



**POTOMAC AND RAPPAHANNOCK  
TRANSPORTATION COMMISSION  
TRANSIT DEVELOPMENT PLAN:  
FISCAL YEARS 2012-2017**

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**June 2011**

**Prepared by:**



**Under Sub-Contract to:**

**ATKINS**

**Under Contract to:**



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## CHAPTER 1 – OVERVIEW OF TRANSIT SYSTEM

With its proximity to Washington, D.C., the Potomac and Rappahannock Transportation Commission (PRTC) provides commuter bus service along the busy I-95 and I-66 corridors to points north, local bus services in Prince William County and the cities of Manassas and Manassas Park, and a free ridesharing service. PRTC partners with the Northern Virginia Transportation Commission (NVTC) to operate the Virginia Railway Express (VRE) commuter rail service along the Manassas and Fredericksburg lines, connecting to transit providers at stations in Virginia and the District of Columbia. This Transit Development Plan (TDP) is being developed for the bus transit services PRTC provides to Prince William County and Manassas and Manassas Park residents.

Prince William County is located in Northern Virginia approximately 25 miles southwest of Washington, D.C. The County is bounded on the north by Fairfax and Loudoun counties, on the east by the Potomac River, on the south by Stafford County, and on the west by Fauquier County. Prince William County includes within its boundaries the independent cities of Manassas and Manassas Park. Together, Prince William County and these independent cities encompass a total area of 360 square miles, making it the second largest county in Virginia. The County also includes four incorporated towns (Dumfries, Haymarket, Quantico, and Occoquan) and 14 Census Designated Places (CDPs). Federal land accounts for nearly 20% of the total area, which includes Marine Corps Base Quantico, two national parks, and two wildlife refuge areas.

According to the 2000 Census, Prince William County is the third most populous jurisdiction in Virginia. The current (March 2010) estimated population for Prince William County is 396,519. Since 2000, the County population has grown 40.8 percent. The average annual growth rate of 4% per year has slowed considerably since 2007, most likely a result of the high number of foreclosures that have affected the area and increased the number of vacant properties. Sixty-four percent of the population is between the ages of 18 and 64, which lends itself to a relatively young and abundant workforce. In recent decades, the population of the County has become racially and ethnically diverse. Along with a significant rise in the percentage of population born outside the U.S., those that speak a language other than English at home has grown to 27% of the total population. As recently reported by Forbes.com, in 2008 Prince William County was the fourteenth wealthiest county in the U.S., with a median household income of \$88,675. Forbes.com also reported that 38% of County residents 25 and older have at least a Bachelor's Degree.

According to the 2008 American Community Survey, Prince William County workers continue to face long commutes, compared with national averages. Approximately 23% of all County workers travel an hour or more one-way to work. The average travel time to work is 38.2 minutes. While 71% of workers drive alone to work, nearly 17% carpool and approximately 6% use public transportation to get to work.

Target markets for economic development in the County have been identified as biotechnology and life sciences, data centers and information technology, and federal facilities and contractors. According to the Global Direct Investment Solutions website, top employers in Prince William County include: Lockheed Martin Naval Electronics, Micron Technology Virginia, Atlantic Research Corp., General Dynamics Land Systems and BAE Systems. A substantial portion of the 100 square mile Marine Corps Base Quantico is located in Prince William County. This Base currently employs 6,700 military personnel. Most of them live in the surrounding areas with their families. The Base also provides employment for



6,900 civilians. The service industry is also a major contributor to the County's economy. Potomac Mills, the 10th most popular tourist destination in Virginia and largest outlet mall in the region, is located in eastern Prince William County in the Woodbridge CDP.

## 1.1 TRANSIT HISTORY

PRTC is a regional transportation district comprised of six jurisdictions: Prince William, Stafford and Spotsylvania Counties and the Cities of Manassas, Manassas Park and Fredericksburg. Virginia law authorizes the creation of transportation districts to facilitate regional transportation solutions to problems that transcend individual localities' borders. With that aim, PRTC was established in 1986 to help create and oversee the Virginia Railway Express (VRE) commuter rail service and also to assume responsibility for bus service implementation as its member governments saw fit, using what was then a 2.0% motor fuels Tax levied on retail fuel sales as a source of local funding in combination with federal and state funds. The 2.0% motor fuels tax statutorily amended (in 2010) so it is now a 2.1% motor fuels tax levied on distributors selling fuel to area retailers. Until the early 1980s, commuter bus service was operated on a private, for-profit basis by a now-defunct operator (Colonial Transit). Prince William County began subsidizing Colonial Transit when the business was no longer profitable and eventually took full responsibility by competitively procuring, then managing, a contract operator. PRTC assumed responsibility of the commuter bus operation and ridematching (carpool/vanpool) program in 1990. Local bus services (flex-route and VRE feeder) began in 1995. By 2000, financial resources used to fund poorly patronized feeder bus service was re-deployed to expand flex-route service operating hours by 50 percent and resulted in a 100 percent increase in patronage. All PRTC bus service operations and maintenance continue to be competitively procured.

Today, PRTC offers a comprehensive network of commuter and local bus services in Prince William County and the Cities of Manassas and Manassas Park, as well as a free ridematching service. In addition, PRTC continues to operate VRE in partnership with the NVTC, which represents the Counties of Arlington, Fairfax and Loudoun and the Cities of Alexandria, Fairfax and Falls Church. PRTC operates from its management, operations, and maintenance headquarters at the PRTC Transit Center, which also serves as the main transit center.

PRTC regularly makes service changes twice a year (Spring and Fall). In between regular service changes, PRTC has often found it necessary to make changes to relieve overcrowding on commuter bus routes.

## 1.2 GOVERNANCE & ORGANIZATIONAL STRUCTURE

PRTC's governing structure consists of a 17-member board of commissioners that includes 13 locally elected officials from its six member jurisdictions: Prince William County (6), Stafford County (2), City of Manassas (1), City of Manassas Park (1), City of Fredericksburg (1), and Spotsylvania County (2). Three of the commissioners are appointed from the General Assembly (one Senator and two Delegates). The other commissioner represents the Virginia Department of Rail and Public Transportation (VDRPT).

Presently, PRTC's members rely exclusively on the 2.1% motor fuels tax to meet their respective local subsidy obligations (at times in the past, Prince William County has supplemented its motor fuels tax with general fund appropriations). Other funding sources include passenger fares and advertising as well as federal and state funding. Stafford County, the City of Fredericksburg, and Spotsylvania County

confine their PRTC service sponsorship to VRE, while Prince William County and the Cities of Manassas and Manassas Park sponsor both PRTC bus services and VRE.

The following is a list of the 17 current Commissioners:

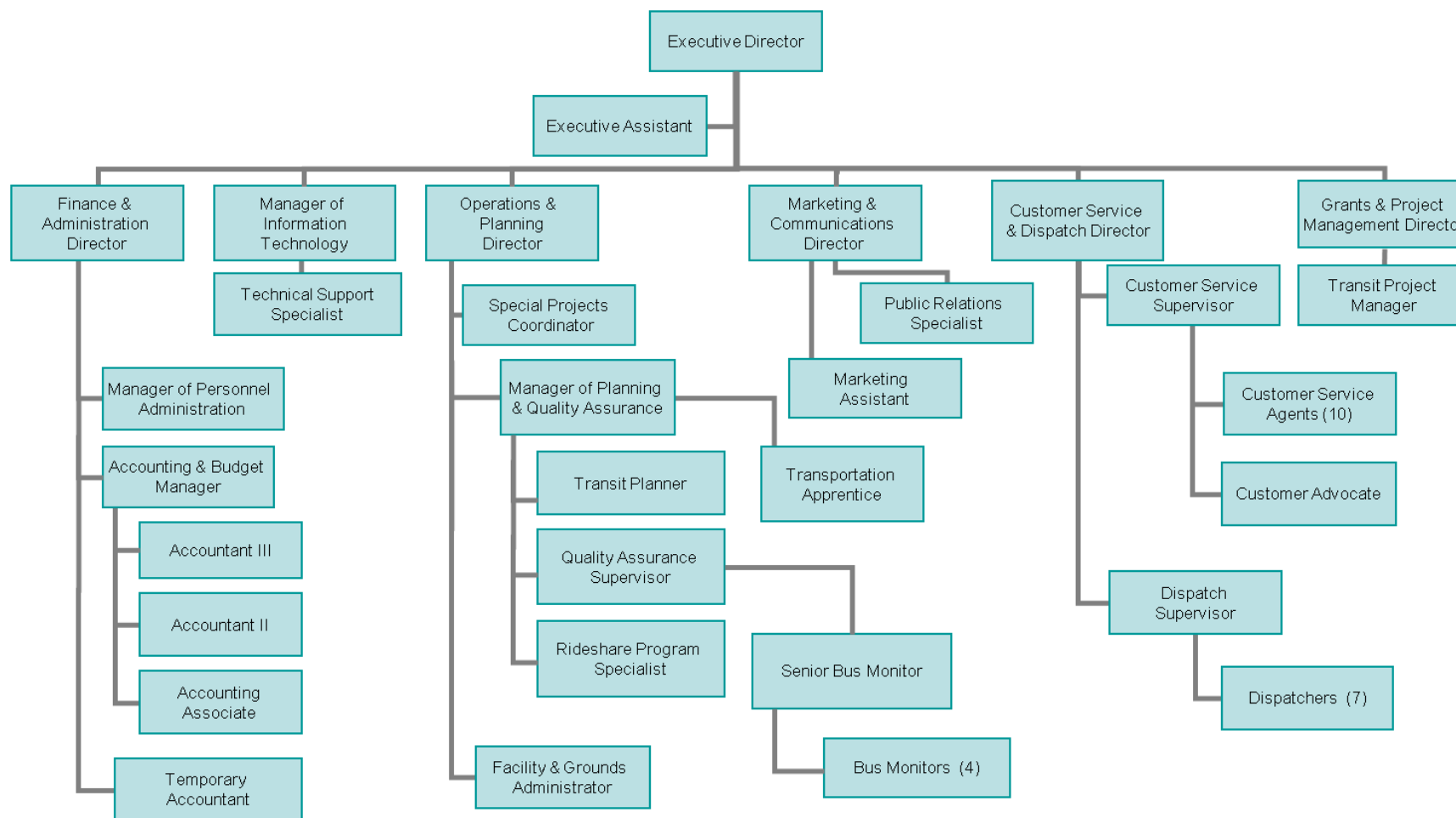
- Honorable Maureen S. Caddigan - Prince William County
- Honorable John D. Jenkins - Prince William County
- Honorable W.S. "Wally" Covington III - Prince William County
- Honorable Michael C. May - Prince William County
- Honorable Martin "Marty" E. Nohe - Prince William County
- Honorable Frank J. Principi - Prince William County
- Honorable Paul V. Milde, III – Stafford County
- Honorable Susan B. Stimpson - Stafford County
- Honorable Jonathan L. Way - City of Manassas
- Honorable Frances "Frank" C. Jones - City of Manassas Park
- Honorable Frederic N. Howe, III – City of Fredericksburg
- Honorable Gary F. Skinner – Spotsylvania County
- Honorable Jerry I. Logan – Spotsylvania County
- Honorable Richard L. Anderson - Virginia House of Delegates
- Honorable Jackson H. Miller - Virginia House of Delegates
- Honorable Linda "Toddy" T. Puller - Virginia State Senate
- Mr. Robert H. Wilson - Department of Rail and Public Transportation

While PRTC provides the facilities and vehicles, operations and maintenance are provided under contract to a private service provider, currently First Transit. As of June 30, 2010, PRTC's staff was comprised of 50 employees in six departments, as presented in Figure 1-1. Key PRTC management personnel include:

- Alfred Harf – Executive Director
- Eric Marx – Director of Planning and Operations
- Joyce Embrey – Director of Finance and Administration
- Betsy Massie – Director of Grants and Project Development
- Doris Chism – Director of Customer Service and Dispatch
- Althea Evans – Director of Marketing and Communications

All other personnel are employees of First Transit, PRTC's current contract service provider, who is managed by PRTC's Director of Planning and Operations. An on-site First Transit General Manager directs the maintenance and transportation operations. First Transit's PRTC staff is currently comprised of 211 employees in four departments, including 150 bus operators. PRTC bus operators and maintenance technicians are unionized, and are represented by the American Federation of State, County, and Municipal Employees (AFSCME).

**Figure 1-1: PRTC Organizational Chart as of June 30, 2010**



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## 1.3 TRANSIT SERVICES PROVIDED AND AREAS SERVED

PRTC provides commuter and local bus services, as well as ridematching services. OmniRide routes provide comfortable and efficient commuter bus service between Prince William County and Washington, DC and Northern Virginia. Metro-Direct is a commute and reverse-commute bus service that provides stops at Metrorail stations. OmniLink is PRTC's innovative local bus service that allows buses to travel up to 3/4 mile off of the standard route, in addition to designated bus stops. OmniMatch is a FREE ridematching service for carpoolers and vanpoolers. Each of these services is more fully described in this section, as well as in Appendix A.

### 1.3.1 PRTC BUS AND SHARED RIDE SERVICES:

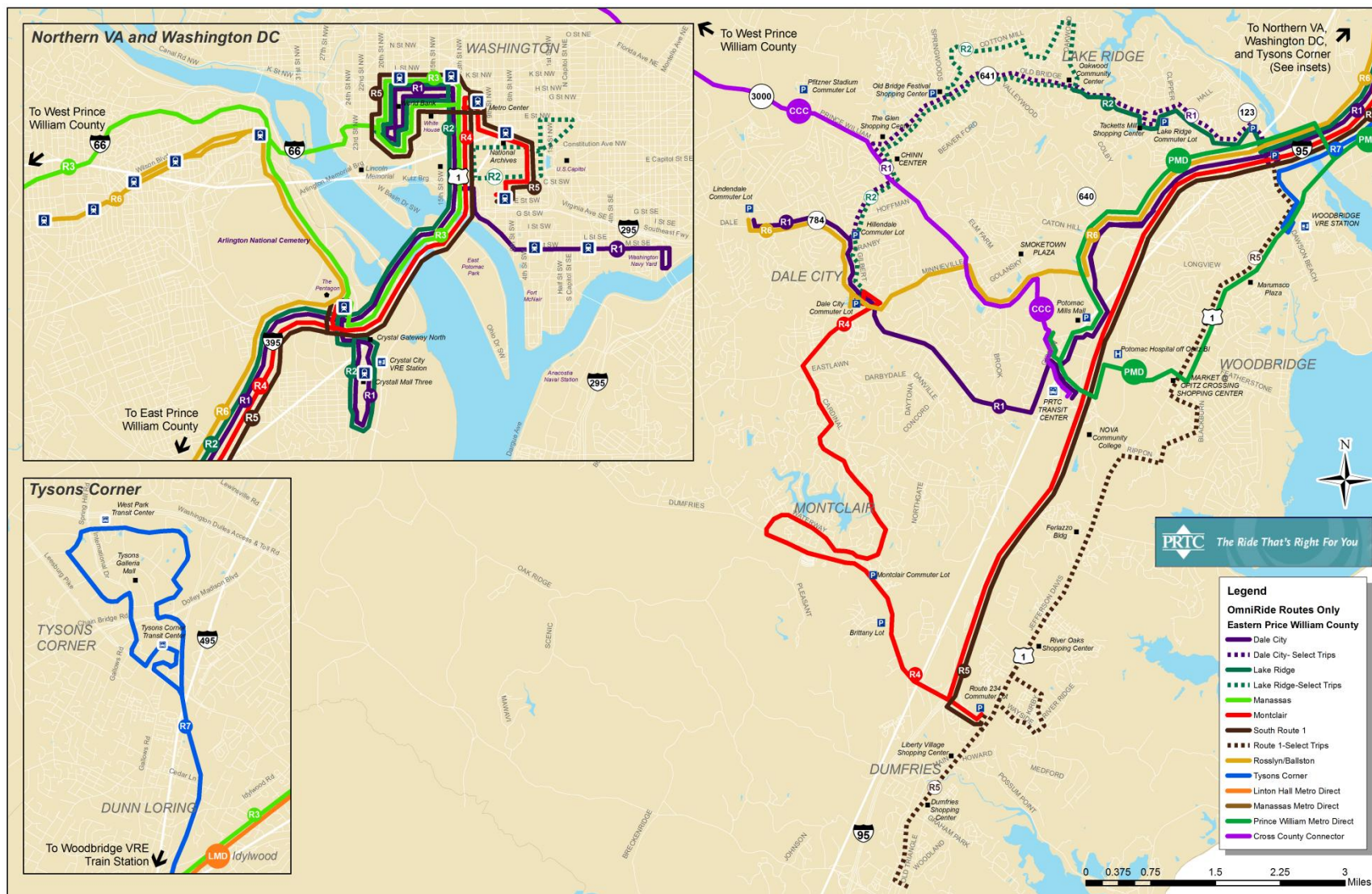
OmniRide is PRTC's commuter bus service operating from eastern Prince William County and the Manassas area to downtown Washington, the Pentagon, Crystal City, Rosslyn/Ballston, Capitol Hill, Washington Navy Yard and Tyson's Corner. Buses operate only on weekdays on both the I-95 and I-66 corridors with service inbound to Washington in the mornings and outbound from Washington in the evenings. In addition, most routes have outbound midday service. As shown in Figures 1-2 and 1-3 and described in Table 1-1, six commuter bus routes operate in the I-95 corridor from Dale City, Lake Ridge, Montclair, and the Route 1 corridor. One route operates in the I-66 corridor from Manassas and Manassas Park. Service frequency varies by route from one trip to six trips per hour. OmniRide service is provided using principally 57-seat over-the-road coaches. The typical patron is a choice rider and has access to a private vehicle.

Three Metro Direct routes offer an all-day connection to the Franconia-Springfield Metro Station from eastern Prince William County and to the Vienna and West Falls Church Metro from Manassas and to the West Falls Church Metro Station from Gainesville. Each route is connected to a Metrorail station, which also serves as the transfer location for Metro Bus and Fairfax Connector bus services, as well as the Virginia Railway Express (VRE) at Franconia-Springfield. The routes have limited stops from Prince William County, Manassas, and Manassas Park to the West Falls Church, Vienna, and Franconia-Springfield Metrorail stations. The Metro Direct routes through the study area are illustrated in Figures 1-2 and 1-3 and described in Table 1-1. Two routes operate in the I-66 corridor (Linton Hall and Manassas), and one route operates in the I-95 corridor (Prince William). The Prince William and Manassas routes operate throughout the day on weekdays with increased frequency during typical commuting times, while the Linton Hall route only operates during peak periods. Headways range from a minimum of 30 minutes in the peak to two hours in the off-peak. Metro Direct service is provided using 45-seat transit buses. The Metro Direct services are ideal for commuters with non-traditional work schedules and those who need midday commuting options.

The Cross County Connector provides hourly service between the Manassas area and eastern Prince William County. This route provides access to Prince William County offices and major shopping centers on both ends of the route. The passengers on this route may also transfer to local OmniLink and OmniRide commuter buses at shared bus stops along the routes and at PRTC's Transit Center. This route is shown in Figures 1-2 and 1-3 and described in Table 1-2.

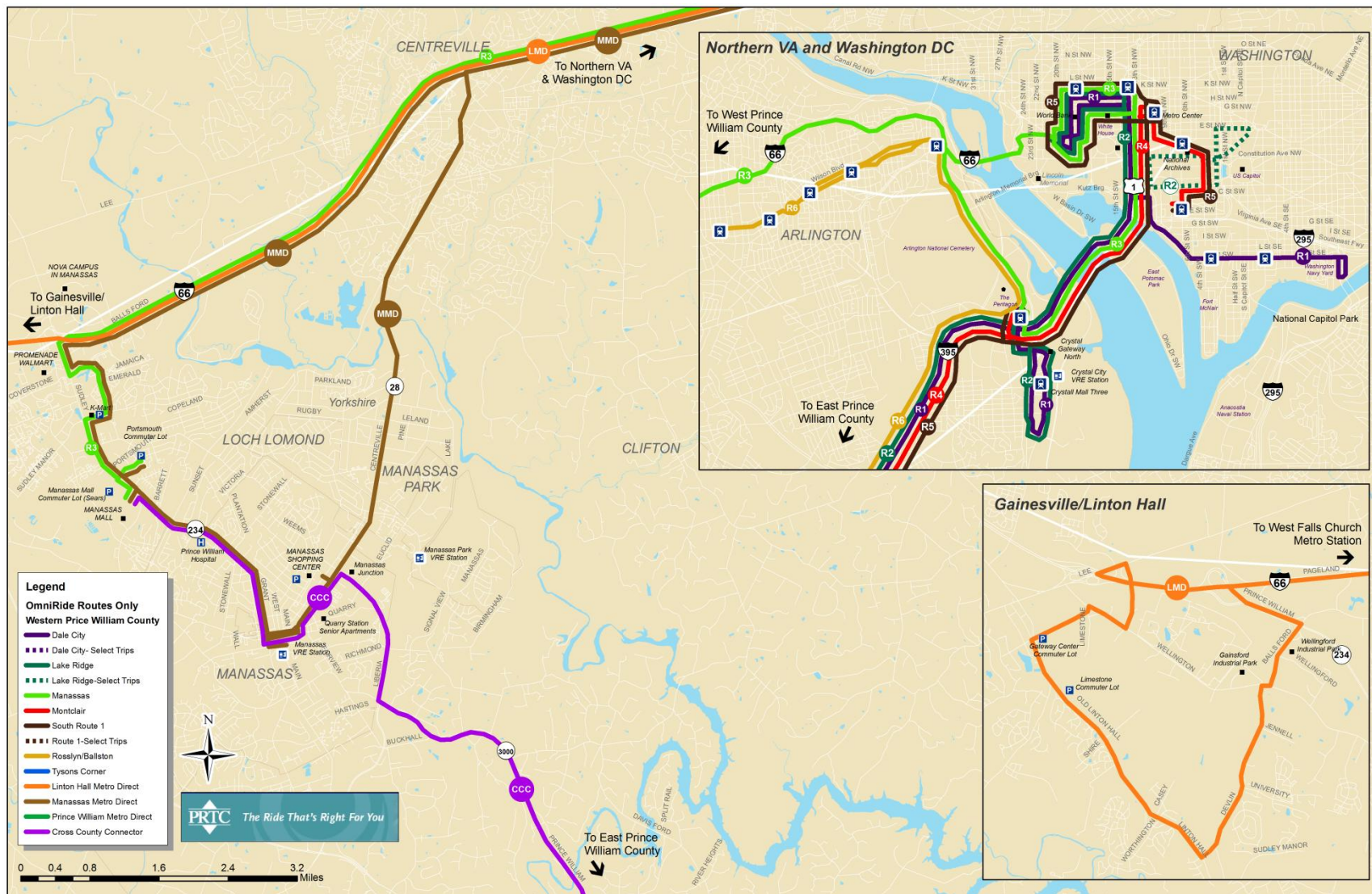


Figure 1-2: OmniRide, Metro Direct, and Cross County Connector Routes - Eastern Prince William County





**Figure 1-3: OmniRide, Metro Direct, and Cross County Connector Routes - Western Prince William County**



**Table 1-1: PRTC OmniRide: Commuter Bus and Metro Direct Service (as of May 2010)**

Route	Area Served	AM Hours of Operation	PM Hours of Operation	Timepoints
<b>Dale City-Washington Commuter Bus</b>	Connecting service between Dale City and Downtown Washington (some trips operate as combined Lake Ridge/Dale City trips)	4:20 a.m. – 12:07 p.m.	12:20 p.m. – 8:53 p.m.	<b>Dale City:</b> PRTC Transit Center, Horner Road/I-95 Commuter Lot; <b>Downtown Washington:</b> 14th & Independence (Agriculture Dept), 14th & New York, 19th & H, Virginia & 21 <sup>st</sup> (State Dept), 18 <sup>th</sup> & Pennsylvania, 14 <sup>th</sup> & Pennsylvania (Commerce Dept); <b>Select Trips:</b> Lindendale Commuter Lot, Dale City Commuter Lot, Cloverdale & Dale, Old Bridge & Titania, Pentagon (Bus Bay L2), Rt. 123 & I-95 Commuter Lot, Dale & Birchdale
<b>Dale City-Pentagon &amp; Crystal City Commuter Bus</b>	Connecting service between Dale City and Pentagon, Crystal City (some trips operate as combined Lake Ridge/Dale City trips)	4:25 a.m. – 9:32 a.m.	12:16 p.m. – 8:53 p.m.	<b>Dale City:</b> Dale City Commuter Lot, Cloverdale & Dale, PRTC Transit Center, Horner Road/I-95 Commuter Lot; <b>Pentagon:</b> Bus Bay L1; <b>Crystal City:</b> Clark & 23 <sup>rd</sup> , Crystal Mall 3, 12 <sup>th</sup> & Old Jefferson Davis, Clark & 20 <sup>th</sup> , 12 <sup>th</sup> & Eads; <b>Select Trips:</b> Lindendale Commuter Lot, Rt. 123 & I-95 Commuter Lot, Dale & Birchdale
<b>Dale City-Navy Yard Commuter Bus</b>	Connecting service between Dale City and Pentagon, Washington Navy Yard (some trips operate as combined Lake Ridge/Dale City trips)	4:36 a.m. – 9:32 a.m.	12:11 p.m. – 8:39 p.m.	<b>Dale City:</b> Dale City Commuter Lot, Cloverdale & Dale, PRTC Transit Center, Horner Road/I-95 Commuter Lot; <b>Pentagon:</b> Bus Bay L1; <b>Downtown Washington:</b> C & 14 <sup>th</sup> , M & 3 <sup>rd</sup> (Waterside Mall), M & Half (Navy Yard Metro), M & 12 <sup>th</sup> (Maritime Plaza), 11 <sup>th</sup> & N (Maritime Plaza), M & New Jersey (Navy Yard Metro), M & 3 <sup>rd</sup> (Waterside Mall), 12 <sup>th</sup> & C (Agriculture Dept.); <b>Select Trips:</b> Lindendale Commuter Lot, Rt. 123 & I-95 Commuter Lot, Dale & Birchdale
<b>Lake Ridge-Washington Commuter Bus</b>	Connecting service between Lake Ridge and Downtown Washington (some trips operate as combined Lake Ridge/Dale City trips)	5:15 a.m. – 12:07 p.m.	12:07 p.m. – 8:49 p.m.	<b>Lake Ridge:</b> Tackett's Mill Commuter Lot, Rt. 123 & I-95 Commuter Lot; <b>Downtown Washington:</b> 14 <sup>th</sup> & Independence (Agriculture Dept.), 14 <sup>th</sup> & New York, 19 <sup>th</sup> & H, Virginia & 21 <sup>st</sup> (State Dept.), 18 <sup>th</sup> & Pennsylvania, 14 <sup>th</sup> & Pennsylvania (Commerce Dept); <b>Select Trips:</b> Dale City Commuter Lot, Old Bridge & Titania, Festival at Old Bridge (Dollar Tree), Oakwood & Old Bridge, Pentagon (Bus Bay L2), Old Bridge & Touchstone
<b>Lake Ridge-Pentagon &amp; Crystal City Commuter Bus</b>	Connecting service between Lake Ridge and Pentagon, Crystal City (some trips operate as combined Lake Ridge/Dale City trips)	5:20 a.m. – 9:32 a.m.	12:34 p.m. – 8:49 p.m.	<b>Lake Ridge:</b> Tackett's Mill Commuter Lot, Rt. 123 & I-95 Commuter Lot; <b>Pentagon:</b> Bus Bay L2; <b>Crystal City:</b> Clark & 23 <sup>rd</sup> , Crystal Mall 3, 12 <sup>th</sup> & Old Jefferson Davis, Clark & 20 <sup>th</sup> , 12 <sup>th</sup> & Eads; <b>Select Trips:</b> Dale City Commuter Lot, Old Bridge & Titania, Festival at Old Bridge (Dollar Tree), Oakwood & Old Bridge, Old Bridge & Touchstone
<b>Capitol Hill Commuter Bus</b>	Connecting service between Dale City, Lake Ridge and Capitol Hill	6:13 a.m. – 7:39 a.m. (1 trip)	5:10 p.m. – 6:36 p.m. (1 trip)	<b>Dale City:</b> Dale City Commuter Lot, Old Bridge & Titania, Lake Ridge Commuter Lot, Rt. 123 & I-95 Commuter Lot; Old Bridge & Touchstone <b>Capitol Hill:</b> C & 14 <sup>th</sup> , 3 <sup>rd</sup> & Constitution, E and N Capitol (Union Station), 7 <sup>th</sup> & Independence, 12 <sup>th</sup> & Independence, N Capitol & E



Route	Area Served	AM Hours of Operation	PM Hours of Operation	Timepoints
<b>Manassas Commuter Bus</b>	Connecting service between Manassas and Pentagon, Downtown Washington	4:38 a.m. – 8:58 a.m.	12:07 p.m. – 9:10 p.m.	<b>Manassas:</b> Manassas Mall (Sears), Portsmouth Commuter Lot, Williamson & Stonehouse; <b>Trips via Pentagon:</b> Pentagon (Bus Bay L-2), 14 <sup>th</sup> & Independence (Agriculture Dept.), 14 <sup>th</sup> & New York, 19 <sup>th</sup> & H, Virginia & 21 <sup>st</sup> (State Department), <b>Trips via Roosevelt Bridge:</b> Virginia & 21 <sup>st</sup> (State Department), 18 <sup>th</sup> & Pennsylvania, 14 <sup>th</sup> & Pennsylvania (Commerce Department), Pentagon (Bus Bay L-2)
<b>Montclair Commuter Bus</b>	Connecting service between Montclair and Pentagon, Downtown Washington	4:26 a.m. – 9:05 a.m.	12:04 p.m. – 9:02 p.m.	<b>Montclair:</b> Dale City Commuter Lot, Ashgrove & Waterway, South Lake & Waterway, Rt. 234 & Rt. 1 Commuter Lot, South Lake & Waterway; <b>Pentagon:</b> Bus Bay L1; <b>Downtown Washington:</b> 14 <sup>th</sup> & Independence (Agriculture Department), 14 <sup>th</sup> & New York, Pennsylvania & 7 <sup>th</sup> , D & 9 <sup>th</sup> , D & 7 <sup>th</sup> , 14 <sup>th</sup> & F; <b>Select Trips:</b> Rt. 123 & I-95 Commuter Lot, Savannah & Minnieville
<b>S. Route 1 Commuter Bus</b>	Connecting service between Woodbridge and Pentagon, Downtown Washington	5:13 a.m. – 8:41 a.m.	12:04 p.m. – 8:48 p.m.	<b>Woodbridge:</b> Rt. 1 & Fox Lair, River Ridge & Rt. 1, Wayside & Rt. 1, Rt. 234 & Rt. 1 Commuter Lot; <b>Pentagon:</b> Bus Bay L2; <b>Downtown Washington:</b> 14 <sup>th</sup> & Independence (Agriculture Department), 14 <sup>th</sup> & New York, Pennsylvania & 7 <sup>th</sup> , D & 9 <sup>th</sup>
<b>Route 1 Commuter Bus</b>	Connecting service between Triangle, Dumfries, Woodbridge and Pentagon, Downtown Washington	5:49 a.m. – 7:37 a.m. (1 trip)	5:08 p.m. – 6:57 p.m. (1 trip)	<b>Triangle:</b> Wendy's in Triangle, River Ridge & Rt. 1, Blackburn & Maryland, Rt. 1 & Mt. Pleasant, Rt. 123 & I-95 Commuter Lot, <b>Pentagon:</b> Bus Bay L2; <b>Downtown Washington:</b> 14 <sup>th</sup> & Independence (Agriculture Department), 14 <sup>th</sup> & New York, 19 <sup>th</sup> & H, Virginia & 21 <sup>st</sup> (State Dept), 18 <sup>th</sup> & Pennsylvania, 14 <sup>th</sup> & Pennsylvania (Commerce Dept)
<b>Rosslyn/ Ballston Commuter Bus</b>	Connecting service between Dale City, Woodbridge and Pentagon, Rosslyn / Ballston	5:19 a.m. – 8:44 a.m.	3:28 p.m. – 7:22 p.m.	<b>Dale City:</b> Dale & Lindendale, Dale City Commuter Lot, Prince William Parkway & Malta, Horner Road/I-95 Commuter Lot; <b>Pentagon:</b> Bus Bay L1; <b>Rosslyn / Ballston:</b> Wilson & N. Kent (Rosslyn), Fairfax & N. Taylor (Ballston), Prince William Parkway & Golansky
<b>Tysons Corner Commuter Bus</b>	Connecting service between Woodbridge and Tysons Corner	6:10 a.m. – 9:36 a.m.	4:00 p.m. – 8:11 p.m.	<b>Woodbridge:</b> Woodbridge VRE, Rt. 123 & I-95 Commuter Lot; <b>Tysons Corner:</b> Tysons Corner Transit Center, Jones Branch across from West Park Transit Center, West Park after Jones Branch
<b>Linton Hall Metro Direct</b>	Connecting service between Linton Hall and Falls Church	4:40 a.m. – 8:36 a.m.	4:00 p.m. – 7:26 p.m.	<b>Linton Hall:</b> Limestone Commuter Lot, Devlin & Autumn Glory, Devlin & Pike Branch; <b>Falls Church:</b> West Falls Church Metro (Bus Bay F)
<b>Manassas Metro Direct</b>	Connecting service between Manassas and Falls Church (with AM only service to Vienna)	4:10 a.m. – 1:02 p.m.	1:05 p.m. – 10:30 p.m.	<b>Manassas:</b> Liberia & Centreville (Manassas Junction-Taco Bell), Church & West, Manassas VRE Station, Manassas Mall (Sears), Portsmouth Commuter Lot, Williamson & Stonehouse, Grant & Lee; <b>Vienna:</b> Vienna Metro (AM only), <b>Falls Church:</b> West Falls Church Metro (Bus Bay F); <b>Select Trips:</b> Centreville & Manassas



Route	Area Served	AM Hours of Operation	PM Hours of Operation	Timepoints
<b>Prince William Metro Direct</b>	Connecting service between Dale City, Woodbridge and Franconia	5:10 a.m. – 12:15 p.m.	12:20 p.m. – 11:13 p.m.	<b>Woodbridge:</b> PRTC Transit Center, Potomac Mills (Main Entrance), Horner Road Commuter Lot, Rt. 1 and Gordon, Rt. 1 and Sandra, Rt. 1 and Featherstone; <b>Franconia:</b> Franconia-Springfield Metro Station,

OmniLink is a demand response / flex route bus service providing transportation within Prince William County, Manassas, and Manassas Park. As shown in Figures 1-4 and 1-5 and described in Table 1-2, OmniLink operates six routes through the more heavily populated parts of the service area. Frequencies vary by route – in the peak periods, headways range from 30 minutes to hourly, while headways range from 45 minutes to hourly in the off-peak periods. Four routes provide Saturday service operating on 1.5-hour headways. The demand-responsive nature of OmniLink service allows patrons to call ahead and request a bus pick-up that can deviate up to  $\frac{3}{4}$  mile from the fixed portion of the route. The OmniLink service is equipped to aide passengers with disabilities and fulfills FTA's ADA service requirements without requiring a dedicated paratransit service. OmniLink service is provided using 30-seat transit buses. OmniLink routes tend to serve a more disadvantaged population and those without access to automobiles (senior citizens, people with disabilities, teenagers, and lower-wage workers).

PRTC also administers OmniMatch, which is a free, personalized ridematching service for carpoolers and vanpoolers that will help the patron find the carpool or vanpool that best suits their needs. Through the use of an extensive regional database, OmniMatch links commuters who have similar work hours, origination and destination points. PRTC also supports VanStart and VanSave, which provide financial assistance to start-up vanpools and to existing vanpools that have lost enough participants that operating costs need to be subsidized in the short-term.

### 1.3.2 OTHER AREA SERVICES:

There are several other transit or shared-ride services provided in the Potomac and Rappahannock Transportation Commission region. Most are designed to provide commuter service to Washington, D.C. and are identified below.

**Guaranteed Ride Home (GRH):** The Guaranteed Ride Home (GRH) program provides commuters who regularly take transit, vanpool carpool bike or walk to work with a reliable ride home when unexpected emergencies arise. Registered commuters are able to use GRH for unexpected personal emergencies such as a personal illness or sick child, as well as unscheduled overtime required by an employer, up to four times per year. The ride home by cab, rental car bus or train is free. The GRH program is administered by Commuter Connections, a regional network of transportation organizations coordinated by the Metropolitan Washington Council of Governments.

**Virginia Railway Express (VRE):** VRE is a commuter rail service connecting Northern Virginia and Washington D.C. VRE is operated as a partnership of PRTC and NVTC to provide commuter rail service on two lines, from Fredericksburg and from Manassas. In Prince William County, the Fredericksburg line serves the Quantico, Rippon, and Woodbridge stations, while the Fredericksburg line serves the Broad Run/Airport, Manassas, and Manassas Park stations (see Figure 1-6). Trains run Monday through Friday, except on federal holidays.

