	8:04	8:10	–	–	–	–	
	8:10	8:24	8:32	8:40	8:45	8:52	8:58	9:15	
	9:20	9:34	9:42	9:50	9:55	10:02	10:08	10:25	
	10:30	10:44	10:49	10:55 *	11:00	11:07	11:13	–	

** NOTE: No connecting local OmniLink service at PRTC Transit Center on this trip.*

Shaded trips operate on Modified Holidays - see other side.

INSTRUCTIONS

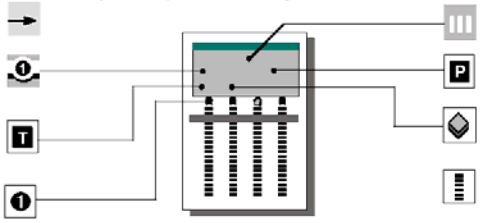
For your safety, do not run along side or after buses.

The route always runs from left to right. The map and timetable are also read from left to right.

The bus stops here at listed times. Look for the matching symbol below the map.

Transfer point. Shows where you may transfer to another bus. Buses will only wait for transferring passengers at pickup locations. At drop off locations, buses will drop and go.

The bus stops at each of the times listed below the symbol.



The bus loops here sometimes. Tip: Look for questions and answers below the map.

Indicates Commuter Lots available along the bus route.

Indicates points of interest along the route.

The timetable shows WHEN the bus stops. Times are always approximate and depend upon traffic and weather conditions. **Shaded trips** operate on modified holidays.

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Design by Smartmaps, Inc.

FARES, SMARTRIP® AND TRANSFERS

Exact cash fare or SmarTrip card is required; the driver does not carry cash.

Regular Fares

One-way cash fare to/from Metro Station	$ 3.00
One-way SmarTrip fare	$ 2.40
Local destinations within Prince William (Cash Only)	$ 1.10
Local Bus Day Pass–Cash Only (see below)	$ 2.50

Reduced Fares

(See below for eligibility) 9:30 AM to 3PM and after 7 PM
MUST BE PAID WITH CASH or WMATA issued Senior (65+)/Disabled SmarTrip Card

One-way cash fare	$ 1.50
Local Bus Day Pass (see below)	$ 1.25

FREE Fares

Valid VRE Ticket or Pass (to or from bus stop nearest a VRE Station)
Children 5 & under (2 per paying adult, children 8 and under cannot ride unattended)

Local Bus Day Pass may be purchased on buses. Passes are good for travel within Prince William, Manassas and Manassas Park all day on the date issued. DAY PASSES MUST BE PURCHASED WITH CASH.

Reduced Fare Eligibility is applicable to adults 60 years and older, persons with a disability or persons presenting a valid Medicare card. Senior citizen verification may be required. Riders eligible for reduced fares on PRTC buses MUST PAY WITH CASH or WMATA issued Senior (65+)/Disabled SmarTrip Card. Passengers meeting reduced fare eligibility may apply for a Reduced Fare Eligibility Card by contacting PRTC's Customer Service.

TRANSFER OPTIONS

Transfers good for 3 hours on the day issued. Please request when you board.

Using a SmarTrip Card—The electronic farebox will calculate and automatically deduct the correct fare from your SmarTrip card.

Local bus to local bus—NO FREE transfers (except between Potomac Mills Mall and PRTC Transit Center), purchase Day Pass, pay separate fares on each bus or pay fare for entire trip on the first bus boarded and request a transfer.

Local bus to/from OmniRide Commuter Bus—For cash fare, pay and request transfer.

Local bus to/from Metro Direct—For cash fare, pay and request transfer.

OmniRide to/from OmniRide—FREE with transfer.

OmniRide or Metro Direct to/from Other Regional bus (e.g. Metrobus, Fairfax Connector)—FREE with transfer to other bus systems. Cost varies for return trip, call Customer Service to determine the cost of your trip.

HOLIDAY SERVICE

Modified Holiday Service—The buses that operate on modified holidays are noted with shaded times on the schedule. Metro Direct will provide limited service on Martin Luther King, Jr. Day, Presidents' Day, Columbus Day, Veteran's Day, Thanksgiving Friday and Christmas Eve.

Holiday Schedule—No service on: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Welcome Aboard!

The Prince William-Metro Direct provides all day service Monday-Friday, connecting the Franconia-Springfield Metro station to points in eastern Prince William County, including the Horner Road Commuter Lot, Potomac Mills Mall, the PRTC Transit Center and the Route One corridor. Avoid the stress and congestion of driving I-95—hop on the Prince William-Metro Direct today!

Metropolitan Washington Travelers

Passengers traveling to the Prince William area from the metropolitan Washington, D.C. area can board Prince William-Metro direct buses at the Franconia-Springfield Metro station. Once in Prince William County, passengers can transfer to a local OmniLink bus to reach destinations throughout the area.

Prince William Travelers

The Prince William-Metro Direct is ideal for commuters with non-traditional work schedules and those who need midday commuting options. To accommodate commuters, buses run more frequently during morning and afternoon rush hours.

Customer Service

PRTC's Customer Service Office is open Monday-Friday, 5:30 AM to 8:30 PM (except some holidays). To contact us:

- Call (703) 730-6664 or (888) 730-6664
- Email Omni@OmniRide.com
- Write to 14700 Potomac Mills Road, Woodbridge, VA 22192

Schedules and other service related information are available on the web at www.PRTCtransit.org. For the latest service updates by email, subscribe to our Rider Express email list at PRTCtransit.org.

SmarTrip® Sales Locations

PRTC Transit Center
Administrative Office (6 AM – 8 PM)
14700 Potomac Mills Rd.
Woodbridge, VA
(703) 730-6664

The Commuter Stores

- Ballston
  4238 Wilson Blvd., Suite 1244
  Arlington, VA
  (703) 528-3541
- Crystal City
  1615-B Crystal Square Arcade
  Arlington, VA
  (703) 413-4287
- Rosslyn
  1700 N. Moore St., Suite 235
  Arlington, VA
  (703) 525-1995

Manassas Area Giant Grocery Stores

- Westgate Plaza, 8025 Sudley Rd.
- Manassas Junction, 8819 Centerville Rd.
- Wellington Station, 10100 Dumfries Rd.

Vending machines located at the Franconia-Springfield, Vienna and West Falls Church Metro Stations and other locations with large parking facilities.

Online at SmarTrip.com and Commuterpage.com.

Emergency Service Plan

Pick up a copy of the Emergency Service Plan brochure, which details procedures for snow and non-weather related emergencies. The plan is also available at PRTCtransit.org or call Customer Service to have a brochure mailed to you.

Lost and Found

Items found on buses will be held at the PRTC Transit Center at 14700 Potomac Mills Road, Woodbridge, VA for 30 days. To inquire about a lost item, please call (703) 730-6664, or send email to Omni@OmniRide.com.

Other PRTC Services

PRTC also offers other services within Prince William County and the cities of Manassas and Manassas Park. For more information on any of these services, call (703) 730-6664.

OmniRide™ commuter buses originate from points throughout eastern Prince William and the Manassas areas to destinations that include the Pentagon, Crystal City, Washington DC and nearby Metro stations.

Metro Direct offers three routes to connect you with nearby Metrorail stations. Prince William-Metro Direct connects eastern Prince William with the Franconia-Springfield Metro Station, with stops at OmniRide Transfer Center, Potomac Mills Mall and Route 1 in Woodbridge. Manassas Metro Direct connects Manassas with the West Falls Church Metro Station, with stops at Manassas Mall and Manassas VRE Station. And the Linton Hall Metro Direct serves stops along the Linton Hall Corridor then travels express on I-66 to the West Falls Church Metro Station.

Cross County Connector provides all day connections between Eastern Prince William and the Manassas area, with transfers to local OmniLink and OmniRide Commuter buses.

OmniLink™ local (demand responsive) buses serve six routes in the Prince William and the Manassas area. With advanced notice, buses can leave the route to serve locations up to 3/4 mile off the route.

OmniMatch™ is a FREE ridematching service that matches you with a carpool or vanpool that best suits your commute needs.

Connecting Service

Metro Direct buses connect to other regional transit providers at the Franconia/Springfield and West Falls Church Metrorail stations.

Metrorail and Metrobus system provides service throughout the Washington Metropolitan area. (202) 637-7000
Fairfax Connector buses serve northern Virginia, including shuttles to Tysons Corner from West Falls Church Metro Station. (703) 339-7200
Virginia Railway Express has six commuter rail stations in the Prince William and Manassas areas. (800) RIDE-VRE

Other Commuter Services

OmniRide also participates in several regional commuter programs.

Metrochek is a tax-free, employer-sponsored benefit. Metrochek vouchers can be redeemed toward SmarTrip value.
SmartBenefits® is the electronically paid monthly (Metrochek) transit benefit that can be downloaded to SmarTrip cards. (202) 962-1326
Guaranteed Ride Home (GRH)—This program relieves commuters of the fear of being stranded in the event of a personal emergency or unscheduled overtime by providing up to four free rides home per year. (800) 745-RIDE

Priority Seating and Special Needs

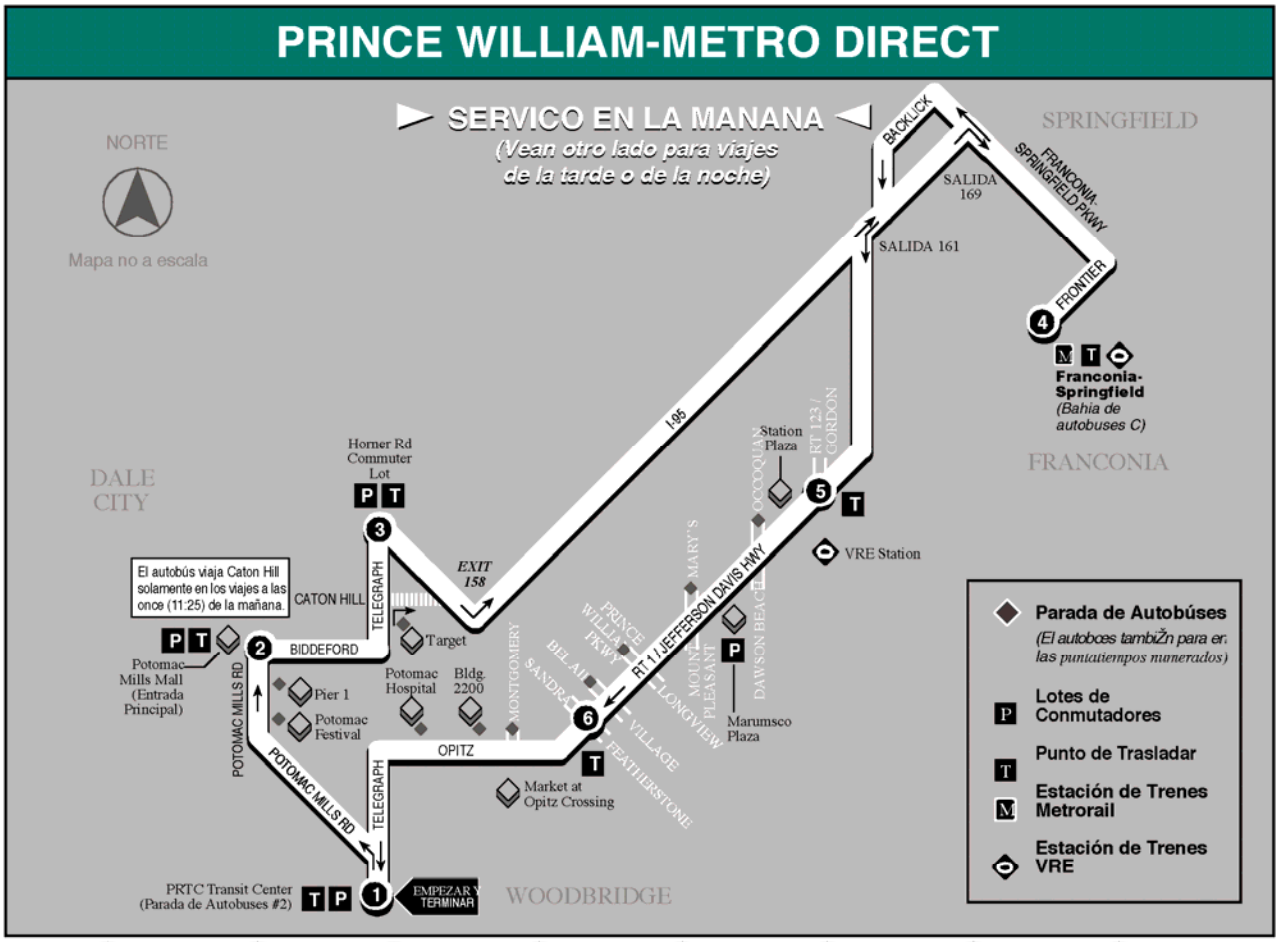
Front row "Priority Seating" has been designated on every Metro Direct bus. Please accommodate the special needs of mobility-impaired passengers by giving up those seats as needed.
Passengers requiring lift-equipped buses are requested to confirm travel arrangements with Customer Service at (703) 730-6664 24 hours prior to their trip. For Virginia Relay Center–TDD call 711.

Passenger Conduct

PRTC reserves the right to deny entry to, expel and/or temporarily or permanently ban any person from PRTC property and/or vehicles, who in the judgement of the PRTC management or its agent, is imperiling public safety or being a public nuisance. Actions that could imperil public safety or quality as a public nuisance include, but are not limited to, 1) verbal or physical intimidation; 2) disrespecting the rights of other PRTC patrons; 3) use of profanity; 4) lewd behavior; 5) refusal to pay a fare; and 6) defacing or otherwise damaging PRTC-owned assets.

Title VI Policy

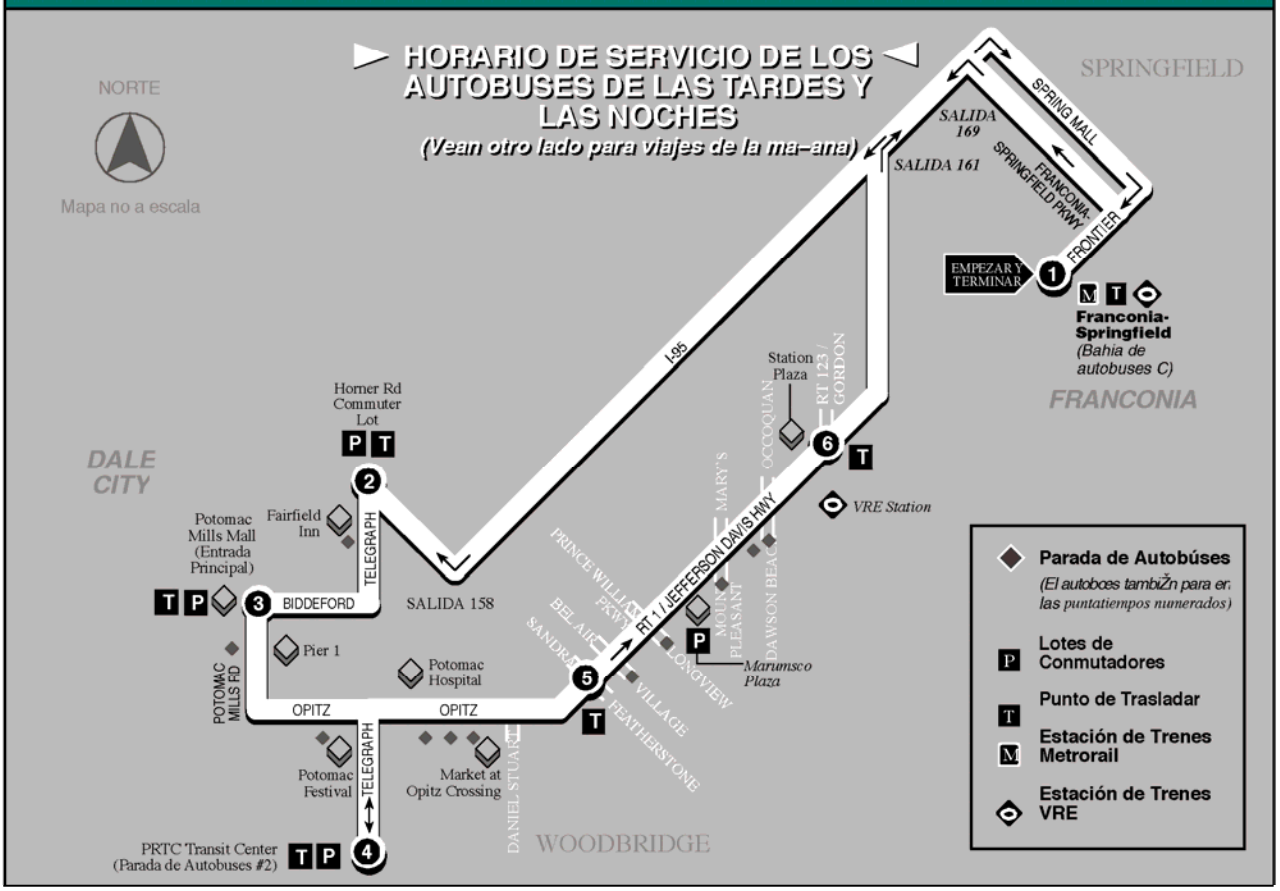
In compliance with Title VI of the Civil Rights Act of 1964, it is PRTC's policy to use its best efforts to assure that no person shall be excluded from participation or denied the benefits of PRTC's services, on the grounds of race, color or national origin. To file a complaint, contact PRTC's Customer Service or visit the "Passenger Rights" page at PRTCtransit.org.



	1 AUTOBUS EMPIEZA en el Centro PRTC Transito	2 Autobus Sale de Potomac Mills (Entrada Principal)	3 Autobus Sale de Horner Road Lot	4 Autobus llega en Franconia-Springfield Metro Station	4 Autobus Sale de Franconia-Springfield Metro Station	5 Autobus Sale de Ruta 1 y Gordon	6 Autobus Sale de Ruta 1 y Sandra	1 AUTOBUS TERMINA en el Centro PRTC Transito	Esta es una ruta circular; El autobús continúa a Franconia-Springfield Metro (Vean el próximo viaje)
Servicio circular cinco dias de la semana; no hay servicio ni los sábados ni los domingos.									
De la mañana	5:10	5:16	5:26	5:45	5:50	6:02	6:08	6:20	
	5:50	5:56	6:06	6:25	6:30	6:42	6:48	7:00	
	6:25	6:31	6:41	7:00	7:05	7:17	7:23	7:35	
	7:05	7:11	7:21	7:40	7:45	7:57	8:03	8:15	
	7:40	7:46	7:56	8:15	8:20	8:32	8:38	8:50	
	8:20	8:26	8:36	8:55	9:00	9:12	9:18	9:30	
	8:55	9:01	9:11	9:30	9:35	9:47	9:53	10:05	
	9:35	9:41	9:51	10:10	—	—	—	—	
	10:10	10:16	10:26	10:45	10:50	11:02	11:08	11:20	
	11:25	11:31	—	12:00	—	(Vean PM para un viaje de volver)	—	—	

Los viajes obscuridos operan según un Modificado Horario Festividad—vean la lista instructional.

PRINCE WILLIAM-METRO DIRECT



1 AUTOBUS EMPIEZA en Franconia-Springfield Metro Station	2 Autobus Sale de Horner Road Lot	3 Autobus Sale de Potomac Mills (Entrada Principal)	4 Autobus llega en el Centro PRTC Transito	4 Autobus Sale de el Centro PRTC Transito	5 Autobus Sale de Route 1 y Featherstone	6 Autobus Sale de Route 1 y Gordon	1 AUTOBUS TERMINA en Franconia-Springfield Metro Station
Servicio circular cinco dias de la semana; no hay servicio ni los sábados ni los domingos.							
De la tarde 12:05	12:19	12:28	12:40	12:45	12:52	12:58	1:15
1:20	1:34	1:43	1:55	2:00	2:07	2:13	2:30
—	—	—	—	2:25	2:33	2:39	3:00
2:35	2:49	2:57	3:05	3:10	3:18	3:24	3:45
3:05	3:19	3:27	3:35	3:40	3:48	3:54	4:15
3:50	4:04	4:12	4:20	4:25	4:33	4:39	5:00
4:20	4:38	4:46	4:55	5:00	5:08	5:14	5:35
5:05	5:23	5:31	5:40	5:45	5:53	5:59	6:20
5:40	5:58	6:07	6:15	6:20	6:27	6:33	6:50
6:25	6:43	6:52	7:00	7:05	7:12	7:18	7:35
6:55	7:13	7:22	7:30	7:35	7:42	7:48	8:05
7:40	7:56	8:04	8:10	—	—	—	—
8:10	8:24	8:32	8:40	8:45	8:52	8:58	9:15
9:20	9:34	9:42	9:50	9:55	10:02	10:08	10:25
10:30	10:44	10:49	10:55*	11:00	11:07	11:13	—

*No hay servicio local OmniLink que conecta con PRTC Transit Center en este viaje

Esta es una ruta circular; El autobús continúa a Franconia-Springfield Metro *(Vean el pr—ximo viaje)*

Los viajes obscuridos operan según un Modificado Horario Festividad—vean la lista instructional.

INSTRUCCIONES

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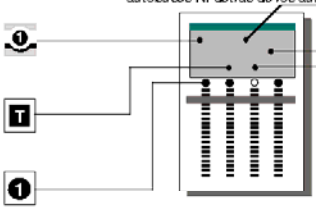
¡Para su seguridad, NO CORREN NI por a lo largo autobuses NI detrás de los autobuses!

El autobús se para aqui en las horas indicadas. Busquen uds. el simbolo parecido a la hora debajo del mapa.

Punto de trasladar. Indica en donde se pueden trasladar a otro autobús. **Los autobuses solamente esperarán a los pasajeros transbordando en las colocaciones de recoger a los pasajeros. En las colocaciones de dejar a los pasajeros, los autobuses dejarán a los pasajeros y salir inmediamente.**

El autobús se para a cualquier hora indicada debajo del simbolo.



El autobus da vuelta aqui a veces. Busquen uds. las preguntas y respuestas debajo del mapa.

Indica terreno de conmutadores. Aprovechables por la ruta del autobus.

Indica puntos de interés por la ruta.

El horario indica CUANDO el autobús se para. Las horas siempre están aproximadas y dependen del tráfico y las condiciones del tiempo. **Viajes con las horas oscuradas** operan en horas modificadas en los días de fiesta.

TARIFAS, SMARTRIP® Y TRANSBORDOS

Es exigente que los clientes tengan la tarifa exacta al contado o tarjeta SmarTrip *porque el conductor no lleva monedas.*

Las Tarifas Regulares

Tarifas pagadas en efectivo para viaje de una vía hasta/desde la Metro Station	**$3.00**
Tarifa SmarTrip	**$2.40**
Destinaciones dentro de Prince William (al contado solamente)	**$1.10**
Pasaje Local Bus Day—al contado solamente (Vea abajo)	**$2.50**

Tarifas Reducidas *(Vean requisitos para las tarifas reducidas)*
9:30 de la ma–ana hasta las 3:00 de la tarde y despues de las 7:00 de la noche. TIENEN QUE PAGAR AL CONTADO o con tarjeta SmarTrip expedida para los mayores (65+) y los invalidos.

Viajas de una vía	**$1.50**
Pasaje Local Bus Day (Vea abajo)	**$1.25**

Tarifas Gratis

Con billete VRE válido o pasaje (hasta o desde la estación VRE)
Los niños de la edad de 5 o menos (2 con adulto de tarifa pagada; los niños no pueden viajar sin estar acompanados).

El Local Bus Day Pass se pueden comprar en los autobuses. Los pases se pueden usar para viajar dentro Prince William, Manassas y Manassas Park todo el día de la fecha comprada. TIENEN QUE PAGAR AL CONTADO POR PASES DE UN DIA.

Requisitos Para Las Tarifas Reducidas se aplican a los adultos de 60 años o mayores, las personas descapacitadas o las personas que presenten una credencial de Medicare. Es posible que el conductor del autobús se exige la prueba de que sea Senior Citizen. Los clientes elegibles para tarifas reducidas en los autobuses PRTC tienen que pagar al contado o con tarjeta SmarTrip expedida para los mayores (65+) y los deshabilitados. Los pasajeros que sean elegibles para una tarjeta de tarifas reducidas pueden hacer aplicación para recibir una Tarjeta de Elegibilidad de Tarifas Reducidas por ponerse en contacto con PRTC Customer Service (Servicio de Clientes).

OPCIONES DE TRANSBORDAR

Se pueden usar los ticketes de transbordo por 3 horas en el dia comprados. Por favor, que soliciten el transbordo al abordar el autobus.

Usando una tarjeta SmarTrip—La cajita electrónica de tarifas calculará y deducirá automaticamente la tarifa correcta de su tarjeta SmarTrip.

Autobús local a autobús local—No hay transbordos GRATIS (hay excepción entre Potomac Mills Mall y PRTC Transit Center); deben comprar un Day Pass o pagar tarifas en cualquier autobús, o pagar la tarifa para el viaje entero en el primer autobús y entonces piden un billete de transbordar.

Autobus local hasta/desde OmniRide autobus de conmutadores—Por tarifa al contado, se pagan y soliciten un transbordo.

Autobus local hasta/desde Metro Direct—Por tarifa al contado, se pagan y soliciten un transbordo.

OmniRide hasta/desde OmniRide—GRATIS con transbordo.

OmniRide o Metro Direct hasta/desde Otro autobus Regional(por ejemplo; Metrobus, Fairfax Connector)—GRATIS con transbordo a otros sistemas de autobuses. El costo varia para un viaje de vuelta; llamen Customer Service para determinar el costo de su viaje.

SERVICIO POR DIAS FESTIVALES

Servicios modificados—Los autobuses que operan por Dias Festivales están notados por horas modificadas y escuridas en el horario. El Metro Direct proveerá servicio limitado por el Dia de Martin Luther King, Dia de los Presidentes, Dia de Colon, Dia de Los Veteranos, el dia (viernes) después del Dia de Dar Gracias, y el Dia antes de La Navidad.

Horario por Dias Festivales—No hay servicio en los dias siguientes: El Año Nuevo, el Dia Memorial, el Dia de Independencia, el Dia de Labor, el Dia de Dar Gracias y el Dia de Navidad.

¡Bienvenidos—Abordo!

El Prince William Direct provee servicio todos los días desde los lunes por los viernes, conectando la estación Metro Franconia-Springfield a puntas en el county Prince William, incluyendo el lote conmutador Horner Road, el Mall Potomac Mills, el Centro Transito OmniRide y el corridor ruta uno. !Evitan uds la tensión y congestión de manejar en I-95; aborden uds. el Metro Prince William Directo hoy en día!

VIAJEROS WASHINGTON METROPOLITANO

Pasajeros viajando a la area de Washington, D. C. metropolitano pueden abordar los autobuses directos de Prince William en la estación Metro Franconia-Springfield. Al llegar al county Prince William, los pasajeros pueden trasladar a un autobús OmniLink local para llegar a sus destinaciones por la área.

VIAJEROS PRINCE WILLIAM

El Prince William Direct es ideal para conmutadores con horario de trabajo no tradicional y los que necesiten opciones conmutables de mediodía. Para acomodar a los conmutadores, los autobuses corren mas frequemente durante las horas "rush"(mas activas) de las mañana y de la tarde.

SERVICIO DE CLIENTES

La Oficina de Servicio de Clientes está abierta desde los lunes por las viernes de las horas 5:30 de la mañana por las 8:30 de la noche (con excepción de los días de fiesta (holidays). Para informarse de cualquier noticia:

- Llamen (703) 730-6664 o (888) 730-6664
- Email Omni@OmniRide.com
- Escríbannos a 14700 Potomac Mills Road, Woodbridge, VA 22192

Los horarios y otros servicios están disponibles en el web at www.PRTCtransit.org. Para el servicio mas corriente por Email, suscriban a nuestra lista Rider Express a PRTCtransit.org.

ARTICULOS ENCONTRADOS O PERDIDOS

Artículos recuperados en los autobuses se guardarán por 30 dias. Para informarse de un articulo

PLAN DE SERVICIOS MIENTRAS HAYA CUALQUIER EMERGENCIA

Recojan uds. un folleto de "El Plan de Servicio Durante emergencias" que les da detalles de como proceder cuando haya nieve o cualquier emergencia que no tenga nada que hacer con el clima. El plan esta disponible en www.PRTCtransit.org o llamen el Servicio de Clientes (Client Service) para recibir un folleto por correo.

ASIENTOS PRIORIDADES Y NECECIDADES ESPECIALES

La frente fila de asientos de prioridad ha sido designada así en cada autobús Metro Direct. ¡Por favor, acomoden a los pasajeros con necesidades especiales por dándoles esos asientos cuando los necisiten!

Los pasajeros que mandan una máquina de levantar las sillas con ruedas, deben pedir y confirmar sus horarios con Customer Services (servicio de clientes) a (703)730-6664 al menos 24 horas antes de su viaje. Para Virginia Relay Center TDD, llamen 711.

CONDUCTO DE LOS PASAJEROS

El PRTC reserva el derecho de negar entrada, y/o, expulsartemporaramente o permanente, a cualquier persona de la propiedad de PRTC y/o sus vehículos, a quienquiera, en el juicio de la gerencia o su agente, está poniendo en peligro la seguridad pública, o sea un fastidio público. Acciones que pueden poner en peligro la seguridad pública o estén consideradas como fastidios públicos incluyen, pero no están limitados a, 1) intimidación verbal o física, 2) desrespando los derechos de otros clientes de PRTC, 3) el uso de profanidad, 4) conducto lascivo, 5) el rehusar de pagar la tarifa, y 6) el desfigurar de la properidad de PRTC.