**Figure 1-4: OmniLink Routes - Eastern Prince William County**

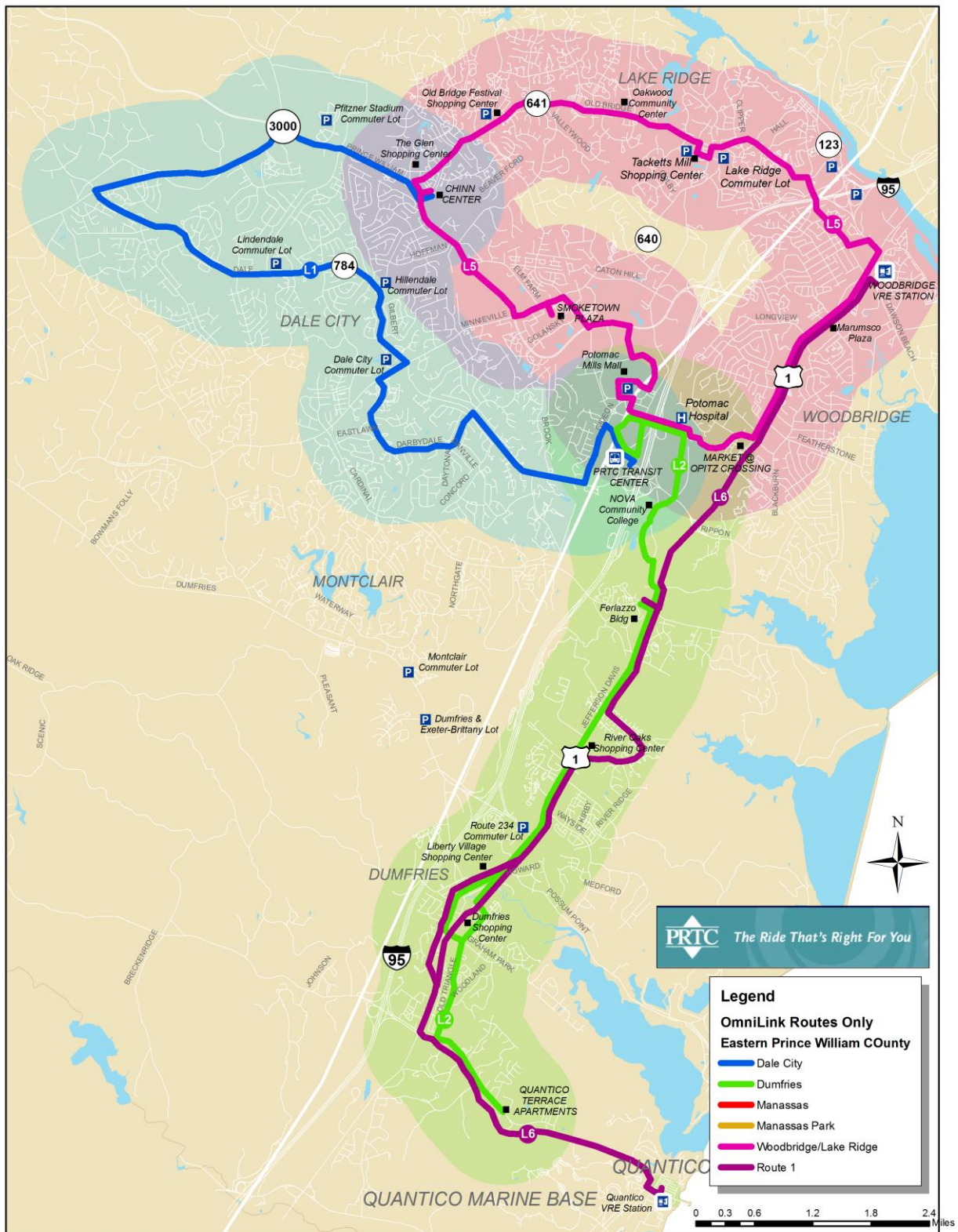
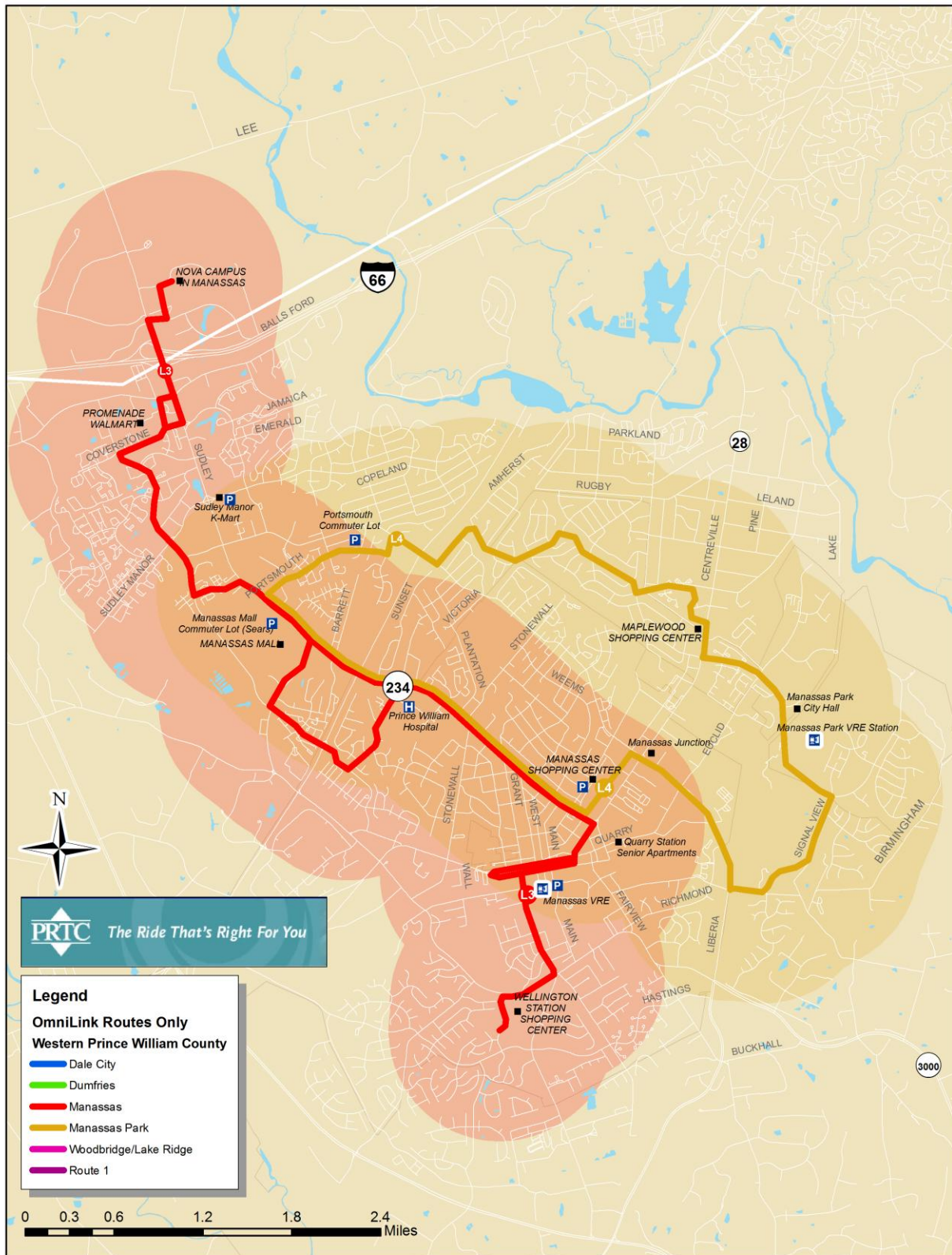




Figure 1-5: OmniLink Routes - Western Prince William County



**Table 1-2: PRTC Cross County Connector and OmniLink Service (as of May 2010)**

Route	Area Served	Days of Operation	Hours of Operation	Timepoints
<b>Cross County Connector</b>	Cross county service between Eastern Prince William County and the Manassas Area	Weekdays	5:30 a.m. – 9:53 p.m.	Manassas Mall (Target,) Center & West, Prince William Pkwy & Liberia, McCoart County Complex, Smoketown & Nazarene, Church & West, Potomac Mills (Main Entrance), PRTC Transit Center
<b>Dale City</b>	Local bus service between Chinn Center and PRTC Transit Center	Weekdays & Saturday	5:38 a.m.–10:37 p.m.	Chinn Center, Mapledale Plaza, Dale & Minnieville (Center Plaza), Dale & Gerry (Glendale Shopping Center), PRTC Transit Center
<b>Dumfries</b>	Local bus service between Quantico Terrace Apts. and PRTC Transit Center	Weekdays & Saturday	5:31 a.m.–10:33 p.m.	Fuller Heights & Old Triangle (select AM trips), Quantico Terrace Apts., Old Triangle & Steele, Main & Lansing, Powell's Creek & Woodmark, Ferlazzo Building, PRTC Transit Center
<b>Manassas</b>	Local bus service between Oaks of Wellington and Northern Virginia Community College	Weekdays	5:30 a.m. – 8:49 p.m.	Oaks of Wellington, Manassas Shopping Center, Manassas Mall (Target), Coverstone & Ashton, Northern Virginia Community College (NOVA)
<b>Manassas Park</b>	Local bus service to and from the Manassas Shopping Center	Weekdays	6:10 a.m. – 7:47 p.m. counterclockwise 5:05 a.m. – 8:04 p.m. clockwise	Manassas Shopping Center (Bowl America), Manassas Dr. & Signal View Dr. / Andrew Dr., Maplewood Shopping Center, Manassas Dr. & Lomond Dr., Manassas Mall (Target) Manassas Shopping Center (Bowl America), Manassas Mall (Target), Maplewood Shopping Center, Manassas Dr. & Railroad Dr. (Manassas Park VRE)
<b>Woodbridge/Lake Ridge</b>	Local bus service to and from PRTC Transit Center	Weekdays & Saturday	5:40 a.m. – 10:20 p.m. counterclockwise 5:40 a.m. – 10:38 p.m. clockwise	PRTC Transit Center, Opitz & Daniel Stuart, Rt. 1 & Dawson Beach, Tacketts Mill, Prince William & Hoffman, Smoketown Plaza PRTC Transit Center, Smoketown Plaza, Chinn Center, Tacketts Mill, Rt. 1 & Mary's Way, Opitz & Montgomery
<b>Route 1</b>	Local bus service between Quantico and Woodbridge VRE Station	Weekdays & Saturday	5:30 a.m. – 11:06 p.m. weekdays 7:10 a.m. – 10:46 p.m. Saturday	Quantico, Fraley & Graham Park, Powell's Creek & Woodmark, Rt. 1 & Maryland (across from Taco Bell), Woodbridge VRE, Rt. 1 & Daniel Stuart (Taco Bell), Powell's Creek & Sherwood, Main & Lansing (ACTS)

Northbound Service from Broad Run Airport (Manassas Line) is provided via six morning peak trips, one midday trip and one evening peak trip, and southbound service to Broad Run Airport includes one peak morning trip, three midday trips and four peak evening trips. Northbound service from Fredericksburg (Fredericksburg Line) is provided via eight morning peak trips, one midday trip and two evening peak trips, and southbound service to Fredericksburg includes one morning peak trip, three midday trips and eight evening peak trips. VRE will be inaugurating its first, “express train” service in the summer of 2010 – a single trip on the Fredericksburg Line.

Surface and/or garage parking is available at all six stations in Prince William County, Manassas, and Manassas Park. Bus connections to PRTC routes are possible at the Quantico, Woodbridge, Manassas, and Manassas Park stations.

**Figure 1-6: Virginia Railway Express (VRE) System**





**Amtrak:** VRE offers the Amtrak-Cross Honor Agreement, which allows VRE riders to also use the Amtrak trains listed on their schedule. Only VRE riders with valid Ten-Trip, Five-Day, Monthly, or VRE-TLC tickets accompanied by a Step-Up ticket are permitted on-board Amtrak trains.

**Slugging (Dynamic Ridesharing):** Slugging is a term used to describe a unique form of commuting primarily in the I-95 corridor. Slugging is an informal ridesharing arrangement where commuters line up and wait for a ride to key destinations in Washington, D.C. A “slug” is someone who rides as a passenger in a private automobile traveling in the HOV lanes. As the I-95 HOV lanes require a minimum of three people to a car, drivers, known as “bodysnatchers,” seek “slugs” in order to legally drive in the HOV lanes. No money is exchanged because both driver and passenger benefit from the arrangement.

Slugging in the Northern Virginia and Washington, D.C. area began in the mid-1970s, shortly after the HOV lanes on I-95/I-395 were opened to carpools. The number of commuters slugging has grown significantly over time. A Virginia Department of Transportation (VDOT) study concluded that, from 1999 to 2006, slugging in the I-95 corridor grew 112% from 3,085 to 6,459.

Of the 6,459 commuters slugging in the I-95 corridor, 56% commuted from Prince William County. Slug lines in Prince William County, which are co-located at OmniRide bus stops, include the Horner Road (Prince William Parkway and I-95) commuter lot, the Potomac Mills commuter lot, the Tackett’s Mill (Lake Ridge) commuter lot, the Rt. 123 and Old Bridge Road (Old Hechinger’s) commuter lot, the Rt. 1 and Rt. 234 (Dumfries) commuter lot, Montclair Fire Station, and Montclair Northgate.

An article written in 2001 regarding slugging in the Washington, D.C. region notes that a symbiotic relationship exists between slugging and transit.<sup>1</sup> As slugs generally come from a line of transit passengers waiting for a bus, transit stops are prime locations at which bodysnatchers find passengers. For the slugs, accepting a ride provides a free commuting option that is comparable in terms of speed and comfort to the bus. At the same time, the presence of bus service insures that the slugs can get to and from work if they are unable to find a ride.

## 1.4 FARE STRUCTURE

Tables 1-3 through 1-5 show the fare structure for OmniRide, Metro Direct, and OmniLink bus services, effective July 6, 2010.

PRTC is part of the regional SmarTrip program, and testing of Smart pass products is underway. PRTC expects to switch from paper to electronic pass products once the capability exists, allowing the farebox to perform all calculations. Paper transfers will also be eliminated, meaning that customers wishing to take advantage of transfer and pass benefits will need to use a SmartCard.

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<sup>1</sup> Frank Spielberg and Phil Shapiro, “Slugs and Bodysnatchers: Adventures in Dynamic Ridesharing,” TR News May – June 2001: 20-23.

Transit benefits may also be used towards PRTC bus fares. The monthly benefit can be any amount an employer chooses to provide, although a maximum of \$230 per month is allowable tax-free or pre-tax to employees. The \$230 per month maximum is a temporary condition; this cap was raised (from \$120 per month) by the American Reinvestment and Recovery Act (ARRA) and extended by the Congress to December 31, 2011, at which time the maximum benefit will revert to \$120 per month unless the Congress sees fit to extend the \$230 maximum still further. SmartBenefits (formerly Metrochek) is the electronically paid transit benefit that can be downloaded to SmarTrip cards at fare machines at Metrorail stations.

**Table 1-3: OmniRide Fares**

Service/Fare Product	Cost to Passenger
Regular Fares:	
One-way cash fare to/from Northern Virginia or Washington	\$7.00
One-way SmarTrip Card fare	\$5.25
One-way cash fare for Tysons Route(see note 1)	\$3.30
One-way SmarTrip Card fare for Tysons Route (see note 1)	\$2.65
Local destinations within Prince William County – cash only	\$1.20
Local bus day pass – cash only	\$2.50
Reduced Fares:	
One-way fare	\$3.50
Local bus day pass	\$1.25

*Note 1: Introductory fare through fall 2011*

**Table 1-4: Metro Direct Fares**

Service/Fare Product	Cost to Passenger
Regular Fares:	
One-way cash fare to/from Metro stations	\$3.30
One-way SmarTrip Card fare to/from Metro stations	\$2.65
Local destinations within Prince William County – cash only	\$1.20
Local bus day pass – cash only	\$2.50
Reduced Fares:	
One-way fare	\$1.65
Local bus day pass	\$1.25

**Table 1-5: OmniLink Fares**

Service/Fare Product	Cost to Passenger
Regular Fares:	
One-way fare (cash or SmarTrip Card)	\$1.20
10-pack of tokens	\$12.00
Local bus day pass – cash only	\$2.50
Off-route trip surcharge – cash only	\$1.00
Reduced Fares:	
One-way	\$0.60
10-pack of tokens	\$6.00
Local bus day pass	\$1.25
Off-route trip surcharge	EXEMPT

Local bus day passes are good for local travel (within Prince William County, Manassas, and Manassas Park) all day on the date issued.

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 a WMATA issued Senior (65+)/Disabled SmarTrip Card. Passengers meeting reduced fare eligibility criteria may apply for a Reduced Fare Eligibility Card.

Children five and under ride free with a fare-paying adult (limit two per paying adult). Children eight and under cannot ride unattended.

For all but seniors and people with disabilities, an off-route trip surcharge applies to all OmniLink pick-ups and drop-offs at locations not along the standard local route, including on-demand stops. In addition to the designated bus stops, there are some locations that are on-demand bus stops. On-demand stops are designated with a triangle on route maps. Major commuter parking lots served by OmniRide commuter buses and local Virginia Railway Express stations and many senior living communities are some of the on-demand stops served by OmniLink buses.

Bus-to-bus transfers are good for three hours on the day issued. For patrons using a SmarTrip Card, the electronic farebox calculates and automatically deducts the correct fare.

For those paying in cash, the following rules apply:

- Local bus to local bus – No free transfers. Purchase Day Pass, pay separate fares on each bus, or pay fare for entire trip and first bus and request a transfer.
- Local bus to/from OmniRide bus – Pay the higher of the two fares and request a transfer.
- Local bus to/from Metro Direct bus – Pay the higher of the two fares and request a transfer.
- OmniRide to/from OmniRide – Pay fare and request transfer.
- OmniRide or Metro Direct to/from other regional bus – Pay PRTC fare and request transfer to other bus systems. Some regional bus systems have eliminated paper transfers. Cost varies for return trip.

PRTC plans to implement fare policy changes in FY 2012 that include the elimination of paper transfers requiring riders to use a SmartTrip card to take advantage of transfer privileges. Riders using cash will be required to pay separate fares.

For transfers between PRTC buses and VRE trains, the following rules apply:

- VRE monthly pass holders – Boarding a PRTC bus at a VRE Station or the nearest bus stop is free. When riding a PRTC bus to get to a VRE Station, the applicable fare is required.
- All other VRE pass holders – Required to pay applicable bus fare when traveling to and from VRE stations.

## 1.5 VEHICLE FLEET

As of July 7, 2010, PRTC had a total fleet of 135 buses, including spares, those currently being rehabilitated and those in PRTC's contingency fleet. Of those, 108 are used in the OmniRide and Metro Direct service, including 17 identified as spares. Most of the commuter buses are 45-foot MCI commuter coaches that PRTC has chosen as a matter of policy to retain for a minimum of 14 years, though the Federal Transit Administration (FTA) allows buses of this sort to be replaced on a federally funded basis when they reach 12 years old. The remainder of the commuter buses are a mix of 40-foot buses, all of which PRTC has chosen as a matter of policy to retain for the federally prescribed useful life of 12 years. For OmniLink service, 23 buses are used, including four spares. Local service is provided with 30-foot Gillig buses, with a federally prescribed useful life of 10 years. Table 1-6 shows PRTC's in service bus fleet, with those identified as spares shown in boldface.

PRTC OmniRide and Metro Direct service, including the Cross County Connector, currently requires a maximum of 79 buses for morning service and 91 buses for afternoon service. With an active fleet of 108 commuter buses, this leaves 29 spares in the AM and 17 spares in the PM, for spare ratios of 36.7% and 18.7%. The current OmniLink service requires 19 buses during maximum service. With an active fleet of 23 local buses, this leaves four spare buses and a spare ratio of 21.1 percent.

Tables 1-7 and 1-8 show the buses undergoing mid-life overhauls and in the contingency fleet, respectively. It has been PRTC's practice to perform mid-life overhauls of its oldest buses, in order to continue providing customers with a complete fleet of vehicles that are in excellent condition. Overhauls include: engine and transmission (powertrain) replacement; exterior painting; seat cushion

and fabric replacement (if applicable); air conditioning system rebuild; major suspension overhaul; electrical system repair; differential and brake rebuilds; aluminum wheels; possible replacement of “flip dot” destination signs with LED units; and a variety of other minor items.

Buses have been overhauled at the rate of two at a time (which was the number of buses PRTC could do without while still maintaining scheduled services), but this was stepped up to three at a time at the end of June 2011 by retaining retirement-age buses in the active fleet for longer than the previously described durations. PRTC also follows a policy of retaining a small number of retirement-age buses, referred to as the contingency fleet, that can be moved into the active fleet if necessitated by additional service requiring additional buses or running time problems. Generally, less than 10 buses have been held in the contingency fleet. As of July 7, 2010, only two 1993-vintage MCI coaches were in the contingency fleet, the rest having been placed in active service in recent years.

**Table 1-6: In Service Bus Fleet Inventory as of July 7, 2010**

Bus #	Model Year	Vehicle Make	Vehicle Model	Number of Seats	Useful Life (Yrs.)
144	1993	MCI	102A3 - 40 foot	47	12
145	1993	MCI	102A3 - 40 foot	47	12
146	1993	MCI	102A3 - 40 foot	47	12
147	1995	MCI	102D3 - 40 foot	43	12
148	1995	MCI	102D3 - 40 foot	43	12
149	1995	MCI	102D3 - 40 foot	43	12
150	1995	MCI	102D3 - 40 foot	43	12
171	2000	Orion	Orion V - 40 foot	43	12
172	2000	Orion	Orion V - 40 foot	43	12
173	2000	Orion	Orion V - 40 foot	43	12
174	2000	Orion	Orion V - 40 foot	43	12
175	2000	Orion	Orion V - 40 foot	43	12
176	2000	Orion	Orion V - 40 foot	43	12
177	2000	Orion	Orion V - 40 foot	43	12
178	2000	Orion	Orion V - 40 foot	43	12
179	2000	Orion	Orion V - 40 foot	43	12
180	2000	Orion	Orion V - 40 foot	43	12
181	2000	Orion	Orion V - 40 foot	43	12
182	2000	Orion	Orion V - 40 foot	43	12
183	2000	Orion	Orion V - 40 foot	43	12
184	2005	Gillig	Phantom - 40 foot	45	12
185	2005	Gillig	Phantom - 40 foot	45	12
186	2005	Gillig	Phantom - 40 foot	45	12
187	2005	Gillig	Phantom - 40 foot	45	12
188	2006	Gillig	Phantom - 40 foot	45	12
189	2010	Gillig	Low-floor-40 foot	39	12

**Table 1-6: In Service Bus Fleet Inventory as of July 7, 2010 (continued)**

Bus #	Model Year	Vehicle Make	Vehicle Model	Number of Seats	Useful Life (Yrs.)
301	2002	MCI	D Series - 45 foot	57	14
303	2002	MCI	D Series - 45 foot	57	14
304	2002	MCI	D Series - 45 foot	57	14
305	2002	MCI	D Series - 45 foot	57	14
306	2002	MCI	D Series - 45 foot	57	14
307	2002	MCI	D Series - 45 foot	57	14
308	2002	MCI	D Series - 45 foot	57	14
309	2002	MCI	D Series - 45 foot	57	14
310	2002	MCI	D Series - 45 foot	57	14
311	2002	MCI	D Series - 45 foot	57	14
312	2002	MCI	D Series - 45 foot	57	14
313	2002	MCI	D Series - 45 foot	57	14
314	2002	MCI	D Series - 45 foot	57	14
315	2002	MCI	D Series - 45 foot	57	14
316	2002	MCI	D Series - 45 foot	57	14
317	2002	MCI	D Series - 45 foot	57	14
318	2002	MCI	D Series - 45 foot	57	14
319	2002	MCI	D Series - 45 foot	57	14
320	2002	MCI	D Series - 45 foot	57	14
321	2002	MCI	D Series - 45 foot	57	14
322	2002	MCI	D Series - 45 foot	57	14
323	2002	MCI	D Series - 45 foot	57	14
324	2002	MCI	D Series - 45 foot	57	14
325	2002	MCI	D Series - 45 foot	57	14
326	2002	MCI	D Series - 45 foot	57	14
327	2002	MCI	D Series - 45 foot	57	14
328	2002	MCI	D Series - 45 foot	57	14
329	2002	MCI	D Series - 45 foot	57	14
330	2002	MCI	D Series - 45 foot	57	14
331	2002	MCI	D Series - 45 foot	57	14
332	2002	MCI	D Series - 45 foot	57	14
333	2002	MCI	D Series - 45 foot	57	14
334	2002	MCI	D Series - 45 foot	57	14
335	2002	MCI	D Series - 45 foot	57	14
336	2002	MCI	D Series - 45 foot	57	14
337	2002	MCI	D Series - 45 foot	57	14

**Table 1-6: In Service Bus Fleet Inventory as of July 7, 2010 (continued)**

Bus #	Model Year	Vehicle Make	Vehicle Model	Number of Seats	Useful Life (Yrs.)
338	2004	MCI	D Series - 45 foot	57	14
339	2004	MCI	D Series - 45 foot	57	14
340	2004	MCI	D Series - 45 foot	57	14
341	2004	MCI	D Series - 45 foot	57	14
342	2004	MCI	D Series - 45 foot	57	14
343	2004	MCI	D Series - 45 foot	57	14
344	2004	MCI	D Series - 45 foot	57	14
345	2004	MCI	D Series - 45 foot	57	14
346	2005	MCI	D Series - 45 foot	57	14
347	2005	MCI	D Series - 45 foot	57	14
348	2005	MCI	D Series - 45 foot	57	14
349	2005	MCI	D Series - 45 foot	57	14
350	2005	MCI	D Series - 45 foot	57	14
351	2006	MCI	D Series - 45 foot	57	14
352	2006	MCI	D Series - 45 foot	57	14
353	2006	MCI	D Series - 45 foot	57	14
354	2006	MCI	D Series - 45 foot	57	14
355	2006	MCI	D Series - 45 foot	57	14
356	2006	MCI	D Series - 45 foot	57	14
357	2006	MCI	D Series - 45 foot	57	14
358	2006	MCI	D Series - 45 foot	57	14
359	2006	MCI	D Series - 45 foot	57	14
360	2006	MCI	D Series - 45 foot	57	14
361	2008	MCI	D Series - 45 foot	57	14
362	2008	MCI	D Series - 45 foot	57	14
363	2008	MCI	D Series - 45 foot	57	14
364	2008	MCI	D Series - 45 foot	57	14
365	2008	MCI	D Series - 45 foot	57	14
366	2008	MCI	D Series - 45 foot	57	14
367	2008	MCI	D Series - 45 foot	57	14
368	2008	MCI	D Series - 45 foot	57	14
369	2008	MCI	D Series - 45 foot	57	14
370	2008	MCI	D Series - 45 foot	57	14
371	2008	MCI	D Series - 45 foot	57	14



**Table 1-6: In Service Bus Fleet Inventory as of July 7, 2010 (continued)**

Bus #	Model Year	Vehicle Make	Vehicle Model	Number of Seats	Useful Life (Yrs.)
372	2009	MCI	D Series - 45 foot	57	14
373	2009	MCI	D Series - 45 foot	57	14
374	2009	MCI	D Series - 45 foot	57	14
375	2009	MCI	D Series - 45 foot	57	14
376	2009	MCI	D Series - 45 foot	57	14
377	2009	MCI	D Series - 45 foot	57	14
378	2009	MCI	D Series - 45 foot	57	14
379	2009	MCI	D Series - 45 foot	57	14
380	2009	MCI	D Series - 45 foot	57	14
381	2009	MCI	D Series - 45 foot	57	14
383	2009	MCI	D Series - 45 foot	57	14
<b>250</b>	<b>2004</b>	<b>Gillig</b>	<b>Low floor - 30 foot</b>	<b>30</b>	<b>10</b>
<b>251</b>	<b>2004</b>	<b>Gillig</b>	<b>Low floor - 30 foot</b>	<b>30</b>	<b>10</b>
<b>252</b>	<b>2004</b>	<b>Gillig</b>	<b>Low floor - 30 foot</b>	<b>30</b>	<b>10</b>
<b>253</b>	<b>2004</b>	<b>Gillig</b>	<b>Low floor - 30 foot</b>	<b>30</b>	<b>10</b>
254	2004	Gillig	Low floor - 30 foot	30	10
255	2004	Gillig	Low floor - 30 foot	30	10
256	2004	Gillig	Low floor - 30 foot	30	10
257	2004	Gillig	Low floor - 30 foot	30	10
258	2004	Gillig	Low floor - 30 foot	30	10
259	2004	Gillig	Low floor - 30 foot	30	10
260	2004	Gillig	Low floor - 30 foot	30	10
261	2004	Gillig	Low floor - 30 foot	30	10
262	2004	Gillig	Low floor - 30 foot	30	10
263	2004	Gillig	Low floor - 30 foot	30	10
264	2004	Gillig	Low floor - 30 foot	30	10
265	2004	Gillig	Low floor - 30 foot	30	10
266	2005	Gillig	Low floor - 30 foot	30	10
267	2005	Gillig	Low floor - 30 foot	30	10
268	2006	Gillig	Low floor - 30 foot	30	10
269	2006	Gillig	Low floor - 30 foot	30	10
270	2006	Gillig	Low floor - 30 foot	30	10
271	2006	Gillig	Low floor - 30 foot	30	10
272	2010	Gillig	Low floor - 30 foot	30	10

**Table 1-7: Buses Currently Being Overhauled as of July 7, 2010**

Bus #	Model Year	Vehicle Make	Vehicle Model	Number of Seats	Useful Life (Yrs.)
300	2002	MCI	D Series - 45 foot	57	14
302	2002	MCI	D Series - 45 foot	57	14

**Table 1-8: Buses in Contingency Fleet as of July 7, 2010**

Bus #	Model Year	Vehicle Make	Vehicle Model	Number of Seats	Useful Life (Yrs.)
142	1993	MCI	102A3 - 40 foot	47	12
143	1993	MCI	102A3 - 40 foot	47	12

All PRTC buses are equipped with Cubic/GFI Smart fareboxes. OmniLink buses and 40-foot OmniRide “transit” buses are also equipped with bike racks. Eight of the newest OmniRide buses are equipped with Wi-Fi. As discussed further in the Transit Security Program section of this chapter, Intelligent Transportation System (ITS) equipment on select buses includes Automatic Vehicle Locator (AVL)/Mobile Data Terminal (MDT) equipment, and video cameras. Vehicles without AVL/MDT have rudimentary GPS tracking through Nextel two-way radios.

## 1.6 EXISTING FACILITIES AND PASSENGER AMENITIES

The PRTC Transit Center, located at 14700 Potomac Mills Road just south of Potomac Mills Mall in Woodbridge, was completed in 1998. PRTC owns the facility, which houses the administrative offices and a transit center. The Transit Center facility also serves as the main transfer point for PRTC’s customers and includes a public Customer Service desk, customer facilities, and dedicated route berthing locations. The transit center has parking on site. PRTC is ADA accessible. An emergency backup facility is located at a VRE-owned and operated building at Quantico.

The PRTC bus maintenance facilities are also located at the PRTC Transit Center. The PRTC fleet is stored and staged from this facility. The maintenance facility consists of 6 service bays plus a steam pit. An expansion of the vehicle storage area at the PRTC Transit Center was recently completed. First Transit is responsible for all vehicle maintenance and hires only experienced technicians with ASE Certifications. In addition, 30 percent of all technicians must be Master Technicians. First Transit technicians perform all light maintenance and repairs. Heavy maintenance is done by vendors offsite to keep service bays open.

In addition to the PRTC Transit Center, PRTC provides benches and shelters at selected stops. As of June 30, 2010, PRTC had 59 bus shelters, as shown in Table 1-9. PRTC adopted a bus shelter siting and lighting plan in 2007, establishing warrants for the placement of shelters and those with lighting. The plan is updated annually. PRTC installs regular sized shelters, as well as “sombbrero” shelters in locations that cannot accommodate regular sized shelters or have extensive underground utilities.

**Table 1-9: PRTC Shelter Inventory as of June 30, 2010**

Shelter Count	Location
1	Chinn Aquatic Center, Woodbridge
2	A.J. Ferlazzo Gov't Bldg, Woodbridge
3	Broadway & 4th Ave, Quantico
4	Manassas Mall, Manassas
5	Wellington & Hampton Rd, Manassas
6	NVCC Campus, Battleview Pky & NOVA Way, Manassas
7	Route 1 (NB) before Dumfries Road, Dumfries
8	Powells Creek Blvd & Woodmark Dr, Woodbridge
9	Manassas Dr & Sandstone Way, Manassas Park
10	Ashton Ave & Gov't Center Way, Manassas
11	Ashton Ave & Coverstone Rd, Manassas
12	Prince William Courthouse, Church St & Peabody St, Manassas
13	Gideon Drive (SB) & Bixby Road, Dale City
14	Dale Blvd (WB) after Gerry Lane, Dale City
15	Route 1 (NB) after Wayside Drive, Dumfries
16	Route 1 (NB) & River Heritage Blvd, Dumfries
17	Prince William Parkway (WB) before County Complex Court, Lake Ridge
18	Dale Blvd (EB) & Minneville Rd, Dale City
19	Dale Blvd (EB) & Cherrydale Dr, Dale City
20	Dale Blvd (WB) & Ashdale Avenue, Dale City
21	Dale Blvd (WB) before Barksdale, Dale City
22	Dale Blvd. (WB) before Nottingdale, Dale City
23	Prince William Parkway (EB) after Marblestone Drive, Lake Ridge
24	Dale Blvd (EB) & Orangewood Dr, Dale City
25	Old Bridge Rd (EB) & Wood Hollow Dr, Occoquan
26	Route 1 (NB) after Fuller Road, Triangle
27	Route 1 (SB) after Dumfries Road (234), Dumfries
28	Potomac Mills Mall, Woodbridge (2 shelters)
29	Crestwood Dr & Ashton Ave, Manassas
30	Dale Blvd (WB) & Mapledale Ave, Dale City
31	Dale Blvd (WB) & Cloverdale Rd, Dale City
32	Darbydale Ave (WB) & Worchester Dr, Dale City
33	Route 1 (NB) before Featherstone Road, Woodbridge
34	Worth Avenue near Prince William Pkwy, Woodbridge
35	Pier One Shelter, Potomac Mills Road and Gideon Drive, Woodbridge
36	Old Bridge Road (EB) at Elysian, Woodbridge
37	Route 1 (SB) after Featherstone, Woodbridge
38	Lindendale Commuter Lot, Dale City
39	Brittany Park & Ride Lot, Dumfries Rd (234) & Exeter Dr, Brittany

**Table 1-9: PRTC Shelter Inventory as of June 30, 2010 (cont.)**

Shelter Count	Location
40	Manassas Dr & Kent Dr, Manassas Park
41	Old Triangle & Steele Court, Dumfries
42	Old Triangle and Kearsarge Drive, Dumfries
43	Route 1 (NB) & Neabsco Drive, Woodbridge
44	Limestone Commuter Lot, Gainesville
45	Old Triangle and Soundview Circle, Triangle
46	Quantico Terrace Apartments, Triangle
47	Route 1 (SB) before Wayside Drive, Dumfries
48	Hoadly Road (NB) at Apollo Drive, Dale City
49	Route 1 - NB (Fraley Blvd) & Graham Park Road, Dumfries
50	Route 1 (NB) before Dumfries Road (234) , Dumfries
51	Old Bridge (WB) after Oakwood Drive, Lake Ridge
52	Ashton Avenue (SB) after Seymour Road, Bull Run
53	Darbydale Ave (SB) after Eastlawn Avenue, Dale City
54	Route 1 (SB) after Prince William Parkway, Woodbridge
55	Opitz Boulevard (EB) before Neabsco Mills Road, Woodbridge
56	Opitz Boulevard (WB) before Neabsco Mills Road, Woodbridge
57	Prince William Pkwy (EB) before Hillendale, Woodbridge
58	PRTC Commuter Lot on Potomac Mills Road, Woodbridge
59	Freedom High School, Woodbridge

OmniRide commuter buses provide service to the major commuter lots in the area, most of which are owned and maintained by the Virginia Department of Transportation. These lots provide convenient, well maintained and free parking lots in local neighborhoods throughout PRTC's service area. As a public service, many churches and retail outlets also designate sections of their parking lots for commuter parking. These lots also serve as meeting areas for vanpools and carpools. Table 1-10 lists the commuter lots served by PRTC routes, their locations, and the total number of parking spaces in each. As of spring 2011, the capacity of these lots totaled 8,484 spaces.

**Table 1-10: Commuter Lots Served by PRTC**

Commuter Lot	Location	Area	Number of Spaces
<b>VDOT Maintained Lots</b>			
Dale City	Dale Boulevard and Gemini Way	Dale City	580
Hillendale	Hillendale Road near Dale Boulevard	Dale City	248
Lindendale	Dale Boulevard and Quate Lane	Dale City	216
Lake Ridge	Old Bridge and Minnieville Road	Montclair	628
Harbor Drive	Harbor Drive at Minneville Road	Lake Ridge	200
Montclair	Route 234 near Stockbridge Drive	Lake Ridge	50
Old Bridge Road & Route 123	Formerly Hechingers Store	Lake Ridge	580
Route 123 & I-95	Off Annapolis Way	Lake Ridge/Woodbridge	580
Horner Road/I-95	I-95 at Prince William Parkway exit	Potomac Mills	2,363
Route 234 & Route 1	I-95 at Route 234 exit	Montclair	843
Portsmouth	Williamson Boulevard, behind K-Mart	Manassas	605
<b>Proffers</b>			
Potomac Mills	Along Ring Road across from Pier 1	Potomac Mills	275
Festival at Old Bridge	designated area in shopping center near Dollar Tree	Lake Ridge	56
Brittany	Route 234 near I-95	Montclair	85
Tackett's Mill	Old Bridge and Harbor Drive	Lake Ridge	170
Limestone	Limestone Drive- Off Linton Hall Road	Gainesville	124
<b>Formal Agreements</b>			
Dale City K-Mart	Dale Boulevard near Gideon	Dale City	90
Manassas Mall (Sears)	Near mall entrance at Sudley Road & Iron Gate Way	Manassas	217
Gainesville Methodist Church	Limestone Drive- Off Linton Hall Road	Gainesville	75
First Baptist Church	Minnieville at Elm Farm Road	Woodbridge	375
<b>Other</b>			
PRTC Transit Center	Potomac Mills and Telegraph Roads	Dale City/Potomac Mills	124

## 1.7 TRANSIT SECURITY PROGRAM

There is an extensive CCTV surveillance system covering the PRTC Transit Center facility. This includes passenger, maintenance, and vehicle storage areas. The CCTV system uses some wired cameras as well as wireless ViconNet® cameras that connect to a dedicated WLAN. The on-duty Security Officer at the front desk monitors the cameras. Access to the building is controlled primarily by combination locks. A new building security system utilizing access cards is planned, funded by a combination of FY 2011 state grant funds being sought and local match. The buses at PRTC are stored in a fenced and "security-locked" lot. The maintenance personnel are at this location from Sunday at 10:00 p.m. through Saturday at 2:00 a.m. These hours are maintained because maintenance work is conducted late in the evening/next morning before the start of a new service day.

The training program for bus operators is intense and a large portion of it is dedicated to security-related matters. The bus operators are instructed on how to inspect their buses for unusual conditions before departing the lot and to report anything unusual.

The Prince William County Police Department participates in "Fleet Watch" along with PRTC. The operators have been trained by the police department on how to recognize any suspicious conditions in the commuter lots and report them promptly.

PRTC (as well as WMATA) participates in a well-established regional incident response network of transit operating, highway, law enforcement and emergency response organizations to discuss incidents and

coordinate responses to them on a real-time basis. This network proved invaluable in responding to the September 11 attack and in coping with the disruptions thereafter.

PRTC also has an email notification service called "Rider Express." This service provides real-time information to patrons about changing service conditions. Currently there are more than 8,300 customers that use this email service.

For PRTC's operating management, there is an incident response plan that helps to guide responses to incidents. It includes an inventory of available buses and operators in the event an incident requires more buses and/or operators than PRTC normally has on staff. Finally, all buses are equipped with a radio and a silent alarm that allows the operators to send a distress message using the electronic sign on the outside of the bus. All buses are also equipped with GPS, so that location can be determined at any time. Local buses are equipped with mobile data terminals (MDTs) and have a covert alarm button that alerts dispatch. Commuter buses are equipped with a rudimentary camera system (i.e., DriveCam). Buses equipped with the more robust camera system (local buses and soon to be all Metro Direct and Cross County buses, via TIGER grant funds) have a feature allowing real-time remote viewing.

PRTC is in the process of acquiring a new CAD/AVL system that will improve tracking of non-local buses by tying the bus to the route and schedule it is serving. It will also equip the remaining fleet with a covert alarm for contacting dispatch and offer remote-listening capability. PRTC also has an Emergency Service Plan (ESP). According to the ESP, PRTC will offer full bus service whenever possible. However, when service must be altered due to weather or other emergency conditions, the plan identifies specified service amendments with prior customer notification so customers are acclimated and staff implements the plan consistently.

A copy of the "Emergency Service Plan" brochure used by PRTC effective November 2009 follows.

## 1.8 CUSTOMER SERVICE

The Customer Service center is located at the PRTC Transit Center. They are open Monday through Friday from 5:30 a.m. to 8:30 p.m. and have some telephone assistance provided on Saturdays. The customer service center is staffed by PRTC employees. There are a total of 10 Customer Service Agents (CSAs). Two of the agents are at the public service desk and the remaining agents provide assistance over the telephone. Customers can access the agents with both a local and a toll-free number. The CSAs not only provide information for transit related questions, they also provide other services to the riding public:

- Schedule customer requests for pick-up and drop-off locations for the OmniLink service between the hours of 7:30 a.m. and 7:00 p.m. Monday through Friday.
- Provide trip planning
- Manage PRTC's Interactive Voice Response (IVR) system. This is the initial customer access to the CSAs via telephone.
- Create and distribute PRTC service timetables. These are available on PRTC's website as well as at various locations throughout the service area.
- Notify customers about planned outages and large service disruptions through recorded notices on the IVR system.



## THE POTOMAC AND RAPPAHANNOCK TRANSPORTATION COMMISSION

has developed an Emergency Service Plan (ESP) with customer needs and comfort in mind. PRTC will offer full service whenever possible. However, when service must be altered due to weather or other emergency conditions, this plan will provide passengers with the safest and most efficient transportation possible under challenging conditions.

### EMERGENCY SERVICE PLAN For Winter Weather Events

#### HOW DOES IT WORK?

- PRTC will attempt to start all morning buses on time.
- Roads deemed unsafe for travel will not be serviced. (See "Snow Routing" panels for specific route information.)
- OmniRide commuter buses will transport passengers to and from West Falls Church and Franconia-Springfield Metro stations only (No service to or from DC, Pentagon, Crystal City, Rosslyn-Ballston, Tysons Corner or Vienna Metro.)
- In the morning, all Metro Direct and Cross County Connector routes will operate according to published schedules as road conditions allow.
- Starting at 12 noon, OmniRide buses (except for Tysons Corner OmniRide) will leave Metro stations about every 20 minutes until 7:30 p.m.
- Prince William Metro Direct and Manassas Metro Direct buses will operate until the last published departure time.
- Tysons Corner and Linton Hall buses will leave the West Falls Church Metro station every hour on the hour with the last buses departing at 7 p.m. and 7:30 p.m. (If the bus is full, it will immediately depart and the next bus will resume departures on the hour.)
- OmniLink local buses WILL NOT make off-route trips.

#### WHEN WILL THE PLAN BE ACTIVATED?

PRTC will check weather service forecasts by 3 a.m. and again by 10 a.m. to determine if the ESP will be activated that day.

The plan will be activated if forecasts predict the Washington, D.C. metro area will receive:

- Four or more inches of snow or
- Accumulations of freezing rain or ice.

OmniRide service will operate the ESP in the morning if inclement weather is expected to affect the morning rush. Another call will be made at 10 a.m. to the weather service to determine if the plan will be in effect for the afternoon and evening.

When the ESP is activated for OmniRide service in the morning, regular service may resume in the afternoon based on weather and road conditions.

OmniLink local bus service will operate the ESP service all day long if inclement weather is predicted for any time during the day.

During winter weather events, OmniRide and Metro Direct bus service is dependent on MetroLink serving its above-ground stations. If MetroLink is expected to stop service in the morning, OmniRide and Metro Direct service may be cancelled for the entire day. If Metro service is suspended midday, OmniRide and Metro Direct service will operate until picking up passengers from the final Metro train.

In extreme situations, PRTC may need to further curtail services or cease bus service entirely. An announcement will be made via the communication methods outlined in this brochure.

#### HOW WILL YOU KNOW THE PLAN IS IN EFFECT?

Starting at 4 a.m. for morning service and at 11 a.m. for afternoon service, customers should check for:

- A Rider Express email advisory or text message (sign up at [PRTCtransit.org](http://PRTCtransit.org))
- A special alert at [PRTCtransit.org](http://PRTCtransit.org)
- A recorded message at (703) 730-6664 or long-distance (888) 730-6664
- Announcements on local television stations and on WTOP radio (103.5 FM) if time and circumstances warrant

#### HOW MUCH WILL IT COST?

- When the Emergency Service Plan is in effect because of winter weather, bus rides on that service are FREE.
- Passengers completing their commutes by train or neighboring regional bus service must pay the appropriate fare on that service.
- When the ESP is in effect on OmniRide, fares are also free on Metro Direct buses, passengers on all other PRTC buses pay regular fares.
- When the ESP is in effect on OmniLink, fares are also free on the Cross County Connector; passengers on all other PRTC buses pay regular fares.

#### OMNIRIDE AND METRO DIRECT PLAN

When the ESP is activated, all buses on the Manassas OmniRide, Tysons Corner OmniRide, Manassas Metro Direct and Linton Hall Metro Direct routes will operate to and from the West Falls Church Metro station only. All other

OmniRide routes and the Prince William Metro Direct will operate to and from the Franconia-Springfield Metro station. Passengers can transfer to MetroLink or a neighboring regional bus service to continue on to their destinations in the morning, with the reverse in effect for afternoon travel if the ESP remains in effect all day.

#### MORNING COMMUTES

Buses will travel along the Snow Routing outlined in this brochure, to the Franconia-Springfield and West Falls Church Metro stations. Service will begin at normal start-times and every attempt will be made to remain on schedule.

#### EVENING COMMUTES

If the plan was implemented in the morning but weather and road conditions are expected to improve considerably by the afternoon, PRTC will resume operating regular service at 12 noon, except for the MX-1 bus to the State Department which will leave at its regularly scheduled time.

If the mid-morning forecast predicts afternoon conditions for the Washington, D.C. area that meet established criteria, the afternoon plan will be implemented as follows:

- OmniRide service at the West Falls Church Metro station (for Manassas, Tysons Corner and Linton Hall route customers) and at the Franconia-Springfield Metro station (for all other customers), will begin at 12 noon with the last buses departing at 7:30 p.m. The only exceptions will be the Prince William Metro Direct and Manassas Metro Direct buses, which will operate until the last regularly scheduled departure times.

- At Franconia-Springfield, passengers can find PRTC buses by bearing left when exiting the Metro station. Some PRTC buses will use the OmniRide bus stop while others will stop past the Grayhound station. At West Falls Church, passengers can find PRTC buses on the Upper Level by bearing right when exiting the Metro station and looking for the OmniRide bus stop sign.

- At the Metro stations, buses for all routes EXCEPT Tysons Corner and Linton Hall will leave about every 20 minutes. (In rare situations, waits may be longer.) Once a bus is full, it will leave the station.

- Tysons Corner and Linton Hall buses will depart every hour on the hour, with the last buses departing at 7 p.m. and 7:30 p.m. If the bus is full, it will immediately depart and the next bus will resume departures on the hour.

- Buses will follow normal routes as long as the streets are safe for bus travel. If local streets are deemed too dangerous for buses to operate safely, buses will follow the Commuter Snow Routing as described in this brochure. (See "Commuter Snow Routing" panels for specific route information.)