TITULO VI CURSO DE ACCION

En complimiento con El ACTO DE LOS DERECHOS CIVILES de 1965, el curso de acción de PRTC es usar sus mejores esfuerzos para asegurar que no haya ninguna persona excluída en cuanto a la participación o el negar de los beneficios de los servicios de PRTC, por razones de raza, color o origen nacional. Para registrar una queja, deben ponerse en contacto con Servicios de Clientes PRTC o visitar la página "Derechos de Pasajeros" en PRTCtransit. org

Otros Servicios de PRTC

PRTC ofrece, tambien, servicios dentro del County Prince Willliam y las ciudades de Manassas y Manassas Park. Para mas información de cualquier de estos servicios, llamen a (703)730-6664.

OmniRide™ los autobuses conmutadores origen de puntos por todas partes de las areas este de Prince William y Manassas rumbo a destinaciones que incluyen el Pentagon, Crystal City, el centro de Washington, el Washington Navy Yard y las cercanas estaciones Metro.

Metro Direct ofrece tres rutas para juntarlos con las estaciones Metrorail cerca. Prince William Metro Direct hace conexión con eastern Prince William con el Franconia-Springfield Metro Station con paradas en OmniRide Transit Center, Potomac Mills Mall y Ruta 1 en Woodbridge. Manassas Metro Direct hace conexión con Manassas con el West Falls Church Metro Station, con paradas en Manassas Mall y Manassas VRE Station. Y el Linton Hall Metro Direct sirve paradas por el Linton Hall Corridor, entonces viaja expreso en I-66 al West Falls Church Metro Station.

OmniLink™ es el servicio local (si está pedido; estará respondido) que ofrece seis rutas de las áreas Prince William y Manassas con deviaciones de 3/4 de una milla fuera de la ruta que aseguran que uds. lleguen a trabajar, a la escuela, ir de compras, ir al doctor, y mas.

El Cross County Connector provee conexiones por todo el día entre (parte este) Eastern Prince William y la area Manassas con transbordos a autobuses OmniLink locales y con autobuses conmutadores.

OmniMatch™ es un servicio GRATIS que les ofrece la oportunidad reunirse con otros conmutadores en coche o en un van; este les hace mas conveniente para su commuta y tambien para sus horas de trabajo.

Servicio Conecta

Los autobuses Metro Direct conecta con otros regionales proveedores transitos.

Los sistemas Metrorail y Metrobus proveen servicio por la área Washington Metropolitano. Llamen (202) 637-7000.

El Conector Fairfax Los auobuses sirven el norte de virginia, incluyendo shuttles desde Metro West Falls Church hasta Tyson Corner. (703) 339-7200

Virginia Railway Express Tiene seis estaciones para conmutadores en las áreas Prince Willam y Manassas, con servicio al centro de Washington, Crystal City y Alexandria. (800) RIDE-VRE

Otros Servicios Conmutadores

OmniRide también participa en varios regionales programas conmutadores.

Metrochek es un beneficio libre de impuestos costeado por el empleador. Los garantes Metrochek se puede redimir hacia el valor SmarTrip.

SmartBenefits es un beneficio transito que está pagado electrónico cada mes (Metrochek) que se puede download a las tarjetas SmarTrip. (202) 962-1326

Guaranteed Ride Home (GRH)—Este programa guarantiza un pasaje a su casa. Este alivia el temor de estar abandonado en caso de una emergencia personal o por causa de horas extraordinarias de trabajo. Los pasajeros y otros conmutadores elegibles pueden recibir, mas o menos, cuatro viajes gratis a casa cada año. Para registrar para este servicio llamen Commuter Connections a 1-800-745-RIDE

SmarTrip® Colocaciones de Ventas

PRTC Transit Center
Administrative Office (6 AM – 8 PM)
14700 Potomac Mills Rd.
Woodbridge, VA
(703) 730-6664

The Commuter Stores

- Ballston
  4238 Wilson Blvd., Suite 1244
  Arlington, VA
  (703) 528-3541
- Crystal City
  1615-B Crystal Square Arcade
  Arlington, VA
  (703) 413-4287
- Rosslyn
  1700 N. Moore St., Suite 235
  Arlington, VA
  (703) 525-1995

Manassas Area Giant Grocery Stores

- Westgate Plaza, 8025 Sudley Rd.
- Manassas Junction, 8819 Centerville Rd.
- Wellington Station, 10100 Dumfries Rd.

Máquinas de vender están colocadas en las estaciones metro Franconia-Springfield, Vienna y West Falls Church y otras colocaciones con facilidades grandes de emparcar.

En el web a SmarTrip.com y Commuterpage.com.

SERVICE STANDARDS

Vehicle Load Factor

Virginia Railway Express (VRE)

The VRE rail system was originally sized for 10,000 daily trips in 1991. Ridership has grown steadily since 1997 and periodically hits over 16,000 passenger trips per day. The average daily ridership is around 15,721 trips/day for FY09 through November 2008. VRE has added 50 new railcars and cabs to the fleet, 21 cars were used to replace older gallery cars and the Sounder cars that were being leased. Eight of the remaining cars were used to bring most train consists to six or eight cars. Attachment A are the train consists by line, the total number of seats available per train, and the current mid-week ridership as of December 11. Both lines have capacity.

OmniRide Commuter Services

PRTC provides commuter bus service called "OmniRide" from points in Prince William County to Washington DC, Arlington, Virginia, and Fairfax County (Metrorail stations).

OmniRide provides long distance commuter service (average trip length is 26 miles). The capacity of OmniRide vehicles ranges from 43 passengers to 57 passengers. (Attachment B is the PRTC Fleet Inventory) The newest vehicles in PRTC's fleet, accessible 2008 MCI buses with a seating capacity of 57 passengers, were put into service in fall of 2008 replacing older vehicles. The average age of the PRTC OmniRide fleet is 5 years.

Because of the nature of commuter service delivery, e.g. higher travel speeds and long distances, PRTC's policy is not to permit standees on commuter routes for safety reasons. When there is evidence of standees (at least one day a week for four consecutive weeks) additional trips will be scheduled on the route. PRTC monitors OmniRide ridership weekly for this purpose as well as others.

OmniLink Local Service:

In addition to commuter services, PRTC operates a local bus service called "OmniLink" that serves passengers along major corridors within Prince William County. OmniLink provides route deviation service within three fourths of a mile from routes.

The OmniLink fleet is comprised of sixteen (22) low-floor accessible, 30 passenger 2004 and 2005 Gillig vehicles The OmniLink vehicles operate in local service areas in Eastern Prince William County in the communities of Woodbridge, Dale City, Lake Ridge, Dumfries/Quantico, and in the Western Prince William County, Manassas and Manassas Park. Travel distances are short (average trip length is 6 miles and all one way trips are less than 15 miles). Passengers board and alight at all points along the route. For these reasons overcrowding has not been an issue on OmniLink service and therefore, the PRTC Commission does not have an adopted standard to define "overcrowding."

With the new fareboxes, boardings are captured on all routes and imported into Transtrack, a management analysis tool software package. PRTC staff carefully reviews the ridership numbers on a weekly basis to determine whether there is potential overcrowding on any route.

Vehicle Headway

VRE

The level of VRE service is limited by agreement regarding track access made available by the private railroad companies owning the right-of-way. Trains operate on approximately 30-minute headways throughout rush hours in the morning and evening, Monday through Friday. (See VRE Schedule Attachment C.)

OmniRide/OmniLink

A table listing vehicle headway by route and span of service is included after this discussion. Both OmniLink and OmniRide operate Monday through Friday, with OmniLink also operating on Saturday. OmniRide commuter service operates almost exclusively during the morning and evening rush hours.

OmniRide headways vary due to ridership levels. Generally, the Dale City and Lake Ridge routes have shorter time between buses as these areas are built out and there is a high demand for bus service to DC.

OmniLink local bus routes operate all day, including the midday period, and provide service at a reduced headway during the evening hours. Eastern OmniLink services run at 30-minute headways while the western service in Manassas and Manassas Park routes operate at roughly 60-minute headways (reflecting ridership differences and differences in development densities.)

OmniLink Headways by Time of Day

Route/Service	AM Peak	Midday	PM Peak	Evening
Woodbridge/Lake Ridge OmniLink	30-45	45	30-55	60-90
Dale City OmniLink	30-45	45	30-45	60-90
Dumfries OmniLink	30-45	45	30-45	60-90
Route 1 OmniLink	40-70	45-60	55-75	95-110
Manassas OmniLink	60	55-68 60 55-58	60-65	
Manassas Park OmniLink	57-59	59	56-59	

OmniRide Headways by Time of Day

Route/Service	AM Peak	Midday	PM Peak	Evening
Potomac Mills to Manassas Mall	55-65	60-65	50-65	50-55
Dale City to/from Washington/State Department	6-20	One Trip Inbound and Two Trips Outbound (MX-1, MX-2, D101)	8-15	
Dale City to/from Pentagon/Crystal City	10-65	One trip Outbound (MX-4)	30-34	
Dale City to/from Washington/Navy Yard/Bolling Air Force Base	40 –48	Two Outbound Trips to the Pentagon (MX-6, MB-1)	15-71	
Lake Ridge to/from Washington/State Department	20	One trip Outbound (MX-3)	13	
Lake Ridge to/from Pentagon/Crystal City	12-40		35-55	
Route 1 to Pentagon/Washington/State Department	46-56		55-65	
South Route 1 to/from Pentagon/Washington/L'Enfant Plaza	40-48	One Trip Outbound	37-66	
Montclair to/from Pentagon/Washington/L'Enfant Plaza	15-36	One Trip Outbound (MX-5)	20-45	
Manassas to Vienna Metro to/from West Falls Church Metro	30-80	One Trip Inbound and One Trip Outbound	30-60	120
Manassas to Pentagon/Washington/State Department	15		25	
Woodbridge/Potomac Mills to Franconia-Springfield Metro	25-35	60	30-45	60-65

Linton Hall/Virginia Gateway to/From West Falls Church Metro	45-65		50-60	
Rosslyn/Ballston to/from Dale City, Woodbridge and Pentagon	45-48		35-50	

Distribution of Transit Amenities

VRE

VRE has 18 stations on the Fredericksburg and Manassas lines. All stations have the following accommodations: ticket vending machines (which utilize Visa, MasterCard, Discover, American Express and Star ATM cards), validation machines, newspaper racks, and bicycle racks. By policy, all VRE stations have parking facilities available free of charge to passengers.

Trains, stations, and support systems operated by VRE are designed to be accessible to persons with disabilities. Those stations that have phones also have TDY's. VRE can also be reached through the Virginia Relay Center for the Hearing Impaired.

Woodbridge, Alexandria, Crystal City Commuter Store and Union Station also have on-site vendors that provide "cash" sales of tickets and also accept Metrocheks

Guaranteed Ride Home Program: Passengers who have an unexpected emergency or unscheduled overtime between 6:00 am and 10:00 pm and need to get home can call VRE for an alternative ride home. VRE, in cooperation with Commuter Connections, will arrange for a ride home, a ride to the train stations or the medical facility handling the emergency. If VRE trains are later than 30 minutes, VRE pays for late fees at child daycare facilities.

OmniRide/OmniLink

PRTC administrative and operations offices are housed in the PRTC Transit Center. Both OmniLink local bus and OmniRide commuter bus serve the PRTC Transit Center. The PRTC Transit Center has a commuter parking lot, street lighting, six bus shelters and a passenger waiting terminal which has benches, trash receptacles, ash trays, newspaper machines, vending machines, bike racks and display boards. The PRTC Transit Center also has a climate-controlled vestibule open to customers. The facility also houses the Contract operations office and the customer service center. Schedules and other public information, tokens, tickets can be obtained at this location.

OmniRide buses also serve Commuter Park and Ride lots, which are owned and maintained by the Virginia Department of Transportation and Prince William County. At the larger commuter lots, VDOT has provided for bus shelters and in some cases benches have been placed at the smaller lots by the property owners. Major area shopping centers are also served and are a location for timed transfers. OmniLink local buses currently

stage and transfer passengers at the PRTC Transit Center, the Manassas Mall and the Manassas Shopping Center. The amenities available at the PRTC Transit Center have already been described. Manassas Mall and Manassas Shopping Center are private property and no passenger amenities are provided.

In 2006 PRTC embarked on a bus shelter siting plan with the assistance of a consultant that would help PRTC prioritize installation of future shelters based on certain parameters. There were two parameters, daily boardings of 15 passengers or more and if the bus stop was near what was termed a "neighboring use." Neighboring use was defined as Hospitals, Senior Center, Elderly Facilities, Health Clinics, Libraries, Local Government Facilities, Community Centers, and Schools. Attachment D are two PowerPoint presentations; 1) the PRTC Bus Shelter Siting Plan as presented September 2007, and, 2) an update to that plan presented October 2008.

In the next three years, PRTC plans to install additional shelters, or benches where shelters are impractical, as outlined in the PRTC Bus Shelter Siting Plan.

Transit Access

VRE

The initial station locations were selected by the local jurisdictions often based on the fact that the land required for a station and parking were public land that was already available. Other locations were selected to make use of old "historic" abandoned train stations e.g. such as in Old Towne Manassas, Quantico Station and Alexandria Station, or are at an existing Metrorail station which provides more travel options to the public. No new stations have been built since 1998. As new stations are proposed (which would be in conjunction with extensions of VRE service), planning, funding, operating and demographic factors will be considered.

According to the 2008 VRE Customer Service Survey (Attachment X) 81% of the riders drove alone to their origination station, 6% rode with others, 7% were dropped off by car, 4% walked. To reach their final destination after getting off the train, 65% walked, 21% transferred to Metrorail, 4% used a car, 6% used a bus, and 4% used some other means.

OmniRide

OmniRide commuter routes serve the most densely populated and heavily traveled corridors of Prince William County (Old Bridge Road, Dale Boulevard, Route 1/Jefferson Davis Highway, Route 234/Dumfries Road) and Manassas (Route 234/Sudley Drive). Generally speaking, routes originate in neighborhoods (Lake Ridge, Dale City, Montclair, Powell's Creek/Southbridge, Dumfries/Woodbridge, Manassas Park, Old Town Manassas) and operate on local streets and serve commuter parking lots on major corridors which feed onto interstate freeways (I-95 in eastern Prince William and I-66 in Manassas). The majority of patrons drive or ride with someone to access OmniRide service – normally to a commuter parking lot (80.0% in the 2006 OmniRide Passenger Survey, which is Attachment X), though some passengers walk to the stop and board in neighborhoods (18% in the 2006 Passenger Survey). In the 2006 Passenger Survey, 24%

of riders indicated they live more than 15 minutes from a route, 20% indicated that they live between eleven and fifteen minutes from a bus route, 33% indicated that they live between five and ten minutes from their route, and 23% indicated they lived less than five minutes for their bus route.