#### SNOW EMERGENCY ROUTES

Snow Emergency Routing will be implemented under two conditions. With your safety in mind:

- Whenever the morning plan has been implemented and
- In the afternoon if neighborhood streets are deemed unsafe. Bus stop signs with a snowflake sticker ARE NOT SERVED when the ESP is in effect.

### COMMUTER SNOW ROUTING EASTERN PRINCE WILLIAM

Capital Hill	The C-1 route will be discontinued during a snow emergency. C-1 passengers should catch a Dale City or Lake Ridge bus.
Dale City Lake Ridge	Buses will operate regular local routing. Bus stops on Arlington, Douglas and Oakwood will not be served. For trips beginning at Festival at Old Bridge, service will be operated from the regular start of the route to the bus stop at Sennelock and Arlington. Buses will take Arlington to Old Bridge, serve the bus stop on Old Bridge at Oakwood, and then continue the regular route. Trips beginning at the Tuckahoe Mill Commuter Lot will operate regular local routing.
Montclair Prince William Metro Direct	Buses will operate regular local routing.
Rosslyn-Ballston Route 1 South Route 1	Buses will operate regular local routing. Bus stops on River Heritage, Kirby, River Ridge and Wayside will not be served. Service will begin at the bus stop on Route 1 after Fox Lair and buses will continue on Route 1, stopping at OmniLink bus stops at River Ridge, Allen Crest/Fox Lair and Wayside, then start regular routing.
Tysons Corner	Buses will operate regular local routing. Passengers may connect with Fairfax Connector or Metrobus at the West Falls Church Metro station to complete their commutes.

#### LEAVING FRANCONIA-SPRINGFIELD METRO STATION

- Dale City and Rosslyn-Ballston – riders will use a combined bus. Rosslyn-Ballston passengers may remain on the bus past Lindendale Commuter Lot to reach Prince William Parkway and Gainsley.
- Montclair, Route 1 and South Route 1 – riders will use a combined bus. Route 1 and South Route 1 passengers will transfer to a waiting bus at the Route 234 Park and Ride Lot to reach destinations along the Route 1 corridor. Montclair passengers should remain on the bus.
- Separate buses will be used for the Lake Ridge and Prince William Metro Direct routes.

### COMMUTER SNOW ROUTING WESTERN PRINCE WILLIAM

Linton Hall Manassas	Buses will operate regular routing. Manassas Metro Direct buses will operate along the regular route to/from the West Falls Church Metro station. No service to the Vienna Metro station. Buses will switch to afternoon routing on the first trip departing West Falls Church after 12 noon.
	Manassas OmniRide buses will operate regular routing in the morning and follow Manassas Metro Direct routing in the afternoon/evening.

LEAVING WEST FALLS CHURCH METRO STATION  
Manassas, Linton Hall, and Tysons Corner evening buses will originate at the West Falls Church Metro station.

### LOCAL SNOW ROUTING

#### OMNILINK

When the ESP is activated, ALL OmniLink off-route trips are cancelled for that day. To learn if the ESP has been activated, customers with off-route reservations should use any of the methods listed in this brochure. (See "How Will You Know the Plan is in Effect?")

Delays can be expected as road conditions change.

#### OMNILINK SNOW EMERGENCY ROUTES

OmniLink buses will stop at all signed PRTC bus stops where it is safe to do so except:

- Bus stops with a snowflake sticker.
- Dale City – No service along Darbydale Avenue
- Dumfries – No service along Neaseco Mills Road between Route 1 and Dale Boulevard or Old Triangle Road

#### CROSS COUNTY CONNECTOR

Buses will start routes at regularly scheduled times and operate along regular routes. Road conditions may cause delays.



**ALONG WITH WINTER WEATHER, THERE ARE OTHER CHALLENGING CONDITIONS THAT CAN IMPACT TRAVEL IN PRTC'S SERVICE AREA.** Traffic jams, road closures, political rallies, and miscellaneous events that simply can't be predicted can all affect PRTC's services. When events such as these occur, PRTC may find it necessary to implement the Emergency Service Plan (ESP).

### GENERAL EMERGENCY SERVICE PLAN For Non-Winter Weather Events

PRTC may implement the ESP in only the morning or afternoon and for only commuter and/or local bus services as circumstances dictate. We will do our best to notify customers through the established methods of communication and to get buses to the Metro stations as quickly as possible. If you haven't already done so, sign up at [PRTCtransit.org](http://PRTCtransit.org) to receive Rider Express email notices and text messages.

#### HOW DOES IT WORK?

- The ESP may be independently activated for commuter and/or local bus services based on emergency conditions.
- If the ESP is activated for OmniRide commuter buses in the morning, regular service may resume in the afternoon based on the status of the emergency; or the ESP may be activated in the afternoon even if buses operated on the regular schedule in the morning.
- OmniRide commuter buses will operate regular local routing to and from West Falls Church and Franconia-Springfield Metrolink stations only. (No service to or from DC, Pentagon, Crystal City, Rosslyn-Ballston, Tysons Corner or Vienna Metro.)
- If the ESP is activated in the morning, all OmniRide and Metro Direct buses will start their morning and midday MX bus routes according to published times.
- Midday MX buses will depart Metro stations at the time they are scheduled to depart the Pentagon.
- If the ESP is in effect in the afternoon, service will begin at 2 p.m. with buses leaving the Metro stations about every 20 minutes.
- All OmniRide service will end at 7:30 p.m.
- Prince William Metro Direct and Manassas Metro Direct buses will operate until the last published departure time.
- Tysons Corner and Linton Hall buses will leave the West Falls Church Metro station every hour on the hour, with the last buses departing at 7 p.m. and 7:30 p.m.

- If the ESP is activated for OmniLink and Cross County Connector services, it will be in effect for the rest of the day. Service will operate regular routes and schedules, but OmniLink local buses **WILL NOT** make off-route trips.

#### HOW WILL YOU KNOW THE PLAN IS IN EFFECT?

Under the General ESP, methods of communication will remain the same as described in the ESP For Winter Weather Events, though notification times may vary as circumstances dictate.

#### HOW MUCH WILL IT COST?

When **unanticipated** events cause PRTC to activate the ESP, bus rides will be **FREE** on the first day the plan is activated.

- When the ESP is in effect on OmniRide, fares are also free on Metro Direct buses; passengers on all other PRTC buses pay regular fares. Passengers completing their commutes by train or neighboring regional bus service must pay the appropriate fare on that service.
- When the ESP is in effect on OmniLink, fares are also free on the Cross County Connector; passengers on all other PRTC buses pay regular fares.

For scheduled events, or when the ESP is activated for multiple consecutive days, bus passengers will pay the current Metro Direct fare (for service to/from Metrolink stations) or the current local fare (for service beginning and ending in Prince William, Manassas and Manassas Park).

### ▶ COMMUTER EMERGENCY ROUTING

- In the morning, buses will operate as described in the ESP For Winter Weather Events, except that service will operate regular routing.
- Unless circumstances dictate otherwise, midday trips (MX buses) will operate along regular local routing to/from the Metro stations with return trips departing the station at the time they are scheduled to depart the Pentagon.
- In the afternoon, service from the Metrolink stations will be as described in the ESP For Winter Weather Events, except afternoon service will begin at 2 p.m. instead of 12 noon, unless circumstances dictate otherwise.

### ▶ LOCAL EMERGENCY ROUTING

Because OmniLink and Cross County Connector buses operate only in the local area, PRTC does not anticipate needing to implement the ESP For Non-Winter Weather Events for those services. However, if activation is required, buses will operate along standard routes and will serve all signed PRTC bus stops.



Whatever the situation, PRTC will make the decision to implement the Emergency Service Plan with your needs in mind. Our goal, as always, is to provide customers with safe, consistent transportation at maximum service levels.

We're available to answer your questions  
Monday - Friday  
5:30 a.m. to 8:30 p.m.  
(703) 730-6664 or  
(888) 730-6664  
[Omni@OmniRide.com](mailto:Omni@OmniRide.com)  
[www.PRTCtransit.org](http://www.PRTCtransit.org)



## ESP EMERGENCY SERVICE PLAN

Passenger Guide  
for Snow and Other  
Emergency Conditions



Potomac and Rappahannock  
Transportation Commission

November 2008

November 2008

The Marketing Department manages the RiderExpress service. This service allows customers to register their email addresses so they can receive transit updates and notifications. Software to enable customers to customize the messages they wish to receive was recently purchased and customers have been so informed. The Marketing Department also manages PRTC's web site ([www.prtctransit.org](http://www.prtctransit.org)) and notifies customers about planned outages and major service disruptions via the website as well as by email to the registered subscribers.

## 1.9 PUBLIC PARTICIPATION PROGRAM

PRTC maintains an active PRTC Adopted Public Participation Program, with the following objective:

To provide opportunities for the public to present its views on issues, initiatives, proposed plans, proposed budgets, etc. as required by federal and state statutes, regulations, and guidance so these views can be taken into account by the PRTC Board prior to final action.

The public participation policy is summarized below.

**Public Comment/Public Hearings:** Public comment must be invited on all subjects meeting the criteria listed below. A public hearing is mandatory for certain subjects, and the public may seek a public hearing for those subjects where a hearing is not mandatory. Public notification for mandatory public hearings and for public hearing opportunities must be advertised at least 30 days in advance of when the hearing would be held. If multiple hearings on one subject are contemplated, hearings are scheduled so that the last public hearing to be held is at least 30 days after the first advertisement. Public hearings must be held on workdays, either during the mid-day or evening depending on the expected ability for affected citizens to attend. The PRTC must provide a minimum of 14 days from the date of first advertisement for citizens to notify PRTC of their desire for a public hearing.

A Public Hearing is mandatory for the following:

- Adoption of a proposed Transportation Plan; and
- Adoption of a proposed Annual Budget.

Subjects warranting an invitation for public comment and the opportunity to request a public hearing are as follows:

- Modifications or changes to service which entail at least a 25% reduction of service hours or at least a 25% change in service routing on any given route or multiple routes collectively<sup>2</sup>;
- Significant changes/modifications in the standards of service;

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<sup>2</sup> In limited circumstances, such as changing market conditions, rapidly deteriorating service quality, significant disruptions due to construction or seasonal events, etc., PRTC may implement temporary service modifications exceeding the thresholds described in "a" without providing an opportunity for the public to seek a public hearing. Affected patrons will be given advance notification and PRTC will advertise the temporary service modification. If PRTC determines the need to make a temporary change permanent, PRTC will advertise 30 days in advance, and then hold a public hearing, if requested, no later than six months after the temporary service modification was implemented

- Proposed facility improvement projects as required by federal and state statutes, regulations, and guidance for such projects; and
- Proposed increases in fares.

Public participation requirements for other subjects are satisfied by the Public Participation Policy of both the Transportation Planning Board (TPB) and the Fredericksburg Area Metropolitan Planning Organization (FAMPO), which are the metropolitan planning organizations for the Washington D.C. and Fredericksburg regions, respectively. These subjects include the region's long range transportation plan; the region's transportation improvement program; and a program of projects for which federal funds will be sought.

**Advertisement of Public Hearing or the Opportunity for Public Hearing:** PRTC publishes advertisements at least once in general circulation newspapers within the transportation district, with the 30 days notice period beginning on the first day the notice is published. Announcements are also made in PRTC Board Meetings and on PRTC's web-site. A notice is also distributed on the buses. Additionally, all affected jurisdictions within the transportation district, elected officials and pertinent state agencies/personnel, and private operators within the transportation district are informed.

**Format of the Public Hearing:** Each public hearing follows a specified format, including making pertinent subject information available from the time of the advertised notice soliciting public comment at the PRTC offices, by mail, email or fax, and at the Public Hearing. PRTC staff presents details at the Public Hearing, and all citizens are given the opportunity to comment or ask questions, either orally at the Public Hearing or in a written format any time before the hearing and a management-specified period of time thereafter (up to seven days). PRTC takes detailed minutes and has all speakers and attendees of the meeting sign in. Detailed minutes and speaker and attendee sign-in sheets are kept on file at the PRTC offices for a record of the meeting, or in the case of federally sponsored projects, the Public Hearing is taped and transcribed for the record.

**Public Comment in the Event a Public Hearing is not Mandatory or Requested:** Public comments will be considered in written or emailed form when a public hearing is not mandatory or requested until as late as 30 days following the date that the advertised notice soliciting public comment appears in the general circulation newspapers as specified earlier.

**Evaluation of Public Comment and Implementation of Proposed Changes or Projects:** Following public hearings and the written comment period, staff summarizes the public comment received and presents the summary to the Commission prior to its decision, along with the transcript of the Public Hearing if transcription is required. The Commission will account for the public comment as one factor in the decision making process. Staff then implements changes, modifications, or projects that have been approved by the Commission.

## CHAPTER 2 – GOALS, OBJECTIVES & STANDARDS

This chapter presents PRTC's mission statement, identifies goals and objectives for the Transit Development Plan (TDP), and establishes a set of performance standards for the transit system. Currently, PRTC does not have formalized Goals, Objectives and Standards to steer its short range and long term activities. While best practices are employed daily and contractual performance standards are in place with the transit operator, First Transit, none of these have been documented to guide future transit service. This chapter of the TDP is designed to acknowledge and build upon existing activities to create a longer range vision for system-wide transportation improvement.

### 2.1 PRTC MISSION

PRTC's mission is to provide safe, reliable, and affordable transportation services that the community views as an important asset and source of pride.

### 2.2 TDP GOALS AND OBJECTIVES

This section provides specific goals and objectives for the six year TDP. Many of these goals and objectives are based on initiatives PRTC has identified as service strategies. Others are developed specifically for the TDP and are developed from other Virginia-based transit systems with a focus on safe, reliable and flexible transit service, as well as the reduction in congestion and pollution.

#### **Goal 1 – Provide a safe, secure and integrated transportation system that accommodates the diverse needs of the region**

Objective 1.1 - Maintain current levels of service and expand service hours on existing routes when warranted

Objective 1.2 - Identify and address transportation needs of the transit-dependent and those residents traveling to destinations that are conducive to transit use.

Objective 1.3 - Continue to promote alternative options for passengers who are not able to be served by traditional fixed-route transit

Objective 1.4 - Ensure staff has the procedural tools available to address system security issues and emergencies

- Continue to promote safety and security through employee training by ensuring all front-line employees, management, drivers and mechanics complete security awareness training and the drivers and other front-line employees complete terrorism training

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## **Goal 2 – Improve the customers’ transit experience, integrating technology where applicable**

Objective 2.1 - Maintain rigorous fleet maintenance, mid-life overhaul, and replacement program

Objective 2.2 - Continue to install additional shelters, or benches where shelters are impractical, as outlined in the PRTC Bus Shelter Siting Plan.

- Add shelters to stops with 15 daily boardings or more and in locations near specified “neighboring uses”

Objective 2.3 - Maintain on-time performance

Objective 2.4 –Acquire and install a new CAD/AVL system and launch real-time passenger information notifications.

Objective 2.5- Progress plans for the acquisition and installation of other advanced technologies as described in PRTC’s adopted technology plan

Objective 2.6- Complete work on the coordinated human services transportation plan under development in cooperation with the Area Agency on Aging, and proceed with implementation efforts as sanctioned by PRTC’s affected member local jurisdictions

Objective 2.7- Position PRTC to take full advantage of the region’s plans for high occupancy toll lanes that promise to open up new transit market opportunities.

## **Goal 3 – Continue to engage the community and expand customer outreach**

Objective 3.1 - Distribute schedule and system information in public places throughout the service area for residents and visitors

Objective 3.2 - Continue to promote ongoing public involvement process through surveys, discussion groups, public workshops and interviews with passengers and drivers

Objective 3.3 - Pursue marketing and advertising opportunities through major employers, the chamber(s) of commerce, community / homeowners associations, educational institutions, and clubs

Objective 3.4- Continue educational outreach efforts to acquaint primary and middle schoolers with PRTC’s bus services, and the promotion of PRTC’s teen summer pass

Objective 3.5- Executive Director to continue serving as a member of the Coalition on Human Services Board of Directors (at the Board’s pleasure), to continue knowledge sharing and collaboration

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**Goal 4 – Continue to develop and maintain an on-going performance monitoring program as identified in Section 2.3 of this chapter**

Objective 4.1 - Record and monitor monthly transit operations statistics and compile monthly report

Objective 4.2 - Review and assess system performance on an ongoing basis to determine if any corrective measures should be considered

**Goal 5 – Promote and implement practices to improve the regional quality of life through reduced pollution and congestion**

Objective 5.1 - Evaluate, and where cost effective, implement the use of “greener” vehicles and facilities

Objective 5.2 - Participate in public awareness campaigns in conjunction with the American Public Transportation Association (APTA) and the Virginia Transit Association (VTA) to promote the environmental benefits of using public transit

- Provide an overview of transit benefits on PRTC website
- Place public service announcements and promotional advertisements in newspapers (in English and Spanish)
- Sponsor promotional events, such as an annual Clean Commute Day offering free transit rides

Objective 5.3 - Continue to seek opportunities to partner with local and regional organizations to promote multimodal transportation in the region.

Objective 5.4 - Continue to proactively seek opportunities to present an overview of the services provided and planned to key stakeholders and community groups

**Goal 6 – Improve coordination between transportation, land use and economic development activities**

Objective 6.1 - Continue to encourage coordination and consistency with local, regional and commonwealth plans for the future provision of public transit

Objective 6.2 - Support land development regulations that encourage transit-friendly development

Objective 6.3 - Support incentives for developers and major employers to promote public transportation and exploit proffer opportunities

Objective 6.4 - Support improved connectivity of sidewalks and bicycle facilities along existing and future public transportation corridors

## 2.3 SERVICE PERFORMANCE MEASURES

Performance measures guide the decision making process by revealing underperforming routes, as well as routes that could support additional service. Effective performance measures require complete and consistent data collection. Ideally, performance measures are collected and calculated on a route-level basis. This section identifies several performance measures to measure the efficiency, effectiveness and reliability of PRTC's transit service.

This section includes some of the measures identified in the annual performance review that are applicable to the TDP as well as industry wide service performance measures. The performance measures provided in this TDP are separated between OmniLink and OmniRide service where appropriate and are based on five-year averages covering fiscal years 2005 through 2009.

Ridership service performance measures evaluate the effectiveness of the service. Table 2-1 shows the average passenger trips, revenue hours, revenue miles, operating costs, farebox revenues, and gross operating subsidy for fiscal years 2005 through 2009 used to calculate the service performance measures.

**Table 2-1: FY 2005-2009 Annual Averages**

Service Type	Passenger Trips	Revenue Hours	Revenue Miles	Operating Costs	Farebox Revenues	Gross Operating Subsidy
OmniRide	1,746,974	85,796	2,056,677	12,680,901	5,823,565	6,876,914
OmniLink	903,195	58,355	762,144	7,761,706	6,330,970	7,070,847
Systemwide	2,650,169	144,150	2,818,821	5,769,484	6,494,845	13,947,761

Productivity measures should be monitored monthly. Corrective measures should be investigated if performance falls below these levels for three consecutive months, once seasonal and other external factors are accounted for. Corrective measures could include service adjustments (frequencies, alignments and/or span of service), and measures to promote ridership (such as marketing efforts/promotions).

### Passenger Trips per Revenue Hour

The ratio of passenger trips per revenue hour is an industry wide standard measure of effectiveness. When hours of service are increased, this measure reveals the effectiveness of those changes. PRTC service should maintain levels equivalent to or higher than the five-year average performance measures shown in Table 2-2.

**Table 2-2: Passenger Trips per Revenue Hour**  
Performance Measures

Service Type	Passenger Trips per Revenue Hour
OmniRide	20.36
OmniLink	15.48

### Passenger Trips per Revenue Mile

Passenger trips per revenue mile relates to the effectiveness of the service based on passenger demand versus service supplied. PRTC OmniLink and OmniRide service should maintain levels equivalent to or higher than the five-year average performance measures shown in Table 2-3.

**Table 2-3: Passenger Trips per Revenue Mile**  
Performance Measures

Service Type	Passenger Trips per Revenue Mile
OmniRide	0.88
OmniLink	1.21

### Farebox Recovery Ratio

The farebox recovery ratio measures farebox revenues as a percentage of operating expenses. Corrective measures could include fare increases, actions to promote ridership, and/or reduced service costs. PRTC OmniLink and OmniRide service should maintain levels equivalent to or higher than the five-year average performance measures shown in Table 2-4.

**Table 2-4: Farebox Recovery Ratio**  
Performance Measures

Service Type	Farebox Recovery Ratio
OmniRide	44.7%
OmniLink	9.2%

### Gross Operating Subsidy/Passenger Trip

This measure reveals the cost effectiveness of the service based on the gross operating subsidy per passenger trip. Changes in the ratio reveal the impact of operating costs on the level of service provided to PRTC customers. PRTC OmniLink and OmniRide service should maintain levels equivalent to or lower than the five-year average performance measures shown in Table 2-5.



**Table 2-5: Gross Operating Subsidy per Passenger Trip**  
Performance Measures

Service Type	Gross Operating Subsidy per Passenger Trip
OmniRide	\$4.13
OmniLink	\$7.92

## Vehicle Load

PRTC identifies a load standard of 1.0 for OmniRide routes, as the PRTC governing board has expressed a preference for all commuter bus riders being seated under normal circumstances. The load standard for OmniLink routes is 1.2. PRTC's adopted overcrowding policies for OmniRide and OmniLink services are as follows.

### OmniRide Policy

- PRTC will examine and introduce ways to alleviate overcrowding on express buses when ridership on any given trip exceeds the seated capacity of the bus normally assigned to that route an average of at least once per week over a period of about a month (excluding unusual incidents). The largest capacity bus seats 57 passengers.

### OmniLink Policy

- Upon receiving reports or through direct observation of overcrowding on at least two days on the same trip, PRTC will ensure the problem trip is monitored for three to five days to verify overcrowding.
- Overcrowding is defined as buses exceeding maximum seating load by more than 20% with riders standing for more than 15 minutes.

## 2.4 SERVICE RELIABILITY MEASURES

While service reliability data is difficult to collect and analyze in lieu of a CAD/AVL system, once a system of this sort is implemented as is planned, it can provide useful information for needed changes and improvements to service. Reliability can be measured objectively through on-time performance standards and vehicle reliability, as well as passenger surveys and complaint monitoring.

PRTC conducts monthly, quarterly, and annual reviews of First Transit's performance to assess contract compliance, determine whether liquidated damages are warranted, and verify the accuracy of monthly billings before payment. As part of the annual reviews of First Transit's performance, there is also an assessment of specified measures to gauge whether incentive payments will be paid. As part of its contract with PRTC, First Transit can receive incentive payments for: (1) low employee turnover (35% or better), (2) service quality as identified in surveys, (3) confining the incidence of service interruptions, complaints, and accidents to specified levels, and (4) favorable passenger revenue variances. Additionally, First Transit is subject to liquidated damages for missed trips, late or early trips, inadequately trained operators, unintended use of strategic vehicles and operators, communication and

late or inaccurate reports. Many of those measures are identified below as relevant to the TDP and build upon the incentive targets identified in the FY 2009 performance review.

## **On-Time Performance**

On-time performance can vary substantially due to traffic conditions and other factors. On time performance can be measured through manual random checks of key timepoints or through the use of technology installed on buses. As noted elsewhere in the TDP, PRTC is in the process of installing and implementing a CAD/AVL system on all buses. Once the system is operational, PRTC intends to establish the most appropriate definitions of on-time performance for both the OmniRide and OmniLink services and establish on-time performance goals based on external factors and known trends.

## **Customer Satisfaction**

PRTC measures customer satisfaction based on passenger surveys and complaints received on the service.

**Excellent Rating:** Passenger surveys provide PRTC with direct passenger input on perceived service quality. Currently, PRTC measures customer satisfaction based on customer feedback on the specified facets of service as well as the overall quality of service, and incentives are earned if the incidence of “excellent” ratings on the “overall quality of service” measure falls within specified percentages as shown below. PRTC’s current “incentive earning” ranges for OmniRide and OmniLink are as follows:

- OmniRide: 70-80% Excellent Rating
- OmniLink: 73-83% Excellent Rating

This standard should continue to be monitored as often as surveys are undertaken, with corrective action investigated if the rating falls from one survey to the next by more than 5%.

**Average Monthly Complaints per 10,000 Passenger Trips:** PRTC also tracks customer complaints based on those complaints that are within the transit provider’s control. The average monthly complaints per 10,000 passenger trips are measured on a monthly basis, with corrective action investigated as the average rises above the target. PRTC’s current “incentive earning” ranges for OmniRide and OmniLink are as follows:

- OmniRide: 7.75-6.0 Complaints per 10,000 Trips
- OmniLink: 5.75-4.0 Complaints per 10,000 Trips

This standard should continue to be monitored monthly, with corrective action investigated if the complaint ratio increases from one month to the next by more than 5%.

## CHAPTER 3 - SERVICE AND SYSTEM EVALUATION

As discussed in Chapter 1, PRTC offers a comprehensive network of commuter and local route deviation bus services in Prince William County and the Cities of Manassas and Manassas Park, as well as a free ridematching service. This chapter provides an evaluation of the existing service and includes an analysis of existing ridership, fare utilization, a historical performance evaluation over the past five years, peer review, onboard survey, recent Title VI and Triennial Review, service area coverage, a land use summary, a review of bicycle and pedestrian plans, and a summary of PRTC's intelligent transportation systems plan.

### 3.1 EXISTING SERVICE EVALUATION

The following is an analysis of the existing ridership for PRTC bus service, using FY 2009 (July 2008 – June 2009) ridership data collected by PRTC for use in National Transit Database (NTD) reporting. In FY 2009, 3,179,244 passengers rode PRTC service. Figure 3-1 shows total annual PRTC ridership by route type. The OmniRide weekday commuter service had the highest percentage of ridership at 53% of the total, followed by OmniLink weekday local service at 32%, Metro Direct at 12%, and the Cross County Connector at 3%.

**Figure 3-1: FY 2009 Annual Ridership by Route Type**

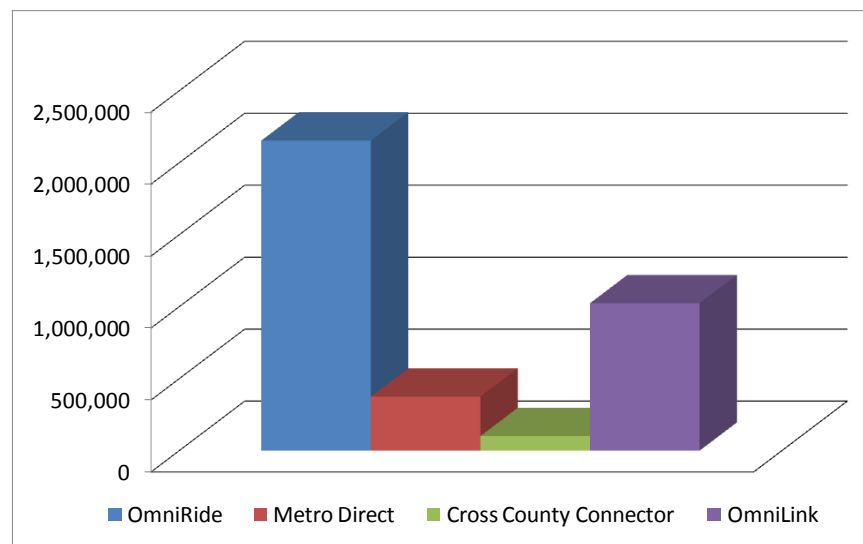


Figure 3-2 shows monthly PRTC ridership by route type by month. Higher than average ridership in the fall of 2008 reflects the extraordinary rise in retail gas prices in late 2008, which prompted many to switch from driving to taking transit, at least temporarily, if not permanently. By December 2009, gas prices had plummeted from an all time high to a five-year low. Also in December 2008, PRTC raised fares to defray higher-than-budgeted fuel costs, higher operating costs owing to the fact that service was added to lessen overcrowding, and unbudgeted capital costs for lease-purchased buses necessary to add service.

**Figure 3-2: FY 2009 Monthly Ridership**

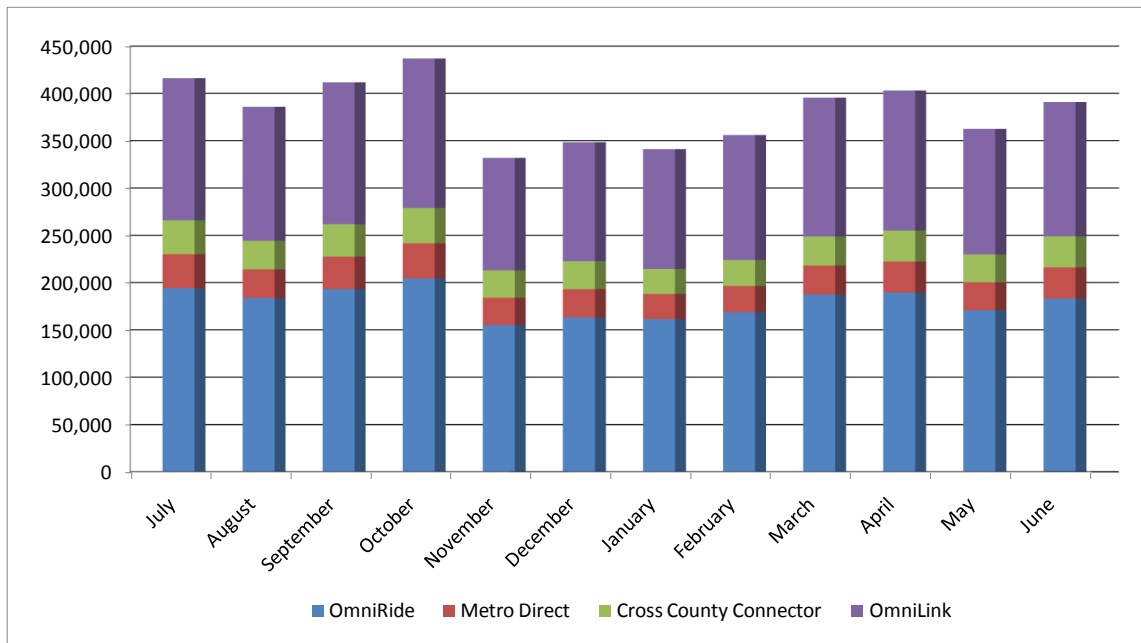
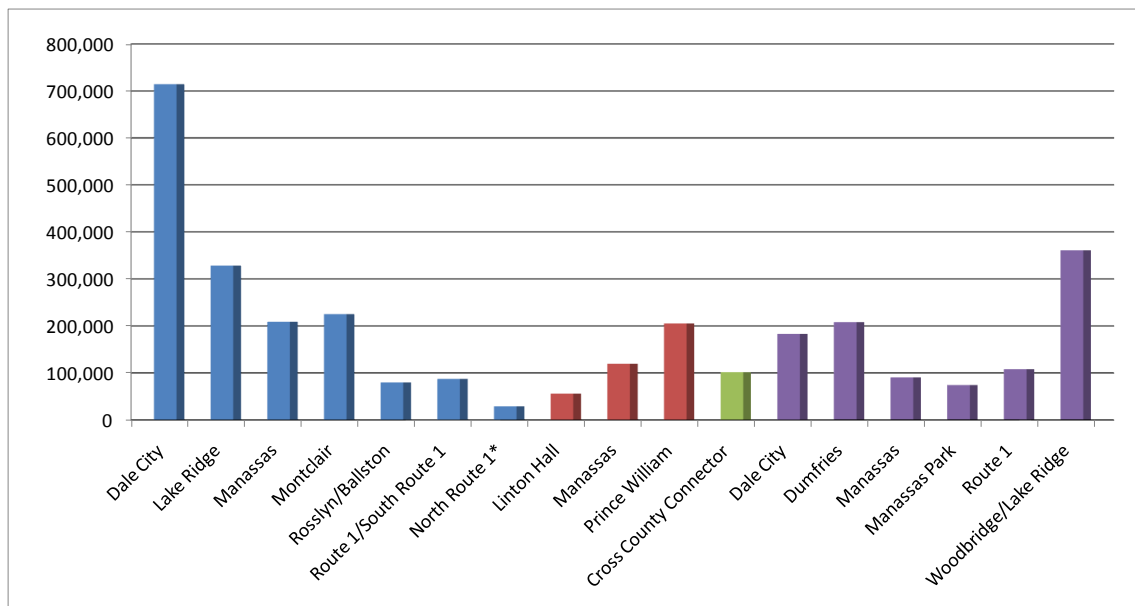


Figure 3-3 follows, which displays the total annual ridership by route. By far, the top route in the system for total ridership is the Dale City OmniRide route. The Woodbridge/Lake Ride OmniLink and Lake Ridge OmniRide routes had the second and third highest total ridership, respectively. It should be noted that the Tysons Express OmniRide route was not yet in operation in FY 2009, and the North Route 1 OmniRide route was not in operation the full fiscal year.

**Figure 3-3: FY 2009 Annual Ridership by Route**



## 3.2 HISTORICAL PERFORMANCE EVALUATION (FIVE-YEAR ANALYSIS)

This section evaluates the historical performance of PRTC's bus system based on data reported by PRTC to the NTD over the past five years (FY 2005-2009). Tables 3-1 through 3-3 display PRTC's service data for the five year period for OmniRide, OmniLink, and the system overall. Over the five-year period, the overall number of unlinked passenger trips grew by 52%, while revenue-hours only grew by 30%, reflecting strong demand for the service. While total operating expenses, as defined by the NTD, grew by almost 68% over the same period, fare revenues grew by 71%.

**Table 3-1: OmniRide Historical Annual Statistics**

Performance Measures	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	% Increase from FY 2005 to FY 2009
Unlinked Passenger Trips	1,392,432	1,608,583	1,738,556	1,840,716	2,154,585	54.7%
Vehicle Revenue Hours	73,185	77,238	87,776	93,640	97,139	32.7%
Fare Revenues	4,617,547	5,230,928	5,641,332	5,636,722	7,893,354	70.9%
Operating Subsidy	4,733,931	5,969,606	6,767,159	8,479,607	8,434,267	78.2%
Total Operating Expenses	9,351,478	11,200,534	12,408,491	14,116,379	16,327,621	74.6%

**Table 3-2: OmniLink Historical Annual Statistics**

Performance Measures	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	% Increase from FY 2005 to FY 2009
Unlinked Passenger Trips	694,366	843,407	944,917	1,008,626	1,024,659	47.6%
Vehicle Revenue Hours	49,831	54,780	60,670	63,225	63,267	27.0%
Fare Revenues	476,285	602,755	739,606	797,285	838,363	76.0%
Operating Subsidy	5,413,165	6,368,569	7,211,175	7,946,118	8,415,209	55.5%
Total Operating Expenses	5,889,450	6,971,324	7,950,781	8,743,403	9,253,572	57.1%

**Table 3-3: Overall PRTC Historical Annual Statistics**

Performance Measures	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	% Increase from FY 2005 to FY 2009
Unlinked Passenger Trips	2,086,798	2,451,990	2,683,473	2,849,342	3,179,244	52.4%
Vehicle Revenue Hours	123,016	132,018	148,446	156,865	160,406	30.4%
Fare Revenues	5,093,832	5,833,683	6,380,938	6,434,057	8,731,717	71.4%
Operating Subsidy	10,147,096	12,338,175	13,978,334	16,425,725	16,849,476	66.1%
Total Operating Expenses	15,240,928	18,171,858	20,359,272	22,859,782	25,581,193	67.8%

*Note: For the purpose of historical performance analysis, the Cross County Connector route was considered part of the OmniRide system.*



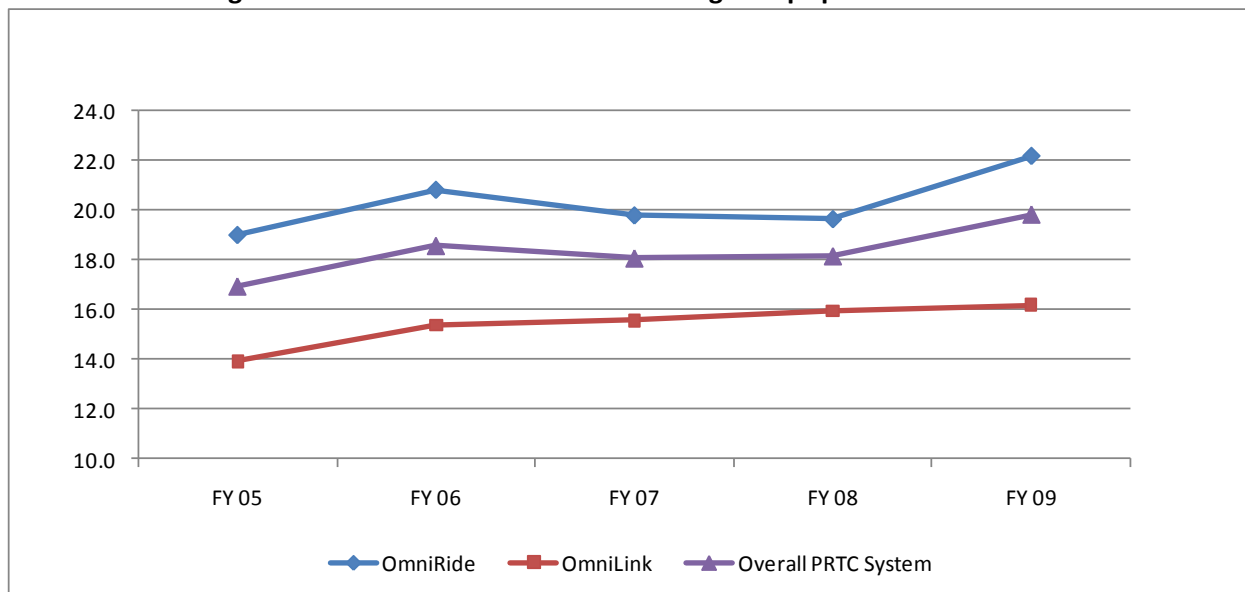
Three evaluation measures derived from these service statistics include service effectiveness, service efficiency, and cost effectiveness. Each of these is discussed in the sections below.

### 3.2.1 SERVICE EFFECTIVENESS

The number of passenger trips per revenue-hour is one measure of how effectively the service is provided. Historically, service effectiveness has increased for both the OmniRide and OmniLink services, as shown in Figure 3-4. Passenger trips per revenue-hour for the whole PRTC system increased by 17% between FY 2005 and FY 2009. Service effectiveness for OmniRide and OmniLink bus systems (analyzed individually) increased by 17% and 16%, respectively, during the same period.

The dip in FY 2007 for OmniRide's service effectiveness can be attributed to the fare increase enacted that spring. While fare increases usually reduce ridership, the fare increase for OmniRide was modest and the transit system ended up with more passenger revenue, notwithstanding the ridership loss. Fares were not increased for OmniLink in FY 2007, and peak period service frequency on the easterly OmniLink routes was increased from once every 45 minutes to once every 30 minutes. Consequently, passenger trips per revenue-hour improved modestly.

**Figure 3-4: Service Effectiveness – Passenger Trips per Revenue-Hour**



The slight dip in FY 2008 for OmniRide's service effectiveness was a consequence of two things: the need to re-time OmniRide routes in recognition of the fact that traffic congestion had slowed bus speeds; and the need to add additional scheduled trips to ease overcrowding. Both actions had the effect of increasing revenue-hours without a commensurate increase in passenger trips, causing the ratio to dip.

The rise in FY 2009 ridership happened despite another fare increase, as soaring fuel prices drove many people to seek refuge from \$4.00/gallon gasoline by becoming transit riders. A further catalyst was the fact that the federal stimulus bill signed into law in January 2009 increased the "commuter benefit" from \$120/month to \$230/month. All federal employees receive that benefit, and those residing in the PRTC service area were able to ride PRTC's bus services (as well as VRE) essentially for free. The increased benefit is currently scheduled to end in January 2012. To address major overcrowding, PRTC

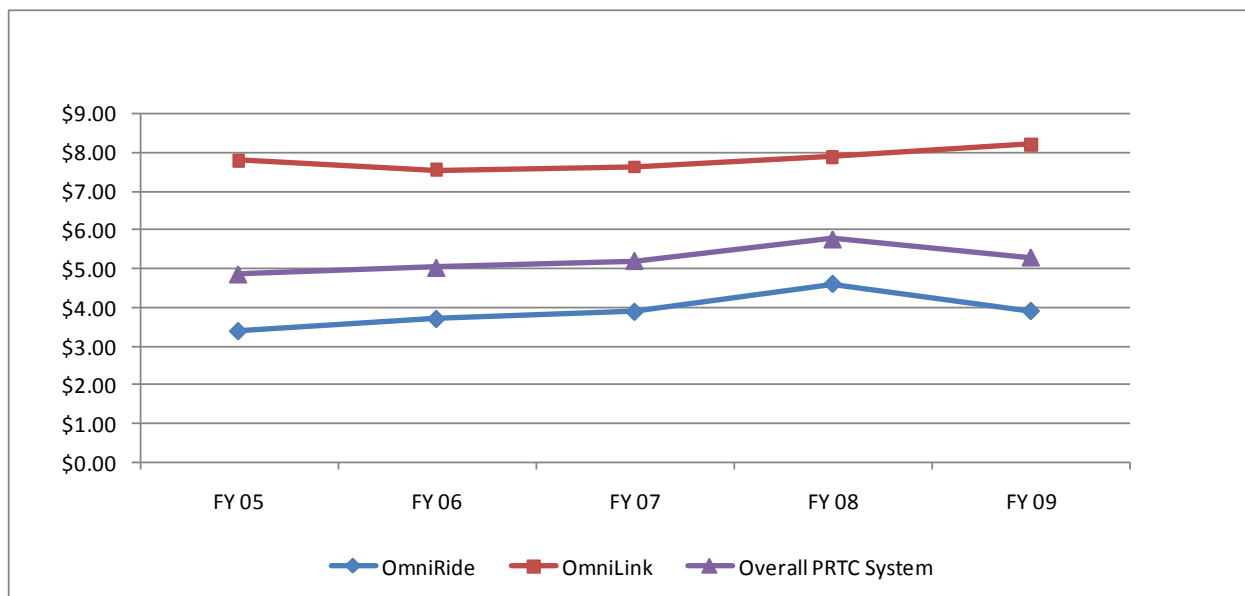
took the unorthodox step of increasing fares in order to bankroll more hours of service and to lease-purchase four more buses.