OmniLink

OmniLink routes also operate on major corridors in eastern Prince William County (Old Bridge Road/Route 1/Prince William Parkway, Dale Boulevard/Hoadley Road/Prince William Parkway, South Route 1) and Manassas (Sudley Road/Old Town/Grant Avenue) and Manassas Park (Liberia Avenue/Manassas Drive/Sudley Road). OmniLink buses serve regular bus stops but they will deviate from the scheduled route within 3/4ths of a mile on either side of the route. In the 2006 OmniLink Passenger Survey (Attachment X), 82% of riders indicated that they always board at bus stops, 11% indicated that they use bus stops and deviations, and 7% of riders stated they use scheduled deviations exclusively. With the exception of a few popular locations and park & ride lots (e.g.—the PRTC Transit Center, the Woodbridge VRE Station, the Dale City Recreation Center, the Manassas VRE Station, the Manassas Park City Hall), deviations have to be scheduled in advance with a customer service representative. Riders have the opportunity to set up a standing deviation, whereby they will be picked up and dropped off at the same off route location as long as the trip is needed on a regular basis. The deviated nature of the service allows PRTC to provide far greater transit access than a traditional fixed route system.

SYSTEM-WIDE SERVICE POLICIES

Vehicle Assignment

VRE:

VRE operates 31 trains for commuter service on an existing track owned by CSX and Norfolk Southern Freight Rail companies. Trains are configured based on the expected passenger loads and which equipment works together.

OmniRide Commuter Services

All OmniRide vehicles are assigned to a route and operators utilize the vehicle assigned to "their picked run". A vehicle change may occur due to the morning ridership, overcrowding etc. The OmniRide and OmniLink vehicle "pull out" sheet listing bus assignments on December 16, 2008 is Attachment A.

Ridership and capacity are the only factors in assigning vehicles; amenities are not considered. Age of the vehicle is only considered with respect to "doubling," which means that a run has a round trip in the AM or PM peak (i.e.—the operator makes one trip, deadheads back to his/her point of origin and makes a second trip.) The lowest mileage, and thus newest, vehicles in our fleet are assigned to runs that are "doubled". "Doubling" occurs on trips to and from all points of our service area and the run assignment is non-discriminatory in its nature.

On OmniRide any trips that average 35 or more passengers are placed on a "big bus list" of trips which are to be assigned to the 47 to 57 passenger buses. If a trip experiences at least one day of overcrowding for four consecutive weeks (overcrowding that is not due to the trip running late) then PRTC adds another trip to the schedule. The commuter express nature of PRTC's services was a key determinant in the purchase of the vehicles in our fleet, which are a mix of over-the-road and suburban transit buses with high back, reclining, upholstered seats. As the vast majority of trips exceed 20 miles and buses travel on highways for extended periods of time passenger comfort and safety are very important. With respect to time of day, PRTC OmniRide service operates primarily in the AM and PM peak, with very limited service in the mid-day period. Vehicle assignment policies do not vary by AM and PM peak.

Because OmniRide vehicles do not remain in service all day, vehicles may be reassigned in the evening to runs different than the morning. Evening runs normally have higher ridership than morning runs as some passengers may "slug" or carpool in the morning, but take the bus home at a more convenient time.

PRTC operates additional midday trips on Fridays and provides no service on six national holidays (New Years, Memorial Day, July 4th, Labor Day, Thanksgiving, Christmas). A modified service system is operated on other Holidays due to the inconsistencies in recognized Holidays by various agencies and businesses. (MLK Birthday, Presidents

Day, Columbus Day, Veterans Day, the day after Thanksgiving, Christmas Eve). The method of making vehicle assignments does not change for any of the Holidays.

OmniLink Local Services

OmniLink vehicles remain in continuous service all day on the route to which they are assigned in the morning. This would be altered only if a breakdown occurs requiring a vehicle switch during normal hours of service. Since all vehicles in the OmniLink fleet are identical, and the services are route deviation, vehicles are only shifted when a breakdown occurs or a vehicle has been scheduled for preventive maintenance. The smaller OmniLink buses are better suited to navigate narrower neighborhood streets and routinely enter and exit parking lots. The type of service and maneuverability were the main factors in purchasing the smaller vehicles. Amenities, time of day and day of week do not vary in the assignment of OmniLink vehicles. OmniLink operates Monday through Saturday from 5:45 am to 10:30 pm. OmniLink operates in the same manner on Holidays as OmniRide.

Security

VRE

VRE is incrementally adding cameras to their stations and yards. The decision was made to do the storage and maintenance yards and the inner stations (which are in dense urbanized areas) first and from their move to the highly used stations. So cameras have now been placed at Alexandria, Crystal City, L'Enfant, Franconia/Springfield and Manassas Park stations. The next round of funding, if approved by Homeland Security, will place cameras at both yards and at Burke, Quantico and Fredericksburg stations.

VRE employs a security firm that patrols the two storage and maintenance yards during the night and periodically visits different stations during the day. Also VRE has an agreement with the State Police that as a training tool, bomb-sniffing dogs and their handlers sweep select trains at Alexandria Station (they can access trains from both lines at this station). This happens at least once a month.

VRE provides some security information for their passengers on their website. Attachment B are examples of what is posted.

PRTC

PRTC has installed cameras to monitor the perimeter of the PRTC Administration building and transfer center, the employee parking lot, the perimeter of the bus storage yard, the entrance to the bus maintenance bays, and the commuter parking lot. PRTC has contracted with a security firm to place an employee in the lobby of the Administration building to monitor the cameras and also to periodically do perimeter checks.

GPS systems have been installed on all buses so that their location can be monitored and "DriveCam" has been installed on the OmniRide buses, but this is mainly for driver training purposes.

PRTC has received funding from Homeland Security for employee training. All front-line employees, management, drivers and mechanics will be taking 'System Security Awareness for Transit Employees" and the drivers and other front-line employees will be taking "Terrorist Activity Recognition and Reaction."

Appendix F

POTOMAC AND RAPPAHANNOCK TRANSPORTATION COMMISSION
FY 2008 TRIENNIAL REVIEW

DRAFT REPORT

FY2008 TRIENNIAL REVIEW

of the

Potomac and Rappahannock Transportation Commission
Woodbridge, Virginia
Recipient ID 5348

Desk Review: April 29, 2008
Site Visit: August 4-6, 2008

August 2008

Prepared for the
Federal Transit Administration
Region III
Philadelphia, Pennsylvania

by

Reid Consulting, LLC

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I. TRIENNIAL REVIEW BACKGROUND

The United States Code, chapter 53 of title 49, requires the Federal Transit Administration (FTA) of the United States Department of Transportation (USDOT) to perform reviews and evaluations of Urbanized Area Formula Grant activities at least every three years. This requirement is contained in 49 U.S.C. 5307(i).

> (2) At least once every 3 years, the Secretary shall review and evaluate completely the performance of a recipient in carrying out the recipient's program, specifically referring to compliance with statutory and administrative requirements and the extent to which actual program activities are consistent with the activities proposed under subsection (d) of this section and the planning process required under sections 5303-5306 of this title.
>
> (3) The Secretary may take appropriate action consistent with the review, audit and evaluation under this subsection, including making an appropriate adjustment in the amount of a grant or withdrawing the grant.

The Triennial Review includes a review of the grantee's compliance in 23 areas. The basic requirements for each of these areas are summarized below.

This report presents the findings from the Triennial Review of the Potomac Rappahannock Transportation Commission (PRTC) in Woodbridge, Virginia. This review was performed in accordance with FTA procedures (published in FTA Order 9010.1B, April 5, 1993) and included preliminary reviews of documents on file at the Region VIII Office in Denver and on-site discussions and review of the procedures, practices, and records of PRTC as deemed necessary. The review concentrated primarily on procedures and practices employed during the past two years; however, coverage was extended to earlier periods as needed to assess the policies in place and the management of grants. During the visit, administrative and statutory requirements were discussed, documents were reviewed, and facilities were toured. Specific documents examined during the Triennial Review are available in FTA's and PRTC's files.

II. REVIEW PROCESS

The desk review was conducted in the Region III Office on April 29, 2008. Following the desk review, an agenda package was sent to PRTC advising it of the site visit and indicating additional information that would be needed and issues that would be discussed.

The site visit to PRTC occurred August 4-6, 2008. The individuals participating in the review are listed in Section VII of this report.

At the entrance conference, the purpose of the Triennial Review and the review process were discussed. During the site visit, urbanized area formula grant program administrative and

statutory requirements were discussed and documents were reviewed. PRTC's transit facilities were toured to provide an overview of activities related to FTA-funded projects. Maintenance records of a sample of FTA-funded vehicles and facilities were inspected during the site visit.

On completion of the review, an exit conference was held with PRTC staff to discuss findings, corrective actions, and schedules. This information is summarized in the table in Section V of this report. A draft copy of this report was provided to PRTC at the exit conference.

III. DESCRIPTION OF THE GRANTEE

PRTC, a regional transit district created by the Virginia legislature in 1986, provides commuter bus, local route deviation, rideshare matching services and, in partnership with the Northern Virginia Transportation Commission (NVTC), commuter rail service in Prince William and Stafford counties and the cities of Manassas, Manassas Park, and Fredericksburg. The 15-member board of commissioners includes two members from the Virginia General Assembly, one from the Virginia Senate, eleven from the member jurisdictions, and one representative from the Virginia Department of Rail and Public Transportation (VDRPT). All but the representative from VDTPR are elected officials.

PRTC provides three commuter bus services: OmniRide, Metro Direct, and the Cross County Connector. OmniRide comprises seven routes to Northern Virginia and Washington, DC. Metro Direct provides service to the West Falls Church (two routes) and Franconia-Springfield (one route) Metro stations. The Cross County Connector provides hourly service between Manassas/Manassas Park and eastern Prince William County. Buses operate weekdays as early as 4:20 a.m. and as late as 11:00 p.m., depending on the route.

Route deviation service, called OmniLink, comprises six routes. OmniLink buses will deviate three quarters of a mile. Buses operate weekdays from 5:00 a.m. to 11:00 p.m. weekdays and 7:00 a.m. to 10:45 p.m. Saturdays.

All bus service is operated by a contractor, First Transit.

PRTC administers OmniRide, a rideshare matching service, and VanStart and VanSave, which provide financial assistance to start-up vanpools.

The cash fare for OmniRide is $5.50, with a reduced fare of $4.00 when using SmartTrip, the regional smart card fare payment system or tokens which are sold in packs of 40. The cash fare for Metro Direct is $2.50, with a reduced fare of $2.10 when using SmartTrip or tokens which are sold in packs of 10. Half fares are available for senior and disabled passengers and Medicare cardholders boarding during the off-peak hours of 9:30 a.m. to 3:00 p.m. and after 7:00 p.m.

The cash fare for OmniLink and the Cross County Connector is $1.00. During all hours, PRTC offers a reduced fare of $0.50 to passengers 65 years and over, persons with disabilities, and Medicare cardholders. For a full fare passenger, there is an additional $1.00 charge for

OmniLink route deviations. For a passenger who qualifies for half fare, there is no deviation surcharge. Pre-payment fare options include SmartTrip, day passes, 10- and 50-pack tickets (full fare only), and 25-pack tickets, (half fare only).

PRTC operates a fleet of 119 buses. The fleet consists of 30- and 40-foot transit coaches and 45-foot over-the-road coaches. At the time of the site visit, the peak requirement was 101 buses, resulting in a spare ratio of 18 percent. In addition to the active fleet, PRTC has a contingency fleet which is pressed into service for new service until such time new buses can be ordered.

PRTC operates from a single management and operations headquarters in Woodbridge, Virginia. PRTC's staff consists of executive, administrative, and dispatch employees. All other transportation and maintenance personnel are the employees of the contractor, First Transit. An on-site First Transit general manager directs the transportation and maintenance operations.

Virginia Rail Express (VRE) is the commuter rail service from Fredericksburg and Manassas, Virginia to employment centers in Northern Virginia and Washington, DC. VRE was formed in 1989 through an agreement between PRTC, its member jurisdictions, NVTC, Arlington and Fairfax counties, and the City of Alexandria. PRTC and NVTC are the joint owners of VRE. VRE is governed by an Operations Board consisting of seven members, three each appointed by PRTC and NVTC, and one by the VDRPT. VRE is not a legal entity under Virginia law and, therefore, is not an FTA grantee. PRTC is the grantee for FTA funds on behalf of VRE and VRE staff are PRTC employees.

VRE operates 39 trains daily on two rail lines, Fredericksburg and Manassas. Both lines terminate at Union Station in Washington. The first train leaves Broad Run at 5:05 a.m. and the last train arrives at Fredericksburg at 8:04 p.m. The Fredericksburg Line has 12 stations and the Manassas Line has ten. Four stations are serviced by both lines. VRE has a variety of occupancy arrangements on the station properties, including outright ownership of some assets, joint ownership, and leases. Most of the stations were built by the local jurisdictions.

VRE contracts Amtrak for rail operations and maintenance. Amtrak, which maintains the locomotives at its facility in Ivy City, subcontracts car maintenance which is performed at VRE's Broad Run facility in Manassas. VRE stores trains at its Crossroad facility in Fredericksburg which is undergoing expansion. VRE's management office is in Alexandria, Virginia. VRE has a fleet of18 locomotives, 21bi-level cab cars, and 63 trailer cars. VRE contracts a facilities management firm for daily inspection and maintenance of its station stops and commuter parking lots.

PRTC's and VRE's National Transit Database reports for FY2007 provided the following financial and operating statistics:

	Bus Service	Commuter Rail
Unlinked Passengers	2,683,473	
Revenue Hours	148,446	
Operating Expenses	$20,359,272	$46,192,429

During the review period, PRTC purchased buses, installed shelters, and installed SmarTrip fareboxes on its fleet. VRE completed construction of a second railroad bridge at Quantico Creek; extended the station platform at the Manassas Park Station; replaced VRE's aging communication system with large, color variable message signs; designed and constructed a 532 space parking facility in the City of Manassas; and purchased 61 railcars, all but 15 of which have been delivered. The Quantico Bridge project is VRE's largest construction project to date.

Current VRE projects include environmental assessment and preliminary design for track alternatives (Cherry Hill Third Track); construction of a second platform, kiss and ride lot, an overhead pedestrian bridge connecting at the Woodbridge Station; construction of additional storage tracks and locomotive and train wash facilities at VRE's Crossroads yard; delivery of the remaining 15 rail cars; and procurement of two locomotives.

Over the next three-to-five years, PRTC plans to install additional bus shelters, purchase replacement and expansion buses, and design and construct a maintenance facility in the western portion of its service area. VRE plans to purchase additional locomotives; study the feasibility of extending the Manassas Line 11 miles west to Gainesville-Haymarket; and design and construct additional storage tracks and locomotive and train wash facilities at the Broad Run.

IV. RESULTS OF THE REVIEW

This Triennial Review focused on PRTC's compliance in 23 areas. This section provides a discussion of the basic requirements and findings in each area. No deficiencies were found with the FTA requirements in 21 areas. Deficiencies were found in two areas, maintenance and planning/ program of projects.

1. Legal

Basic Requirement: The grantee must be eligible and authorized under state and local law to request, receive, and dispense FTA funds and to execute and administer FTA funded projects. The authority to take all necessary action and responsibility on behalf of the grantee must be properly delegated and executed.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for legal.