### 3.2.2 COST EFFECTIVENESS

The ratio of gross operating subsidy per passenger trip reflects how cost effectively the agency is providing the service. Gross operating subsidy is defined as operations and maintenance (O&M) costs less passenger revenues. These numbers are not adjusted for inflation. Figures 3-5 shows that cost effectiveness declined for both systems between FY 2005 and FY 2009. Gross operating subsidy per passenger trip for OmniRide increased by 15% and for OmniLink by 5% from FY 2005 to FY 2009, for an overall system increase of 9%.

The slight rise in gross operating subsidy in FY 2007 was a result of PRTC's bus contractor, First Transit, seeking a financial accommodation from PRTC in the wake of a labor negotiation with AFSCME (which represents the operators and the mechanics). PRTC was persuaded that costs were being incurred which could not have been reasonably foreseen at the time of the contract award, and an accommodation was made, raising the gross operating subsidy per passenger trip. This event occurred in the spring of 2007, so there was a partial effect in FY 2007 and a full year's effect in FY 2008.

**Figure 3-5: Cost Effectiveness – Gross Operating Subsidy per Passenger Trip**



In addition to the impact of the annualization of the change order discussed above, there was a further rise in gross operating subsidy in FY 2008 due to a second change order request PRTC assented to in which the "incentive" provisions of First Transit's contract were enhanced to build in CPI adjustments to the potential incentive earnings. This was in recognition of the growth in ridership, service levels, and First Transit's work-force since the commencement of the contract, resulting in performance-based incentive earnings per person diminishing for the same level of exemplary accomplishment. As mentioned above, in FY 2008 OmniRide routes were also re-timed to account for the effect of traffic congestion, and additional scheduled trips were added to ease overcrowding. Since gross operating

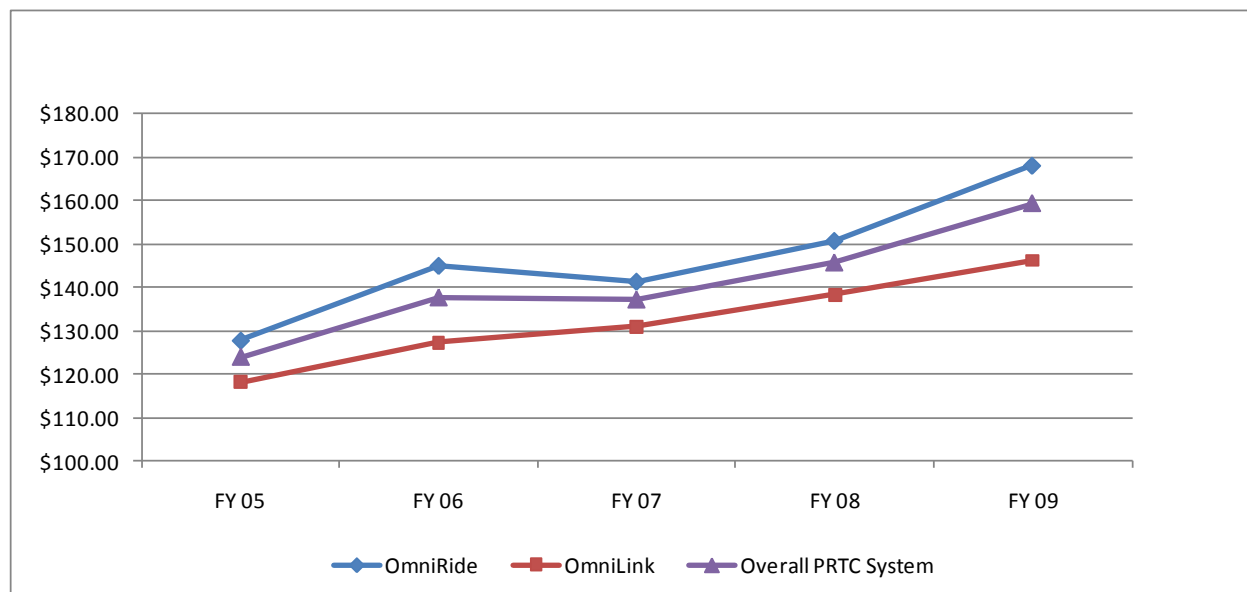
subsidy increased but passenger trips were not directly impacted by these factors, the cost effectiveness declined in FY 2008.

In FY 2009, the ridership gain on OmniRide was so great that it more than offset the increased cost of change orders, additional service hours, and the lease-purchased buses needed to ease overcrowding. The decrease in OmniLink cost effectiveness in FY 2009 was a consequence of the recession and associated layoffs which hit the Prince William area especially hard, particularly in the service industries whose workers make up a large portion of PRTC's OmniLink bus ridership.

### 3.2.3 SERVICE EFFICIENCY

The measure of O&M costs per revenue-hour provides an overview of how efficiently the service is operated. These numbers are not adjusted for inflation. Figure 3-6 shows that service efficiency has declined significantly for both systems. Between FY 2005 and FY 2009, O&M costs per revenue hour increased by 32% for OmniRide and by 24% for OmniLink, resulting in an increase of 29% for the overall PRTC system. The decrease in service efficiency is a result of the increase in O&M costs explained above.

**Figure 3-6: Cost Effectiveness – O&M Costs per Revenue-Hour**



## 3.3 PEER REVIEW

For this study, a peer system review was prepared to compare PRTC's system characteristics and performance measures with seven other transit systems that have comparable size and operational characteristics. A supplemental peer review was undertaken to compare PRTC's OmniLink service to five other transit systems that provide flex bus service. These comparisons or peer analyses are used to gauge where deficiencies occur and improvements could be warranted. The detailed peer analysis which includes both the primary and supplemental peer reviews is included as a technical memorandum in Appendix B.

While it is difficult to factor in the unique nature of Prince William County's location and demographic and system characteristics, seven peer systems have been identified and used that best replicate PRTC's overall service. These peer systems are: Transit Authority of Northern Kentucky; Cobb County Department of Transportation, GA ; Gwinnett County Board of Commissioners, GA; Laketran, OH ; Johnson County Transit, KS; San Joaquin Regional Transit District, CA; and Golden Gate Bridge, Highway & Transportation, CA.

The primary peer review analysis determined that PRTC operated more express or commuter routes than peer systems (71% of PRTC's routes are express/commuter routes compared to a peer average of 42% express/commuter routes). However, PRTC provided less service per capita and revenue miles than peer systems. PRTC was more cost efficient than the peer average on a passenger-trip basis. Farebox recovery rate was 40 percent more than the peer average.

Key findings of the peer analysis were as follows:

- **Vehicle Utilization:** PRTC's revenue-miles and revenue-hours per peak bus were 12% and 23% lower than the peer average, respectively. However, PRTC's low vehicle utilization relative to its peers is largely attributable to PRTC's high proportion of express/commuter service compared to local service. All the peers exhibited high spare ratios in comparison to FTA guidelines of 20 percent spares.
- **Service Supplied:** PRTC operates 20% fewer fixed routes than the peer average, but 36% more express/commuter routes than the peer average. In comparison to its peers, PRTC operates fewer service hours and revenue-miles per capita and per square mile than the peer averages. This measure is impacted by local policy and budget decisions.
- **Ridership Productivity:** The passenger trips per capita for PRTC are slightly higher than the peer average. Despite the fact that PRTC has fewer revenue-hours per capita than most of its peers, the productivity of those revenue hours is better than the peer average. PRTC's productivity in terms of passenger trips per revenue-hour is 29% higher than the peer average. PRTC serves 0.95 passenger trips per revenue-mile which is 12% more than its peers. Extremely congested conditions on I-95 and I-66, a long-established model HOV system, and the high incidence of employer-sponsored commuting benefits in the DC region has a significant impact on these measures. A majority of PRTC's revenue-miles are accounted for by OmniRide express/commuter bus service, and seats are filled once by passengers riding from end to end rather than multiple riders in each seat as is characteristic of local bus systems. This reduces the number of passenger trips and impacts these measures. These measures are also dependent on the population density of the service area.
- **Cost Efficiency:** PRTC was more cost efficient than the peer average on a passenger trip basis but was less cost efficient per revenue-hour and revenue-mile. The high incidence of "dead-head miles" or miles when buses travel without people aboard impacts PRTC's cost efficiency.
- **Farebox Revenues:** PRTC's farebox recovery rate was 40% more than the peer average.

- **O&M Funds:** PRTC's FY 2008 operating budget was 21.7% less than the peer average. PRTC derived a significant share of its operating revenue from fares (28%) and local assistance (motor fuels tax; 39%), in line with the average of peer systems. State operating assistance for PRTC (16% of the total operating budget) was twice the peer average (8%).

The supplemental peer review compares PRTC's OmniLink bus system to five bus systems that provide flexible bus service. The bus systems selected as OmniLink's peers were: Annapolis DOT, MD; Fredericksburg Regional Transit, VA; St. Joseph Transit, MO; Mountain Line Transit Authority, WV; and Ottumwa Transit Authority, IA.

The supplemental peer review shows that OmniLink provides much less service per capita than other peer systems, but exhibits high ridership productivity measures compared to the peer average. OmniLink serves a larger number of passengers compared to the peer average. However, since the service area and population served are larger than the peer averages, this reduces the impact of the service provided.

### 3.4 ON-BOARD SURVEY FINDINGS

In the spring of 2008, NuStats conducted an extensive on-board transit rider survey on behalf of the National Capital Region Transportation Planning Board (TPB), which is the Metropolitan Planning Organization of the Metropolitan Washington Council of Governments (MWCOG). This survey effort included transit systems in and around the greater Washington D.C. metropolitan area, including systems in the District, Maryland, and Virginia. The survey instrument and method were developed based on previous MWCOG bus surveys. The purpose of this coordinated survey was to gain a comprehensive dataset that could be utilized for both local transit and regional travel planning and modeling in the greater Washington, D.C. regional area.

NuStats' regional survey included riders on OmniLink and OmniRide routes, which are the bus services provided by PRTC. A total of 16 PRTC routes were surveyed: seven OmniLink routes and nine OmniRide routes. Data for PRTC's Cross County Connector route is included as part of the OmniLink analyses, and data for the Metro-Direct routes is included as part of the OmniRide analyses. Surveys were distributed during all time periods of the day: AM peak, mid-day, PM peak, and evening hours.

There were a total of 254 responses from PRTC riders in the MWCOG survey. A complete discussion of the survey and results is provided in Appendix C.



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### 3.5 TITLE VI PROGRAM

PRTC's Title VI program is updated every three years, and includes the following elements:

- Several public outreach activities between May 2006 to September 2008 by PRTC and Virginia Railway Express (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 CFR U.S.C. 5307.
- Demographic and service profile maps and charts, and recent PRTC and VRE Customer Surveys.
- System-wide Service Standards.
- Two fare increase evaluations for PRTC - one that was implemented on April 2, 2007 and the other that was implemented on December 15, 2008. <sup>3</sup>
- Customer Satisfaction Surveys for PRTC done three times a year and for VRE done annually.

PRTC's most recent Title VI submittal is available at PRTC's offices.

### 3.6 TRIENNIAL REVIEW

A Triennial Review of PRTC was completed in August 2008. Table 3-4 below 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.

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<sup>3</sup> A Title VI analysis for the fare increase implemented in July of 2010 was also undertaken, and will be incorporated in the next Title VI update in 2012.

**Table 3-4: Summary of Findings of the FY 2008 Triennial Review**

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				

Review Area	Finding	Deficiency	Corrective Action	Response Days/Date	Date Closed
13. Public Comment for Fare and Service Changes	ND				
14. Half Fare	ND				
15. ADA	ND				
16. Charter Bus	ND				
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

## 3.7 SOCIOECONOMIC ANALYSIS OF THE SERVICE AREA

Socioeconomic characteristics such as population, households and employment are essential to identifying transit needs and developing transit services which address those needs. The section focuses on locations within PRTC's service area that are likely to be most supportive of transit, using household, population and employment estimates provided by the Prince William County of Virginia (PWC) based on Traffic Analysis Zones (TAZs). Population and employment estimates for 2010, 2015 and 2020 by TAZ from PWC were used to estimate the number of households, residents and employees that live and work within Prince William County.

### 3.7.1 SOCIOECONOMIC TRENDS

Table 3-5 shows the estimated households, population and employment within the County. The number of households in Prince William County is expected to grow 11% between 2010 and 2015, and another 9% between 2015 and 2020. Over the full decade, households are expected to increase by 32,067 (from 157,610 to 189,677) or approximately 20%. Similarly, from 2010 to 2020, the population in Prince William County is expected to increase by 78,251 persons (from 463,121 to 541,372) or approximately 17%.

**Table 3-5: Prince William County Households, Population and Employment**

Year	Households	Population	Employment
<b>2010</b>	157,610	463,121	152,264
<b>2015</b>	174,571	504,310	175,027
<b>2020</b>	189,677	541,372	197,682

Employment is expected to grow even faster than either households or population. The number of workers in Prince William County is expected to grow 15% between 2010 and 2015, and another 13% between 2015 and 2020. Over the full decade, employment in the County is expected to increase by 45,418 (from 152,264 to 197,682) or approximately 30%.

### 3.7.2 PROPENSITY FOR TRANSIT

For mass transit to be successful there needs to be “mass” or density. Fixed-route transit services are generally successful in areas with high household and/or employment densities. Thus, one means of evaluating transit is to identify areas served that have attained at least the minimum densities, or thresholds, sufficient to be supportive of fixed route transit service. Using density thresholds, transit propensity is estimated for 2010, 2015 and 2020 using household, population and employment data for each TAZ.

The methodology for this approach is derived from the *Transit Cooperative Research Program’s (TCRP) Transit Capacity and Quality of Service Manual – 2nd edition (2003)* (the “Manual”), which identifies a density of three households per acre and/or four jobs per acre as the thresholds to qualify as a transit-supportive environment. Figures 3-7 through 3-24 display 2010, 2015 and 2020 household densities, population densities and employment densities for the PRTC service area. PRTC service currently serves most transit supportive areas. This is merely a measure of coverage, however, as distinct from other transit quality of service measures delineated in the Manual.