2. Financial

Basic Requirement: The grantee must demonstrate the ability to match and manage FTA grant funds, to cover cost overruns, to cover operating deficits through long-term stable and reliable sources of revenue, to maintain and operate federally funded facilities and equipment, and to conduct an annual independent organization-wide audit in accordance with the provisions of OMB C A-133.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for financial.

3. Technical

Basic Requirement: The grantee must be able to implement the Urbanized Area Formula Grant Program of Projects in accordance with the grant application, Master Agreement, and all applicable laws and regulations, using sound management practices.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for technical.

4. Satisfactory Continuing Control

Basic Requirement: The grantee must maintain control over real property, facilities and equipment and ensure that they are used in transit service.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for satisfactory continuing control.

5. Maintenance

Basic Requirement: The grantee must keep federally funded equipment and facilities in good operating order.

Findings: During this Triennial Review of PRTC, a deficiency was found with the FTA requirements for maintenance.

Three mission critical facility systems were selected to review adequate preventive in accordance with the standards contained in the PTRC procedures manuals: portable lifts, bus washer, and fueling system. The records review indicated that the portable lifts and bus washer

were inspected at the planned intervals but that the fueling system was not. PRTC's procedures require an inspection of this system biannually. Documentation was provided from a third party contractor (Tanknology) documenting that annual inspections were performed over the last three years. There was no documentation that any other inspections of the fueling system had occurred.

Corrective Action and Schedule: By December 6, 2008, either change the preventive maintenance inspection intervals for the fueling system or implement procedures to ensure that the system is inspected timely. Submit the new plan or the procedures to the FTA Region III office.

6. Procurement

Basic Requirement: FTA grantees will use their own procurement procedures that reflect applicable state and local laws and regulations, provided that the process ensures competitive procurement and that the procedures conform to applicable federal law including 49 CFR Part 18, specifically Section 18.36 and FTA C 4220.1E, "Third Party Contracting Requirements." Grantees will maintain a contract administration system that ensures that contractors perform in accordance with terms, conditions, and specifications of their contracts or purchase orders.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for procurement.

7. Disadvantaged Business Enterprise (DBE)

Basic Requirement: The grantee must comply with the policy of USDOT that DBEs, as defined in 49 CFR Part 26, are ensured nondiscrimination in the award and administration of USDOT-assisted contracts. Grantees also must create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts; ensure that only firms that fully meet eligibility standards are permitted to participate as DBEs; help remove barriers to the participation of DBEs; and assist the development of firms that can compete successfully in the marketplace outside the DBE program.

Findings: During this Triennial Review of PRTC, no deficiencies were found with USDOT requirements for DBE.

8. Buy America

Basic Requirement: Per Buy America law, federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless FTA has granted a waiver, or the product is subject to a general waiver. Rolling stock must have a 60 percent domestic content and final assembly must take place in the United States.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for Buy America.

9. Suspension/Debarment

Basic Requirement: To protect the public interest and prevent fraud, waste, and abuse in federal transactions, persons or entities, which by defined events or behavior, potentially threaten the integrity of federally administered programs, are excluded from participating in FTA assisted programs. Federal agencies use the government-wide nonprocurement debarment and suspension system to exclude from Federal programs persons who are not presently responsible. Grantees are required to ensure to the best of their knowledge and belief that none of the grantee's "principals" (as defined in the governing regulation 49 CFR Part 29), subrecipients, and third-party contractors and subcontractors is debarred, suspended, ineligible, or voluntarily excluded from participation in federally assisted transactions or procurements. Grantees are required to review the Excluded Parties Listing System (http://epls.arnet.gov/) before entering into any third party contracts.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for suspension/debarment.

10. Lobbying

Basic Requirement: Recipients of federal grants and contracts exceeding $100,000 must certify compliance with Restrictions on Lobbying before they can receive funds. In addition, grantees are required to impose the lobbying restriction provisions on their contractors.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for lobbying.

11. Planning/Program of Projects

Basic Requirement: The grantee must participate in the transportation planning process in accordance with FTA requirements, SAFETEA-LU, and the Metropolitan and Statewide Planning Regulations.

Each recipient of a grant shall have complied with the public participation requirements of Section 5307(c)(1) through (7). Each recipient is required to develop, publish, afford an opportunity for a public hearing on, and submit for approval a Program of Projects (POP).

Findings: During this Triennial Review of PRTC, a deficiency was found with the FTA requirements for planning/POP.

PRTC relies on the public involvement process for the transportation improvement program (TIP) to meet Section 5307 public involvement requirements. When doing so, the public notice for the TIP must state that the TIP public involvement process serves as the Section 5307 public involvement process. The most recent TIP did not include the notification. The notices are published by the Transportation Planning Board (TPB), the MPO.

Corrective Action and Schedule: By December 6, 2008, develop and implement procedures to ensure that TPB includes a statement in future TIP public notices that the TIP public involvement process serves as the Section 5307 public involvement process or to carry out a separate public involvement process for annual Section 5307 program of projects, including publication of legal notices for the draft and final programs of projects. Submit a copy of the procedures and the next public notice to the FTA Region III office.

12. Title VI

Basic Requirement: The grantee must ensure that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participating in, or denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance. The grantee must ensure that federally supported transit service and related benefits are distributed in an equitable manner.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for Title VI.

13. Public Comment Process for Fare Increases and Service Reductions

Basic Requirement: The grantee must have a locally developed process to solicit and consider public comment before raising a fare or carrying out a major reduction of transportation services.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for public comment process for fare increases and service reductions.

14. Half Fare

Basic Requirement: Grantees must ensure that elderly persons and persons with disabilities, or an individual presenting a Medicare card, will be charged during non-peak hours for transportation using or involving a facility or equipment of a project financed under Section 5307 not more than 50 percent of the peak hour fare.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for half fare.

15. ADA

Basic Requirement: Titles II and III of the Americans with Disabilities Act of 1990 provide that no entity shall discriminate against an individual with a disability in connection with the provision of transportation service. The law sets forth specific requirements for vehicle and facility accessibility and the provision of complementary paratransit service.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for ADA.

16. Charter Bus

Basic Requirement: Grantees are prohibited from using federally funded equipment and facilities to provide charter service except on an incidental basis and when one or more of applicable exceptions for urban areas set forth in the charter service regulation at 49 CFR 604.9 (b) applies.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for charter bus.

17. School Bus

Basic Requirement: Grantees are prohibited from providing exclusive school bus service unless the grantee qualifies under specified exceptions. In no case can federally funded equipment or facilities be used.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for school bus.

18. National Transit Database (NTD)

Basic Requirement: The grantee must collect, record, and report financial and non-financial data in accordance with the Uniform System of Accounts (USOA) and updated with the *National Transit Database (NTD) Reporting Manual* as required by 49 USC 5335(a).

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for National Transit Database.

19. Safety and Security

Basic Requirement: Any recipient of Urbanized Area Formula Grant Program funds must annually certify that it is spending at least one percent of such funds for transit security projects or that such expenditures for security systems are not necessary.

Under the safety authority provisions of the Federal transit laws, the Secretary has the authority to investigate the operations of the grantee for any conditions that appear to create a serious hazard of death or injury, especially to patrons of the transit service. However, FTA has no specific requirements for transit safety. States are required to oversee the safety of rail fixed guideway systems through a designated oversight agency.

Under security, a list of 17 Security and Emergency Management Action Items has been developed by FTA and the Department of Homeland Security's Transportation Security Administration (TSA). This list of 17 items, an update to the original FTA Top 20 security action items list, was developed in consultation with the public transportation industry through the Mass Transit Sector Coordinating Council, for which the American Public Transportation Association (APTA) serves as Executive Chair. Security and Emergency Management Action Items for Transit Agencies aim to elevate security readiness throughout the public transportation industry by establishing baseline measures that transit agencies should employ.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for safety and security.

20. Drug-Free Workplace

Basic Requirement: Grantees are required to maintain a drug-free workplace for all employees and to have an ongoing drug-free awareness program.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for drug-free workplace.

21. Drug and Alcohol Program

Basic Requirement: Grantees receiving FTA funds under Capital Grant, Urbanized Area Formula Grant, or Non-Urbanized Area Formula Grant Programs must have a drug and alcohol testing program in place for all safety-sensitive employees.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for drug and alcohol program.

22. Equal Employment Opportunity (EEO)

Basic Requirement: The grantee must ensure that no person in the United States shall, on the ground of race, color, creed, national origin, sex, age, or disability be excluded from participating in, denied the benefits of, or be subject to discrimination in employment under any project, program or activity receiving federal financial assistance from the federal transit laws.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the requirements for EEO.

23. ITS Architecture

Basic Requirement: Intelligent Transportation Systems (ITS) projects funded by the Highway Trust Fund and the Mass Transit Account must conform to the National ITS Architecture, as well as to U. S. Department of Transportation (USDOT) adopted ITS standards.

Findings: During this Triennial Review of PRTC, no deficiencies were found with the FTA requirements for ITS architecture.

V. SUMMARY OF FINDINGS AND CORRECTIVE ACTIONS

Review Area	Finding	Deficiency	Corrective Action	Response Days/Date	Date Closed
1. Legal	ND				
2. Financial	ND				
3. Technical	ND				
4. Satisfactory Continuing Control	ND				
5. Maintenance	D	07 – Late facility/ equipment preventive maintenance	Either change the preventive maintenance inspection intervals for the fueling system or implement procedures to ensure that the system is inspected timely. Submit the new plan or the procedures to the regional office.	12/6/08	
6. Procurement	ND				
7. Disadvantaged Business Enterprise	ND				
8. Buy America	ND				
9. Suspension/ Debarment	ND				
10. Lobbying	ND				
11. Planning/POP	D	04 – Public notice deficiencies	Develop and implement procedures to ensure that TPB includes a statement in future TIP public notices that the TIP public involvement process serves as the Section 5307 public involvement process or to carry out a separate public involvement process for annual Section 5307 program of projects, including publication of legal notices for the draft and final programs of projects. Submit a copy of the procedures and the next public notice to the FTA Region III office.	12/6/08	
12. Title VI	ND				
13. Public Comment for Fare and Service Changes	ND				
14. Half Fare	ND				
15. ADA	ND				
16. Charter Bus	ND				

Review Area	Finding	Deficiency	Corrective Action	Response Days/Date	Date Closed
17. School Bus	ND				
18. National Transit Database	ND				
19. Safety and Security	ND				
20. Drug-Free Workplace	ND				
21. Drug and Alcohol Program	ND				
22. Equal Employment Opportunity	ND				
23. ITS Architecture	ND				

Findings: ND = No Deficiencies; D = Deficient; AC = Advisory Comment; NA = Not Applicable; NR = Not Reviewed

VI. TRANSIT SECURITY EXPENDITURES

Does the grantee expend one percent or more of its Section 5307 Urbanized Area Formula Grant funds for transit security? Yes__X__ No____

If no, why does the grantee consider such expenditure unnecessary (check all that apply):
_____ No deficiency found from a threat and vulnerability assessment
_____ TSA/FTA Security and Emergency Management Action Items met or exceeded
_____ Other (please describe):

Security Funding	FTA Section 5307 Funds (in Dollars)		
	FY 2005	FY 2006	FY 2007
Total amount of 5307 Funds expended	$7,726,725	$9,689,875	$9,436,158
Amount of 5307 Funds expended on security	$41,824	$104,946	$113,132
Percent of 5307 Funds expended on security	.5%	1.1%	1.2%
Infrastructure/Capital Improvement Security Projects:			
Lighting, Fencing & Perimeter Control			
CCTV and Surveillance Technology			
Communications Systems	$1,200	$27,793	
Security Planning*		$19,635	$27,884
Drills & Tabletop Exercises*	$8,748	$3,569	$23,648
Employee Security Training*			
Other Security-Related Infrastructure & Capital Improvements (please list): Hot Site Security video Bomb-resistant trash cans	 $31,876	 $22,323 $11,051	 $58,565
Operating/Personnel Expenditures (can only be used by agencies in areas with populations UNDER 200,000):			
Contracted Security Force			
In-house Security Force			
Other Security-Related Operating Expenditures (please list):			

* SAFETEA-LU amended the definition of a capital project to include:
- projects to refine and develop security and emergency response plans;
- the conduct of emergency response drills with public transportation agencies and local first response agencies; and
- security training for public transportation employees.

VII. ATTENDEES

Name	Title/Organization	Phone Number	e-mail address
PRTC			
Denny St.Denis	Facility & Grounds Administrator	703-580-6152	dstdenis@omniride.com
Joyce Embrey	Director of Finance & Administration	703-580-6123	jembrey@omniride.com
Althea Evans	Director of Marketing	703-580-6131	aevans@omniride.com
Anthony Foster	Transportation Project Manager	703-580-6147	afoster@omniride.com
Alfred Harf	Executive Director	703-580-6121	aharf@omniride.com
Eric Marx	Director of Operations	703-580-6117	emarx@omniride.com
Betsy Massie	Director, Grants & Projects	703-580-6113	bmassey@omniride.com
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VRE			
Detrius Bolton	Procurement Administrator	703-838-5426	dbolton@vre.org
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Gerri Hill	Manager, Contracts Administration	703-838-5427	ghill@vre.org
Dennis Larson	Director of Rail Equipment & Services	703-838-5439	dlarson@vre.org
Jennifer Straub	Deputy CEO	703-838-5414	jstraub@vre.org
Contractors			
Jeffery Apple	Manager, Broad Run, RPI	703-498-4030	japple262@aol.com
Melvin Baskfield	Facility Manager, First Transit	571-436-2124	m.baskfield@firstgroup.com
John Hagan	Clerk, Broad Run, Amtrak	202-437-6297	hagans@amtrak.com
Mike Jefferson	Senior Foreman, Amtrak	202-906-3429	jefferm@amtrak.com
Todd Johnson	Director of Maintenance, First Transit	703-580-6105	todd.johnson@firstgroup.com
Ed Kindt	Assistant Superintendent, Amtrak	202-906-3107	kindte@amtrak.com
Myra Simms	Foreman II, Amtrak	202-906-2922	simmsm@amtrak. com
FTA			
Sheila Byrne	Transportation Program Specialist	215-656-7256	sheila.byrne@dot.gov
VADRPT			
Tanya Husick	DRTP	703-934-4636	tanya.husick@drpt.virginia.gov
Reviewers			
Sharon Ahmad	Reid Consulting, LLC	703-351-5056	ahmad@reidconsult.com
John Clare	Reid Consulting, LLC	315-729-9073	clare@reidconsult.com

Name	Title/Organization	Phone Number	e-mail address
Dan Wagner	Reid Consulting, LLC	703-532-7629	wagner@reidconsult.com

PRTC
Potomac and Rappahannock Transportation Commission

14700 Potomac Mills Road
Woodbridge, VA 22192

November 14, 2008

Ms. Letitia A. Thompson
Regional Administrator
Federal Transit Administration – Region III
1760 Market Street, Suite 500
Philadelphia, PA 19103-4124

RE: FY 2008 Triennial review – Corrective Actions

Dear Ms. Thompson:

I have enclosed documentation to confirm completion of the two corrective actions described in the Federal Transit Administration's (FTA's) draft Triennial Review Report, submitted to the Potomac and Rappahannock Transportation Commission (PRTC) on August 6, 2008.