Figure 3-7: 2010 Household Density- Eastern Prince William County

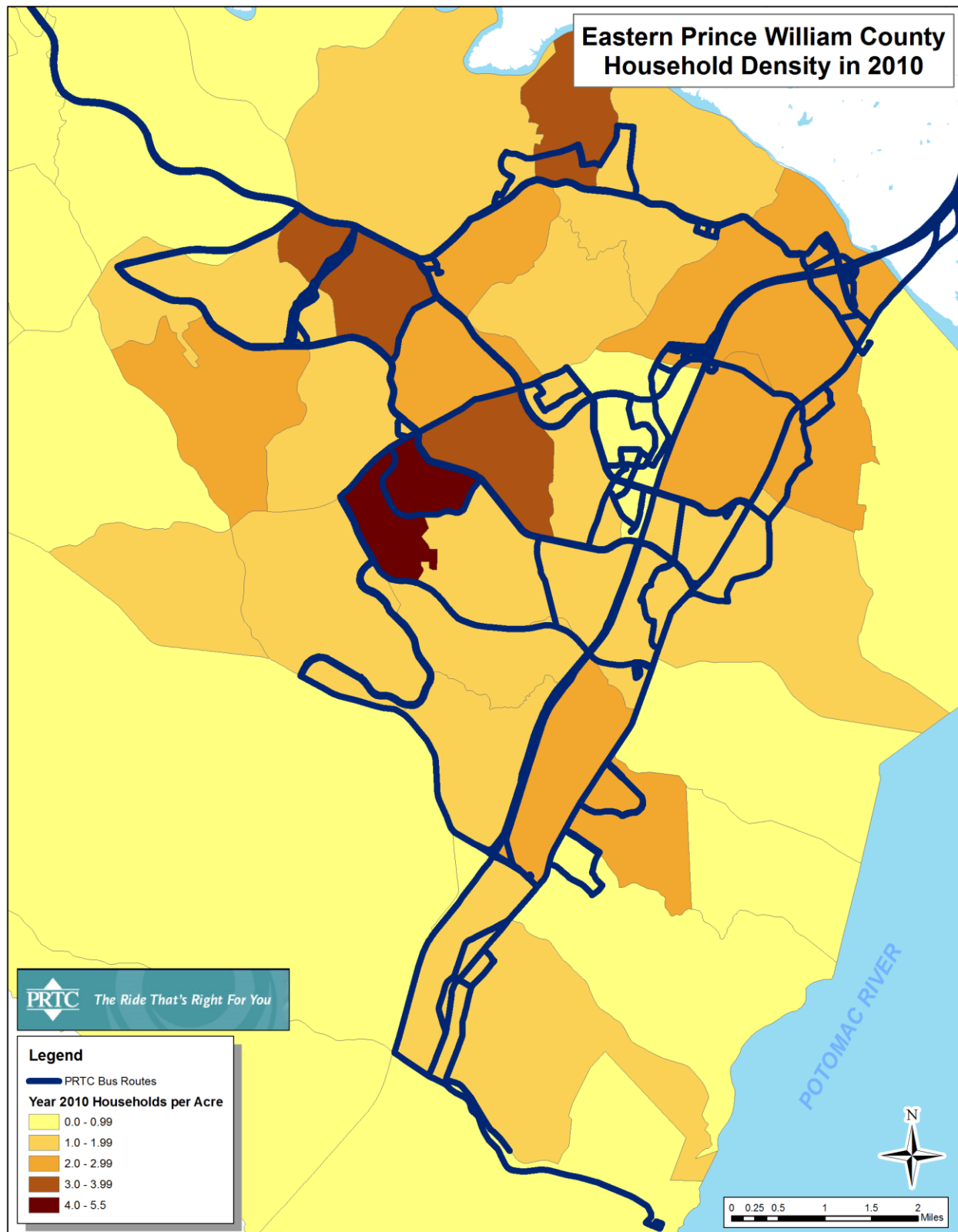




Figure 3-8: 2010 Household Density – Western Prince William County

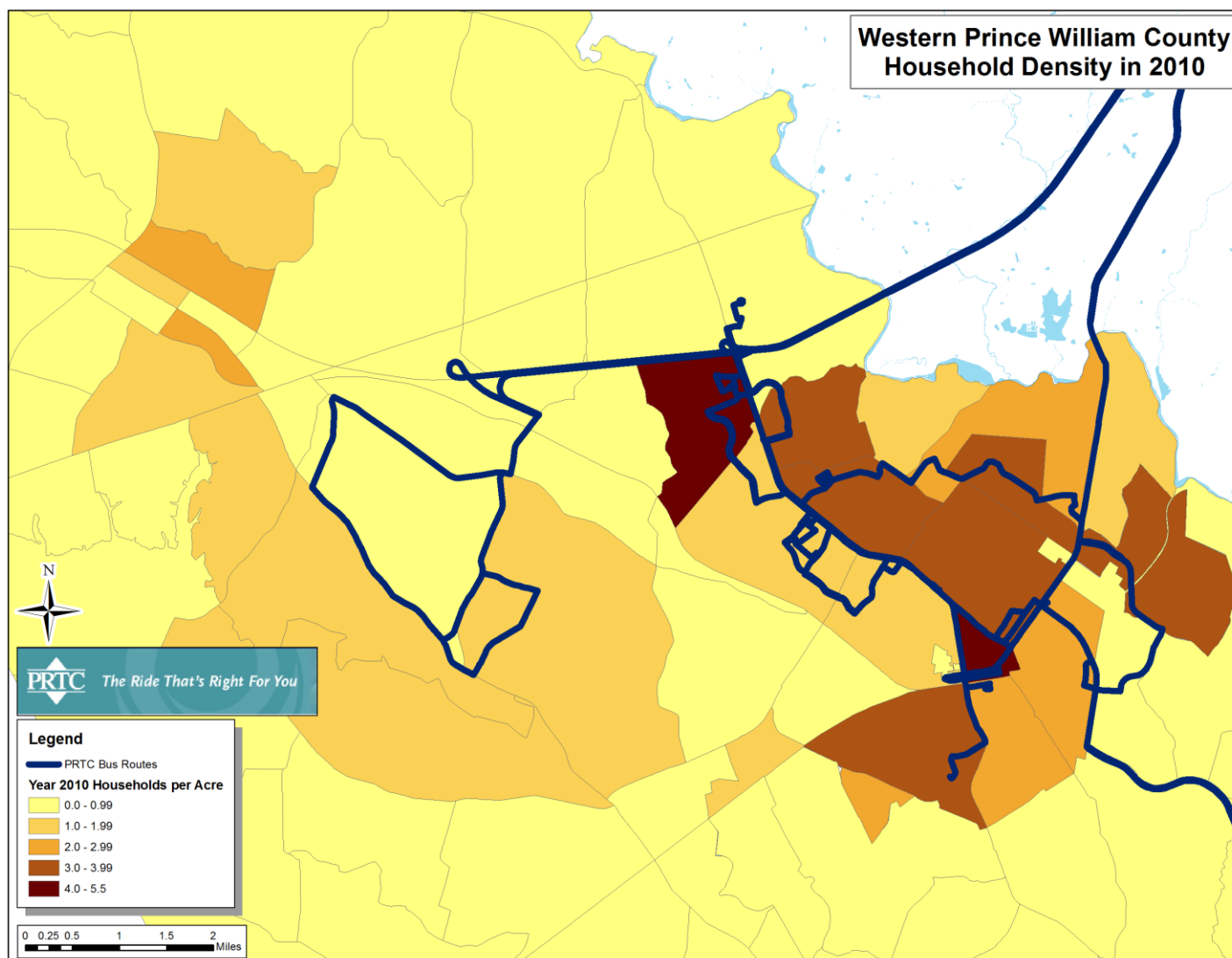


Figure 3-9: 2015 Household Density- Eastern Prince William County

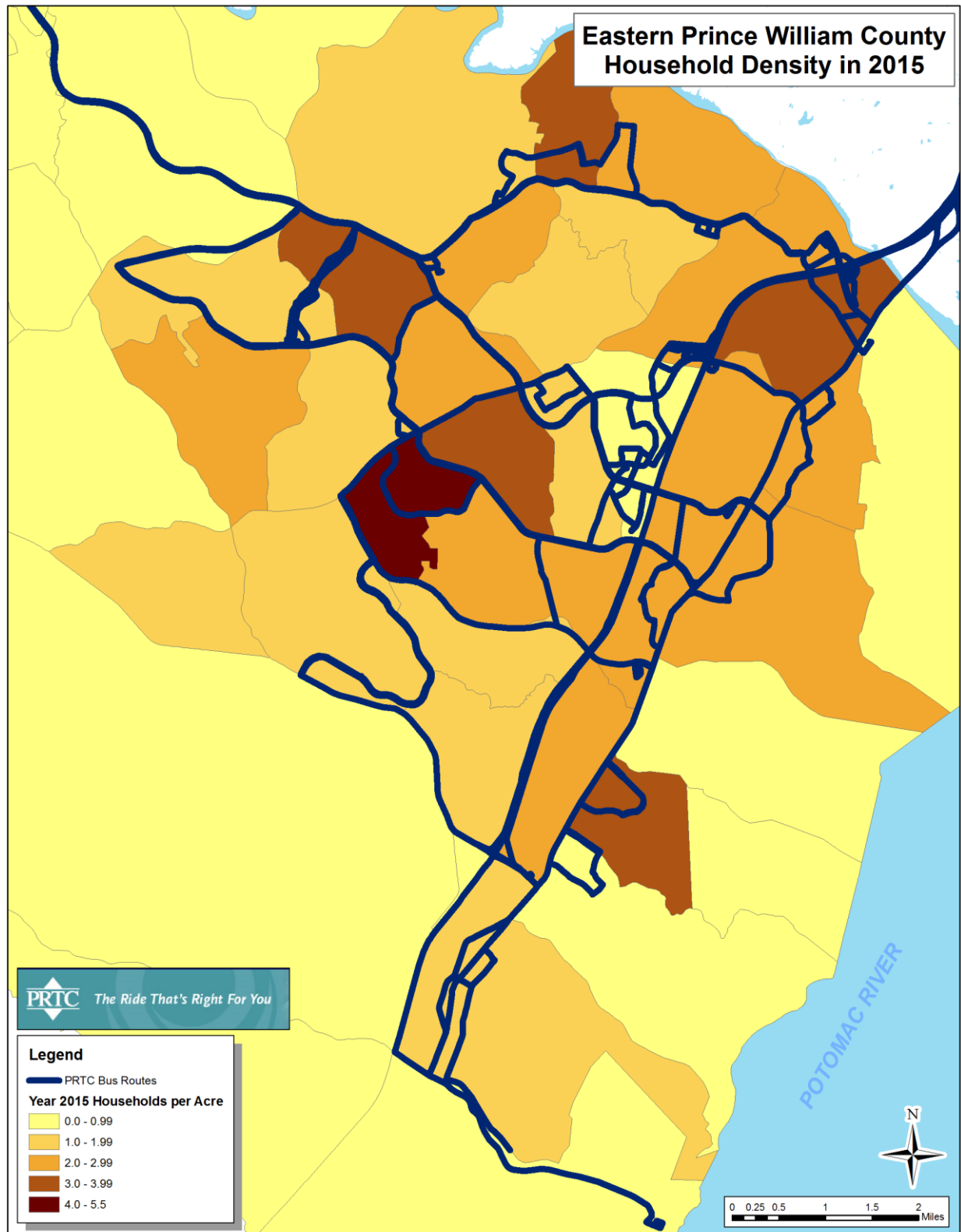


Figure 3-10: 2015 Household Density – Western Prince William County

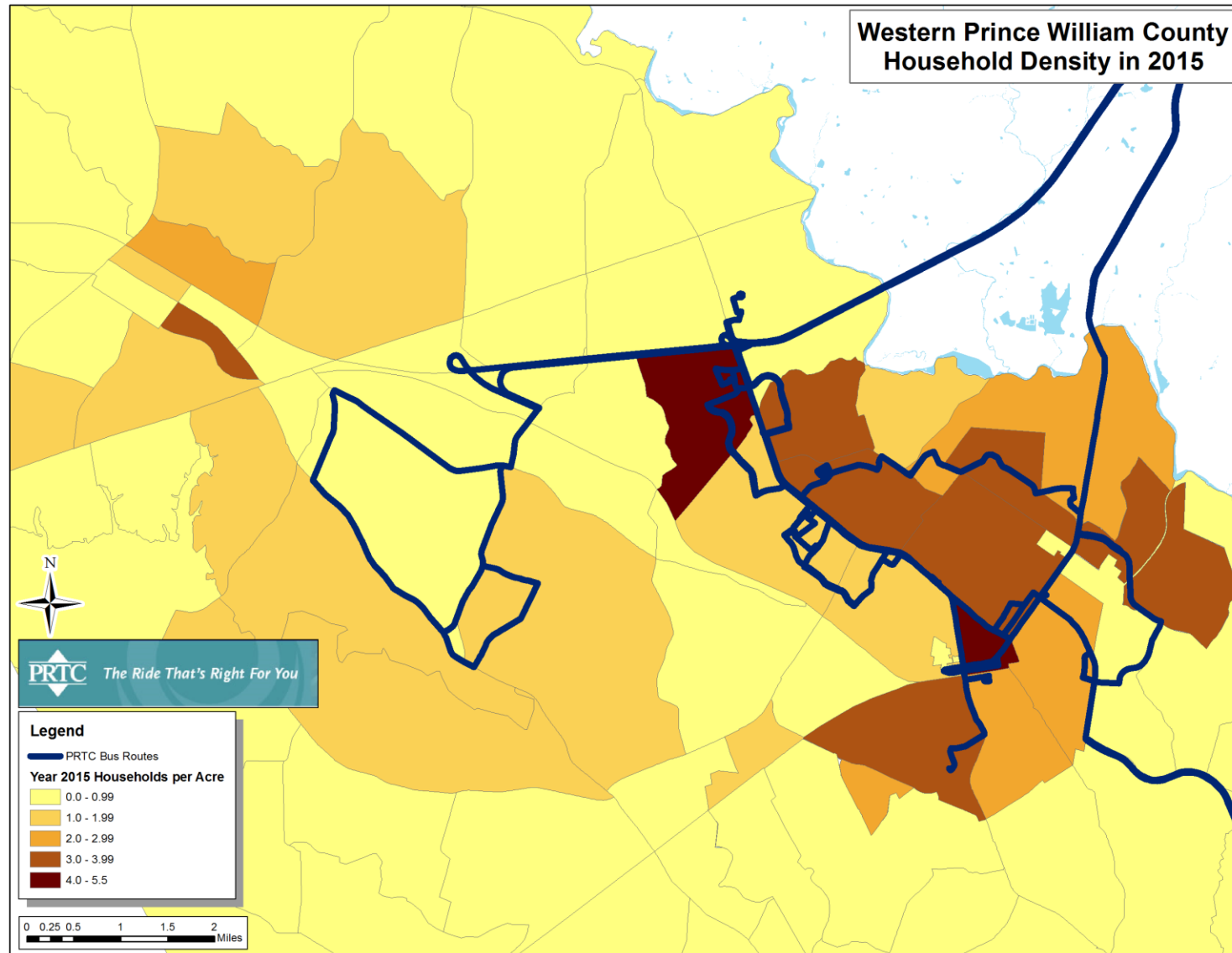


Figure 3-11: 2020 Household Density – Eastern Prince William County

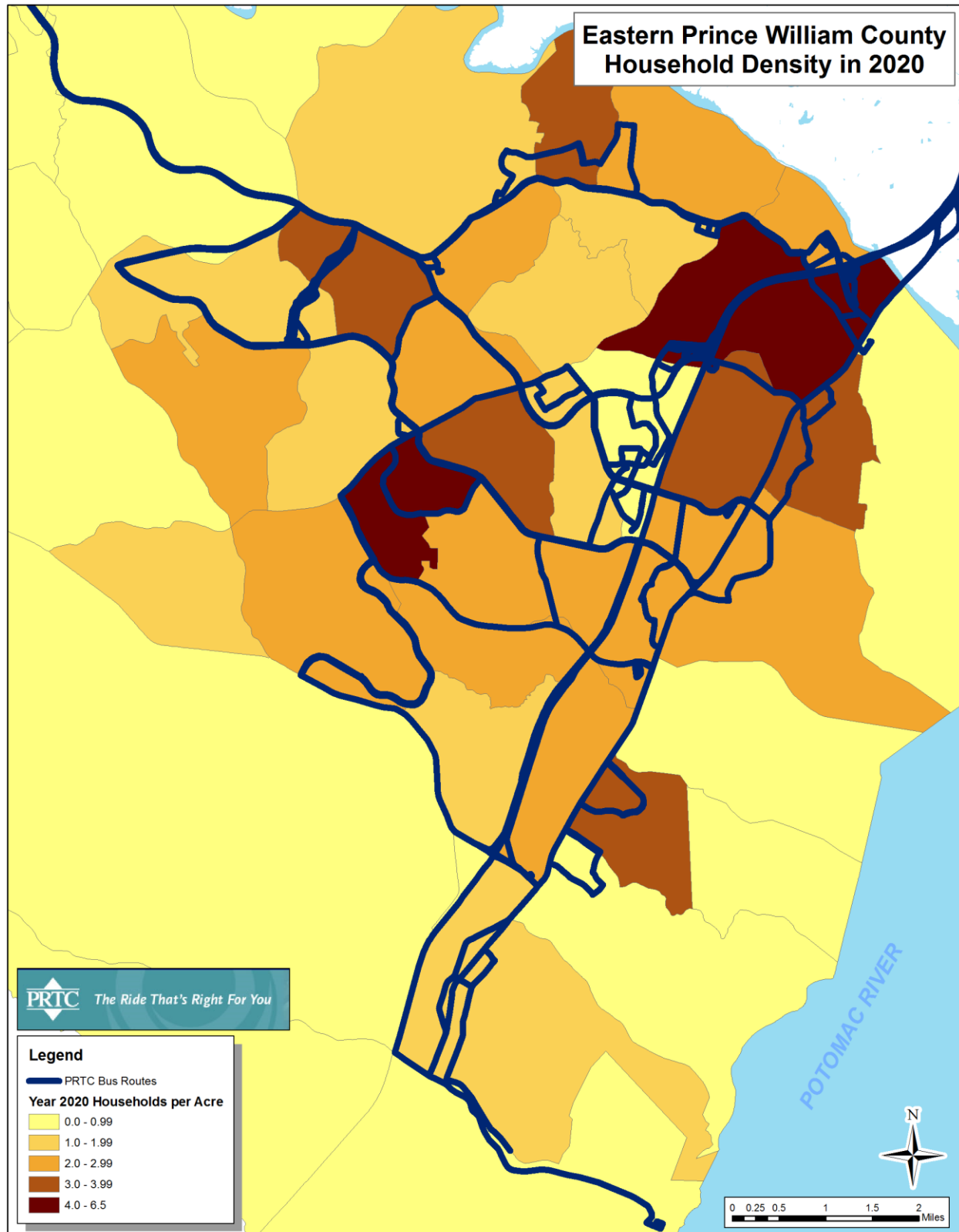


Figure 3-12: 2020 Household Density – Western Prince William County

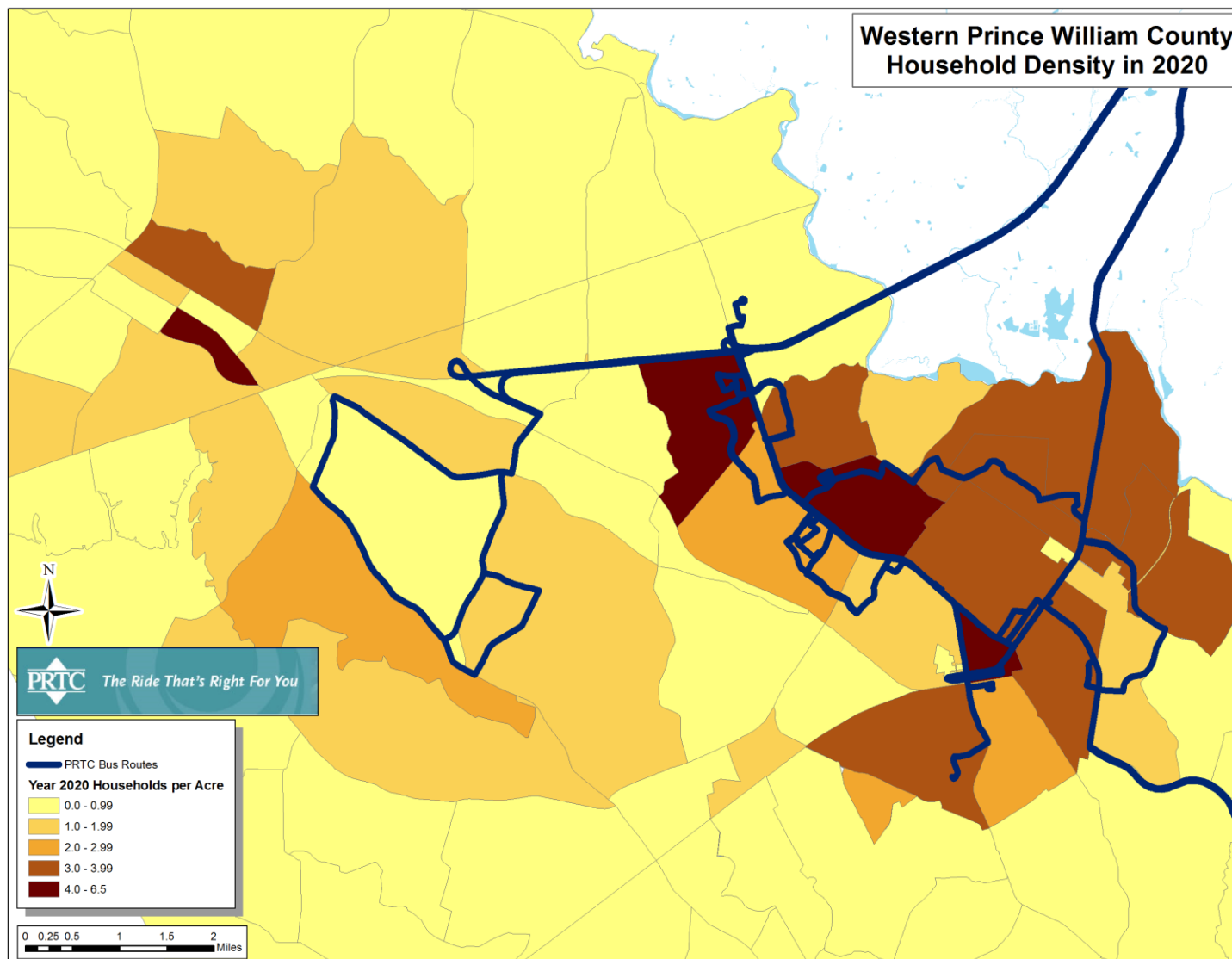


Figure 3-13: 2010 Population Density – Eastern Prince William County

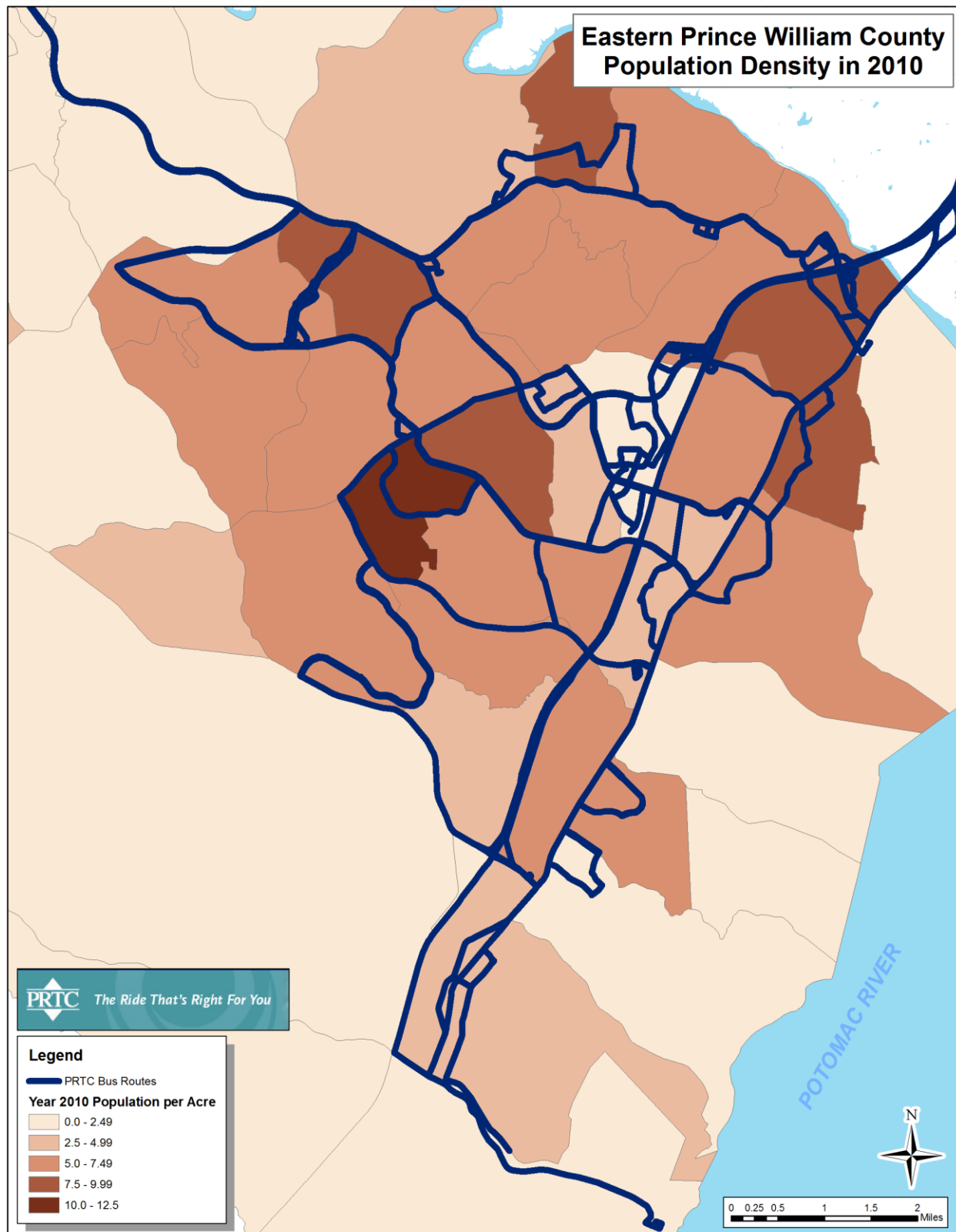




Figure 3-14: 2010 Population Density – Western Prince William County

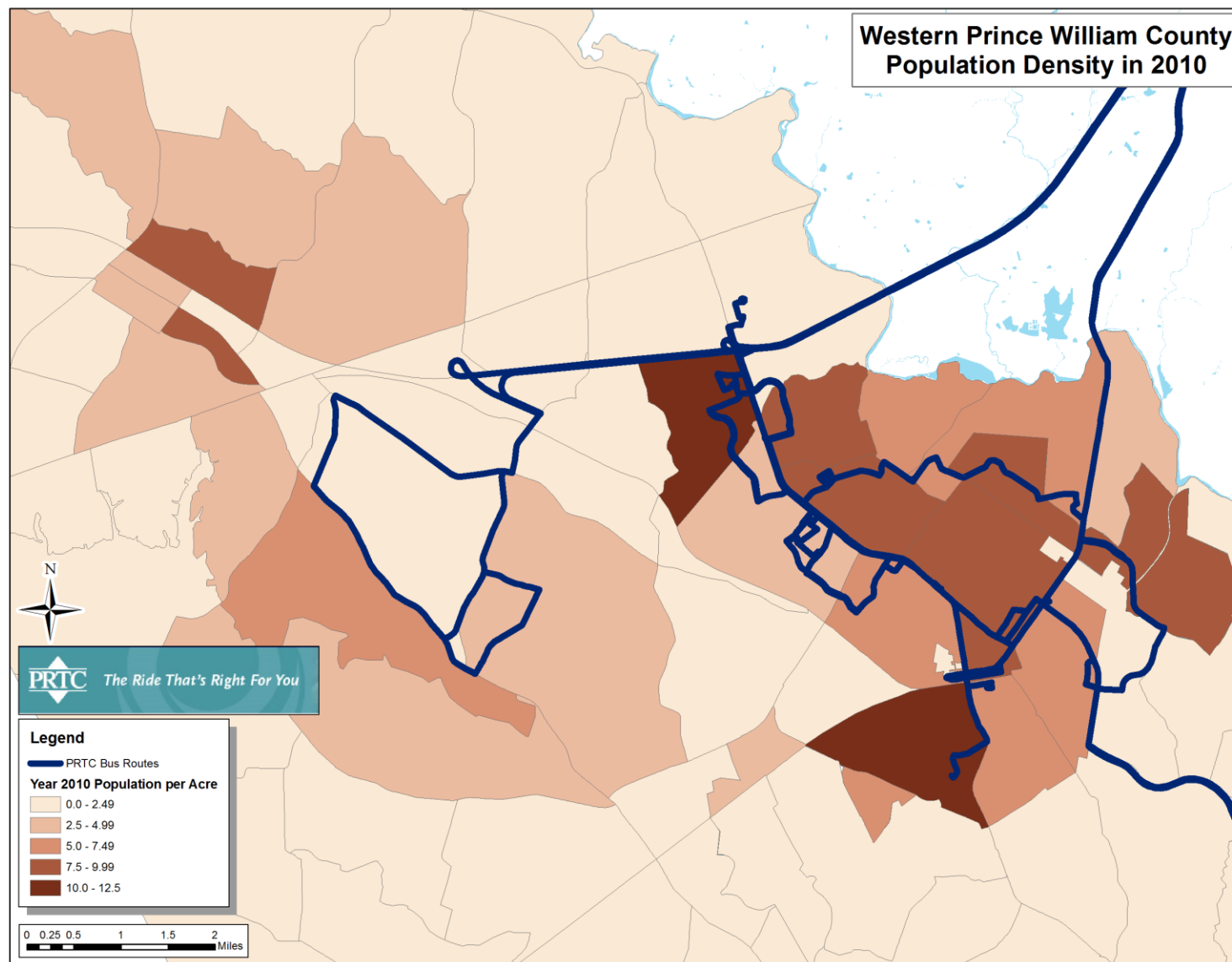


Figure 3-15: 2015 Population Density – Eastern Prince William County

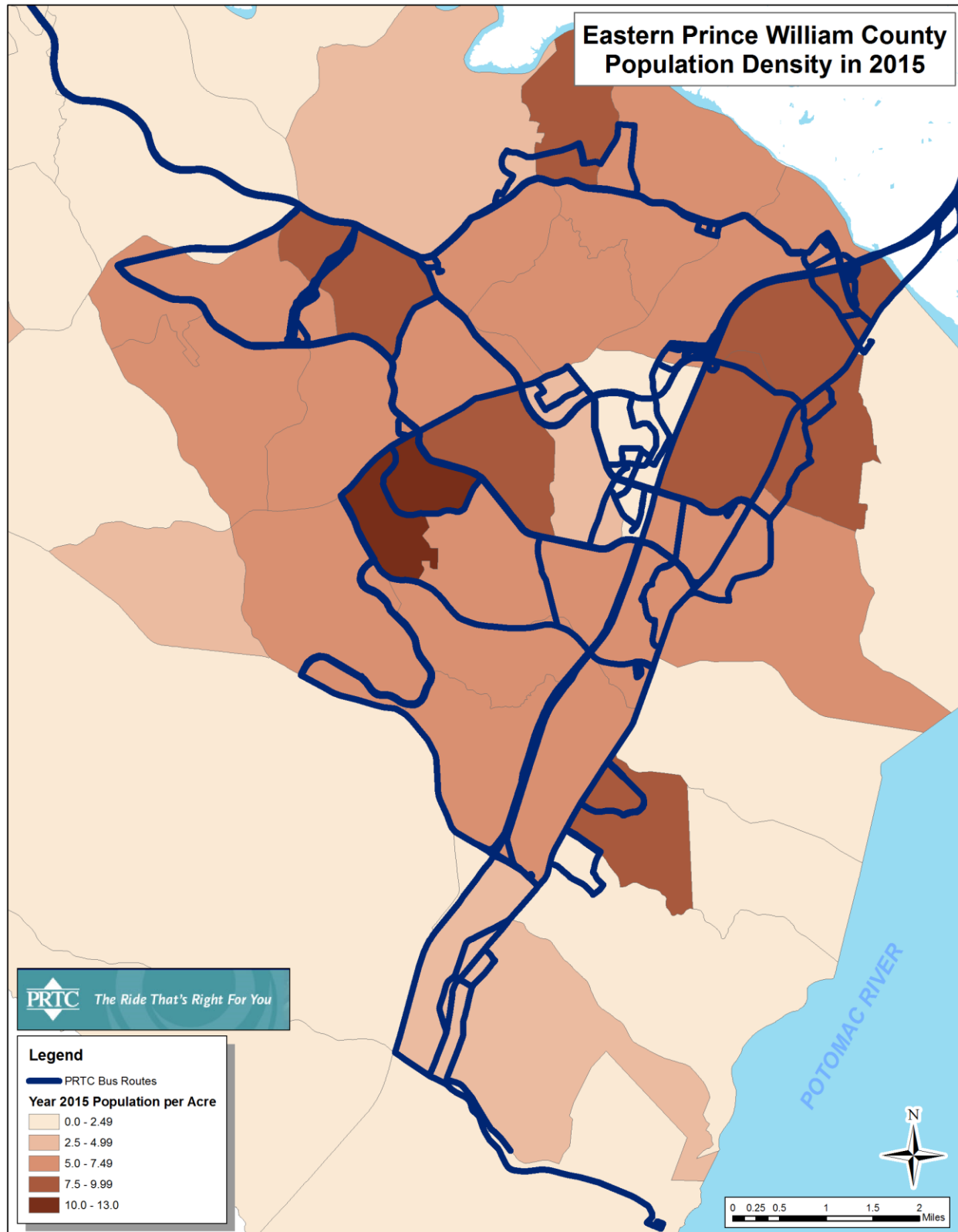


Figure 3-16: 2015 Population Density – Western Prince William County

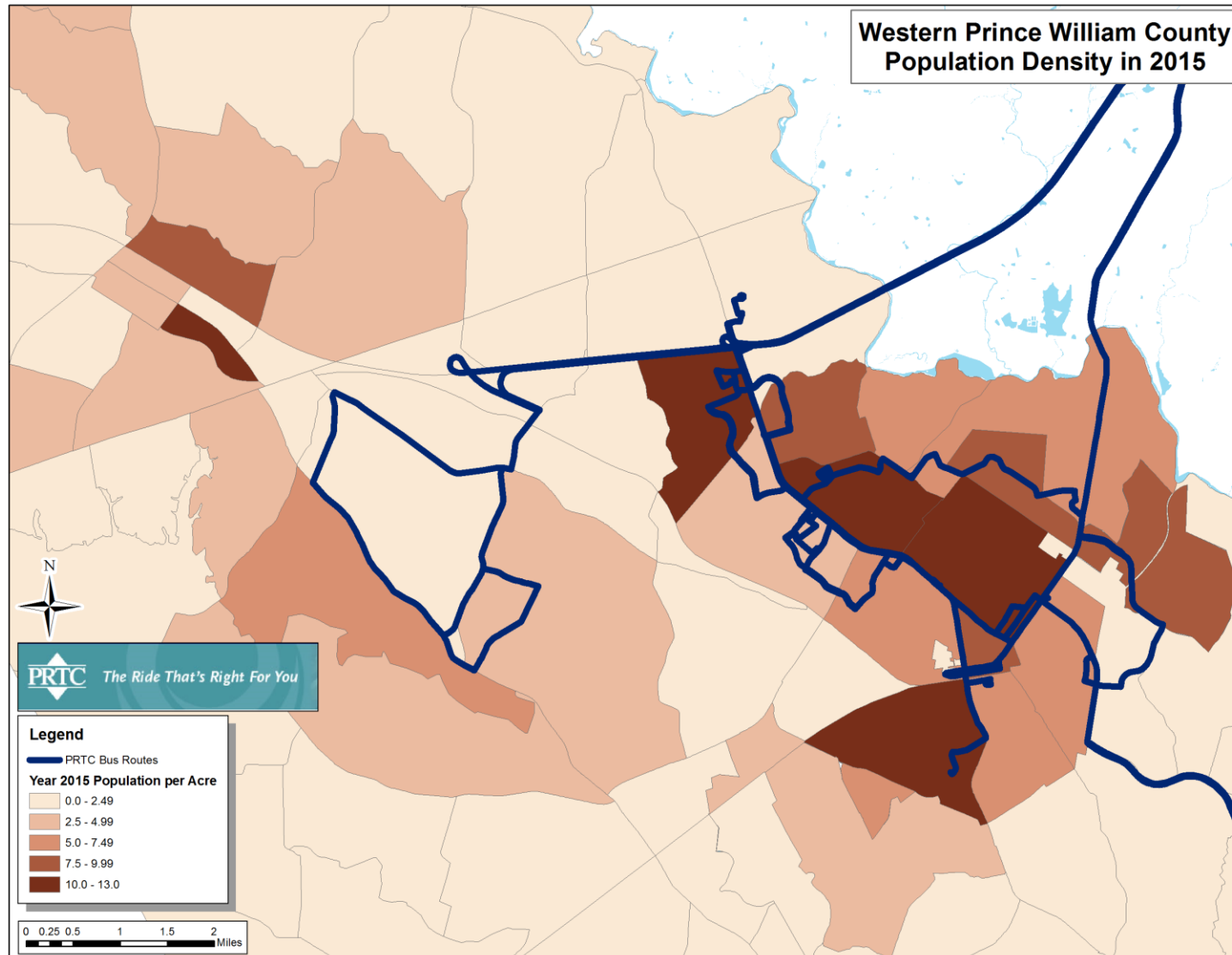


Figure 3-17: 2020 Population Density – Eastern Prince William County

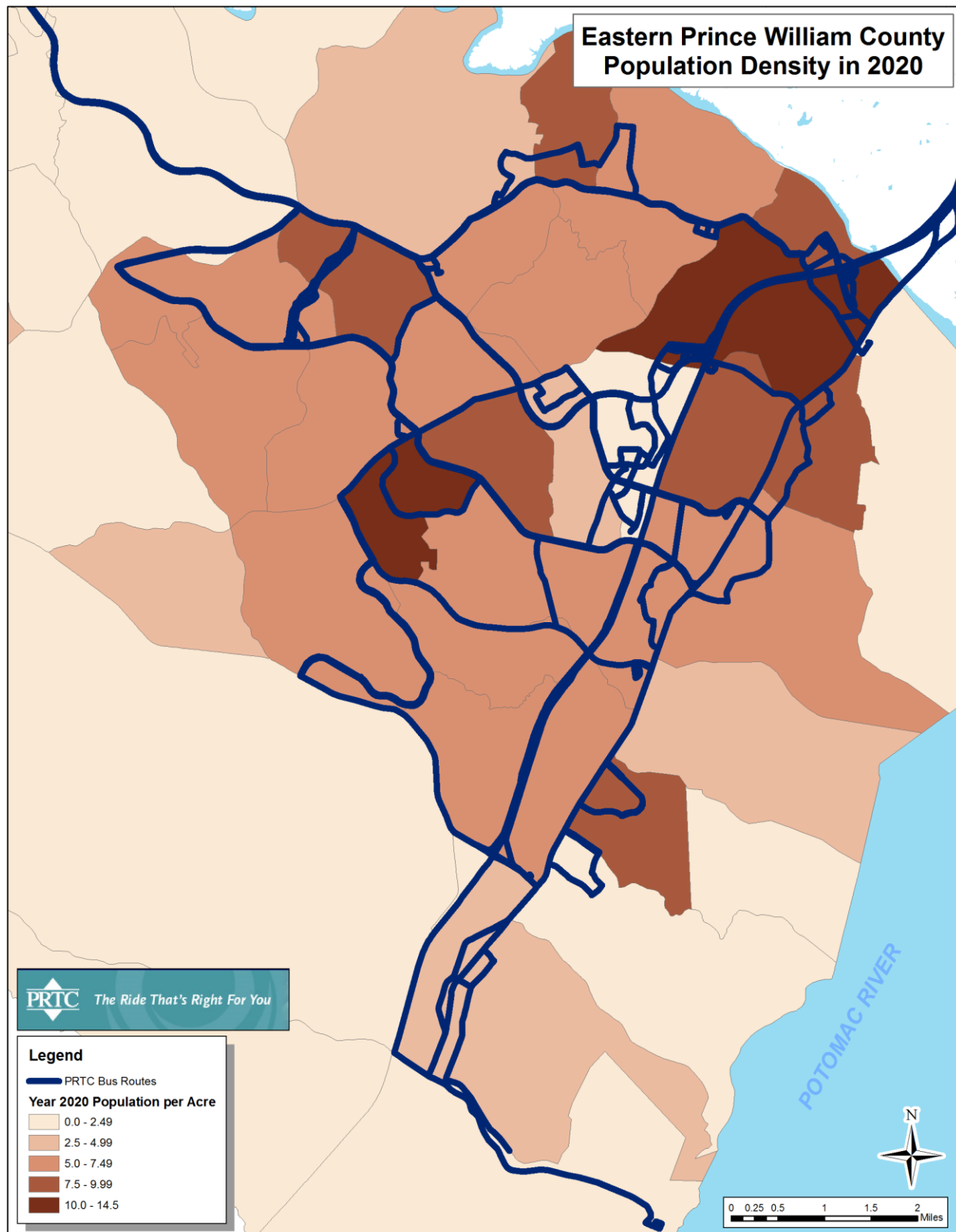


Figure 3-18: 2020 Population Density – Western Prince William County

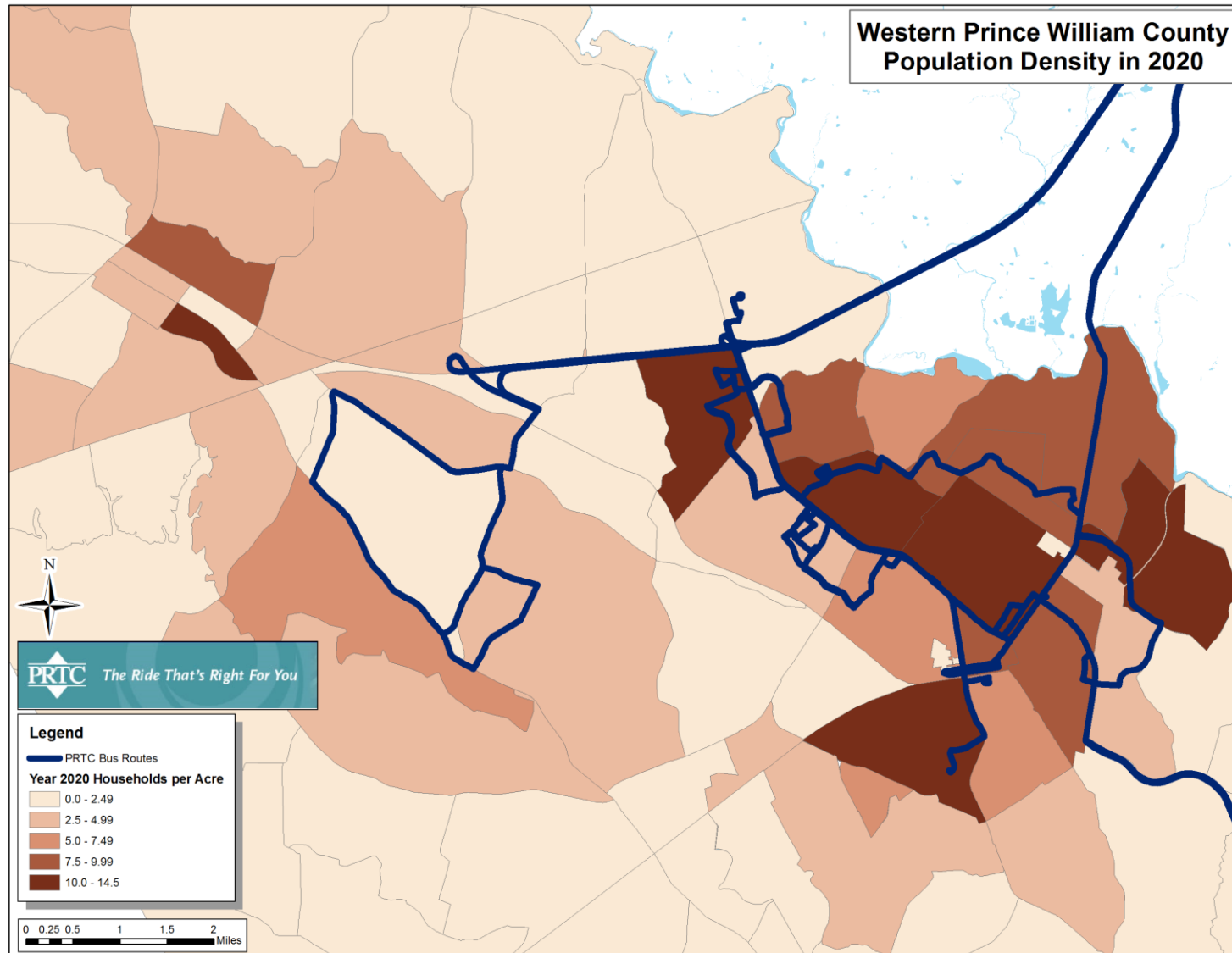


Figure 3-19: 2010 Employment Density – Eastern Prince William County

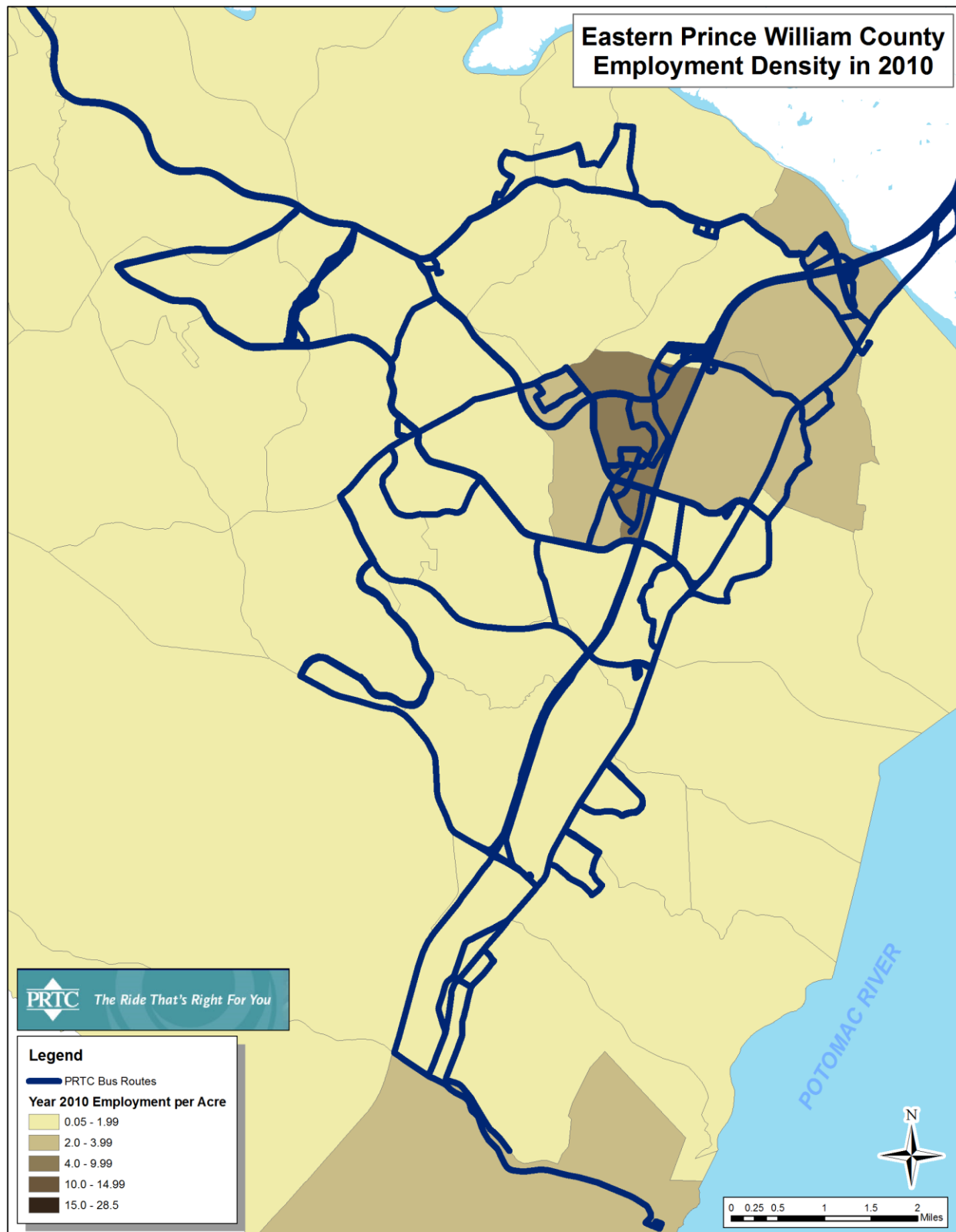




Figure 3-20: 2010 Employment Density – Western Prince William County

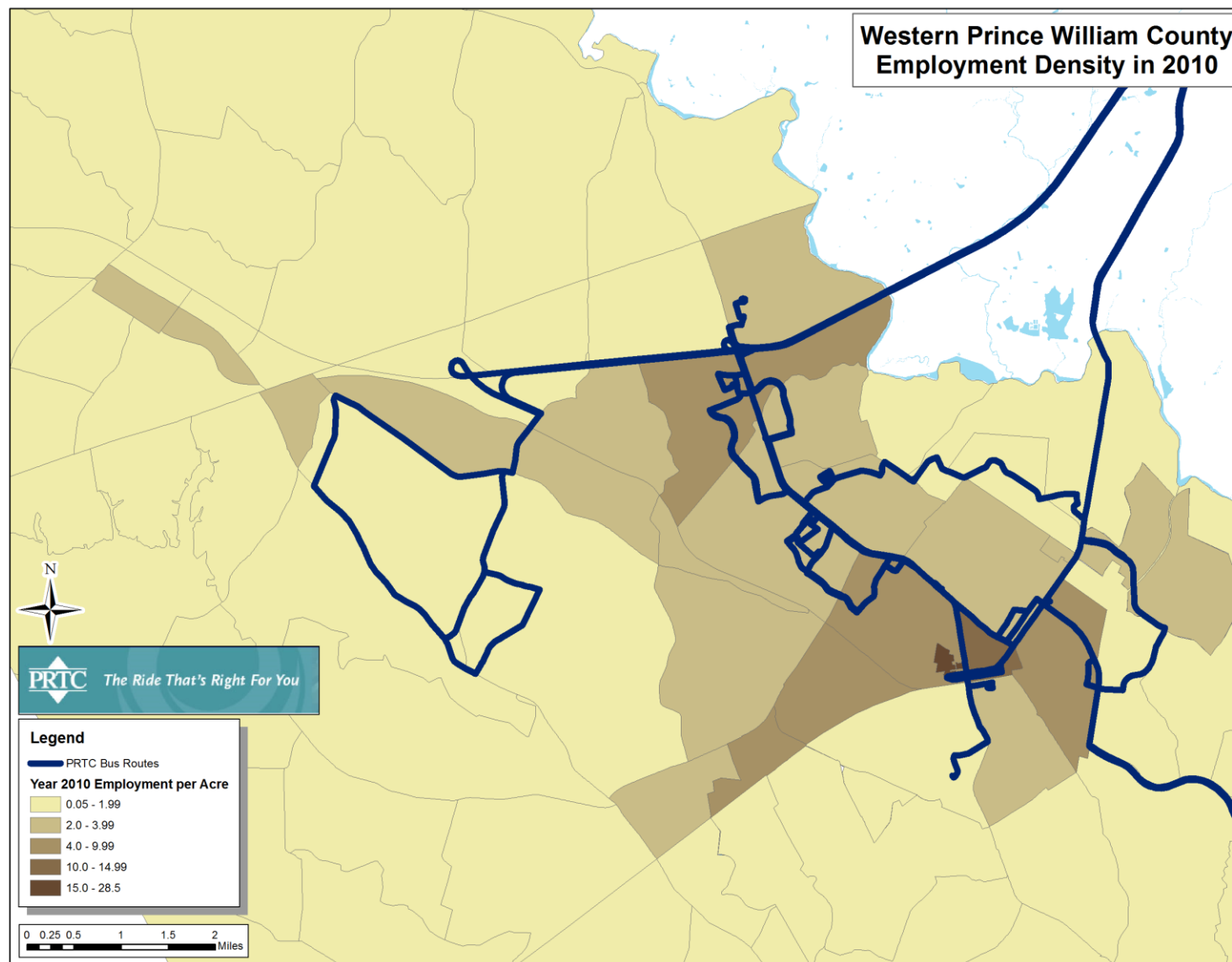


Figure 3-21: 2015 Employment Density – Eastern Prince William County

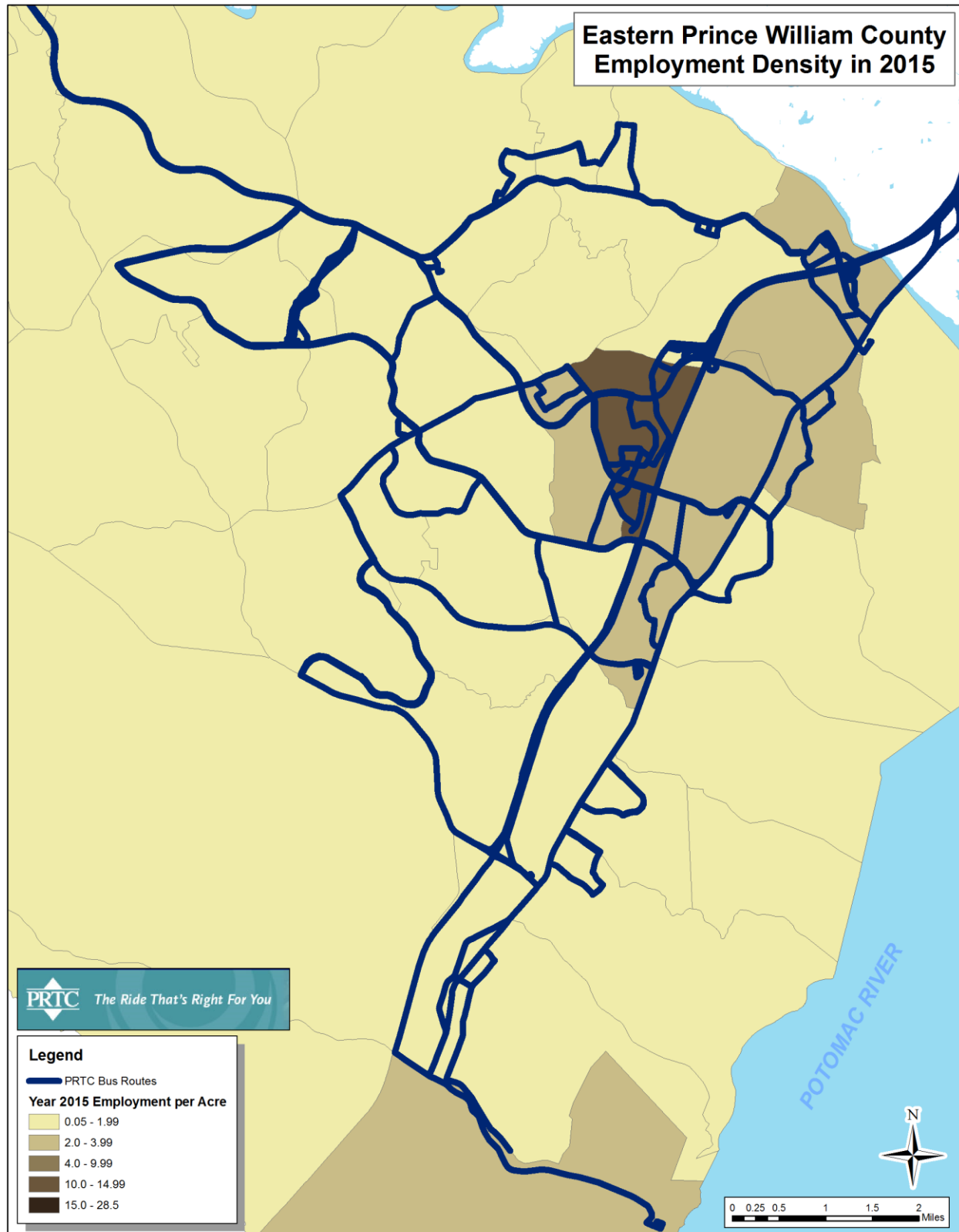


Figure 3-22: 2015 Employment Density – Western Prince William County

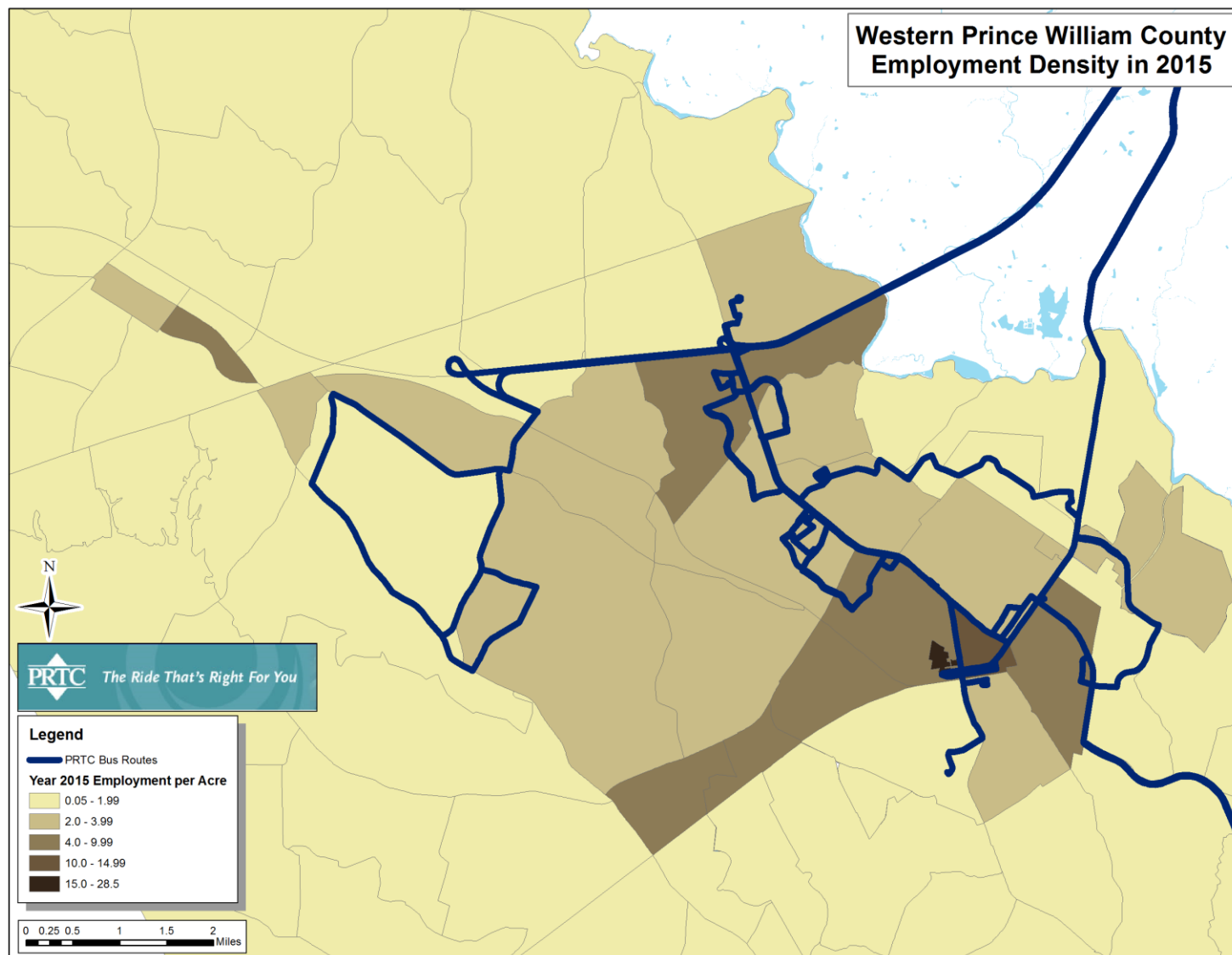


Figure 3-23: 2020 Employment Density – Eastern Prince William County

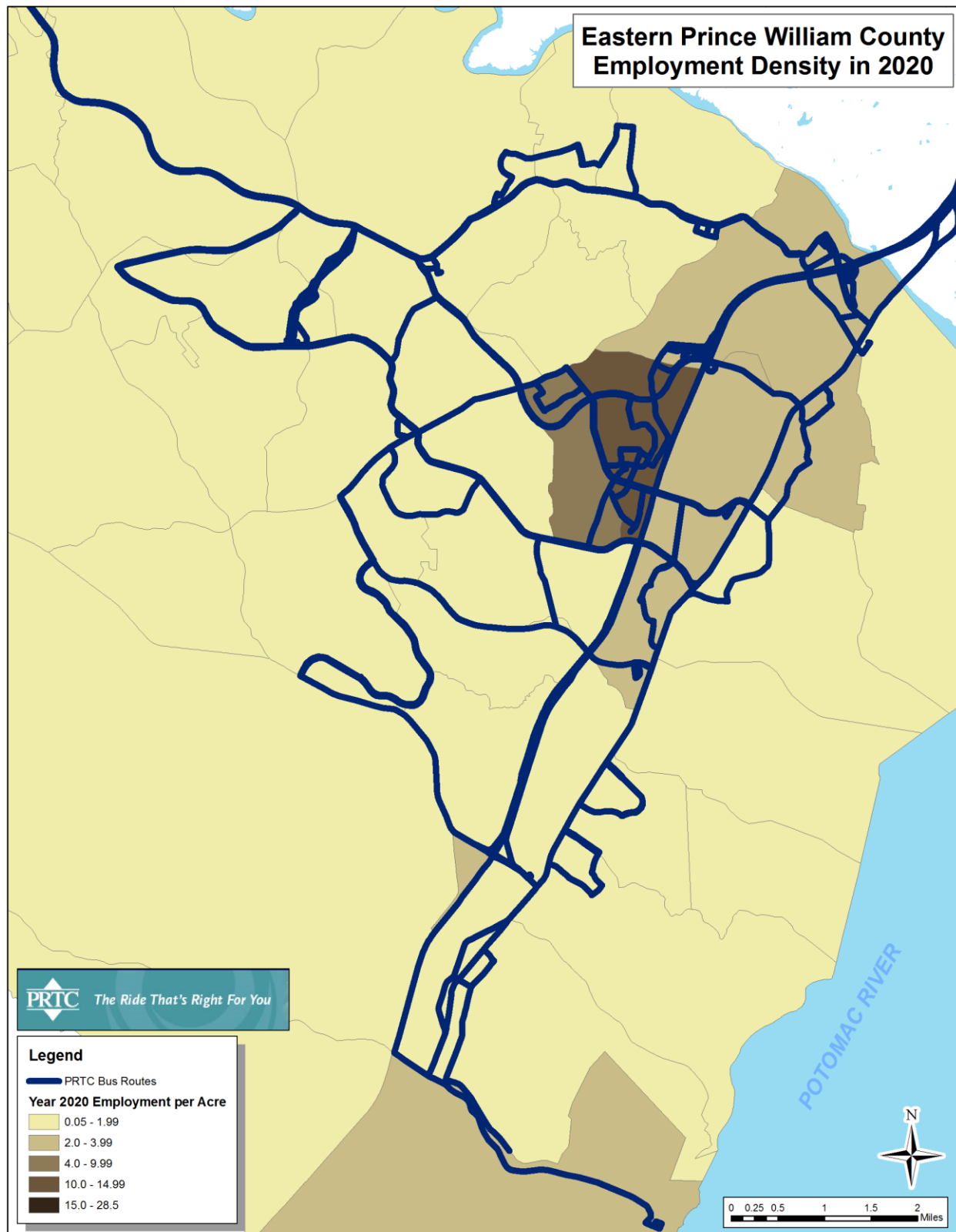
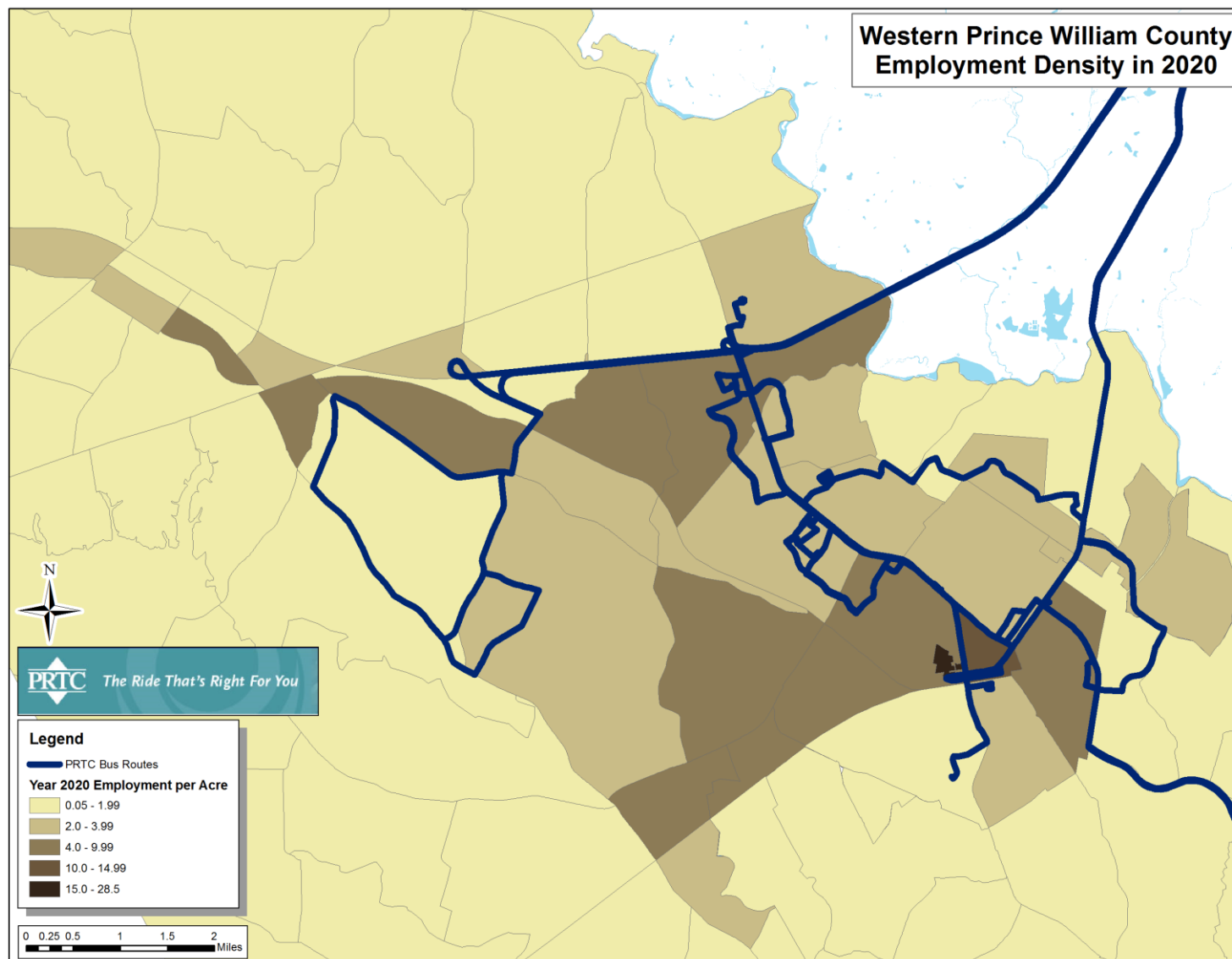


Figure 3-24: 2020 Employment Density – Western Prince William County



## 3.8 SERVICE COVERAGE ANALYSIS

This section analysis identifies areas within Prince William County that are served and not served by weekday time period and on Saturday. A series of maps were created which depict transit service by route for weekday peak period, midday period, and evening and for Saturday. The series of maps on the following pages reflect OmniRide service, including Metro Direct routes and the Cross County Connector for the eastern and western sides of the county (Figures 3-25 through 3-30) and OmniLink service (Figures 3-31 through 3-38). On the maps for OmniRide service, OmniLink routes operating during the same time period are shown in gray, to reflect transfer opportunities. In the same manner, in the OmniLink maps, the OmniRide routes are shown in gray.

The results of this analysis reflect a comparison of all service periods against service coverage provided during the weekday peak period service (when service coverage is at its greatest).

### 3.8.1 OMNIRIDE SERVICE COVERAGE

As previously discussed, OmniRide service currently only operates on weekdays, as it is primarily oriented to commute trips. On weekdays during peak hours, PRTC operates 12 OmniRide routes, several of which operate multiple route patterns. Of these, eight are operated in the eastern part of the county, three are operated in the western part of the county, and one operates across the county.

#### **Eastern Prince William County**

Figure 3-25 shows the eight routes operated in the peak periods, plus the eastern portion of the Cross County Connector. Service coverage is reduced during the midday and evening service periods to five routes plus the Cross County Connector (see Figure 3-26 and Figure 3-27). Routes not operated during the midday (i.e., late morning and early afternoon) and evening include:

- Route 1
- Rosslyn/Ballston
- Tysons Express

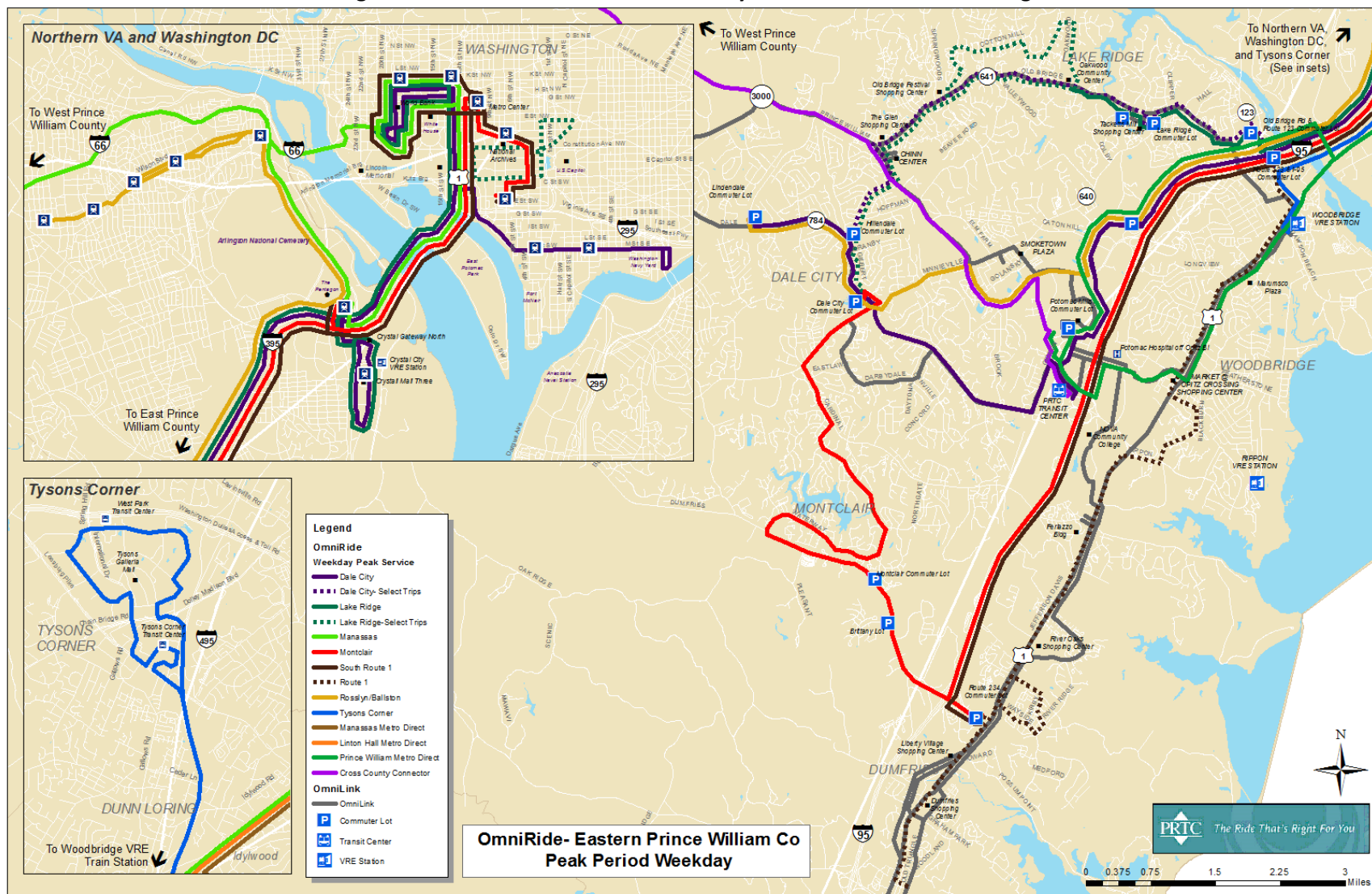
#### **Western Prince William County**

Figure 3-28 shows the three routes operated in the peak periods, plus the western portion of the Cross County Connector. Service coverage is reduced during the midday and evening service periods to two routes plus the Cross County Connector (see Figure 3-29 and Figure 3-30). The route not operated during the midday (i.e., late morning and early afternoon) and evening is:

- Linton Hall Metro Direct



Figure 3-25: Eastern OmniRide - Weekday Peak Period Service Coverage





**Figure 3-27: Eastern OmniRide – Weekday Evening Period Service Coverage**

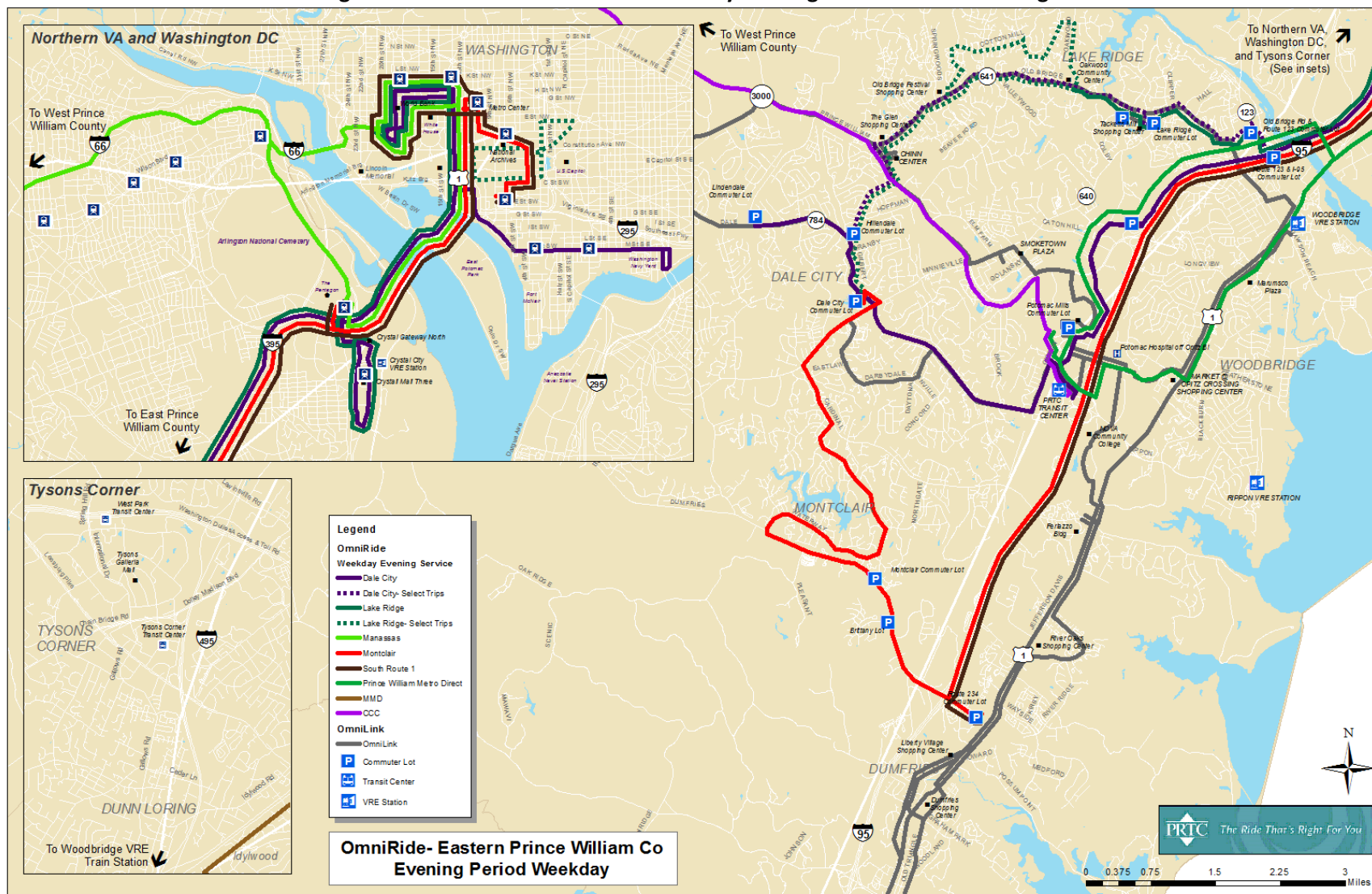




Figure 3-28: Western OmniRide – Weekday Peak Period Service Coverage

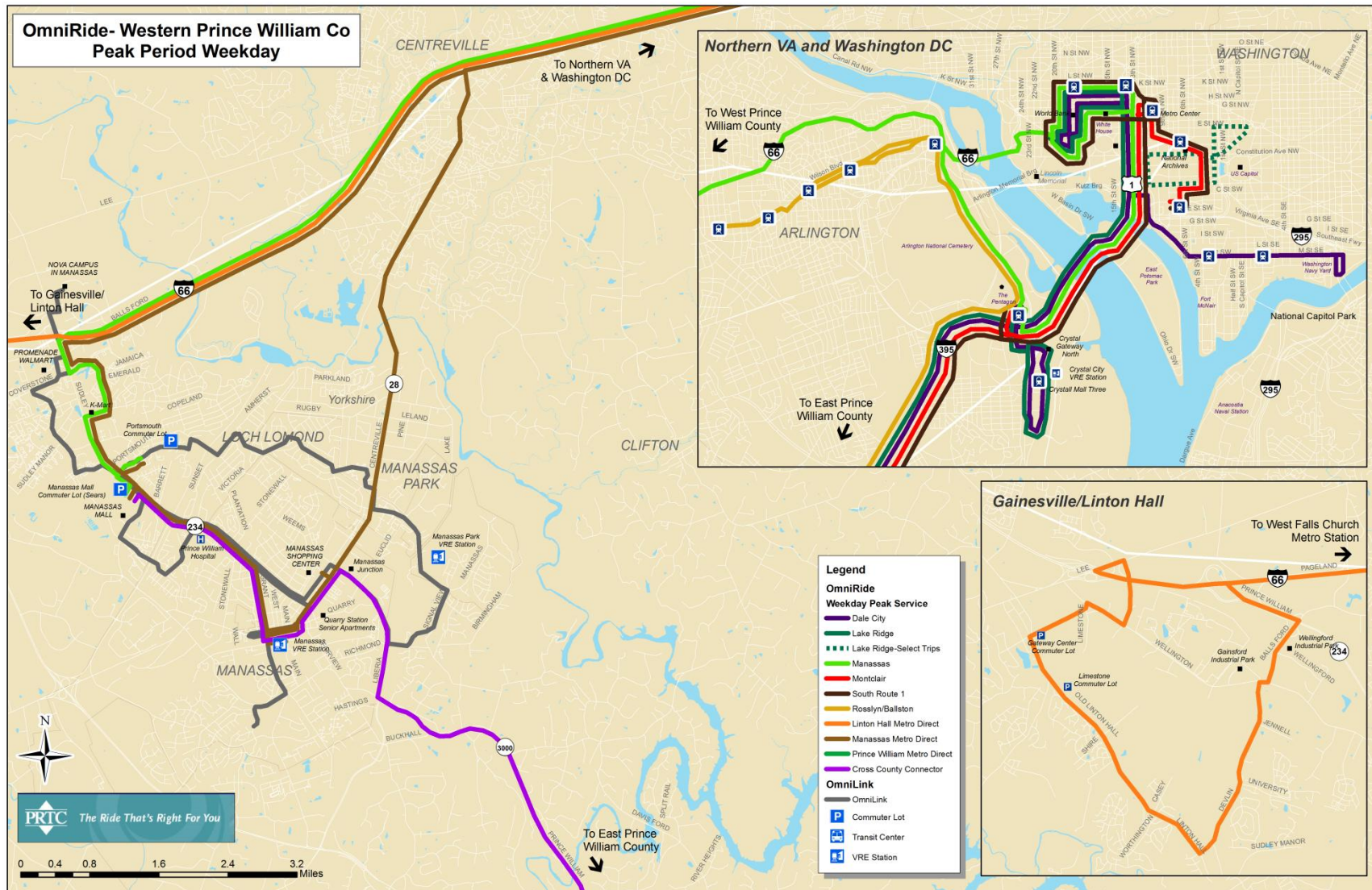




Figure 3-29: Western OmniRide – Weekday Midday Period Service Coverage

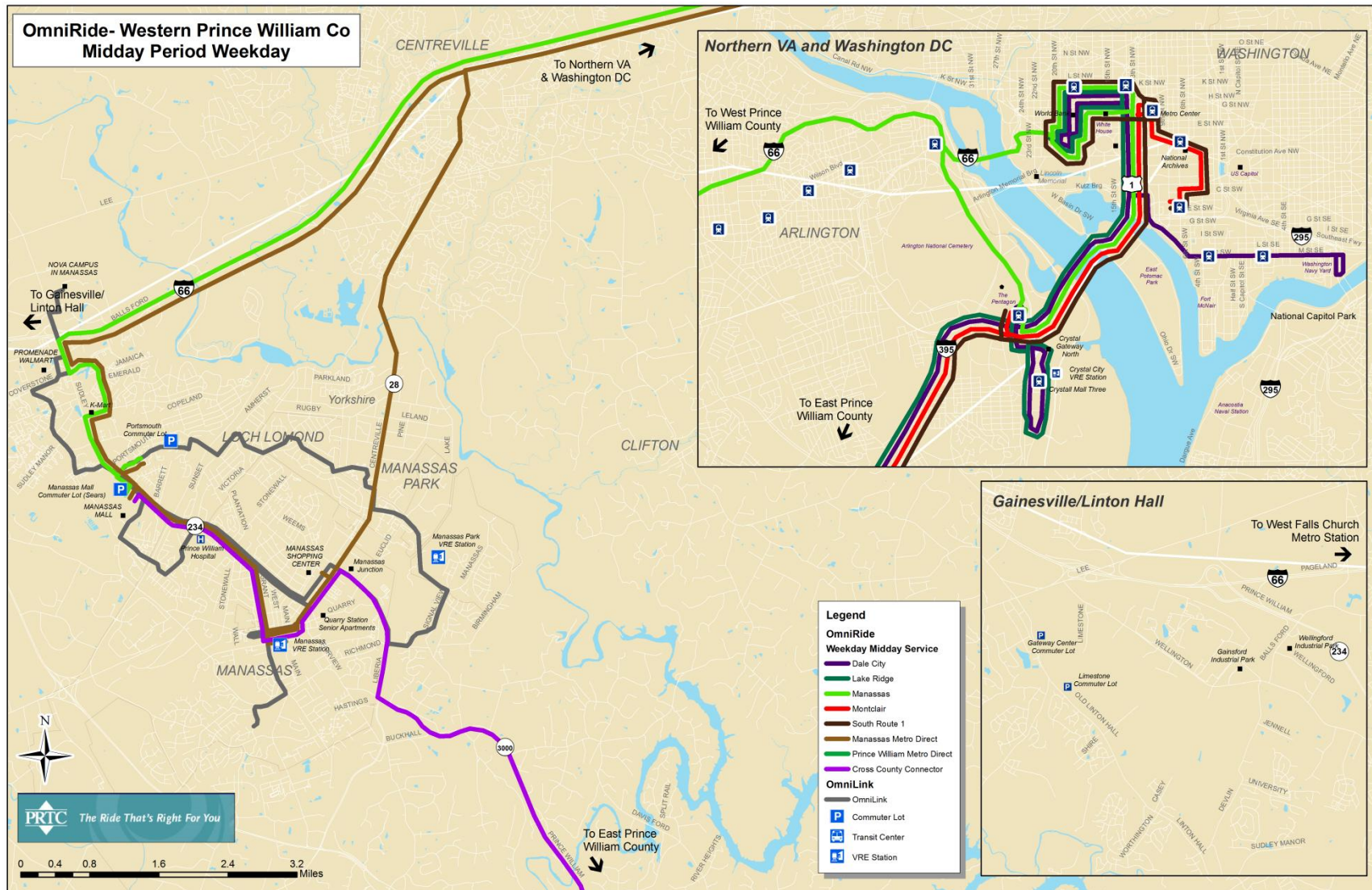
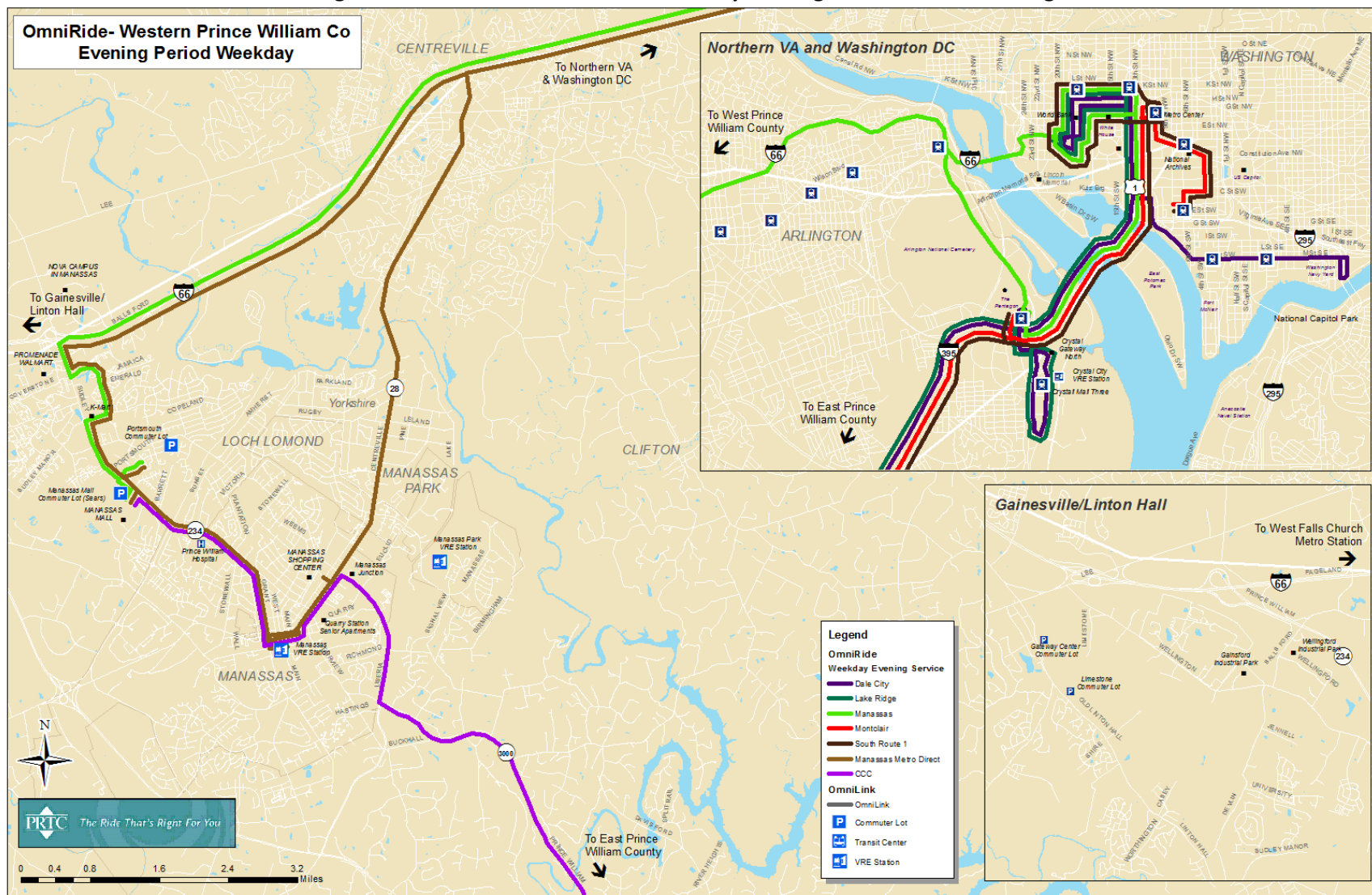


Figure 3-30: Western OmniRide – Weekday Evening Period Service Coverage





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### 3.8.2 OMNILINK SERVICE COVERAGE

As previously discussed, OmniLink service currently only operates on weekdays and Saturdays. On weekdays during peak hours, PRTC operates six OmniLink routes. Of these, four are operated in the eastern part of the county and two are operated in the western part of the county.

#### **Eastern Prince William County**

Figure 3-31 shows the four routes operated in the weekday peak periods. All four of these routes remain in service throughout the weekday and also operate on Saturday (Figures 3-32 through 3-34).

#### **Western Prince William County**

Figure 3-35 shows the two routes operated in the weekday peak and midday periods. Both routes remain in service during the midday on weekdays (see Figure 3-36). In the evenings and on Saturdays, however, there is no OmniLink service in the western part of the county (see Figures 3-37 and 3-28). The OmniLink routes not operated on weekday evenings and Saturdays are:

- Manassas
- Manassas Park

### 3.8.3 PRTC SERVICE COVERAGE SUMMARY

Table 3-6 presents a summary of the time periods when each PRTC route operates.

**Table 3-6: Summary of PRTC Service by Time Periods**

Weekday			Saturday
Peak	Midday	Evening	
OmniRide			
Dale City	Dale City	Dale City	
Lake Ridge	Lake Ridge	Lake Ridge	
Manassas	Manassas	Manassas	
Montclair	Montclair	Montclair	
Route 1			
South Route 1	South Route 1	South Route 1	
Rosslyn/ Ballston			
Tysons			
Metro Direct			
Linton Hall			
Manassas	Manassas	Manassas	
Prince William County	Prince William County	Prince William County	
Cross County Connector			
Cross County Connector	Cross County Connector	Cross County Connector	
OmniLink			
Dale City	Dale City	Dale City	Dale City
Dumfries	Dumfries	Dumfries	Dumfries
Manassas	Manassas		
Manassas Park	Manassas Park		
Woodbridge/Lake Ridge	Woodbridge/Lake Ridge	Woodbridge/Lake Ridge	Woodbridge/Lake Ridge
Route 1	Route 1	Route 1	Route 1

**Figure 3-31: Eastern OmniLink – Weekday Peak Period Service Coverage**

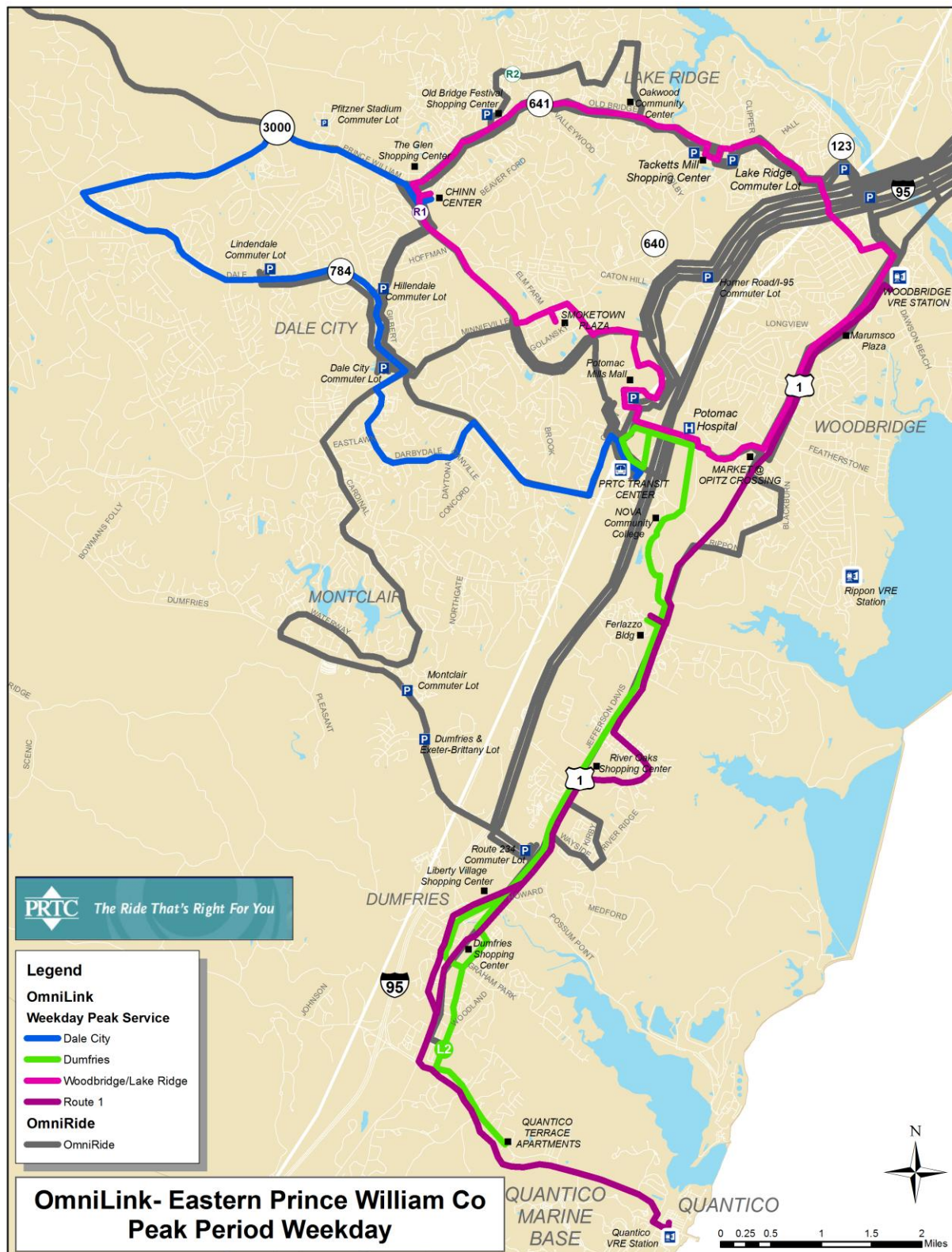
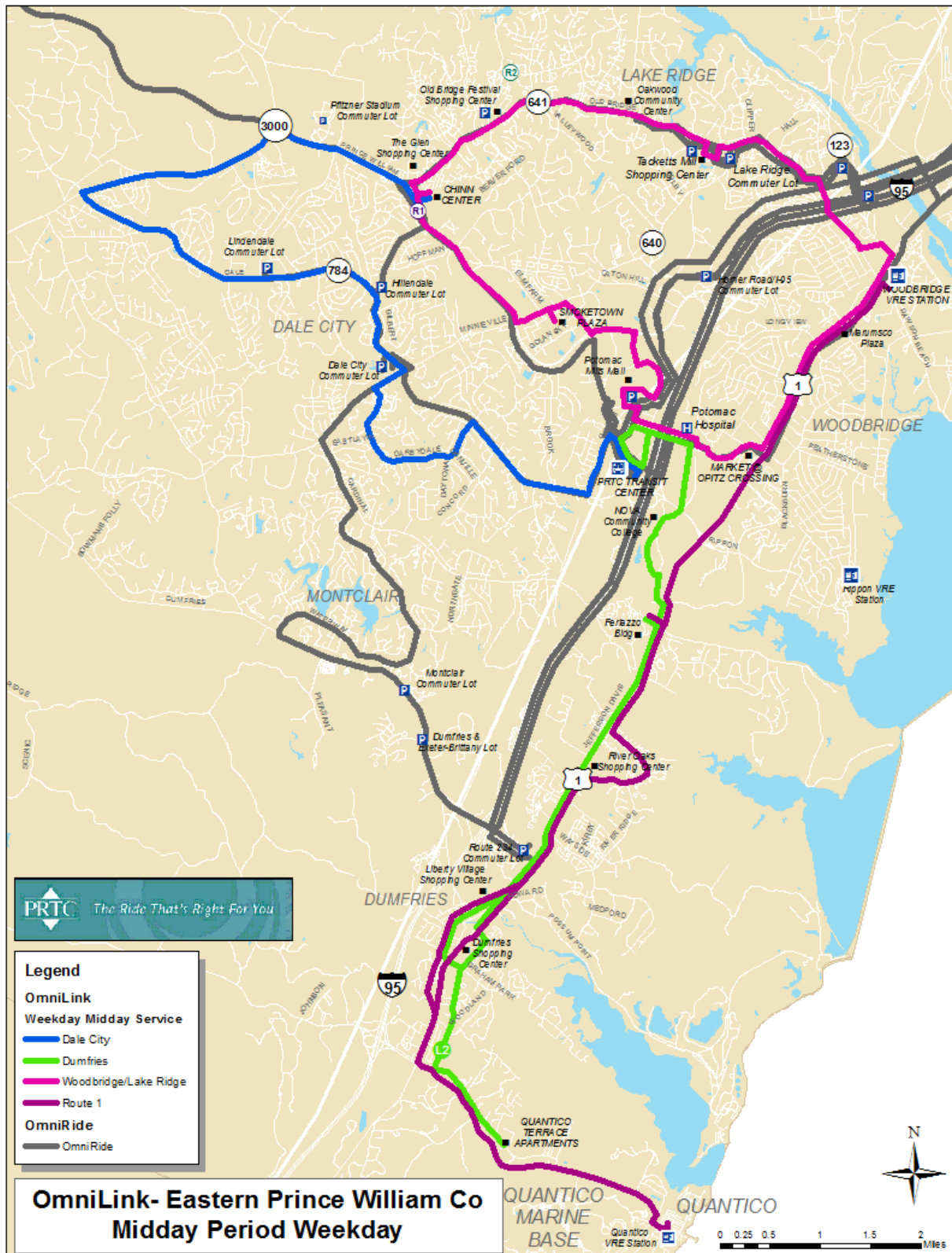


Figure 3-32: Eastern OmniLink- Weekday Midday Period Service Coverage





**Figure 3-33: Eastern OmniLink – Weekday Evening Period Service Coverage**

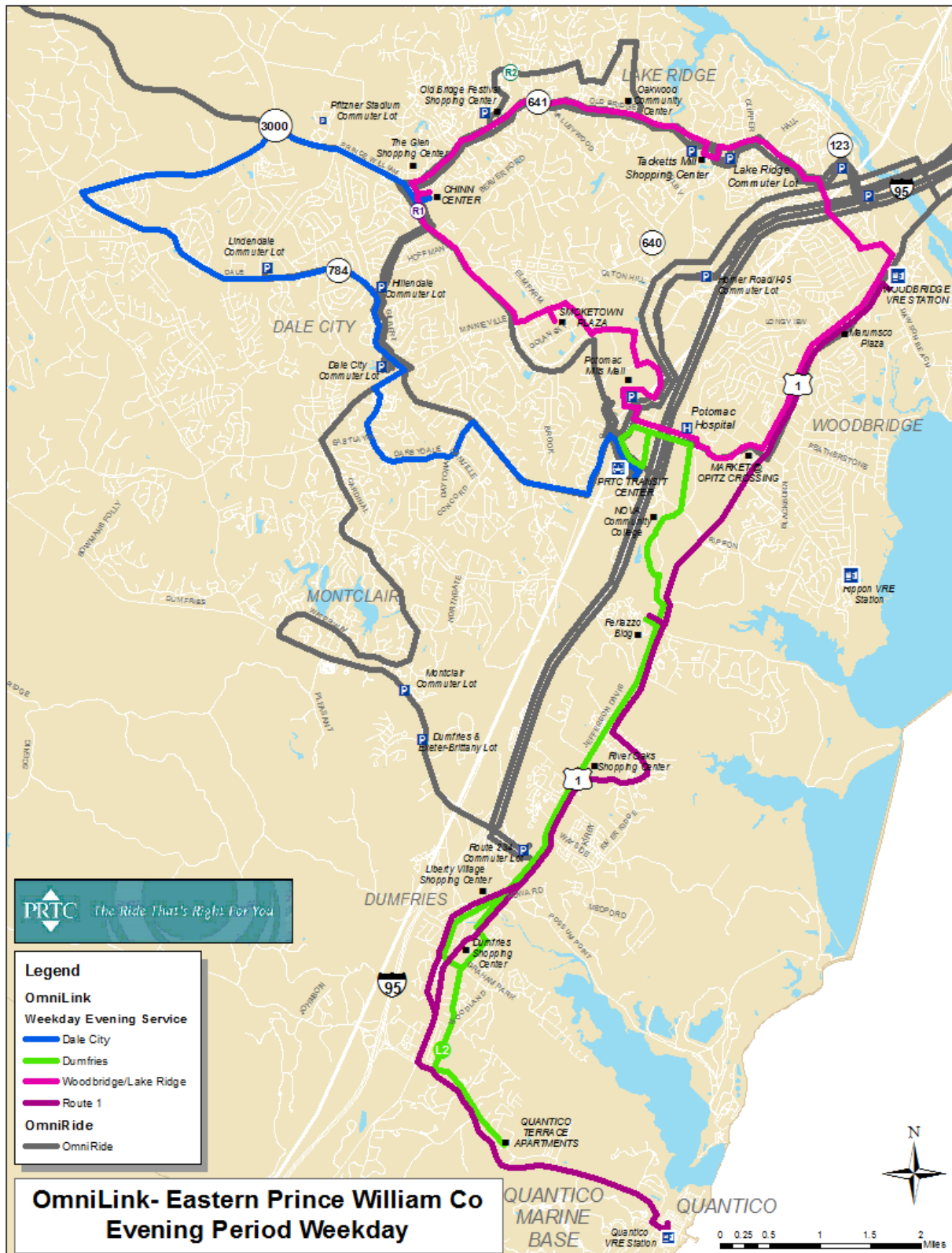


Figure 3-34: Eastern OmniLink – Saturday Service Coverage

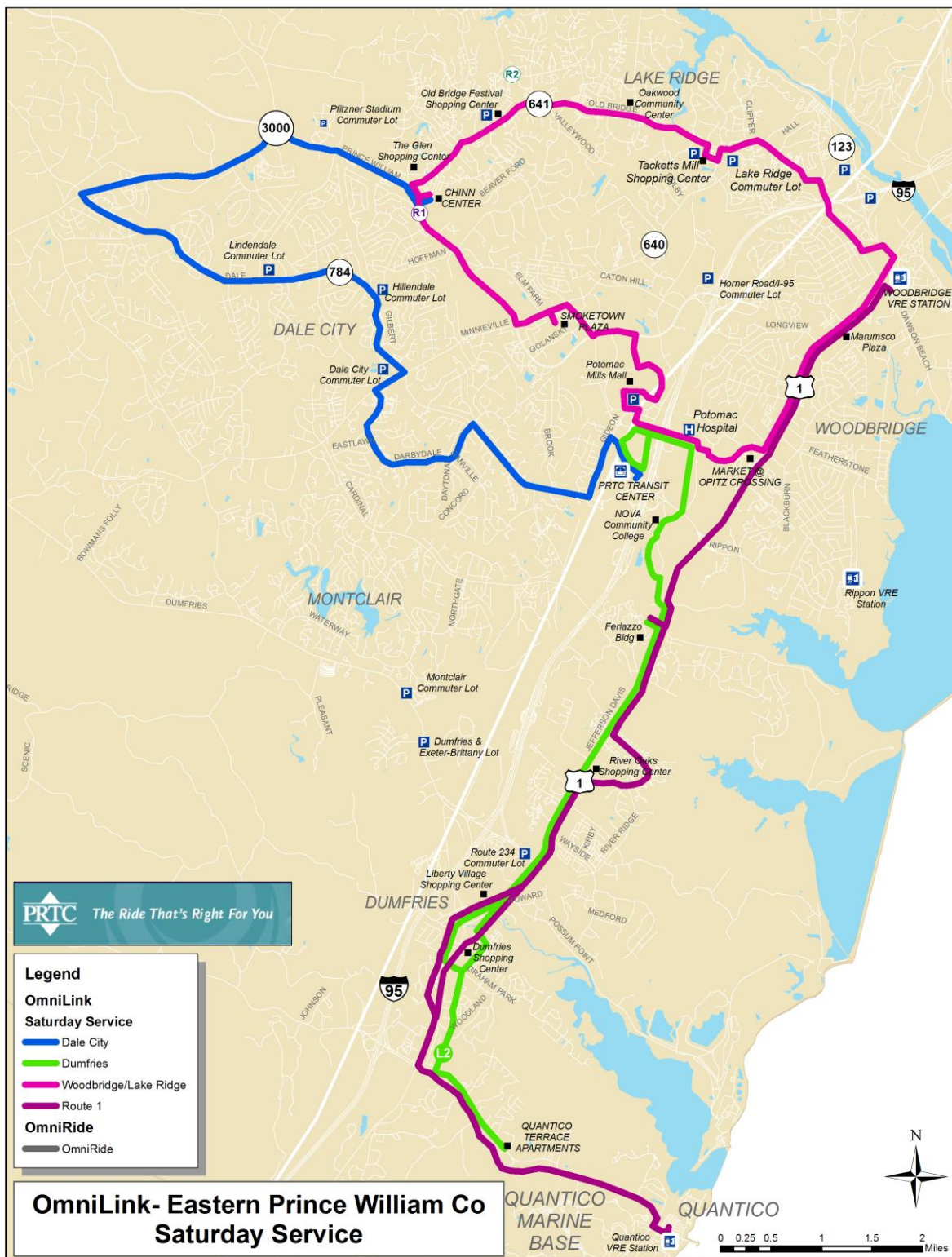




Figure 3-35: Western OmniLink – Weekday Peak Period Service Coverage

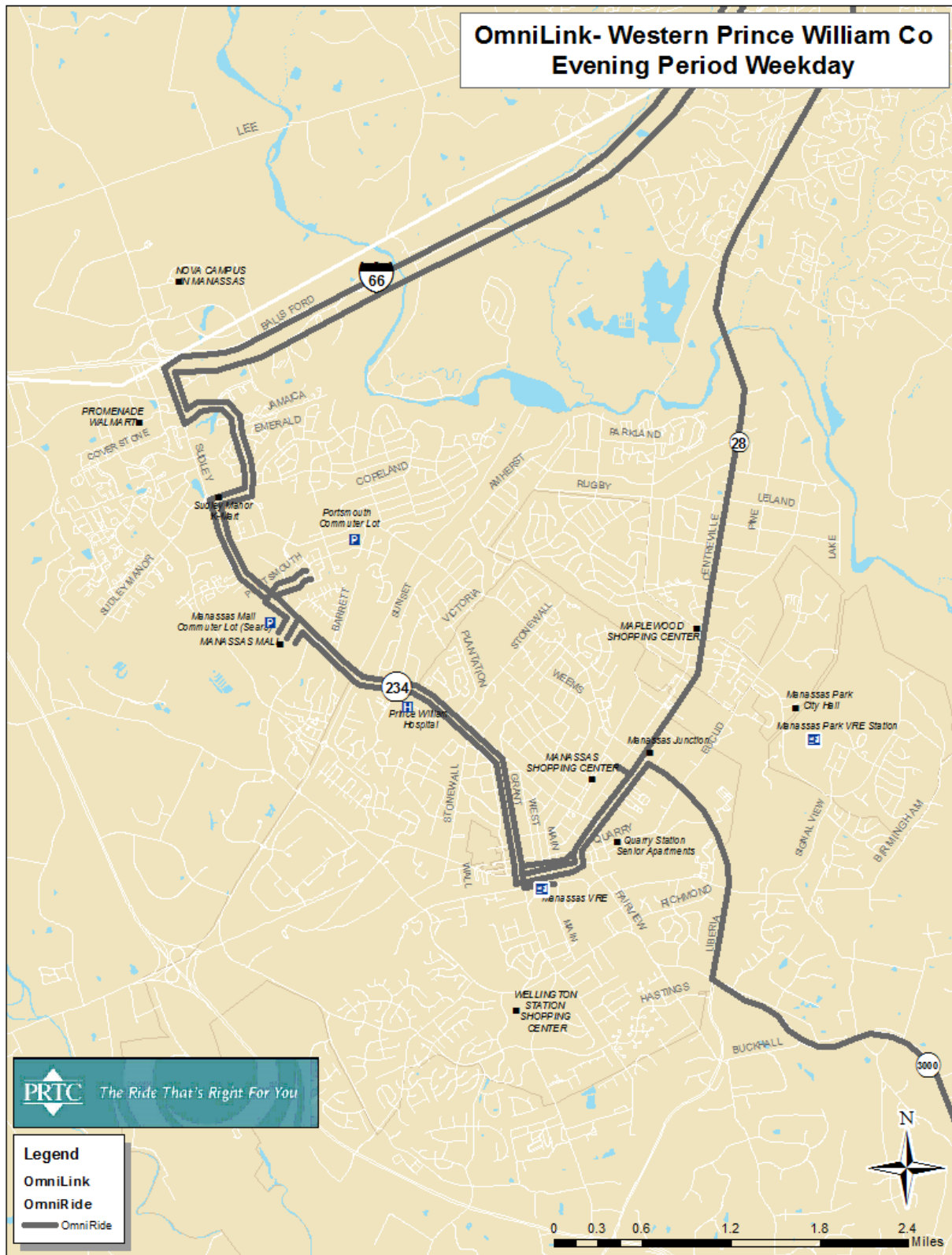




Figure 3-36: Western OmniLink – Weekday Midday Period Service Coverage

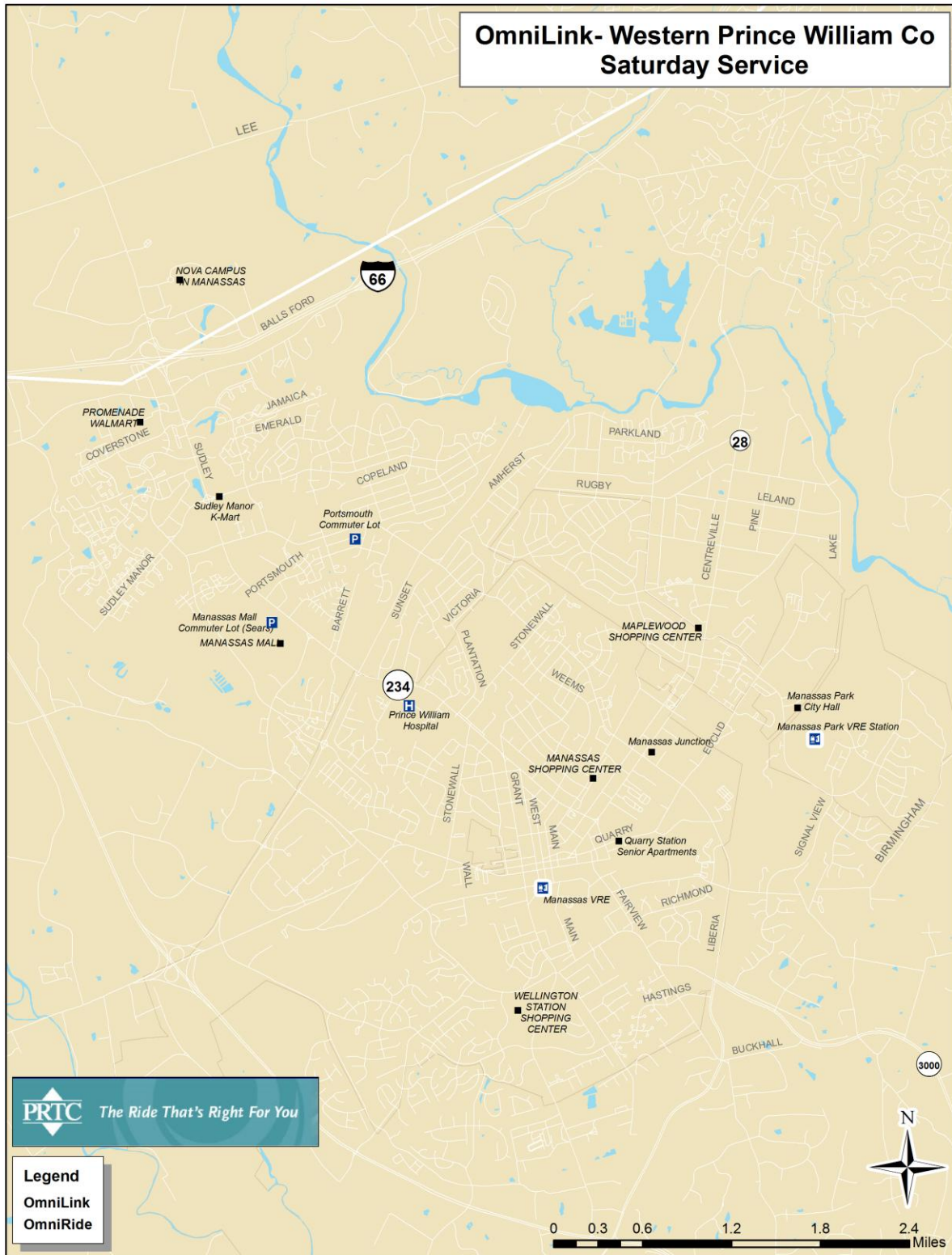


**Figure 3-37: Western OmniLink - Weekday Evening Period Service Coverage**





**Figure 3-38: Western OmniLink - Saturday Service Coverage**



### 3.9 INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PROJECT AND PROGRAMS

This section provides a summary of PRTC's program to improve its operations and customer service through the implementation of Intelligent Transportation System (ITS) strategies. 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.