For ease of reference, I'll summarize here the findings described in the draft report and the specific documentation enclosed to confirm PRTC's corrective actions:

Section 5: Maintenance – Contractor Lacked Internal Preventative Maintenance Inspection Documentation of the Bus Fueling System

First Transit, PRTC's operations and maintenance contractor, has devised a form (Enclosure A) to be used during the bi-annual preventative maintenance inspection of the bus fueling system.

The form exactly replicates the preventive maintenance tasks for the bus fueling system (equipment item #29) as outlined in the PRTC's Facility Maintenance Plan (provided at the Triennial), a summary is attached for your reference (Enclosure B). The preventive maintenance tasks are based on the recommended tasks found in the manufacturer's operation manual for the Gasboy fuel pumps (see Enclosure A-1).

Section 11: Planning/Program of Projects – Regional TIP Public Notice Excluded FTA Required Language

Enclosure C is a copy of an e-mail message that announces the adoption of new TIP public notice language by the Metropolitan Washington's Transportation Planning Board (TPB). According to the TIP Coordinator (Andrew Austin), all future public comment notices will state

OmniRide • Metro Direct • OmniLink • Cross County Connector • OmniMatch • VRE
Adminsitrative Office: (703)-583-7782 • Customer Info: (703) 730-6664 • Toll Free: (888) 730-6664 • Fax: (703) 583-1377 • PRTCtransit.org

that "the TIP comment process is being used to obtain comments on the region's projects that are funded by the Federal Transit Administration (including Section 5307 funds) and the Federal Highway Administration".

Enclosure D is a photocopy of TPB's updated public comment notice ad, from the October 9th edition of the Washington Post, for the region's 2008 CLRP Update and amendments to the FY 2009-2014 TIP.

I trust that the enclosed material will enable the FTA to conclude that all the corrective actions have been completed. I would be pleased to respond to any questions the enclosed materials may prompt, and we'd like to reiterate our appreciation for the professional manner in which the review was conducted as well as its constructive findings.

Sincerely,

Alfred H. Harf
Executive Director

Enclosures: As stated

cc: (w/enclosures)
Dale Zehner, VRE
Jennifer Straub, VRE
Betsy Massie, PRTC
Sheila Byrne, FTA

Preventive Maintenance Tasks
For Bus Fueling System
Inspected Biannually

Refer to Section 8, "Preventive Maintenance", of the OEM manual for further details

Task Number	Description	Date	Signature
47	Inspect for fuel leaks, belt tension and condition, lubrication and strainer cleanliness		
47	Inspect the watertight seal on the storage tank fill opening covers		
47	Lubricate fuel pumping unit (every 6 months or 100,000 gallons)		
47	Inspect the meter drive shaft extending from the top of the meter unit for leaks. If leaks are present replace Teflon seals		
47	Inspect the hose retreiver reel assembly for frayed or worn cable and proper operation		
47	Clean and lubricate the Non-computer (every 6 months or 100,000 gallons)		
47	Clean the fuel strainer		
47	Change fuel filter		
47	Clean bypass and regulating valve assemblies only if there is notable loss in system performance		
47	To preserve the finish of the pumps, thoroughly clean painted surfaces with a high grade automobile polish and protect with a coat of wax paste. Clean stainless steel surfaces with soap and water followed by a rinse		

ENCLOSURE A

GASBOY™

SERIES 9100A

PUMPS AND DISPENSERS

INSTALLATION/OPERATION

MANUAL

035257

REV. 03/07/03

INSTALLERS - IMPORTANT

In addition to installation information, this manual contains warnings, safeguards and procedures on the use and care of the Series 9100A pumps. Please leave this manual with the pump owner after the installation is complete.

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The information in this document is confidential and proprietary. No further disclosure shall be made without permission from Gasboy International LLC. Gasboy International LLC believes that the information in this document is accurate and reliable. However, we assume no responsibility for its use, nor for any infringements of patents or other rights of third parties resulting from its use. We reserve the right to make changes at any time without notice.

GASBOY INTERNATIONAL LLC LANSDALE, PA

Section 8

PREVENTIVE MAINTENANCE

GENERAL

GASBOY pumps and remote dispensers are designed and constructed to give many years of uninterrupted service. In fact, hundreds of operators report years of trouble-free operation with absolutely no service expense. Yet, certain parts of a pump are bound to wear, and GASBOY therefore recommends a periodic inspection, at least twice a year, for such things as fuel leaks, belt tension and condition, lubrication and strainer cleanliness. If such a procedure is followed, any small adjustments that are necessary can be made before expensive, annoying breakdowns occur. The result of this sound approach is continuous, profitable service from all of your GASBOY equipment.

Procedures requiring disassembly of portions of the pump/remote dispenser must be performed by qualified service personnel.

> **WARNING:**
> *To reduce the risk of electrical shock when servicing, turn off all power to the pump/remote dispenser. In submersible pump applications turn off power to the submersible pump and any other remote dispensers which use that submersible pump. AC power can feed back into a shut-off, remote dispenser when dispensers share a common submersible pump or starter relay. Always turn off all power to the remote dispenser and submerged pumps at the master panel and close any impact valve before performing any maintenance or service to the remote dispenser, including the changing of any fuel filters or strainers. Also block islands so no vehicles can pull up to the remote dispenser when the dispenser is being worked on.*

HINTS FOR BETTER PUMP PERFORMANCE

Demand Competent Service

If your pump should stop or fail to operate properly, don't depend upon the repair service of a general mechanic unless he is thoroughly familiar with the mechanism. Experience shows that the repair results will be much more satisfactory if you demand the service of a competent representative of the pump manufacturer. GASBOY has a distributor network which services fuel dispensing and management systems in every section of the country.

Use Authorized Parts

Should excessive wear, rust, or corrosion of parts cause inefficient operation, it is always best to replace them immediately; but if you want the best results and continuity of the Underwriters' Label on your pump, be sure they are new authorized service parts supplied by GASBOY. Every part of a pump or remote dispenser is carefully designed for a particular purpose. If it is replaced by an incorrect or substandard substitute, pump operation will be unsatisfactory. Always use new gaskets or seals when servicing or rebuilding Gasboy equipment; do not re-use old ones.

Operate with Reasonable Care

Like any machine, the pump or remote dispenser that is operated with reasonable care will last longer and give better service. Abuse should be avoided (such as dropping the nozzle on the ground, operating the unit with a dirty strainer, dragging the hose across the concrete island or driveway, running the pump with the nozzle closed for more than two minutes, etc.). The time and care given to your pumps will be returned to you in the form of dependable service.

PREVENTIVE MAINTENANCE CHECK LIST

Keep Water Out

Water tends to collect in underground and above ground storage tanks. This is due to moisture-laden air being drawn into the storage tank and condensing, or to defective fill openings that are not properly protected with watertight covers. Storage tanks should be checked after every fill-up for water and removed with a sump pump, to forestall serious damage to equipment. Water, sediment, and other foreign matter that accumulates in the tank can be drawn up into the pump or remote dispenser and cause failures.

Pump Lubrication

The pumping unit should be lubricated every six months or every 100,000 gallons. Turn off AC power. Apply a few drops of a light grade oil (SAE 10) to the felt pad located on the pump body slightly above the shaft which connects to the pump pulley. Oil used should be suitable for temperatures ranging from -40 F to 180 F.

All rotary pump models are packed with special "V" packings which can be easily replaced by slipping the pump pulley off the shaft and removing the cap screws, retainer plate, and oil well felt. Pull the bearing from the pump shaft to allow the new packing rings to be inserted. The packing gland is spring-loaded to keep packing tight at all times. When old packing rings are removed, be sure to replace them with a like number of new rings. It is important to fill the stuffing box to prevent leaks.

Meter Lubrication

If the meter begins to leak around the drive shaft extending from the top of the meter unit, it may be necessary to replace the Teflon seals. Turn off the AC power. Remove the outer packing gland plate and the upper bearing assembly. When replacing the new seals (reddish brown and black) and the O-ring into the packing cavity of the meter cover, be careful not to damage them.

Hose Retrievers (If Applicable)

The cable reel assembly does not require lubrication but the cable should be checked periodically and replaced when it appears worn or frayed.

Keep the Non-Computer Lubricated

Although the non-computers used in GASBOY pumps are carefully adjusted and lubricated at the factory before shipment, they require (as do all mechanical parts) occasional cleaning and lubrication when in service. The intervals at which this should be done vary with conditions of operation, but under normal conditions it is necessary only twice a year, or after each 100,000 gallons delivered.

Turn off the AC power to the pump. It's easier to clean and oil the non-computer if you remove it from the pump. Clean the non-computer with compressed air and wipe all accessible parts (such as figure wheel drums) with a clean cloth. *NOTE: Always wear protective safety goggles or glasses when using compressed air.* Never use solvents, such as gasoline or kerosene, as this will become trapped in many of the inaccessible bearings and dissolve the new lubricant when it is applied.

A light, non-acid type oil (SAE 10) is recommended because this gives maximum protection in varying temperatures. The oil must also be acid-free so that it will not cause corrosion of the cast metal parts. A long handled, fine lettering brush is very convenient for applying the oil to all bearings and shafts and for applying light, nonfluid oil (grease with body similar to that of chassis lubricant) to the bevel type gears.

Dial Face

Clean the dial face with a soft, clean, damp cloth as often as necessary.

Cleaning the Strainer

Clean the strainer immediately after the pump has been installed and tested, and again after a few hundred gallons have been delivered. Thereafter, once every six months, or as required.

The symptoms of a dirty or clogged strainer in a pump are slow delivery, noisy operation, and pulsation. Before starting, close the 10RU safety shutoff valves under each pump you are working on. Then follow these directions:

Pump: Turn off AC power to the pump. Locate the Suction Strainer Cap on the plumbing unit and unscrew it to access and remove the strainer. Use compressed air to blow the dirt out of the strainer.

Remote dispenser: Turn off AC power to the dispenser, submersible pump, and any other dispensers which use that submersible pump. Locate the Strainer Cap on the meter and unscrew it to access and remove the strainer. Use compressed air to blow the dirt out of the strainer.

NOTE: Always wear protective safety goggles or glasses when using compressed air.

Filter

If the unit is equipped with a filter, check and change it at regular intervals. A dirty filter in a pump or remote dispenser will cause a slower delivery rate. Refer to the accessories section of your parts manual to ensure that you replace the filter with one designed for your model. Always use a drip pan directly below the filter when removing the cartridge to prevent contamination of both the soil and the electrical components within the cabinet.

Cleaning By-pass and Regulating Valve Assemblies

By-pass and regulating valve assemblies should be removed only for cleaning and should be checked if there is notable loss in system performance. No adjustment is required. To remove the valves, turn off AC power to the unit. If the unit is in a remote dispenser, remove the separator cover and clamp plate, allowing the by-pass valve assembly and regulating valve assembly to be lifted from place.

Adjusting the Belts - Suction Pumps Only

With the proper care, belts will give exceptionally good service. A loose belt not only cuts down dispensing speed, due to slipping, but also results in excessive wear. A properly tightened belt will allow twisting the belt 180 degrees midway between the motor and the pump pulleys. Before adjusting any belt, turn off AC power to the pump/remote dispenser.

On the 9152A, 9153A, 9153AHC, 9152ATW2, and 9153ATW2 models, the belt can be tightened by loosening the hex nut which holds the idler pulley and sliding the pulley to either side to obtain the correct belt tension of 6-3/4 lbs. ± 3/4 (30N, ±3.3N). When the adjustment is complete, remember to retighten the hex nut.

On the 9152ATW1 model, the belt can be tightened by loosening the cap screw which holds the idler arm and sliding the arm to obtain the correct belt tension of 6-3/4 lbs. ± 3/4 (30N, ±3.3N). When the adjustment is complete, remember to retighten the cap screw.

Preserve the Finish of Your Pumps

Nearly all gasoline pumps are installed outdoors where their surfaces are subjected to the action of the weather. As a result, it is necessary to give the finish a reasonable amount of care if an attractive appearance is to be maintained.

The finish on GASBOY pump housings is a high-heat baked synthetic enamel, similar to that used on automobiles. The life of this finish can be lengthened several years if, at regular intervals, the painted surfaces are thoroughly cleaned with a high grade automobile polish and then protected with a coat of paste wax. Do not use abrasive cleaners or polish. Do not use high pressure spraying equipment.

In order to retain the unmarked finish on stainless steel, occasional cleaning is required. In corrosive atmospheres, such as coastal areas, a more frequent cleaning schedule is necessary. Under ordinary conditions, washing with detergent or soap and water, followed by a clean water rinse, is sufficient. If hard water is used, the surface should be wiped dry with a soft clean cloth to prevent the formation of water spots. Marks or spots, such as grease, oily fingerprints and smudges which resist soap and detergents, will have to be removed with a stronger cleaner. (DO NOT use ordinary steel wool as iron particles may adhere to the surface and cause corrosion.) Care should be taken in choosing a cleaner because any cleaning compounds or powders which contain abrasives can scratch a mill-rolled finish. Care must be exercised in their use to run in the direction of the polishing lines in the steel, never across them. After cleaning, an application of paste wax is recommended to protect the surface and prolong the interval between cleaning.

GW01 - 6/04/02 Rev. 1

WARRANTY

General Statements:

Gasboy International LLC. warrants all new equipment manufactured by Gasboy against defective material and/or workmanship, for the warranty period specified below, when the equipment is installed in accordance with specifications prepared by Gasboy.

This warranty does not cover damage caused by accident, abuse, Acts of God, lack of surveillance of automatic recording systems, negligence, mis-application, faulty installation, improper or unauthorized maintenance, installation or use in violation of product manuals, instructions, or warnings.

Under no circumstance shall Gasboy be liable for any indirect, special, or consequential damages, losses, or expenses to include, but not limited to, loss of product, loss of profits, litigation fees, or the use, or inability to use, our product for any for any purpose whatsoever.

Parts Only - During the warranty period, Gasboy will, at its option, repair or replace defective parts returned transportation prepaid to its factory.

On-Site Labor Included - Gasboy will also provide, within the Continental United States and during the warranty period, the services of an Authorized Service Representative (ASR) for on-site repair or replacement of defective parts.

Replacement Parts - Any system components that are not part of the original system order, including Island Card Readers, Pump Control Units, etc., are considered replacement parts.