In order to improve communications for dispatch operations and provide real-time passenger information (RTPI) to its customers, PRTC defined the following objectives, in prioritized order, relating to ITS technology:

- Enhanced voice communications between Dispatch and Operators
- Enhanced route and schedule adherence monitoring and reporting
- Enhanced data communications between Dispatch and Operators
- Increased passenger and Operator security
- Real-Time passenger information – transit centers, PDAs, web, cell phones, etc.
- Web-based Demand Response trip scheduling
- On-board wireless Internet access for riding customers on commuter routes

In an effort to achieve those objectives, PRTC has prepared an ITS Technology Plan which contains:

- An analysis of existing systems and conditions, including hardware, software, personnel and staffing, policies and procedures, system support and maintenance, and regional ITS architecture and pertinent stakeholders.
- A needs assessment of PRTC's ITS needs and future goals and objectives.
- Alternatives development and evaluation, including system compatibility and effectiveness, use of commercial off-the-shelf (COTS) hardware and software, operations and maintenance staffing, training, future expansion, and initial and recurring costs.
- An implementation plan for the chosen alternatives with cost estimates

The ITS Technology Plan proposes four alternative approaches with solution elements mapped to implementation timeframes (Table 3-7). Solution elements in each alternative are designated for Near-Term (0-2 years), Mid-Term (2-5 years), and Far-Term (5-10 years) implementation.

Alternative 1 attempts to minimize overall cost by implementing only the most needed changes and upgrades to existing technology at PRTC. It includes a significant number of solution elements, but it avoids major system procurements. However, the likely result of this approach is that PRTC will have a larger number of small specialized systems that are isolated from each other and are not easily integrated to achieve more efficiency or more advanced capabilities. This alternative provides a baseline reference for technology costs and is not a recommended implementation approach.

**Table 3-7: Proposed Alternatives with Implementation Timeframes**

Solution Elements	Alternative #1 (minimal change)	Alternative #2 (CAD/AVL w/cellular voice)	Alternative #3 (CAD/AVL w/lease radio)	Alternative #4 (CAD/AVL w/own radio)
<b>CAD/AVL – Fixed-Route</b>				
Upgrade Existing AirTrak® System – Data Path	Mid-Term	Mid-Term		
Upgrade Existing AirTrak® System – Schedule Adherence	Near-Term	Near-Term	Near-Term	Near-Term
Procure Turnkey CAD/AVL System		Mid-Term	Mid-Term	Mid-Term
Implement RTP1 w/ CAD/AVL		Mid-Term	Mid-Term	Mid-Term
Implement RTP1 Stand-alone	Mid-Term			
<b>CAD/AVL – OmniLink</b>				
Conduct Audit of Trapeze/Greyhawk System				
Update Greyhawk/PTS Tracker with Current Map Data	Near-Term	In CAD/AVL	In CAD/AVL	In CAD/AVL
Increase Operator Use of Text Messaging	Near-Term	Near-Term	Near-Term	Near-Term
Enhance System to Coordinate Time	Near-Term	In CAD/AVL	In CAD/AVL	In CAD/AVL
Enhance the Greyhawk Navigation Aid	Far-Term	In CAD/AVL	In CAD/AVL	In CAD/AVL
Implement MDT Training Unit	Mid-Term	In CAD/AVL	In CAD/AVL	In CAD/AVL
Replace OmniLink CAD/AVL System (option on F/R system)		Mid-Term	Mid-Term	Mid-Term
<b>Trapeze Software Modules</b>				
Manage All Ridership Data in Trapeze Plan	Far-Term	Far-Term	Far-Term	Far-Term
Trapeze FX Data for Public Time Tables	Near-Term	Near-Term	Near-Term	Near-Term
Trapeze FX GIS Data	Near-Term	Near-Term	Near-Term	Near-Term
Generate Fixed-Route Turn Sheets	Near-Term	Near-Term	Near-Term	Near-Term
Procure Trapeze OPS Module		Far-Term	Far-Term	Far-Term
Examine Options for Improving Flex-Route Scheduling	Far-Term	Far-Term	Far-Term	Far-Term
<b>Fare and Ridership Reporting</b>				
Enhance Hummingbird System for Reporting	Mid-Term	Mid-Term	Mid-Term	Mid-Term
Implement New Ridership Reporting System				
<b>TransTrack System</b>				
Enhance TransTrack System	Mid-Term			
Replace TransTrack System		Far-Term	Far-Term	Far-Term
Address Specific Performance Issues	Near-Term	Near-Term	Near-Term	Near-Term
Implement a Direct Database Interface	Far-Term			
<b>Bus Voice Communications</b>				
Upgrade Existing Nextel System Equipment	Near-Term	Near-Term	Near-Term	Near-Term
Implement RTT Concept for Nextel System	Near-Term	Near-Term	Near-Term	Near-Term
Integrate Nextel Voice into CAD/AVL		Mid-Term		
Join/Subscribe to an Existing Fleet Radio System			Mid-Term	
Procure Voice Radio System				Mid-Term
Explore High-Speed Data Options for Voice		Far-Term		
<b>Bus Onboard Systems</b>				
Enhance Existing DriveCam Camera System	Not Possible	Not Possible	Not Possible	Not Possible
Procure New Bus Camera System		Near-Term	Near-Term	Near-Term
Implement Real-Time Bus Surveillance		Far-Term	Far-Term	Far-Term
Implement High-Speed Wireless Data Network	Far-Term	Far-Term	Far-Term	Far-Term
Implement Automated Next Stop Announcements w/ CAD/AVL		Mid-Term	Mid-Term	Mid-Term
Implement Automated Next Stop Announcements, standalone				
Implement Automatic Passenger Counting (15% fleet), w/ CAD/AVL		Far-Term	Far-Term	Far-Term
Implement Automatic Passenger Counting (15% fleet), standalone				
<b>Trip Planner</b>				
Implement Google Transit Trip Planner	Mid-Term	Far-Term	Far-Term	Far-Term
Procure Trapeze Trip Planning Module		Far-Term	Far-Term	Far-Term
Enhance Existing AITG Trip Planning System	Mid-Term	Near-Term	Near-Term	Near-Term
<b>Facilities</b>				
Expand AC Power Panel Capacity	Mid-Term	Near-Term	Near-Term	Near-Term
Expand UPS Capacity		Mid-Term	Mid-Term	Mid-Term
Renovate to Provide More Computer Room Space		Mid-Term	Mid-Term	Mid-Term
<b>Training</b>				
Train Operators on Proper Use of Nextel Voice Communications	Near-Term	Near-Term	Near-Term	Near-Term
Establish Training Program for OmniLink Operators	Mid-Term	Mid-Term	Mid-Term	Mid-Term
Procure Additional Trapeze System Training	Near-Term	Near-Term	Near-Term	Near-Term
Priority Needs Satisfied by Alternative (out of 31 total)	24	31	31	31

Key to Implementation Timeframes:

Red = Near-Term (0 – 2 years), Yellow = Mid-Term (2 – 5 years), Blue = Far-Term (5 – 10 years), White = Not included in set

Alternatives 2 through 4 implement an integrated computer-aided dispatch/automated vehicle location (CAD/AVL) solution to varying degrees, but differ from each other in the technology used to provide wireless voice and data communications. CAD/AVL is a key element in these alternatives because that technology is the most capable of satisfying a significant number of PRTC's needs within a single procurement and with a high degree of integration.

The ITS Technology Plan was completed in June 2009 and was adopted by the PRTC Board of Commissioners in September 2009. Simultaneously, the Board approved the pursuit of TIGER Grant funds for a "bus priority" network encompassing PRTC and all the other transit providers in the Washington D.C. metropolitan area, which all told amounted to over \$200 million dollars. PRTC's portion of the application amounted to \$10,000,000 -- to fund the acquisition of thirteen replacement buses and multiple elements of the PRTC ITS Technology Plan including a new CAD/AVL system, automated passenger counters, supplemental surveillance cameras, and an "automated stop announcement" capability. TIGER funding for \$58,838,000 was awarded, including all \$10,000,000 that PRTC sought. Now that the TIGER grant has been awarded, PRTC is currently being assisted by a competitively procured ITS consultant on the preparation of the CAD/AVL RFP, the conduct of the CAD/AVL competitive procurement, and eventually the oversight of the selected vendor for the CAD/AVL implementation, which can serve as a model for other transit agencies in the Commonwealth interested in procuring CAD/AVL systems.

### 3.10 LAND USE SUMMARY

The Prince William County 2008 Comprehensive Plan is a planning document for long term transportation projects, including road improvements, bicycle and pedestrian facilities and public transportation. The planning document includes a Long Range Land Use map for the PRTC region, as shown in Figure 3-39.

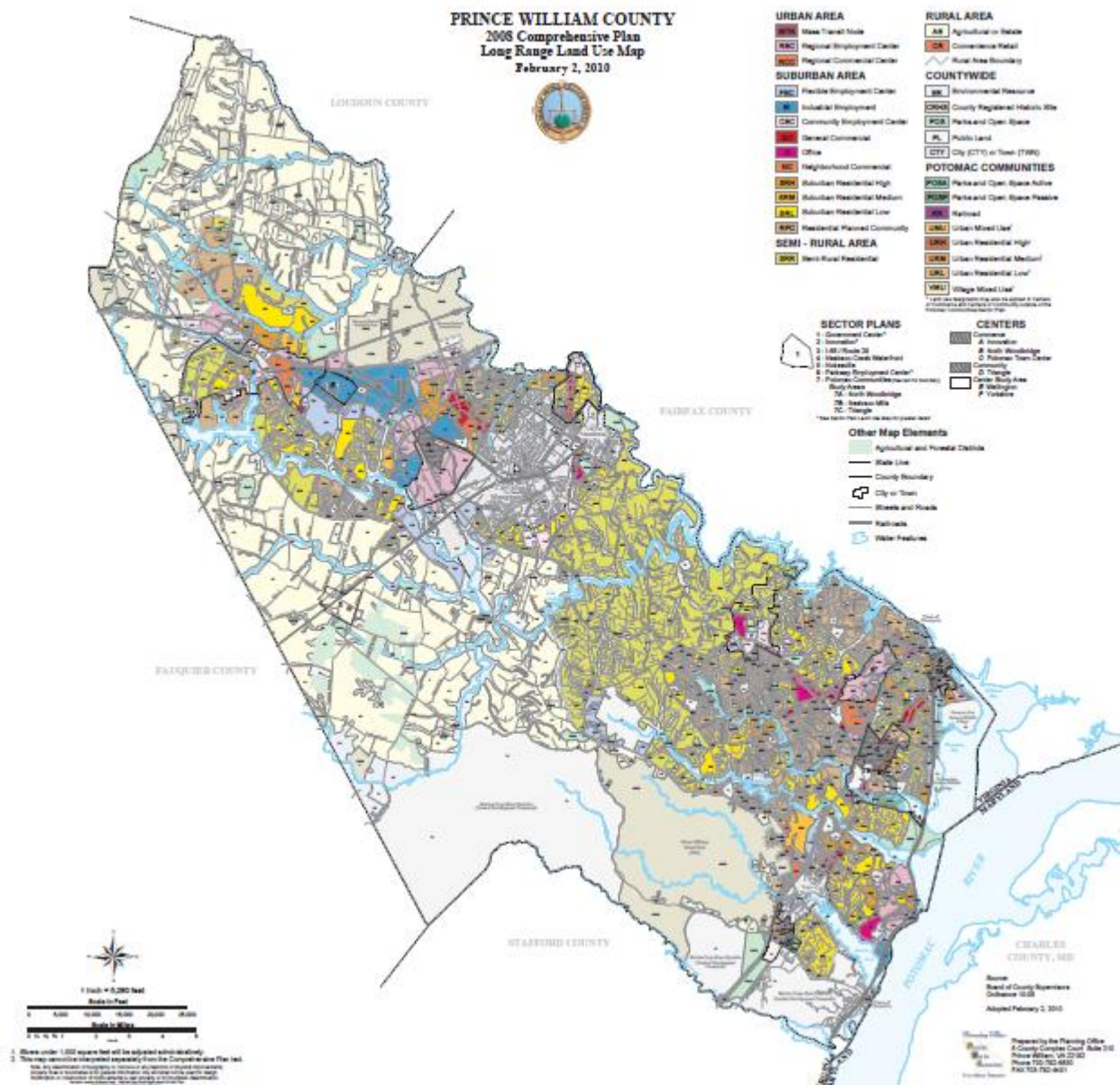
The comprehensive plan identifies major transportation corridors where development is and should continue to be focused. In eastern Prince William County: I-95, Route 1, Old Bridge, Prince William Parkway, Dumfries Rd, Quantico Base, Minnieville Rd and Dale Blvd. In western Prince William County (including Manassas and Manassas Park): I-66, Centerville Rd, Manassas Dr, Sudley Rd, Church, Grant and Center.

### 3.11 BICYCLE AND PEDESTRIAN PLANS

The Prince William County Comprehensive Plan; Parks, Open Spaces and Trail Chapter, identifies the existing and projected trails in the Prince William County area. Figure 3-40 shows existing and proposed trails.

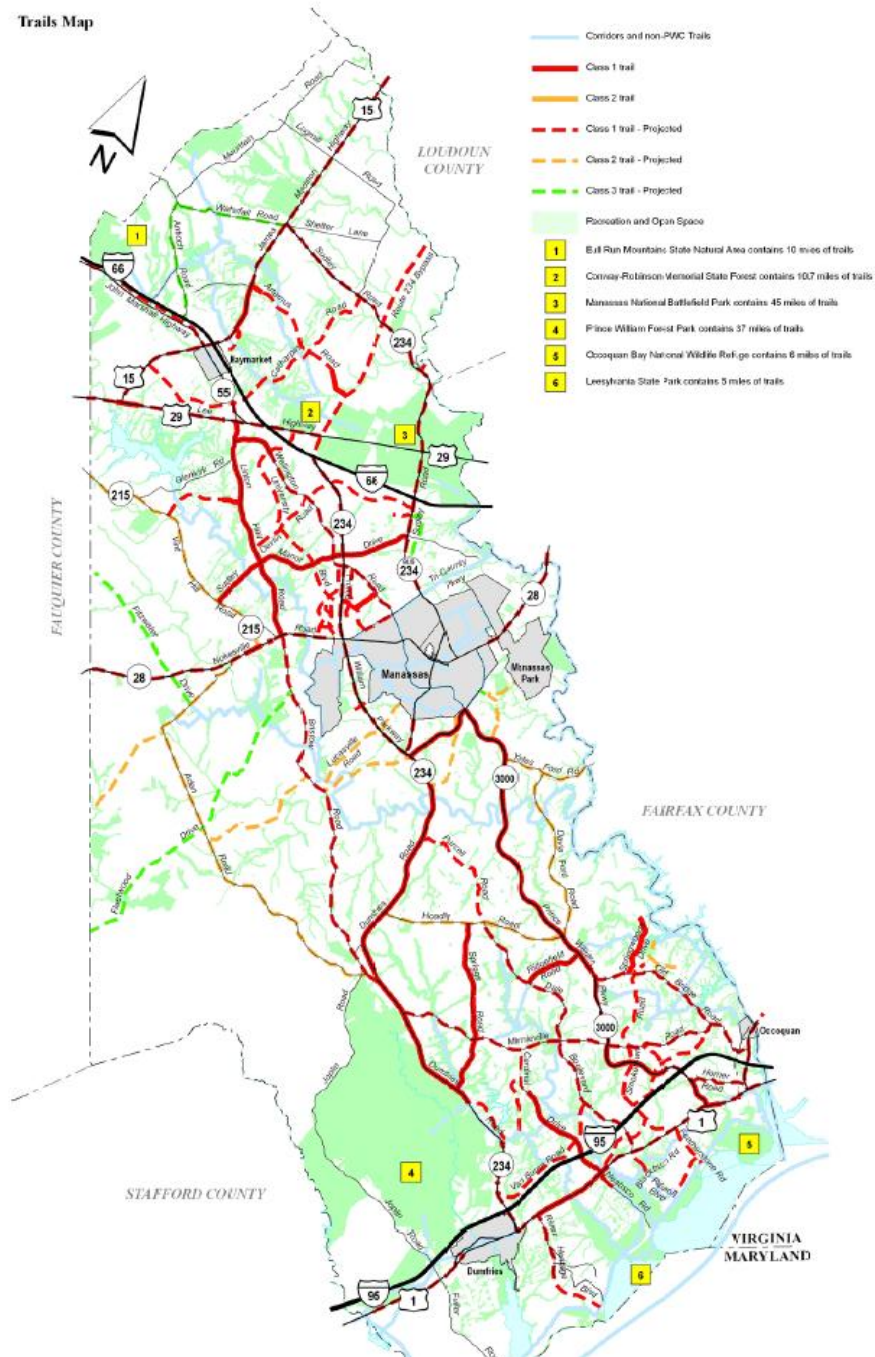


Figure 3-39: Prince William County Long Range Land Use Plan





**Figure 3-40: Prince William County Existing and Projected Trails Map**



## CHAPTER 4 – TRANSIT SERVICE AND FACILITY NEEDS ASSESSMENT

This chapter identifies potential transit service and capital needs for PRTC. Service and capital needs are identified based on the evaluation conducted in previous chapters of this TDP, stakeholder meetings, evaluation of the existing PRTC OmniRide and OmniLink transit service, service coverage and level analysis, demographic analysis, future land use and development plans, and existing plans for PRTC service.

Several plans and studies provided the foundation for the service needs included in this chapter. These plans include recommendations through the year 2030. While some of these identified needs extend beyond the FY 2012-2017 timeframe, they are included for comprehensiveness. Key PRTC documents include PRTC's *Bus Strategic Plan* (October 2004) and *Long Range Transit Bus Plan* (May 2007).

Subsequently, DRPT led the completion of two interstate corridor transit and Transportation Demand Management (TDM) studies. The purpose of the *I-95/I-395 Transit/TDM Study* (February 2008) was to determine the appropriate transit services to be implemented in conjunction with the I-95/I-395 HOV/Bus/HOT Lane project. Similarly, the purpose of the *I-66 Transit/TDM Study* (December 2009) was to identify more transportation choices through transit service and TDM program enhancements to increase mobility in the I-66 corridor.

Some of the identified improvements would also address recent transit needs associated with Base Realignment and Closure Commission (BRAC) recommendations for BRAC 133 (Mark Center), Fort Belvoir, and Engineer Proving Ground (EPG). These recommendations were reviewed in a meeting with PRTC staff and modified where necessary to reflect current conditions and plans.

General transit service and transit capital needs have been identified for consideration for inclusion in PRTC's TDP follow.

### 4.1 TRANSIT SERVICE NEEDS

Transit service needs have been identified for the two major categories of PRTC service, OmniRide and OmniLink, as summarized below. Estimated revenue-hours and vehicles required were defined based on a spreadsheet based operating statistics model developed for the TDP, in combination with assumptions noted in the source documents, where available. Using PRTC's FY 2011 cost per revenue hour of \$92.20 to operate service plus \$20.80 for fuel, cost estimates, rounded to the nearest \$100, were also developed for each proposed need.

#### OmniRide and Metro Direct Service Needs

- Continue to address overcrowding and longer travel times due to congestion by programming contingency hours and buses annually
- Implement new and modified commuter service to growth areas of the County (e.g., Gainesville, Haymarket, central county)

- Provide improved connectivity between Prince William County and regional activity centers (e.g., downtown Washington, Pentagon, Crystal City, Tysons Corner, Dulles Airport, Alexandria, Merrifield, Bailey's Crossroads)
- Provide funding to continue the Tysons Express route once traffic mitigation funding for this route expires in mid-FY 2013
- Implement Saturday Metro Direct service connecting eastern Prince William County to the Metrorail system
- Position PRTC to take full advantage of the region's plans for high occupancy toll (HOT) lanes on I-95/I-395 and I-495 and priority bus facilities on I-66 by planning for modifications to existing routes and new routes
- Implement new and modified commuter service in the I-66 corridor to take full advantage of extended HOV lanes and park-and-ride facilities (e.g., Cushing Road Commuter Lot)
- Coordinate commuter bus service plans and service levels with implementation of the Dulles Corridor Metrorail extension
- Address transit needs associated with BRAC recommendations

### **OmniLink and Cross County Connector Service Needs**

- Implement a three-phase approach to address on-time performance issues on the eastern routes which make timed transfers at the PRTC Transit Center
- Improve service frequencies, expand service hours, and/or expand service days over time consistent with PRTC's Long Range Transit Bus Plan service policy
- Address transit needs associated with Fort Belvoir BRAC recommendations
- Implement new or modified local route serving the Montclair, Gainesville, and Haymarket residential areas and destinations such as the George Mason University Prince William Campus and Innovation Business Park

#### **4.1.1 OMNIRIDE AND METRO DIRECT TRANSIT SERVICE NEEDS**

##### **Ambient Growth Needs**

PRTC has historically employed a policy for its OmniRide routes to counteract overcrowding and longer running time in downtown Washington, DC. With regard to overcrowding, the policy defines overcrowding as the presence of more passengers on a particular trip than the seated capacity of the bus normally assigned to the trip (i.e., standees), observed at least once per week for a period of a month or longer. This excludes trips that experienced unusual loads because of an incident. Given the operation of OmniRide routes on area interstate highways and associated running times in express mode exceeding 30 minutes or more, the presence of standees on these trips is not only uncomfortable for passengers, but also potentially dangerous.

Added to this challenge is traffic congestion in downtown D.C. that has progressively worsened over time, prompting the DC Department of Transportation to prepare new traffic regulations requiring changes to PRTC bus routings and stops. As a consequence of the growth in traffic congestion, PRTC's

services in downtown DC are experiencing. longer running times, which then result in on-time performance and customer satisfaction issues if not addressed.

PRTC's first set of recourses to address overcrowding, as well as running time issues, include a schedule change, routing change, or some other operational change that can remedy the problem without increasing expenses or adding buses. However, these types of changes do not always fully address the problem, and it becomes necessary to add scheduled service hours, which often also requires additional buses.

To combat this problem, PRTC has retained a small number (generally less than 10) of retirement-age buses in its "contingency fleet," which can be moved into the active fleet when necessary. As documented in Chapter 1, as of April 30, 2010 only two 1993-vintage MCI coaches remained in the contingency fleet, the rest having been placed in active service in recent years. PRTC also budgets a small number (up to 17) of daily "contingency hours" each year to provide some ability to make service adjustments.

To provide PRTC with the ability to proactively remedy overcrowding and running time issues, the needs plan ideally would identify ambient growth needs in each year of the TDP at the level of 15 daily "contingency hours" and two commuter buses. However, PRTC's current maintenance facility is at practical capacity until the Western Maintenance Facility is substantially complete, which is anticipated in FY 2016. Thus, the needs plan has been developed assuming the completion of the second maintenance facility is a prerequisite for any substantial service improvement requiring additional buses. Without additional buses, OmniRide service changes are limited to schedule adjustments and perhaps the occasional addition of a trip, if cycle times allow a bus to deadhead back and complete a second trip. Given that limitation, from FY 2012 through FY 2015 the needs plan includes only 10 daily ambient growth hours per year. When the restriction on additional buses is lifted in FY 2016, the needs plan assumes six new buses and 40 daily revenue hours, based on the presumption that pervasive overcrowding will be present after an extended period of no overcrowding relief. Then in FY 2017, the addition of two buses and 15 daily revenue hours would begin. The ambient growth needs service plan is presented in Table 4-1.

### **Modifications to Existing Routes Serving I-95/I-395**

As shown in Table 4-2 and described below, several existing OmniRide and Metro Direct routes serving I-95/I-395 are proposed to be modified in the TDP. Some of what is proposed is predicated on funding being made available by virtue of the planned I-95 HOT lanes project for bus purchases as necessary and for ongoing operating subsidy, as was envisioned in a transit improvement plan produced under VDRPT leadership in conjunction with the originally proposed I-95 HOT lanes plan ("the original HOT lanes plan"). That transit improvement plan is referred to hereinafter as the *I-95/I-395 Transit/TDM Study* or the I-95/I-395 Study.

**Table 4-1: OmniRide and Metro Direct Ambient Growth  
Operating and Funding Requirements**

Service	Existing or Prior Year Service			Proposed Service				Impact of Proposed Changes	
	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Rev-Hours	Description	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Hours	Peak Vehicles Required	Annual Hours
<b>Ambient Growth Needs</b>									
1. OmniRide: FY 2012	n/a	n/a	n/a	Address overcrowding and longer travel times due to congestion	n/a	0	2,550	0	2,550
2. OmniRide: FY 2013	n/a	n/a	n/a	Address overcrowding and longer travel times due to congestion	n/a	0	2,550	0	2,550
3. OmniRide: FY 2014	n/a	n/a	n/a	Address overcrowding and longer travel times due to congestion	n/a	0	2,550	0	2,550
4. OmniRide: FY 2015	n/a	n/a	n/a	Address overcrowding and longer travel times due to congestion	n/a	0	2,550	0	2,550
5. OmniRide: FY 2016	n/a	n/a	n/a	Address overcrowding, addition of midday & evening trips, and congestion increases	n/a	6	10,200	6	10,200
6. OmniRide: FY 2017	n/a	n/a	n/a	Address overcrowding, addition of midday & evening trips, and congestion increases	n/a	2	3,825	2	3,825

In February 2011, the original HOT lanes plan was scuttled and a new, more modest scope HOT lanes plan was proposed, which will necessitate reexamination of the I-95/I-395 Study. That reexamination was still pending when work on this TDP was being concluded so, for the present, PRTC has assumed that the previously developed I-95/I-395 Study is still operative. Wherever service modifications presumed to be funded by virtue of the I-95 HOT lanes project are described, they are highlighted as such.

1. **Saturday Service Prince William Metro Direct** – PRTC’s 2004 *Bus Strategic Plan* identified the need for Saturday service connecting to the Metrorail system. It is one of PRTC’s most requested service enhancements, particularly since Potomac Mills is a major destination for both customers and employees from the WMATA service area. Via the Franconia-Springfield Metro station, Saturday service on the Prince William Metro Direct route would provide WMATA customers with access to employment locations along Route 1 and the Potomac Mills area, and connecting service to other areas of eastern Prince William County through transfers with the Dale City, Dumfries, Woodbridge, and Route 1 OmniLink routes. Similarly, it would also provide Saturday access to the WMATA system for Prince William County residents.

Using one bus, service is proposed to operate from 8:20 a.m. until the route’s current weekday end of service at 11:13 p.m. approximately every 75 minutes. A 40-foot suburban bus from the existing fleet is assumed for this service. This service would be warranted as early as FY 2012.

2. **Tysons Express** – In the fall of 2009, PRTC implemented the Tysons Express route, operating between Woodbridge and the Tysons Corner area. The route starts at the Woodbridge VRE Station, makes a stop at the Route 123/ I-95 Commuter Lot, and travels via the I-95 HOV lanes and I-495 to Tysons Corner, where it circulates to serve 16 stops in the Tysons area. The route’s buses and operation during the construction of the I-495 HOT lanes are funded entirely by Virginia Megaprojects, a partnership between DRPT and the Virginia Department of Transportation, to help alleviate congestion during construction of the I-495 High Occupancy Toll (HOT) lanes and Dulles Metrorail.

Once construction of the HOT lanes on I-495 is complete, faster and more attractive service to the Tysons area will be possible. To continue this service beyond the period covered by the agreement with DRPT (i.e., beyond mid-2013 when the HOT lanes open) would require PRTC to assume its operating costs unless the continuation of this service during the course of construction of the proposed I-95 HOT lanes becomes part of a “congestion mitigation plan.” While an I-95 HOT lanes-related “congestion mitigation” plan is anticipated now that the I-95 HOT lanes project has been rekindled, the “congestion mitigation” plan has not been produced as yet and so, for the present time, PRTC is assuming that the continuation of this service will require local funds beyond mid-2013 and until the I-95 HOT lanes project is completed. Thereafter, PRTC is assuming the continuation of service would be funded as an I-95 HOT lanes complementary strategy, just as the *I-95/I-395 Transit/TDM Study* envisioned. Therefore, operating funds for Tysons Express are shown as a need beginning in the second half of FY 2013 and continuing through the end of FY 2014 (when the construction of the northerly segment of the I-95 HOT lanes is expected to be completed).

**Table 4-2: I-95/I-395 OmniRide and Metro Direct Service Modifications  
Operating and Funding Requirements**

Service	Existing or Prior Phase Service			Proposed Service				Impact of Proposed Changes		Annual Operating Cost (FY 12\$)
	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Rev-Hours	Description	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Rev-Hours	Peak Vehicles Required	Annual Rev-Hours	
Modified Routes Serving I-95/395										
1. Prince William Metro Direct Saturday Service	n/a	n/a	n/a	Add Saturday service from 8 AM to 11 PM connecting with Metrorail	3 am rnd. trips 8 pm rnd.trips 22 total	0	715	0	715	\$ 83,100
2. Tysons Express	4 am peak dir. trips 5 pm peak dir. trips 9 total	4	3,272	Will be PRTC's cost from mid-FY 2013 until FY 2015, when HOT lanes funding begins	4 am peak dir. trips 5 pm peak dir. trips 9 total	4	2,703	0	-569	\$ (66,100)
3. East County-Springfield OmniRide (modified Prince William Metro Direct)	4 am peak rnd. trips 4 pm peak rnd.trips 15 mid./even. rnd. trips 46 total	2	7,097	During peaks only, serve Metro then circulate in Springfield (HOT lanes dependent)	4 am peak rnd. trips 4 pm peak rnd.trips 15 mid./even. rnd. trips 46 total	3	8,372	1	1,275	\$ 148,300
4. Dale City - Washington/Navy Yard	5 am peak dir. trips 6 pm peak dir. trips 11 total	6	4,118	Modify to serve add'l P&R lots along I-95; improve frequency (HOT lanes dependent)	7 am peak dir. trips 8 pm peak dir. trips 15 total	7	5,636	1	1,517	\$ 176,400
5. Route 1 OmniRide	1 am peak dir. trip 1 pm peak dir. trip 2 total	1	921	Improve peak freq., add midday/evening service	4 am peak dir. trips 4 pm peak dir.trips 2 mid./even. dir. trips 10 total	4	4,590	3	3,669	\$ 426,700



This service to Tysons Corner is generally consistent with the PRTC *Long Range Transit Bus Plan* (LRTP), which calls for a route operating between Central and East Prince William County to Tysons and Merrifield, assuming the construction of HOT lanes on I-495. Similarly, the *I-95/I-395 Transit/TDM Study* (I-95/I-395 Study) called for a route operating between East Prince William County (Woodbridge) and Tysons and Merrifield. No specific modifications to the existing Tysons Express alignment or service levels are proposed in this TDP. However, PRTC may re-evaluate its alignment once I-495 HOT lanes construction is complete for possible modifications to its origination points in Prince William County.

As the LRTP and I-95/I-395 Study recommended continuing the route from Tysons to Merrifield, the destination end of the route should also be evaluated. Continuing the route to Merrifield would require significant backtracking for passengers bound for the Merrifield area. Thus, this TDP envisions a separate new route between East Prince William County and Merrifield, as described in the next section.

3. **Modify Prince William Metro Direct** – To provide more direct service to employment destinations in the Springfield area, PRTC's LRTP called for modifying the alignment of this route in the peak periods to provide limited circulation after its stop at the Springfield-Franconia Metro Station. Since that time, DRPT completed the I-95/I-395 Study. The fiscally-constrained recommendation from that study reaffirmed this modification to the route.

The route would serve the retail, commercial, and office uses clustered around the Franconia Road/I-95 interchange, an area which has been designated by Fairfax County as a Community Reinvestment District (CRD). Springfield Mall, located in the southeast quadrant of the interchange, is being redeveloped into a mixed-use Town Center. While the specific alignment has yet to be determined, it has been generally assumed that it would travel from the Franconia-Springfield Metro Station north to serve the Springfield Mall area, west of I-95 to serve the Tower Shopping Center, Concord Shopping Center, and Springfield Plaza Shopping Center, and south to serve the Backlick Shopping Center before making the return to Prince William County.

Assuming an additional 30 minutes per peak period round trip for circulation in Springfield plus layover, one additional bus would be required. A 40-foot suburban bus is assumed, consistent with the buses used on the existing route. No changes are proposed in the off-peak periods. While implementation of this route modification is desired in the early years of the TDP, the implementation of this service change is bus dependent. Therefore, the earliest possible implementation date is FY 2016. The timing of this improvement will also be dependent on the implementation of HOT lanes on I-95/I-395.

4. **Modify Dale City – Washington/Navy Yard OmniRide** – Both the PRTC LRTP and DRPT's subsequent I-95/I-395 Study call for modifying this route to serve additional park-and-ride lots in the I-95 corridor and adding two morning and two evening peak period trips. Consistent with these plans, the TDP proposes increasing the number of peak trips from five to seven in the AM and from six to eight in the PM, for a total of nine trips daily. This service improvement would require one additional vehicle, assumed to be a 45-foot commuter bus, consistent with the buses used on the existing route.

While implementation of this route modification was identified in the PRTC LRTP as being timely in FY 2010, the implementation of this service change is bus dependent. Therefore, the earliest possible implementation date is FY 2016. The timing of this improvement will also be dependent on funding being made available as envisioned by the *I-95/I-395 Transit/TDM Study*.

5. **Improve frequency of Route 1 OmniRide** – To meet estimated ridership demand, the LRTP and I-95/I-395 Study call for adding increasing the number of peak direction trips in both the AM and PM peak periods and adding a limited number of midday and evening trips. While the LRTP proposes eight additional trips in both the AM and PM, the I-95/I-395 Study and PRTC staff indicated a more modest peak service increase of only three additional trips in each period. Consistent with the more recent work, the TDP proposes increasing the number of peak trips from one to four in the AM and PM, plus one mid-day and one evening peak direction trips, for a total of 10 trips daily. This service improvement would require three additional vehicles, assumed to be 40-foot suburban buses, consistent with the bus used on the existing route.

The timing of this improvement will be dependent on residential development, particularly in the Cherry Hill Peninsula area, as well as the implementation of priority treatment as proposed in the *Route 1 Bus Rapid Transit Feasibility Study*, such as queue jumper lanes and transit signal priority. The envisioned start date for this service change is FY 2020.

## **New Routes Serving I-95/I-395**

As presented in Table 4-3 and described below, four new OmniRide routes serving I-95/I-395 are proposed in the TDP.

1. **New Central/East County to Alexandria OmniRide** – The PRTC LRTP calls for adding service to several regional activity centers with significant employment densities, including the East Eisenhower Valley and Downtown Alexandria. To meet this need, the plan includes a new route from commuter lots in Central and East Prince William County to this area via the I-95 HOV lanes. This new route was reaffirmed in the *I-95/I-395 Transit/TDM Study*.

Since that time, the City of Alexandria completed a Comprehensive Transportation Master Plan, which, in part, proposes dedicated right-of-way and transit priority features in three corridors. Of these, the east-west Corridor B would follow Duke Street from west of the City to a loop around the East Eisenhower area on the east, following Holland Avenue, Eisenhower Avenue, and Telegraph Road, with connections to the King Street and Eisenhower Avenue Metro Stations. To take advantage of the proposed dedicated transit rights-of-way, the TDP proposes routing the proposed Alexandria OmniRide route from I-95 via Corridor B. Thus, the proposed Alexandria alignment would be east on Duke Street to the corridor's East Eisenhower loop.

Proposed service levels would be four peak direction trips in both the AM and PM peak periods (a total of eight trips daily), requiring four 45-foot commuter buses. While implementation of this route modification was identified in the PRTC LRTP as FY 2010, the implementation of this service change is bus dependent. Therefore, the earliest possible implementation date is FY 2016. The timing of this improvement would also be dependent on state funding as envisioned by the *I-95/I-395 Transit/TDM Study*.

**Table 4-3: I-95/I-395 OmniRide and Metro Direct New Routes  
Operating and Funding Requirements**

Service	Existing or Prior Phase Service			Proposed Service				Impact of Proposed Changes	
	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Rev-Hours	Description	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Rev-Hours	Peak Vehicles Required	Annual Rev-Hours
<b>New Routes Serving I-95/395</b>									
1. Central/East County-Alexandria OmniRide	n/a	n/a	n/a	New route to East Eisenhower Valley and Downtown Alexandria (HOT lanes dependent)	4 am peak dir. trips 4 pm peak dir. trips 8 total	4	2,372	4	2,372
2. East County-Seminary Road OmniRide	n/a	n/a	n/a	New route to Mark Center, Skyline, and Baileys Crossroads (HOT lane transit interchange dependent)	4 am peak dir. trips 4 pm peak dir. trips 8 total	3	2,040	3	2,040
3. Central/East County-Pentagon/DC OmniRide	n/a	n/a	n/a	New route from Central/East County to Pentagon/Washington	4 am peak dir. trips 4 pm peak dir. trips 8 total	4	1,479	4	1,479
4. East County-Merrifield OmniRide	n/a	n/a	n/a	New route from East County to Merrifield	4 am peak dir. trips 4 pm peak dir. trips 8 total	4	2,372	4	2,372

2. **New East County to Seminary Road Area OmniRide**– The PRTC LRTP calls for modifying the existing Dale City to Pentagon and Lake Ridge to Pentagon routes to serve Skyline and Baileys Crossroads via Seminary Road, dependent on an “easy off - easy on” solution for buses. It calls for adding a trip to each route to maintain current headways.

The fiscally-constrained recommendation from the *I-95/I-395 Transit/TDM Study* maintained the provision of a new route providing service between Lake Ridge and the Seminary Road area via I-95 and I-395. This route would serve the Mark Center, Skyline, and Baileys Crossroads. This route would also serve BRAC 133 (Mark Center) currently under construction, which will house the Washington Headquarters Service (WHS).

Consistent with the *I-95/I-395 Transit/TDM Study*, this TDP proposes the addition of this new route from eastern Prince William County, dependent on an “easy off – easy on” bus access solution such as an HOV transit interchange at Seminary Road. For TDP purposes, this routing in Prince William County is assumed to be the same as the existing Lake Ridge OmniRide route between Festival at Old Bridge and the Route 123/I-95 Commuter Lot, though it could originate at the Dale City Commuter Lot instead.

While the specific alignment in the Seminary Road area has yet to be determined, it has been generally assumed that it would travel north from the I-395 at Seminary Road interchange, serving, at a minimum, the proposed Mark Center Transportation Center at BRAC 133, the Alexandria Campus of Northern Virginia Community College, the Skyline Center, and the Bailey’s Crossroads Community Business Center (CBC). Fairfax County recently adopted plans to revitalize the Bailey’s Crossroads CBC into a new mixed-use town center area, which would be served by the proposed Columbia Pike streetcar and a transit center to be located at its Jefferson Street Station.

Proposed service levels would be four peak direction trips in both the AM and PM peak periods, requiring three 40-foot suburban buses. The estimated start date for this service change is FY 2020. The timing of this improvement will also be dependent on the implementation of HOT lanes on I-95/I-395 with a HOT lanes interchange at Seminary Road, as well as operating and capital funds.

3. **New Central/East County to Pentagon/DC OmniRide** – The PRTC LRTP and the *I-95/I-395 Transit/TDM Study* include a new route from commuter lots in Central and East Prince William County to the Pentagon and downtown Washington, DC via the I-95 HOV lanes. Proposed service levels would be four peak direction trips in both the AM and PM peak periods, requiring four 45-foot commuter buses. The envisioned start date for this service change is FY 2025.

The alignment of the route in the *I-95/I-395 Transit/TDM Study* assumed this new route would start at the Pfitzner Stadium Commuter Lot near the Prince William County Complex, then travel southeast on Prince William Parkway to the I-95 HOV lanes, presumably with a stop at the Horner Road Commuter Lot. On the destination end, the alignment is assumed to be the Pentagon and downtown Washington via the existing Dale City to Washington and Lake Ridge to Washington routes.

4. **New East County to Merrifield OmniRide** – As discussed for the Tysons Express route above, the TDP proposes a new route serving the Merrifield area of Fairfax County. Buses would operate between the PRTC Transit Center and Merrifield, with intermediate stops at the Potomac Mills and Horner Road Commuter Lots, routed via the I-95 HOV lanes and the I-495 HOT lanes.

While the specific alignment in the Merrifield area has yet to be determined, it has been generally assumed that it would exit I-495 at Gallows Road north and travel north to serve the Inova Fairfax Hospital complex, ExxonMobil Fairfax Office Complex, and the Merrifield Revitalization Area, including existing large employers and the proposed new town center, ending at the Dunn-Loring Metro Station.

Proposed service levels would be four peak direction trips in both the AM and PM peak periods, and would require four 45-foot commuter buses. The envisioned start date for this service change is FY 2025.

## **Modifications to Existing Routes Serving I-66**

As presented in Table 4-4 and described below, several existing OmniRide and Metro Direct routes serving I-66 are proposed to be modified in the TDP.

1. **Modify Linton Hall Metro Direct (Phases 1 & 2)** – With the completion of an extension of the I-66 HOV lanes from Prince William Parkway to US 29, PRTC has an opportunity to capture additional federal formula funds by operating over the newly opened HOV lanes. To utilize these lanes, the Linton Hall Metro Direct route is proposed to be modified in three phases. A new route providing direct service between Gainesville and downtown DC, as described below, will also be phased in to utilize these new lanes.

Based on a recent survey of current Manassas OmniRide, Linton Hall Metro Direct, and Manassas Metro Direct riders, PRTC staff confirmed there is a sizeable number of residents north and west of Manassas that are driving long distances to access the service directly to DC provided by the Manassas OmniRide route and that a sizeable number of Linton Hall Metro Direct riders are bound for downtown DC, relying on the transfer connection to Metrorail at the West Falls Church Station to get to their final destinations.