Equipment	Term	Coverage
Commercial Pumps and Dispensers Full-Cabinet Consumer Pumps	One year from date of installation or 18 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.	Parts and Labor.
Small Transfer Pumps, Meters, Pressure Regulators	One year from date of installation or 18 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.- Excepting the Model 2020 Hand Pump, which has a 90-day warranty from date of GASBOY International's invoice.	Parts Only.
Keytrol	One year from date of installation or 18 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.	Parts and Labor.
Fuel Management Systems: - CFN/ Profit Point - Series 1000/Fleetkey - TopKAT - Fuel Point Readers (sold with new systems)	One year from date of start-up or 15 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.- The basic warranty only applies to systems which have been started up by a Gasboy Authorized Service Representative (ASR).	Parts and Labor.
Additional Fuel Point Items: - Fuel Point Readers sold for retrofitting existing systems. - Fuel Point vehicle and dispenser components.	One year from date of start-up or 15 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.	Parts Only.
Encoders, Embossers, Modems, CRTs, and Logger Printers	Purchased with Fuel Management System (Encoders, Embossers only): 90 days from the date of start-up by a Gasboy ASR, or 180 days from date of Gasboy International's invoice, whichever occurs first. Purchased with Fuel Management System (Modems, CRTs, and Logger Printers only): Matches system warranty. Purchased Separately: 90 days from date of Gasboy International's invoice to the purchaser.	Purchased with System (Encoders, Embossers only): Parts only. Purchased with System (Modems, CRTs, Logger Printers only): Matches system warranty. Purchased Separately: Parts Only.
Air Diaphragm Pumps	Three years from date of purchase (for full warranty description, see Price List).	Parts Only.
Items not manufactured by Gasboy (ex. automatic nozzles, hoses, swivels, etc.)	Not warranted by Gasboy International (consult original manufacturer's warranty).	Not Applicable.
Replacement Parts	One year from date of Gasboy International's invoice to the purchaser.	Parts Only.

To the extent permitted by law, this warranty is made in lieu of all other warranties, expressed or implied, including warranties of freedom from patent infringement, or merchantability, or fitness for a particular purpose, or arising from a course of dealing or usage of trade. No one is authorized to vary the terms of the warranty nor may anyone make any warranty of representation, or assume any liability other than that herein stated, in connection with the sale described herein. The acceptance of any order by Gasboy International is expressly made subject to the purchaser's agreement to these conditions.

GASBOY

GASBOY INTERNATIONAL LLC
P.O. Box 309, Lansdale, PA 19446 ● (800) 444-5579 ● FAX: (800) 444-5569 ● www.gasboy.com

Equipment Type Inventory

Equipment Number	Equipment Description	Task Number						
		Daily	Weekly	Monthly	Quarterly	Bi-Annual	Annual	Run to Failure
1	Air compressor, for shop air in hydraulic pump room, Champion Model HRA-15D-25 Duplex (2) 15 HP	18	19		20			
2	Air compressor, vertical compressor in fuel station, Champion Model VR 1-8 1.5 HP	14	15	16	17			
3	Air dryer, for shop air compressor in hydraulic pump room, Ultra air UA-100-AC						21	
4	Bus washing system, air control panel	36		37				
5	Bus washing system, compressed air							39
6	Bus washing system, electrical							40
7	Bus washing system, general	30	31	32		33		
8	Bus washing system, plumbing							38
9	Bus washing system, programmable logic control system							35
10	Bus wash system, water recycling system	52	53	54				
11	Drinking fountain, refrigerated						28	
12	Fan, rooftop exhaust						29	
13	Fan, Car-mon vehicle exhaust system						4	
14	Filter, "Turbo Flo" air line filters for fluid and chassis lube dispensing pumps, Balcrank		12					
15	Heater, electric unit heater, Trane UHEC-053DA						27	
16	Heater, garage bay infrared heater and fan						6	
17	Heater, gas fire duct furnace, inside mezzanine level make up air unit						22	
18	Heater, mezzanine level make up air unit				25	24	23	
19	Heater, propeller unit heater, Trane UH-IM-2D						26	
20	Lift, air operated pump lift, Balcrank			11				
21	Lift, magnetic starter with start/stop, Rotary P/N FA74							3
22	Lift, multi-position lift locks, Rotary P/N FA299			51				
23	Lift, power unit, 106 gallon, 10 HP, Rotary Model P572			50		49		
24	Lift, two post front and rear, Rotary Model 70 E		7	8	9			

ENCLOSURE "B"

Equipment Type Inventory

Equipment Number	Equipment Description	Daily	Weekly	Monthly	Quarterly	Bi-Annual	Annual	Run to Failure
25	Lubricator, "Perma Fog" air line lubricators for fluid and chassis lube dispensing pumps, Balcrank			13				
26	Oil Water Separator					1	2	
27	Pump, chassis lube dispensing, Balcrank 1150-002 Giant Jet Pump, 50:1 Ratio				10			
28	Pump, fluid dispensing, Balcrank 1131-004 Giant Jet Pump, 10:1 Ratio				10			
29	Pump, Gasboy fuel pump		48			47		
30	Pump, pneumatic pump in steam cleaning pit					34		
31	Pump, submersible sump pump in pit for oil/water collection							3
32	Reel, chassis lube dispensing reel and control handle							3
33	Reel, compressed air dispensing							3
34	Reel, electric light							3
35	Reel, fluid service dispensing reel and control handle							3
36	Storm Water Management System (SWMS)		41 (Dry) 41 (Rain)		42	43	44	
37	Veeder Root TLS-350 UST Monitoring System	45					46	

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
1	Perform preventive maintenance as described by McTighe Industries Oil Water Separator OEM Manual, sections B.1 through B.2, D.2, E.2, E.3.c.6, and F.2.a.	Click to view OEM Instructions for further detail.	
2	Perform preventive maintenance as described by McTighe Industries Oil Water Separator OEM Manual, sections C.1 and D.2. Inspect unit operation and overall condition.	Click to view OEM Instructions for further detail.	
3	Run To Failure (RTF), repair as necessary.		
4	Inspect exhaust hose for burn marks and tears. Perform operational check of exhaust fan and hose reel. Inspect exhaust fan for excessive vibration and noise.		
6	Visually inspect burner air intake screen and exhaust, remove all restrictions such as organic debris and bird nests. Check for dirt build up on the infrared reflectors; clean the reflectors with a mild detergent as needed. Visually inspect all fan parts including bearings, fan wheel, sheaves, and motor. Clean and replace parts as necessary. Perform operation check and ensure all burners are igniting. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.		
7	Visually inspect that all bolts are tight. Keep lift area, superstructure and trenches clean and free of tools, debris, grease, etc.	Click to view OEM Instructions for further detail.	

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
8	Lubricate carriage rollers, housing door hinges, ratchet mechanism, and sprockets. Lubricate the pivot ins on the latch release air cylinders and locking latches. Check adapters for distortion, broken parts, etc., replace as needed. Check and keep superstructure to jack attachment bolts tight. Maintain 150 ft.-lbs. torque. Check and keep locking latch strut to superstructure bolts tight. Maintain 150 ft-lbs. torque. Check fluid seals at each jack and control valve stems for leakage. Replace as required with OEM parts.	Click to view OEM Instructions for further detail.	
9	Check all hoses, pipes and fittings for leaks, drainage or deterioration. Lubricate roller chain and trench chain with a good grade of chain lube. Check for proper tension. Check and keep roller channel clean of debris. Check fluid level in power unit fluid tank, increase frequency of fluid level check as necessary. Should jacks stop short of full rise or the power unit squeals, this is an indication the system may be low of fluid. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.	Click to view OEM Instructions for further detail.	
10	Keep the fluid/lube free of trash and debris, check the pump inlet for foreign matter and clean as needed. Visually inspect for damage and fluid/lube/compressed air leaks, repair as necessary. Maintain a supply air pressure of 90 psi.		

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
11	Check all equipment regularly and repair or replace worn or damaged parts before next use. Inspect unit operation and overall condition.		
12	Drain condensate from filter and clean as needed. Refer to the Balcrank OEM Installation and Operating Instructions Manual for details. Inspect unit operation and overall condition.	Click to view OEM Instructions for further detail.	Adjust frequency as needed.
13	Visually inspect for oil dripping through sight glass and correct operation, clean as needed. Refer to the Balcrank Installation, Operating and Maintenance Instructions for cleaning details. Inspect unit operation and overall condition.	Click to view OEM Instructions for further detail.	
14	Check for proper oil level. Add oil as necessary. Drain any condensate from receiver and traps. Check for any unusual noise or vibration.	Click to view OEM Instructions for further detail.	
15	Clean inlet filter. Clean all external parts of compressor and driver. Pressure relief valve should be tested manually to see that it does not stick.	Click to view OEM Instructions for further detail.	Motor is sealed and requires no lubrication.
16	Inspect entire air system for leaks. Inspect oil for contamination and change if necessary. Check belt tension and wear.	Click to view OEM Instructions for further detail.	

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
17	Change oil. Inspect valve assemblies and repair as needed. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.	Click to view OEM Instructions for further detail.	
18	Check oil level of compressors. Add oil as necessary. Drain condensate moisture from tank. Turn off compressor and end of each day's operation.	Click to view OEM Instructions for further detail.	
19	Clean inlet filter. Clean dust and foreign matter from cylinder head, motor, fan blade, air lines, intercooler and tank. Remove and clean intake air filters.	Click to view OEM Instructions for further detail.	Motors are sealed and require no lubrication.
20	Change crankcase oil. Check entire system for air leakage. Tighten nuts and cap screws as required. Check and clean compressor valves, replace valves when worn or damaged. Pull ring on all pressure relief valves to assure proper operation, replace if needed. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.	Click to view OEM Instructions for further detail.	

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
21	Clean condenser coils and straighten bent fins and blades. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.		
22	Service according to the "Periodic Service" section of OEM manual, page 18. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.	Click to view OEM Instructions for further detail.	
23	Service according to the "VI. Maintenance" section of the OEM manual, page 16. Exclude the "Seasonal Maintenance" section under this PM task. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.	Click to view OEM Instructions for further detail.	
24	Service according to the "Seasonal Maintenance" section of the OEM manual, page 17.	Click to view OEM Instructions for further detail.	Perform at beginning and end of heating season.
25	Replace the air filters according to the "Filters" section of the OEM Manual, page 17.	Click to view OEM Instructions for further detail.	
26	Lubricate fan motor according to the "Motor Lubrication" section of the OEM Manual, Page 13. Sleeve bearing motors will require regular lubrication, ball bearing motors were lubricated at the factory and do not require regular lubrication. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight. Clean the casing, fan, diffuser, and coil.	Click to view OEM Instructions for further detail.	Perform at beginning of heating season.
27	Clean the unit casing, fan and motor. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.		Perform at beginning of heating season.

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
28	Clean strainer screen, fan motor, and fan blade. Lubricate fan motor. Clean condenser fins on chiller. Verify that water output is at 50 degrees Fahrenheit. Adjust temperature control behind front chiller panel as necessary. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.		
29	Inspect unit operation and overall condition. Clean and lubricate motor. Inspect, clean and adjust belts, pulleys and drive gear; replace as needed. Check all fasteners. Verify unit is centered, adjust as needed. Clean blower wheel.	Click to view OEM Instructions for further detail.	
30	Perform preventive maintenance according to section 3.2, "Daily Maintenance", of the OEM manual, page 3-3.	Click to view OEM Instructions for further detail.	Click to view the OEM recommendations for general maintenance.
31	Perform preventive maintenance according to section 3.3, "Weekly Maintenance", of the OEM manual, page 3.3.	Click to view OEM Instructions for further detail.	Click to view the OEM recommendations for general maintenance. Click to view the OEM recommendations for General Lubricants.

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
32	Perform preventive maintenance according to section 3.4, "Monthly Maintenance", of the OEM manual, page 3-5.	Click to view OEM Instructions for further detail.	Click to view the OEM recommendations for general maintenance. Click to view the OEM recommendations for General Lubricants.
33	Perform preventive maintenance according to section 3.5, "Semi-annual Maintenance", of the OEM manual, page 3-6.	Click to view OEM Instructions for further detail.	Click to view the OEM recommendations for general maintenance. Click to view the OEM recommendations for General Lubricants.
34	Check for proper operation of pump. Inspect for air leaks, repair as necessary. Inspect flexible diaphragms, diaphragm rod, air distribution rod, pilot spool, ball/flapper valves, and o-rings, replace if wear or cracking is present. Lubricate all pump parts as required. Clean and inspect pump body, paint as necessary to prevent corrosion.		
35	Run To Failure (RTF), repair as necessary.	Click to view OEM troubleshooting guide	
36	Verify main air pressure is approximately 40-60 psi. Adjust as necessary. Verify brush air pressure is approximately 15-20 psi. Adjust as necessary.	Click to view OEM Instructions for further detail.	
37	Clean the automatic air line filter. Clean the pneumatic solenoid valves.	Click to view OEM Instructions for further detail.	
38	Run To Failure (RTF), repair as necessary.	Click to view OEM troubleshooting guide	

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
39	Run To Failure (RTF), repair as necessary.	Click to view OEM troubleshooting guide	
40	Run To Failure (RTF), repair as necessary.	Click to view OEM troubleshooting guide	
41(Rain)	Perform the following tasks after each significant rainfall. Inspect the Storm Water Management System control box and storage pipe for proper operation. Repair as necessary. If water is standing in both compartments of the control box more than 12 hours after rain stoppage, outlet end of 36" pipe and inlet end at control box will be checked for obstructions. Because heavier-than-air gases can be trapped above water, only qualified personnel with appropriate respiratory protection equipment shall conduct this type of inspection and maintenance. If only the main compartment contains standing water, the 18" hole in the weir/orifice wall is probably plugged which is normally the cause. Monitor and maintain a log indicating the rate of dewatering and the water depth for each observation. Complete drawdown or dewatering of filter chamber within 40 hours after each large storm. If the filter chamber does not draw down within 40 hours, remove and replace the top layer of filter cloth and ballast gravel. Also remove and replace any discolored or sediment contaminated sand.	Click to view further details about maintenance of the Storm Water Management System.	Copies of contracts and records pertaining to sand filter maintenance must be kept on site and available upon request.
41 (Dry)	Perform the following tasks during dry weather. Inspect the control structure and pipe for litter and sediment deposits. Remove and dispose of such materials. Sediment disposal should be in accordance with current procedures for disposal of sediment and where deemed necessary or desirable when contaminants are detected, the sediment should be tested for appropriate pollutants before final disposal.	Click to view further details about maintenance of the Storm Water Management System.	Copies of contracts and records pertaining to sand filter maintenance must be kept on site and available upon request.

Preventive Maintenance Tasks

Task Number	Description	O&M Manual	Notes
42	Inspect sand filter and detention cell for proper operation. Remove and replace filter cloth and ballast stone as necessary. Remove and replace all filter media as necessary. Inspect and clean monitoring manholes, flumes, and other facilities to ensure they are ready for use.	Click to view further details about maintenance of the Storm Water Management System.	Copies of contracts and records pertaining to sand filter maintenance must be kept on site and available upon request.
43	Monitor and maintain a log indicating the rate of dewatering and the water depth for each observation. Inspect the sand filters; this must be done by a firm licensed and qualified to conduct required inspections and maintenance. After each semi annual inspection, pump out the sediment chamber. If the chamber contains oil it must be removed by a qualified and licensed firm that specializes in oil recovery and recycling. Remove the remaining material by vacuum pump and dispose of in an appropriate landfill. Sediment disposal should be in accordance with current procedures for disposal of sediment and where deemed necessary or desirable when contaminants are detected, the sediment should be tested for appropriate pollutants before final disposal. After cleaning, refill the first chamber to a depth of three feet with clean water to reestablish the water seals.	Click to view further details about maintenance of the Storm Water Management System.	Copies of contracts and records pertaining to sand filter maintenance must be kept on site and available upon request.
44	Conduct an inspection of the entire store water detention system with representatives from PRTC, the bus operations contractor, and County. Perform all necessary repairs a result of this joint annual inspection. Visually inspect for cracking, loose, or missing caulking. Replace as necessary.	Click to view further details about maintenance of the Storm Water Management System.	Copies of contracts and records pertaining to sand filter maintenance must be kept on site and available upon request.

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
45	The Veeder Root Environmental Monitoring System incorporates failure warnings in all of its components. A failure indication will be reason to shut down the fueling operation until it is corrected by an authorized Veeder-Root service contractor. Perform daily monitoring of the Veeder Root Environmental Monitoring System and record the fuel inventory per the Virginia Department of Environmental Quality requirements which have incorporated National Fire Protection Association (NFPA) Flammable and Combustible Liquids Code 30 (NFPA 30).	Click to view NFPA 30 extract.	
46	Inspect console and perform all inspection tasks identified as "Owner or Station Attendant" according to Section 27, "System Periodic Maintenance Checklist", of the OEM manual, pages 27-1 through 27-4. Secure an authorized Veeder-Root service contractor to perform all inspection tasks identified as "Service Contractor" according to Section 27, "System Periodic Maintenance Checklist", of the OEM manual, pages 27-1 through 27-4. Make all necessary repairs.	Click to view OEM Instructions for further detail.	

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
47	Inspect for fuel leaks, belt tension and condition, lubrication and strainer cleanliness. Inspect the watertight seal on the storage tank fill opening covers. Lubricate fuel pumping unit (every 6 months or 100,000 gallons). Inspect the meter drive shaft extending from the top of the meter unit for leaks. If leaks are present, replace Teflon seals. Inspect the hose retriever reel assembly for frayed or worn cable and proper operation. Clean and lubricate the Non-computer. (every 6 months or 100,000 gallons) Clean the fuel strainer. Change fuel filter. Clean bypass and regulating valve assemblies only if there is notable loss in system performance. To preserve the finish of the pumps, thoroughly clean painted surfaces with a high grade automobile polish and the protect with a coat of wax paste. Clean stainless steel surfaces with soap and water followed by a rinse. Refer to Section 8, "Preventive Maintenance", of the OEM manual for further details.	Click to view OEM Instructions for further detail.	

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
48	Check fuel storage tank after every fill-up for water, sediment, and other foreign matter and remove with a sump pump. Clean the dial face on the pump with a non-abrasive, clean, damp cloth. Refer to Section 8, "Preventive Maintenance", of the OEM manual for further details.	Click to view OEM Instructions for further detail.	
49	Check oil level and condition. Replace as necessary. Check relief valve function by deadheading the power unit. Fluid bypass should engage at 350 psi. Replace as necessary.		
50	Lubricate motor bearings. Thoroughly clean power unit housing and floor area. Inspect for excessive noise and vibration. Repair as necessary. Perform operation check of power unit. Inspect unit operation and overall condition. Inspect electrical components and ensure connections are tight.		
51	Clean and lubricate actuator cylinder. Ensure proper operation and check overall condition. Check for compressed air leaks. Repair as necessary.		

Preventive Maintenance Tasks

Task Number	Description	OEM Manual	Notes
52	Empty silt cart. Verify proper operation of float switches and controls. Clean basket strainer serving self priming sump pump. Verify that water/sludge flow is present at bottom discharge of cyclone separator. If no flow or less than normal flow is present, clean separator orifice, adjust valve at bottom discharge of cyclone separator, and backwash separator as necessary to induce normal water/sludge flow. After the last bus is washed for each shift, run the bus wash and recycle system for 15 minutes to purge the recycle system.		
53	Check sediment level in reclaim pit. Remove sediment from pit as necessary. Sediment in the reclaim pit will increase basket strainer and cyclone separator clogging. Sediment accumulation is expected to increase during the winter months due to street sanding.		
54	Lubricate bearings on self priming sump pump (not required if bearings are sealed). Check self priming sump pump for correct operation, excessive vibration, and noise. Repair as needed.		

820 Official Notices

PUBLIC COMMENT PERIOD FOR THE WASHINGTON REGION'S PROPOSED 2008 UPDATE TO THE CONSTRAINED LONG-RANGE PLAN (CLRP), FY 2009-2014 TRANSPORTATION IMPROVEMENT PROGRAM (TIP), AND AIR QUALITY CONFORMITY ANALYSIS

The National Capital Region Transportation Planning Board (TPB) will initiate a 30-day public comment period for the proposed 2008 update to the Constrained Long-Range Plan (CLRP) and amendments to the FY2009-2014 Transportation Improvement Program (TIP), including an air quality conformity analysis, on October 9, 2008 at the TPB Citizen Advisory Committee (CAC) meeting. The CAC meets from 6 pm to 8 pm in the COG first floor conference center. These documents are scheduled to be approved at the November 19, 2008 TPB meeting. This public comment period will extend through 6 pm Saturday November 8, 2008. Members of the public are invited to review these draft documents on the COG website, **www.mwcog.org/transportation/**. These materials may also be reviewed at the Metropolitan Washington Council of Governments (COG), 777 N. Capitol St. NE, Washington, DC 20002.

The CLRP shows the road, bridge, high-occupancy vehicle (HOV), transit, bicycle and pedestrian projects funded through the year 2030. The six-year TIP includes all projects, programs, and strategies that state and local transportation agencies plan to implement between 2008 and 2014. The TIP comment process is being used to obtain comments on the region's projects that are funded by the Federal Transit Administration (including Section 5307 funds) and the Federal Highway Administration. The air quality conformity analysis assesses the plan amendments and program with respect to the air quality requirements under the 1990 Clean Air Act Amendments.

Members of the public are invited to submit comments on the draft documents on-line at **www.mwcog.org/tpbpubliccomment/**. Written comments can also be mailed to TPB Chairman Phil Meldelson, Metropolitan Washington Council of Governments (COG), 777 N. Capitol St. NE, Suite 300, Washington, DC 20002.

For additional information or for special assistance, please call (202) 962-3311 or (202) 962-3213 (TDD).

840 Trustees Sale - DC

HARVEY WEST AUCTIONEERS, INC.
5335 Wisconsin Avenue, NW
Suite 440
Washington, DC 20015
202-463-4567

SUBSTITUTE TRUSTEES' SALE OF VALUABLE property known as **50 T STREET NW , WASHINGTON, DC 20001** By virtue of a Deed of Trust recorded in the Land Records of the **District of Columbia**, on August 14, 2006 as instrument 2006110882 and in accordance with PL 90-566 notice filed on August 14, 2008 and at the request of the party secured thereby, the undersigned Sub. Trustees will offer to sell at public auction within the offices of, **HARVEY WEST AUCTIONEERS, INC.** 5335 Wisconsin Avenue, NW Suite 440 Washington DC 20015 202-463-4567 On **SEPTEMBER 16, 2008 AT 10:36 AM**, the land and premises situated in the District of Columbia, and designated as and being Lot 93 in Square 3110, and more particularly described in said Deed of Trust.

TERMS OF SALE: A deposit of $65,000.00 will be required at time of sale in cash or certified funds, except from secured party. Property sold in "AS IS" condition. Subject to leins of record. Conveyance by Trustees' deed. Settlement in 30 days. If Sub. Trustees cannot convey insurable title, purchaser's sole remedy is return of deposit. Additional sale terms announced at sale. Sub. Trustees' File No. 213379.

By the order of the Substitute Trustees the above sale has been postponed until OCTOBER 14, 2008, at 11:10 A.M. All other terms and conditions remain the same.

L. Darren Goldberg, James E. Clarke, Renee Dyson,
Substitute Trustees

HARVEY WEST AUCTIONEERS, INC.
5335 Wisconsin Ave., NW, Ste 440
Washington, DC 20015
202-463-4567
www.hweastauctions.com

OCTOBER 9, 2008 10600479

HARVEY WEST AUCTIONEERS, INC.
5335 Wisconsin Avenue, NW
Suite 440
Washington, DC 20015
202-463-4567

SUBSTITUTE TRUSTEES' SALE OF VALUABLE property known as **801 PENNSYLVANIA AVENUE NW UNIT #1201, WASHINGTON, DC 20004** By virtue of a Deed of Trust recorded in the Land Records of the **District of Columbia**, on November 8, 2002 as instrument 2002130403 and in accordance with PL 90-566 notice filed on September 11, 2008 and at the request of the party secured thereby, the undersigned Sub. Trustees will offer to sell at public auction within the offices of, **HARVEY WEST AUCTIONEERS, INC.** 5335 Wisconsin Avenue, NW Suite 440 Washington DC 20015 202-463-4567 On **OCTOBER 14, 2008 AT 10:36 AM**, the land and premises situated in the District of Columbia, and designated as and being Lot 5056 in Square 408, and more particularly described in said Deed of Trust.

TERMS OF SALE: A deposit of $40,000.00 will be required at time of sale in cash or certified funds, except from secured party. Property sold in "AS IS" condition. Subject to liens of record. Conveyance by Trustees' deed. Settlement in 30 days. If Sub. Trustees cannot convey insurable title, purchaser's sole remedy is return of deposit. Additional sale terms announced at sale. Sub. Trustees' File No. 219021.

L. Darren Goldberg, James E. Clarke, Renee Dyson,
Substitute Trustees

HARVEY WEST AUCTIONEERS, INC.
5335 Wisconsin Ave., NW, Ste 440
Washington, DC 20015
202-463-4567
www.hweastauctions.com

OCTOBER 6, 7, 8, 9, 10, 2008 10596561

HARVEY WEST AUCTIONEERS, INC.
5335 Wisconsin Avenue, NW
Suite 440
Washington, DC 20015
202-463-4567

SUBSTITUTE TRUSTEES' SALE OF VALUABLE property known as **126 SEATON PLACE NW, WASHINGTON, DC 20001** By virtue of a Deed of Trust recorded in the Land Records of the **District of Columbia**, on December 8, 2005 as instrument 2005176244 and in accordance with PL 90-566 notice filed on August 14, 2008 and at the request of the party secured thereby, the undersigned Sub. Trustees will offer to sell at public auction within the offices of, **HARVEY WEST AUCTIONEERS, INC.** 5335 Wisconsin Avenue, NW Suite 440 Washington DC 20015 202-463-4567 On SEPTEMBER 16, 2008 AT 10:42 AM, the land and premises situated in the District of Columbia, and designated as and being Lot 59 in Square 3107, and more particularly described in said Deed of Trust.

TERMS OF SALE: A deposit of $32,000.00 will be required at time of sale in cash or certified funds, except from secured party. Property sold in "AS IS" condition. Subject to leins of record. Conveyance by Trustees' deed. Settlement in 30 days. If Sub. Trustees cannot convey insurable title, purchaser's sole remedy is return of deposit. Additional sale terms announced at sale. Sub. Trustees' File No. 205983.

By the order of the Substitute Trustees the above sale has been postponed until OCTOBER 14, 2008, at 10:50 A.M. All other terms and conditions remain the same.

L. Darren Goldberg, James E. Clarke, Renee Dyson,
Substitute Trustees

HARVEY WEST AUCTIONEERS, INC.
5335 Wisconsin Ave., NW, Ste 440
Washington, DC 20015
202-463-4567
www.hweastauctions.com

OCTOBER 9, 2008 10596569

HARVEY WEST AUCTIONEERS, INC.
5335 Wisconsin Avenue, NW
Suite 440
Washington, DC 20015
202-463-4567

HARVEY WEST AUCTIONEERS, II
5335 Wisconsin Avenue, NW
Suite 440
Washington, DC 20015
202-463-4567

ENCLOSURE D

From:	Andrew Austin
To:	Betsy Massie; Anthony Foster; Clayton Ashby
Cc:	Wendy Klancher; Gerald Miller; Mark Pfoutz; Ron Kirby
Subject:	Revised Language for TIP Public Comment Notices
Date:	Thursday, October 09, 2008 12:06:41 PM

Good afternoon,

Based on the input we received from PRTC and WMATA and their respective FTA reviewers, we have added the following language to our public comment notices for the TIP:

"The TIP comment process is being used to obtain comments on the region's projects that are funded by the Federal Transit Administration (including Section 5307 funds) and the Federal Highway Administration."

This language was included in the Washington Post ad that ran for the October 9 public comment release for the 2008 CLRP Update and Amendments to the FY 2009-2014 TIP. We will also include this language in our electronic notices. This will be incorporated into the standard boiler-plate language that we use for all future public comment notices for the TIP.

Please let me know if you have any questions or concerns regarding this issue.

Thanks,
Andrew

Andrew Austin | Transportation Planner IV | MWCOG
Phone: 202.962.3353 | Fax: 202.962.3202 | aaustin@mwcog.org

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION III
Delaware, District of
Columbia, Maryland,
Pennsylvania, Virginia,
West Virginia

1760 Market Street
Suite 500
Philadelphia, PA 19103-4124
215-656-7100
215-656-7260 (fax)

DEC 22 2008

Mr. Alfred Harf
Executive Director
Potomac and Rappahannock Transportation Commission
14700 Potomac Mills Road
Woodbridge, VA. 22192

Re: FY 2008 Triennial Review Final Report

Dear Mr. Harf:

This letter is to formally close out the FY 2008 Triennial Review conducted for the Potomac and Rappahannock Transportation Commission, (PRTC) in Woodbridge, VA. Reid Consulting, LLC conducted the review and prepared the report for the Federal Transit Administration.

The Triennial Review examines 23 areas. There were no deficiencies found related to the FTA requirements in 21 areas. There were deficiencies found in two areas, maintenance and planning/program of projects. Based on the documentation submitted to the FTA on November14, 2008, we have closed the findings and the review as well.

Enclosed is a copy of our Triennial Review tracking sheet from FTA's Oversight tracking system. This sheet shows all items are closed.

Thank you for your paying prompt attention to the findings from the review as well as the hospitality and cooperation shown to us in conjunction with the review. If you have any questions, please contact Sheila Byrne. She can be reached at (215) 656-7256 or sheila.byrne@dot.gov.

Sincerely,

Letitia A. Thompson
Regional Administrator

Enclosure

cc: Corey Hill, VDRPT

Review Findings

POTOMAC AND RAPPAHANNOCK TRANSPORTATION COMMISSION
(Recipient ID: 5348, DUNS: 136149650)
FTA Office: TRO-03 (WOODBRIDGE, VA)
Fiscal Year Planned 2008 Triennial Review
Findings by Review Area

Review Area	Program Impact	Finding	Due Date	Date Closed	Latest Update
Maintenance	Medium	07 - Late facility/equipment preventive maintenance	12/6/2008	11/14/2008	12/22/2008
Planning/Program of Projects	Medium	04 - Public notice deficiencies	12/6/2008	11/14/2008	12/22/2008

SB