To begin moving towards improved transit service between Gainesville and downtown DC and allow PRTC to begin earning the additional HOV federal formula funds, the PRTC Board approved a modest service change in July 2010 which will require no additional local subsidy.

The Phase 1 service was implemented with the Fall Service Change on October 25, 2010. Phase 1 consists of adding two trips per day (one in the AM and one in the PM) between Gainesville and the West Falls Church Metro Station operated in an express mode. This is in contrast to the existing service, which travels on local streets between the Limestone Commuter Lot and Prince William Parkway. The additional hours of revenue service associated with this change are being funded using two of the “contingency hours” already built into the FY 2011 budget. The additional 45-foot commuter bus required for this change was taken from PRTC’s “contingency fleet.” Thus, while this change impacts revenue hours and buses required for the Linton Hall Metro Direct route, there is no fiscal impact to PRTC’s FY 2011 budget.

**Table 4-4: I-66 OmniRide and Metro Direct Service Modifications  
Operating and Funding Requirements**

Service	Existing or Prior Year Service			Proposed Service				Impact of Proposed Changes	
	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Rev-Hours	Description	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Hours	Peak Vehicles Required	Annual Hours
<b>Modified Routes Serving I-66</b>									
1. Gainesville-Tyson Central 123 (Phases 1 & 2) (modified Linton Hall Metro Direct)	4 am peak dir. trips 4 pm peak dir. trips 8 total	4	2,004	Modify to serve Tysons Central 123 Metro, instead of WFC, with 8 trips	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	2,004	0	0
2. Gainesville-Tyson Corner (Phase 3) (modified Linton Hall Metro Direct)	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	2,004	Extend to circulate through Tysons Corner	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	3,020	0	1,016
3. Manassas OmniRide	11 am peak dir. trips 11 pm peak dir. trips 3 mid./even. dir. trips 25 total	11	10,169	Curtail AM trips through DT to Pentagon and PM trips serving Pentagon but not DC	9 am peak dir.trips 9 pm peak dir.trips 3 mid./even. dir. trips 21 total	9	8,688	-2 (Note 1)	-1,482 (Note 1)
4. Manassas-Tysons (Phase 1) (modified Manassas Metro Direct)	5 am peak rnd. trips 4 pm peak rnd.trips 6 mid./even. rnd. trips 30 total	4	8,645	During peaks only, serve Tysons Corner instead of West Falls Church	5 am peak rnd. trips 4 pm peak rnd.trips 6 mid./even. rnd. trips 30 total	4	8,645	0	0
5. Manassas-Tysons (Phase 2) (modified Manassas Metro Direct)	5 am peak rnd. trips 4 pm peak rnd.trips 6 mid./even. rnd. trips 30 total	4	8,645	Extend peak period routing to circulate through Tysons Corner	5 am peak rnd. trips 4 pm peak rnd.trips 6 mid./even. rnd. trips 30 total	5	10,430	1	1,785

Notes:

- 1 Bus needs met by trimming 4 trips from Manassas OmniRide.
- 2 Operating hours reduced by trips taken from Manassas OmniRide.



The Phase 2 service changes would take place within the TDP period and would consist of three changes. First, the two additional express trips per day would be terminated, with the hours and bus utilized for concurrent implementation of the new Gainesville to DC route described below. This modification would take the route back to service levels of four peak direction trips in both the AM and PM peak periods, using four 45' commuter buses.

The implementation of Phase 2 is dependent of the start of the Dulles Corridor MetroRail service in Tysons (anticipated in 2013). It will also be triggered by the opening of the Cushing Road Commuter Lot in Prince William County at the interchange of I-66 and Route 234 Bypass (Prince William Parkway), which is scheduled for mid-FY 2013. The route will be modified to exit I-66 to serve this new commuter lot, and re-enter I-66 via a transit connection between the lot and the I-66 eastbound entrance ramp.

Finally, rather than ending at the West Falls Church Metro Station, the route would be modified to provide direct service to the Tysons Central 123 Metro Station. As the distances to West Falls Church and to Tysons Central 123 are nearly equivalent, this modification would have no fiscal impact. It would entail simply swapping one destination for the other.

These service modifications are generally consistent with both the PRTC LRTP and the I-66 Study, which called for modifying the alignment of this route in the peak periods to provide service to Fairfax Center and Tysons Corner, with stops at several intermediate priority bus stations assumed in the *I-66 Transit/TDM Study* (I-66 Study). PRTC staff has since indicated the current proposal for this route is to serve Tysons Corner, but not Fairfax Center, until such time as priority bus is implemented in the corridor, as service to Fairfax would require an “easy off – easy on” solution such as an in-line priority bus station.

2. **Modify Linton Hall Metro Direct (Phase 3)** – The Phase 3 service change would extend the alignment from Tysons Central 123 to circulate through the Tysons Corner employment area, using an alignment very similar to the current Tysons Express route. Service levels would remain four peak direction trips in both the AM and PM peak periods. Assuming an additional 30 minutes per peak period round trip for circulation in Tysons Corner plus layover, one additional 45-foot commuter bus would be required. As the implementation of this service change is bus dependent, the earliest possible implementation date is FY 2016.
3. **Modify Manassas OmniRide** –Based on a recent rider survey, PRTC anticipates a significant shift in ridership patterns from the Manassas OmniRide to the new Gainesville to DC route that would justify trimming four trips, and two buses, from this route, which would be utilized for concurrent implementation of the new Gainesville to downtown DC route described in the next section. PRTC proposes to implement this service change when the Cushing Road Commuter Lot opens, currently assumed in FY 2013.

PRTC staff have indicated the most sensible trips to curtail would be the two AM trips routed through DC before stopping at the Pentagon and the two PM trips that solely serve the Pentagon on the origin end. These trips are the exception, not the rule, for how Manassas originating direct bus service is routed.

4. **Modify Manassas Metro Direct (Phase 1)** – To provide more direct service to employment destination in the Tysons Corner area, the PRTC LRTP calls for modifying the alignment of this route in the peak periods to provide service to Fairfax Center and Tysons Corner. Subsequently, the I-66 Study reaffirmed the proposed modification of this route to serve Tysons Corner, with stops at several intermediate I-66 priority bus stations. PRTC staff indicated the current proposal for this route is to serve Tysons Corner, but not Fairfax Center, until such time as priority bus service is implemented in the corridor. The route would maintain its existing alignment in Prince William County, but would provide express service to the proposed Tysons Corner 123 Metro Station once it opens in 2013, rather than ending at the West Falls Church Metro Station. No changes are proposed in the off-peak periods.

As the distances to West Falls Church and to Tysons Central 123 are nearly equivalent, this modification will be neutral in terms of revenue hours, buses, and costs. It entails simply swapping one destination for the other. Service levels would remain five peak AM trips and four peak PM trips, using four 45-foot commuter buses. PRTC proposes to implement this service change when the Tysons Central 123 Metrorail Station opens, currently assumed in FY 2013.

5. **Modify Manassas Metro Direct (Phase 2)** – A second modification of the Manassas Metro Direct route would extend the route during peak periods in Tysons Corner to circulate through this major employment area, using an alignment very similar to the current Tysons Express route. No changes are proposed in the off-peak periods.

Service levels would remain five peak AM trips and four peak PM trips, with no changes proposed in the off-peak periods. Assuming an additional 30 minutes per peak period round trip for circulation in Tysons Corner plus layover, one additional 45-foot commuter bus would be required. While implementation of this route modification was identified in the PRTC LRTP as FY 2010, the implementation of this service change is bus dependent. Therefore, the earliest possible implementation date is FY 2016.

## New Routes Serving I-66

As presented in Table 4-5 and described below, several new OmniRide routes serving I-66 are proposed in the TDP.

1. **New Gainesville to DC OmniRide (Phase 1)** – As discussed in the previous section, PRTC plans to implement a new route providing direct service between Gainesville and downtown DC. This new route is generally consistent with both the PRTC LRTP and the I-66 Study. Implementation of this route will be triggered by the opening of the Cushing Road Commuter Lot at the interchange of I-66 and Route 234 Bypass (Prince William Parkway), which is scheduled for mid-FY 2013. Proposed service levels would be four peak direction trips in both the AM and PM peak periods, using four 45' commuter buses. PRTC proposes to implement this service change when the Cushing Road Commuter Lot opens, currently assumed in FY 2013.

**Table 4-5: I-66 OmniRide and Metro Direct New Routes  
Operating and Funding Requirements**

Service	Existing or Prior Year Service			Proposed Service				Impact of Proposed Changes	
	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Rev-Hours	Description	Total 1-Way Trips per Service Day	Peak Vehicles Required	Annual Hours	Peak Vehicles Required	Annual Hours
<b>New Routes Serving I-66</b>									
1. Gainesville-DC OmniRide (Phase 1)	n/a	n/a	n/a	Limestone Commuter Lot & Cushing Commuter Lot to Washington/Navy Yard	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	3,825	4 (Note 1)	1,845 (Note 2)
2. Gainesville-DC OmniRide (Phase 2)	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	3,825	Extend route to serve Haymarket Commuter Lot(s)	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	4,335	0	510
3. Manassas-Dulles OmniRide	n/a	n/a	n/a	New route from Manassas Mall to Dulles via Sudley, Old Town Manassas, VA 28	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	2,007	4	2,007
4. Gainesville/Haymarket-Dulles OmniRide	n/a	n/a	n/a	New route from Haymarket and Gainesville Commuter Lots via I-66 and VA 28	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	2,066	4	2,066
5. West County-Reston/Herndon OmniRide	n/a	n/a	n/a	New route from western Prince William County to Reston/Herndon	4 am peak dir.trips 4 pm peak dir.trips 8 total	4	2,117	4	2,117

Notes:

- 1 Bus needs met by trimming 4 trips from Manassas OmniRide.
- 2 Operating hours reduced by trips taken from Manassas OmniRide.

Bus needs would be met by trimming trips and buses, as previously discussed, from the Linton Hall Metro Direct schedule (Phase 2) and the Manassas OmniRide schedule, plus the use of one “contingency fleet” bus. Operating costs would be covered by the trips trimmed from these two routes. The remainder of the operating costs would be covered by additional federal and state formula funding earned by operating the Linton Hall express trips in the extended I-66 HOV lanes beginning in FY 2011, as well as additional fare revenues from riders switching from the Linton Hall Metro Direct route to this new route, as riders which would be paying the higher OmniRide express fare.

The proposed alignment is from the Limestone Commuter Lot to the I-66 at US 29 interchange via Linton Hall and US 29, exiting I-66 to serve the Cushing Road Commuter lot, and continuing via I-66 to the State Department, through downtown DC, and east to the Navy Yard.

2. **New Gainesville to DC OmniRide (Phase 2)** – The Phase 2 service change would extend the route to the west of Gainesville to the Haymarket area. Implementation would be dependent on the development of commuter parking in the Haymarket area. Proposed service levels would be four peak direction trips in both the AM and PM peak periods, with no additional buses required. The envisioned start date for this service change is FY 2020.
3. **New Manassas to Dulles OmniRide** – The PRTC LRTP and the I-66 Study include a new route from Manassas to Dulles Airport through the Manassas area and then via Route 28. Proposed service levels would be four peak direction trips in both the AM and PM peak periods, requiring four 45-foot commuter buses. The envisioned start date for this service change is FY 2020.

While the specific alignment in the Manassas area has yet to be determined, it has been generally assumed that the route would serve the Manassas Mall Commuter Lot, downtown Manassas, old town Manassas, and the Route 28 corridor.

4. **New Gainesville/Haymarket to Dulles OmniRide** – The PRTC LRTP and the I-66 Study include a new route from commuter lots in Haymarket and the Cushing Road Commuter Lot in Gainesville to Dulles Airport via the I-66 HOV lanes and Route 28. Implementation would be dependent on the development of commuter parking in the Haymarket area. Proposed service levels would be four peak direction trips in both the AM and PM peak periods, requiring four 45-foot commuter buses. The envisioned start date for this service change is FY 2025.
5. **New West County to Reston/Herndon OmniRide**- The PRTC LRTP and the I-66 Study include a new route from commuter lots along the I-66 corridor to the Reston/Herndon employment area along the Dulles Tollway. Proposed service levels would be four peak direction trips in both the AM and PM peak periods, requiring four 45-foot commuter buses. The envisioned start date for this service change is FY 2030.

While the specific alignment in western Prince William County and the Reston-Herndon areas have yet to be determined, it has been generally assumed that the route would serve the Cushing Road Commuter Lot and travel east via the I-66 HOV lanes and north on Route 28, exiting Route 28 at McLearen Road. From there, the route would operate on local streets, serving office and commercial areas along Centreville Road, Worldgate Drive, Monroe Street,

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Sunrise Valley Drive, Reston Parkway, and Bluemont Way to the Reston Town Center Transit Center.

#### 4.1.2 OMNILINK AND CROSS COUNTY CONNECTOR TRANSIT SERVICE NEEDS

##### **Ambient Growth Needs**

Increased traffic congestion and slowing travel speeds have made it progressively more difficult to maintain service frequencies and accommodate off-route trip requests on PRTC's OmniLink routes, particularly in eastern Prince William County. In addition to periodic schedule revisions, PRTC management has employed a number of other measures to improve the off-route/on-time performance, including adding a third bus to these routes in 2006 during the AM and PM peak periods when the buses have been most prone to on-time performance issues. Adding the third bus temporarily relieved the time pressures, but the gains resulting from that have been fully eroded by ridership gains and continuing deterioration of travel speeds, to the point that additional changes are necessary.

In September 2010, the PRTC Board of Commissioners approved a series of remedial actions which would not require additional resources in FY 2011 or FY 2012. These changes were implemented in October 2010. However, more permanent solutions to the OmniLink on-time performance challenges will impact operating costs and/or require additional vehicles.

Beyond the remedial action plan that has been implemented, the following changes are proposed in the TDP to address on-time performance issues on the Dale City, Dumfries, and Woodbridge/Lake Ridge routes, which are the eastern routes which make timed transfers at the PRTC Transit Center. The third bus being deployed on these routes would operate throughout the midday. To allow the schedules to more realistically reflect the running time realities of getting from one end of the route to the other time and allow time to be reinstated for off-route trips, a fourth bus would be deployed in the peak periods (three hours in the AM and three hours in the PM).

For the Dale City, Dumfries, and Woodbridge/Lake Ridge routes, four additional 30-foot local buses would be required. As the current maintenance facility has the capacity to accommodate these buses, PRTC proposes to implement these changes in FY 2014. FY 2014 is the earliest new buses could realistically be put into operations, given the two year lead time to procure local buses. The ambient growth needs service plan is presented in Table 4-6.

##### **1. Dale City**

- Maintain weekday peak period service frequency of 30 minutes with a cycle time increase from 90 to 120 minutes and
- Improve weekday midday service frequency from 45 minutes to 30 minutes.

##### **2. Dumfries**

- Maintain weekday peak period service frequency of 30 minutes with a cycle time increase from 90 to 120 minutes and
- Improve weekday midday service frequency from 45 minutes to 30 minutes.

**Table 4-6: OmniLink and Cross County Connector Ambient Growth  
Operating and Funding Requirements**

Service	Existing or Prior Year Service			Proposed Service				Impact of Proposed Changes	
	Days & Frequency	Peak Vehicles Required	Annual Rev-Hours	Description	Days & Frequency	Peak Vehicles Required	Annual Hours	Peak Vehicles Required	Annual Hours
<b>Eastern Prince William County: Ambient Growth Needs</b>									
1. Dale City	Wkdy: 30 mins. peak 45 mins. midday 90 mins. night Sat: 90 mins.	3	10,173	Add 4th bus in peak periods to maintain headways & allow add'l deviations	Wkdy: 30 mins. peak 30 mins. midday 90 mins. night Sat: 90 mins.	4	13,830	1	3,657
2. Dumfries	Wkdy: 30 mins. peak 45 mins. midday 90 mins. night Sat: 90 mins.	3	10,169	Add 4th bus in peak periods to maintain headways & allow add'l deviations	Wkdy: 30 mins. peak 30 mins. midday 90 mins. night Sat: 90 mins.	4	13,820	1	3,652
3. Woodbridge/Lake Ridge	Wkdy: 30 mins. peak 45 mins. midday 90 mins. night Sat: 90 mins.	6	20,530	Add 4th bus in peak periods to maintain headways & allow add'l deviations	Wkdy: 30 mins. peak 30 mins. midday 90 mins. night Sat: 90 mins.	8	27,637	2	7,107



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### 3. Lake Ridge/Woodbridge

- Maintain weekday peak period service frequency of 30 minutes with a cycle time increase from 90 to 120 minutes and
- Improve weekday midday service frequency from 45 minutes to 30 minutes.

## Frequency Improvements/Alignment Modifications to Existing Routes

These improvements would address the existing ridership needs of several key OmniLink routes. Building on base service levels of 45-minute frequencies on weekdays only, the adopted service policy in the PRTC LRTP identifies three levels of frequency improvements, depending on the number of boardings per revenue hour, as follows:

- If ridership exceeds 15 boardings per revenue hour under the base service level, then frequencies are improved to 30 minutes during the AM and PM peak periods, weekday off-peak service remains at 45-minute frequencies, and Saturday service is added at 90-minute frequencies.
- If ridership exceeds 15 boardings per revenue hour under the first enhanced service level, then frequencies are improved to 20 minutes during the peak periods and 30 minutes in the off-peak weekday periods. Saturday service is improved to 60-minute frequencies, and Sunday service is added at 90-minute frequencies.
- If ridership exceeds 15 boardings per revenue hour under the second enhanced service level, then Saturday service is improved to 45-minute frequencies, and Sunday service is improved to 60-minute frequencies.

Consistent with this service policy unless otherwise noted in the LRTP or in discussions with PRTC staff, frequency improvements are now justified for several OmniLink routes, as described below. As the modifications for each of these routes would require additional vehicles, the earliest possible implementation date is FY 2016. The OmniLink and Cross County Connector frequency improvement and alignment modification recommendations are presented in Table 4-7.

1. **Dale City** – This route is already operating at the first enhanced service level for weekdays and Saturdays, and ridership justifies the second enhanced service level, requiring two additional 30-foot local buses:
  - Improve weekday peak period service frequency from 30 minutes to 20 minutes,
  - Maintain weekday midday service frequency of 30 minutes,
  - Improve weekday night service frequency from 90 minutes to 30 minutes,
  - Improve Saturday service frequency from 90 minutes to 45 minutes, and
  - Add Sunday service at a frequency of 60 minutes.

**Table 4-7: OmniLink and Cross County Connector Service Modifications  
Operating and Funding Requirements**

Service	Existing or Prior Year Service			Proposed Service				Impact of Proposed Changes	
	Days & Frequency	Peak Vehicles Required	Annual Rev-Hours	Description	Days & Frequency	Peak Vehicles Required	Annual Hours	Peak Vehicles Required	Annual Hours
<b>Service Level Improvements/Alignment Modifications</b>									
1. Dale City	Wkdy: 30 mins. peak 30 mins. shoulder 30 mins. midday 90 mins. night Sat: 90 mins.	4	13,830	Improve weekday and Saturday frequency; add Sunday service	Wkdy: 20 mins. peak 30 mins. shoulder 30 mins. midday 30 mins. night Sat: 45 mins. Sun: 60 mins.	6	19,308	2	5,478
2. Dumfries	Wkdy: 30 mins. peak 30 mins. shoulder 30 mins. midday 90 mins. night Sat: 90 mins.	4	13,820	Improve weekday and Saturday frequency; add Sunday service	Wkdy: 20 mins. peak 30 mins. shoulder 30 mins. midday 30 mins. night Sat: 45 mins. Sun: 60 mins.	6	19,308	2	5,488
3. Woodbridge/Lake Ridge	Wkdy: 30 mins. peak 30 mins. shoulder 30 mins. midday 90 mins. night Sat: 90 mins.	8	27,637	Improve weekday and Saturday frequency and add Sunday service on both loops	Wkdy: 20 mins. peak 30 mins. shoulder 30 mins. midday 30 mins. night Sat: 45 mins. Sun: 60 mins.	12	38,616	4	10,979
4. Manassas (Phase 1)	Wkdy: 60 mins. peak 60 mins. shoulder 60 mins. midday	2	7,512	Improve weekday frequency; add weekday night and Saturday service	Wkdy: 30 mins. peak 30 mins. shoulder 30 mins. midday 30 mins. night Sat: 120 mins.	4	18,120	2	10,608
5. Route 1 (Phase 1)	Wkdy: 60 mins. peak 60 mins. shoulder 60 mins. midday 120 mins. night Sat: 110 mins.	2	8,515	Improve weekday frequency	Wkdy: 30 mins. peak 45 mins. shoulder 45 mins. midday 45 mins. night Sat: 110 mins.	4	14,539	2	6,024

**Table 4-7: OmniLink and Cross County Connector Service Modifications  
Operating and Funding Requirements (Cont.)**

Service	Existing or Prior Year Service			Proposed Service				Impact of Proposed Changes	
	Days & Frequency	Peak Vehicles Required	Annual Rev-Hours	Description	Days & Frequency	Peak Vehicles Required	Annual Hours	Peak Vehicles Required	Annual Hours
<b>Service Level Improvements/Alignment Modifications</b>									
6. Cross County Connector (Phase 1)	Wkdy: 60 mins. peak 60 mins. shoulder 60 mins. midday 120 mins. night	2	7,204	Improve weekday frequency; add Saturday service	Wkdy: 45 mins. peak 60 mins. shoulder 60 mins. midday 60 mins. night Sat: 120 mins.	3	9,896	1	2,693
7. Route 1 (Phase 2)	Wkdy: 30 mins. peak 45 mins. shoulder 45 mins. night 45 mins. night Sat: 110 mins.	4	14,539	Extend to Ft. Belvoir during peaks only; improve weekday and Saturday frequencies; add Sunday service	Wkdy: 20 mins. peak 30 mins. shoulder 30 mins. night 30 mins. night Sat: 60 mins. Sun: 110 mins.	9	24,735	5	10,197
8. Cross County Connector (Phase 2)	Wkdy: 45 mins. peak 60 mins. shoulder 60 mins. midday 60 mins. night Sat: 120 mins.	3	9,896	Extend to Innovation; improve weekday frequency; add Sunday service	Wkdy: 45 mins. peak 45 mins. shoulder 45 mins. midday 45 mins. night Sat: 120 mins. Sun: 120 mins.	3	14,015	0	4,118
9. Manassas (Phase 2)	Wkdy: 30 mins. peak 30 mins. shoulder 30 mins. midday 30 mins. night Sat: 120 mins.	4	18,120	Add Sunday service	Wkdy: 30 mins. peak 30 mins. shoulder 30 mins. midday 30 mins. night Sat: 120 mins. Sun: 120 mins.	4	18,732	0	612
10. Manassas Park	Wkdy: 60 mins. peak 60 mins. shoulder 60 mins. midday	2	7,293	Improve weekday frequency and add weekday night service on both loops	Wkdy: 45 mins. peak 45 mins. shoulder 45 mins. midday 45 mins. night	4	15,555	2	8,262

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2. **Dumfries** – This route is already operating at the first enhanced service level for weekdays and Saturdays, and ridership justifies the second enhanced service level, requiring two additional 30-foot local buses:
    - Improve weekday peak period service frequency from 30 minutes to 20 minutes,
    - Maintain weekday midday service frequency of 30 minutes,
    - Improve weekday night service frequency from 90 minutes to 30 minutes,
    - Improve Saturday service frequency from 90 minutes to 45 minutes, and
    - Add Sunday service at a frequency of 60 minutes.
  3. **Woodbridge/Lake Ridge** – The two loops of this route are already operating at the first enhanced service level for weekdays and Saturdays, and ridership justifies the second enhanced service level, requiring four additional 30-foot local buses:
    - Improve weekday peak period service frequency from 30 minutes to 20 minutes,
    - Maintain weekday midday service frequency of 30 minutes,
    - Improve weekday night service frequency from 90 minutes to 30 minutes,
    - Improve Saturday service frequency from 90 minutes to 45 minutes, and
    - Add Sunday service at a frequency of 60 minutes.
  4. **Manassas (Phase 1)** – This route is currently operating at less than base service levels, and ridership justifies the following enhanced service level, requiring two additional 30-foot local buses:
    - Improve weekday peak period service frequency from 60 minutes to 30 minutes,
    - Improve weekday midday service frequency from 60 minutes to 30 minutes,
    - Add weekday night service at a frequency of 30 minutes, and
    - Add Saturday service at a frequency of 120 minutes.
  5. **Route 1 (Phase 1)** – This route is currently operating at less than base service levels, and ridership justifies the following enhanced service level, requiring two additional 30-foot local buses:
    - Improve weekday peak period service frequency from 60 minutes to 30 minutes,
    - Improve weekday midday service frequency from 60 minutes to 45 minutes,
    - Improve weekday night service frequency from 60 minutes to 45 minutes, and
    - Maintain current Saturday service frequency of 110 minutes.

**6. Cross County Connector (Phase 1)** – This route is currently operating at less than base service levels, and ridership justifies the following enhanced service level, requiring one additional 40-foot bus:

- Improve weekday peak period service frequency from 60 minutes to 45 minutes,
- Maintain weekday midday service frequency of 60 minutes,
- Add weekday night service at a frequency of 60 minutes, and
- Add Saturday service at a frequency of 120 minutes.

In the long-range, additional frequency improvements are anticipated to be justified for four routes, along with extensions of Route 1 and the Cross County Connector.

**7. Route 1 (Phase 2)** – By 2020, ridership on this route is anticipated to justify the second enhanced service level on weekdays and also improved weekend service. Additionally, this route would also be extended in the peak periods only from its current northern terminus at the Woodbridge VRE Station to Fort Belvoir, consistent with the PRTC LRTP and in support of BRAC recommendations. The peak period frequency improvement and extension to Fort Belvoir would require five additional 30-foot local buses. Frequencies would be as follows:

- Improve weekday peak period service frequency from 30 minutes to 20 minutes,
- Improve weekday midday service frequency from 45 minutes to 30 minutes,
- Improve weekday night service frequency from 45 minutes to 30 minutes,
- Improve Saturday service frequency from 110 minutes to 60 minutes, and
- Add Sunday service at a frequency of 110 minutes.

**8. Cross County Connector (Phase 2)** – By 2025, ridership on this route is anticipated to justify the base service level of 45-minutes all-day on weekdays. Sunday service is also proposed. Additionally, this route would also be extended from its current western terminus at Manassas Mall to the Innovation Business Park, requiring one additional bus.

Innovation is the county's research and development business park, and is located just west of Manassas at the intersection of Prince William Parkway and Nokesville Road. While development of the park has been slower than originally anticipated, it is already home to the 124-acre George Mason University Prince William Campus, which serves more than 4,000 students.

Frequencies would be as follows:

- Maintain weekday peak period service frequency of 45-minutes,
- Improve weekday midday service frequency from 60 minutes to 45 minutes,
- Improve weekday night service frequency from 60 minutes to 45 minutes,
- Maintain Saturday service frequency of 120 minutes, and
- Add Sunday service at a frequency of 120 minutes.



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- 9. Manassas (Phase 2)** – By 2025, Sunday service is proposed for this route. Frequencies would be as follows:
- Maintain weekday peak period service frequency of 30 minutes,
  - Maintain weekday midday service frequency of 30 minutes,
  - Maintain weekday night service frequency of 30 minutes,
  - Maintain Saturday service frequency of 120 minutes.
  - Add Sunday service at a frequency of 120 minutes.
- 10. Manassas Park** – The two loops of this route are currently operating at less than base service levels. By 2025, ridership is anticipated to justify the implementation of base service levels, requiring two additional 30-foot local buses:
- Improve weekday peak period service frequency from 60 minutes to 45 minutes,
  - Improve weekday midday service frequency from 60 minutes to 45 minutes, and
  - Add weekday night service at a frequency of 45 minutes.

## **New Proposed Routes**

As presented in Table 4-8 and described below, three new OmniLink routes are envisioned in this aspirational section of the TDP.

- 1. New Innovation West OmniLink route** – This new route is included in the PRTC LRTP, and would connect the Innovation Business Park to the Linton Hall, Gainesville, and Haymarket areas. Proposed service frequencies are 30-minutes all-day on weekdays and 90-minutes on Saturdays. Implementation of this route is proposed in FY 2020, requiring three 30-foot local buses.

While the specific alignment has yet to be determined, it has been generally assumed that the route would serve Innovation Loop and the GMU Prince William Campus and operate northwest to serve the Virginia Gateway Shopping Center, downtown Haymarket, and the Heathcote Health Center.

- 2. New Innovation North OmniLink route** – This new route is included in the PRTC LRTP, and would connect Innovation with Manassas. Proposed service frequencies in the plan are 45-minutes all-day on weekdays. Implementation of this route is proposed in FY 2020, requiring two 30-foot local buses.

While the specific alignment has yet to be determined, it has been generally assumed serve the GMU Prince William Campus, Innovation Business Park, Manassas Mall, and apartments along Ashton Avenue.

**Table 4-8: OmniLink New Routes  
Operating and Funding Requirements**

Service	Existing or Prior Year Service			Proposed Service				Impact of Proposed Changes	
	Days & Frequency	Peak Vehicles Required	Annual Rev-Hours	Description	Days & Frequency	Peak Vehicles Required	Annual Hours	Peak Vehicles Required	Annual Hours
<b>New Routes</b>									
1. Innovation West	n/a	n/a	n/a	New route from Innovation to Haymarket via Gainesville	Wkdy: 30 mins. peak 30 mins. shoulder 30 mins. midday 30 mins. night Sat: 90 mins.	3	13,403	3	13,403
2. Innovation North	n/a	n/a	n/a	New route from Innovation to Bull Run via Manassas Mall	Wkdy: 45 mins. peak 45 mins. shoulder 45 mins. midday 45 mins. night	2	8,415	2	8,415
3. Montclair	n/a	n/a	n/a	New route from PRTC to Montclair via Potomac Mills	Wkdy: 45 mins. peak 45 mins. shoulder 45 mins. midday 45 mins. night	3	12,623	3	12,623

- 3. New Montclair OmniLink route** –This new OmniLink route would supplement the existing Montclair OmniRide route by providing all-day local routes service on the weekdays. It would also serve recent residential developments along Benita Fitzgerald Drive and Cardinal Drive. The route would link these residential communities to Potomac Mills Mall and other OmniLink routes at the PRTC Transit Center. The PRTC LRTP calls for this route to provide all-day weekday service at 45-minute frequencies. Implementation of this route is proposed in FY 2020, requiring three 30-foot local buses.

The alignment is proposed to operate between the PRTC Transit Center and Dumfries Road, as follows. From the PRTC Transit Center, the route would operate north on Potomac Mills Road to Potomac Mills Mall. After circling the mall on Potomac Mills Circle, the route would operate south on Gideon Drive, west on Dale Boulevard, southeast on Benita Fitzgerald Drive, west on Cardinal Drive, and through Lake Montclair on Waterway Drive, ending at Lake Montclair Center.

## 4.2 FACILITY AND EQUIPMENT NEEDS

In addition to the transit service needs identified above, facility and equipment needs have also been identified, as listed below. Estimated facility and equipment costs are based on unit costs and PRTC capital budget documents, and are provided in year of expenditure dollars, to the extent possible.

- Mid-Life Vehicle Overhaul Program
- Vehicle Replacement Program
- Service Expansion Vehicles
- High Technology Bus Enhancement System
- Bus Radios
- Virginia Resources Board (VRA) Loan Debt Service
- Western Maintenance Facility
- Bus Shelter Program

It is important to note that this list represents potential improvements as a result of PRTC and DRPT short and long-range planning efforts. As such, this chapter presents a financially unconstrained set of projects, only some of which can realistically be implemented within the TDP timeframe, given financial, facility, and bus constraints. Chapter 5 identifies the improvements PRTC intends to implement during the TDP time period, as constrained by “reasonably” anticipated revenues. Chapter 6 presents the capital programs (vehicles, facilities, and equipment) associated with the operations and services identified in Chapter 5.

PRTC’s transit facility and equipment needs consist of projects categorized under the following three categories: fleet needs, capital improvement projects, and operating capital. Each of the capital projects is described briefly below.

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#### 4.2.1 FLEET NEEDS

As detailed in Chapter 1, most PRTC's commuter buses are 45-foot MCI commuter coaches, while the remainder is a mix of 40-foot buses. These buses are used on the OmniRide, Metro Direct, and Cross County Connector routes. OmniLink local service is provided with 30-foot Gillig buses.

##### **Mid-Life Vehicle Overhaul Program**

It has been PRTC's practice to keep its OmniRide revenue vehicles beyond their normal useful age as part of the active fleet and later as a "contingency bus fleet" so there is always a readiness to deploy extra buses as ridership growth warrants. Since 2004, PRTC has completed mid-life revenue vehicle overhauls for its OmniRide fleet (including Metro Direct and Cross County Connector routes) to ensure service is operated with vehicles in excellent condition irrespective of age. PRTC's model year 1993 and 1995 MCIs were overhauled in 2004 and 2006, respectively, and the model year 2000 Orions were overhauled in 2009. In FY 2011 PRTC completed mid-life overhauls of the first 12 of its 38 model year 2002 MCI buses.

Over the six-year TDP, PRTC anticipates completing a total of 74 mid-life overhauls and associated line inspections, covering the model year 2002 through 2009 MCI buses and the model year 2005 40-foot Gillig buses. PRTC will also continue its practice of completing powertrain (engine and transmission) replacements and purchasing extended warranties on the engines (as transmission replacements include warranties) over the six-year period.

Table 4-9 shows the buses being overhauled in each fiscal year, associated line inspections, powertrain replacements and extended warranties planned over the course of the TDP. As additional OmniRide vehicles are added to the fleet through replacement or expansion, a mid-life overhaul schedule should be established for these new vehicles.

##### **Vehicle Replacement Program**

Under FTA regulations, PRTC's heavy-duty large OmniRide buses qualify for replacement when they reach 12 years old and the heavy-duty small OmniLink buses qualify for replacement at 10 years old. For the OmniRide buses, however, PRTC's standard practice has been to retain them in the active fleet until they are 14 years old, at a minimum, because they are used on weekdays only, primarily in the peak periods, with most of the mileage logged on well-maintained highways. Additionally, the mid-life overhauls of the OmniRide buses enhance their suitability for longer-term use.

On the other hand, PRTC schedules replacement of the OmniLink buses at their federally qualifying retirement age of 10 years. These buses are operated on less well-maintained roadways with a much higher incidence of stop-and-go traffic. Thus, they are scheduled for replacement in accordance with FTA regulations given their more punishing usage.

**Table 4-9: OmniRide Revenue Vehicle Overhaul Schedule**

Model Year	Make	Vehicle Model	Mid-Life OmniRide Vehicle Overhauls						
			FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
Vehicle Overhauls									
2002	MCI	D Series - 45 foot	17	7					24
2004	MCI	D Series - 45 foot		8					8
2005	MCI	D Series - 45 foot		1	4				5
2006	MCI	D Series - 45 foot			10				10
2007	MCI	D Series - 45 foot					1		1
2008	MCI	D Series - 45 foot					11		11
2009	MCI	D Series - 45 foot						11	11
2005	Gillig	Phantom - 40 foot		4					4
2006	Gillig	Phantom - 40 foot							
2010	Gillig	Low-floor-40 foot							
Total Overhauls			17	20	14	0	12	11	74
Line Inspections									
varies	MCI	D Series - 45 foot	17	16	14	0	12	11	70
varies	Gillig	Phantom - 40 foot	0	4	0	0	0	0	4
Total Line Inspections			17	20	14	0	12	11	74
Engine Replacements									
varies	MCI	D Series - 45 foot	2	2	2	2	2	2	12
varies	Gillig	Phantom - 40 foot	6	8	7	0	3	2	26
Total Engine Replacements			8	10	9	2	5	4	38
Transmission Replacements									
varies	MCI	D Series - 45 foot	2	2	2	2	2	2	12
varies	Gillig	Phantom - 40 foot	6	8	7	0	3	2	26
Total Transmission Replacements			8	10	9	2	5	4	38
Extended Warranties									
varies	MCI	D Series - 45 foot	2	2	2	2	2	2	12
varies	Gillig	Phantom - 40 foot	6	8	7	0	3	2	26
Total Extended Warranties			8	10	9	2	5	4	38

Given the long lead time for delivery for these buses (typically 18 to 24 months), funding must be in place two years ahead of the scheduled replacement. For example, if a bus is scheduled for replacement in FY 2016, funding for it would be budgeted in FY 2014.

PRTC's active fleet currently consists of 88 OmniRide buses and 23 OmniLink buses. Using the assumptions noted above, 55 of the 88 OmniRide buses and 22 of the 23 OmniLink buses would be replaced during the six-year TDP period. The remainder of the active fleet would be replaced after FY 2017. The replacement schedules for these vehicles are summarized in Tables 4-10 and 4-11.

### **Service Expansion Vehicles**

As previously noted, PRTC retains a small number of retirement-age buses in its "contingency fleet," which can be moved into the active fleet when necessary to address overcrowding. In recent months, all of PRTC's contingency buses have been pressed into active service, meaning that there are some over-aged buses in the active fleet. Therefore, PRTC's FY 2011 and FY 2012 budgets provide funding to purchase a small number of new MCI buses as a permanent means of accommodating trips now being carried by over-aged (former contingency fleet) buses. PRTC's FY 2011 budget includes funding for four buses, and the FY 2012 budget includes funding for five more buses.

Additionally, many of the aspirational service modifications described in Sections 4.1 and 4.2 would require the purchase of additional fleet and spare vehicles. PRTC plans for a spare ratio of 20 percent for each bus type (OmniRide and OmniLink). Thus, the total fleet in each fiscal year must take into account the need for additional spares.

For the OmniRide (including Metro Direct and Cross County Connector) aspirational needs plan, including spares, a total of twenty-three 45-foot commuter buses and one 40-foot suburban bus would be required within the six-year TDP period for the routes, as shown in Table 4-12. For the OmniLink aspirational needs plan, including spares, a total of twenty 30-foot low-floor buses would be required within the six-year TDP period for the routes, as shown in Table 4-13.

### **4.2.2 CAPITAL IMPROVEMENT NEEDS**

PRTC's major capital improvement projects include completion of PRTC's high technology bus enhancement system, development of a Western Maintenance Facility, interest expenses and debt service, and several on-going operating capital needs.

#### **High Technology Bus Enhancement System**

PRTC has been pursuing the implementation of a high technology bus enhancement system for the last several years. This system includes a computer-aided dispatch/automated vehicle location (CAD/AVL) system, an automatic next stop announcement system, the capability to disseminate real-time passenger information (RTPI), automated passenger counters (APCs) to make passenger counting more accurate/robust, and video surveillance cameras for the entire fleet.



**Table 4-10: Revenue Vehicle Replacement Schedule  
OmniRide, Metro Direct, and Cross County Connector**

Model Year	Make	Model	PRTC Service Life (Yrs.)	End of PRTC Service Life Fiscal Year	# of Vehicles	Vehicle Replacements (Funded 2 Years Prior)						
						FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
OmniRide Fleet												
2002	MCI	D Series - 45 foot	14	2016	38			38				38
2004	MCI	D Series - 45 foot	14	2018	8					8		8
2005	MCI	D Series - 45 foot	14	2019	5						5	5
2006	MCI	D Series - 45 foot	14	2020	10							0
2007	MCI	D Series - 45 foot	14	2021	1							0
2008	MCI	D Series - 45 foot	14	2022	11							0
2009	MCI	D Series - 45 foot	14	2023	9							0
2005	Gillig	Phantom - 40 foot	14	2019	4						4	4
2006	Gillig	Phantom - 40 foot	14	2020	1							0
2010	Gillig	Low-floor-40 foot	14	2024	1							0
Total OmniRide Vehicles to be Replaced					88	0	0	38	0	8	9	55

**Table 4-11: Revenue Vehicle Replacement Schedule  
OmniLink**

Model Year	Make	Model	PRTC Service Life (Yrs.)	End of PRTC Service Life Fiscal Year	# of Vehicles	Vehicle Replacements (Funded 2 Years Prior)						
						FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
OmniLink Fleet												
2004	Gillig	Low floor - 30 foot	10	2015	16		16					16
2005	Gillig	Low floor - 30 foot	10	2016	2			2				2
2006	Gillig	Low floor - 30 foot	10	2017	4				4			4
2010	Gillig	Low floor - 30 foot	10	2021	1							0
Total OmniLink Vehicles to be Replaced			23			0	16	2	4	0	0	22

**Table 4-12: Revenue Vehicle Expansion Schedule  
OmniRide, Metro Direct, and Cross County Connector**

	Number of Anticipated Expansion Vehicles					
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>OmniRide/Metro Direct/Cross County Connector Fleet</b>						
<b>AM Peak Period:</b>						
Expansion Vehicles - 45' Commuter	4	2	0	0	12	2
Expansion Vehicles - 40' Suburban	0	0	0	0	1	0
Expansion Spare Vehicles - 45' Commuter	1	0	0	0	2	0
Expansion Spare Vehicles - 40' Suburban	0	0	0	0	0	0
<i>Base Pullout Vehicles</i>	<i>80</i>	<i>84</i>	<i>86</i>	<i>86</i>	<i>86</i>	<i>99</i>
<i>Base Strategic Vehicles</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>
<i>Base Spare Vehicles</i>	<i>31</i>	<i>32</i>	<i>32</i>	<i>32</i>	<i>32</i>	<i>34</i>
<i>Revised Total Active Fleet</i>	<i>118</i>	<i>120</i>	<i>120</i>	<i>120</i>	<i>135</i>	<i>137</i>
Revised Total Spare Ratio	38%	37%	36%	36%	36%	34%
<b>PM Peak Period:</b>						
Expansion Vehicles - 45' Commuter	4	2	0	0	12	2
Expansion Vehicles - 40' Suburban	0	0	0	0	1	0
Expansion Spare Vehicles - 45' Commuter	1	0	0	0	2	0
Expansion Spare Vehicles - 40' Suburban	0	0	0	0	0	0
<i>Base Pullout Vehicles</i>	<i>90</i>	<i>94</i>	<i>96</i>	<i>96</i>	<i>96</i>	<i>109</i>
<i>Base Strategic Vehicles</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
<i>Base Spare Vehicles</i>	<i>18</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>21</i>
<i>Revised Total Active Fleet</i>	<i>118</i>	<i>120</i>	<i>120</i>	<i>120</i>	<i>135</i>	<i>137</i>
Revised Total Spare Ratio	19%	19%	19%	19%	19%	18%
<b>Total Expansion Vehicles, Including Spares</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>2</b>

**Table 4-13: Revenue Vehicle Expansion Schedule**  
**OmniLink**

	Number of Anticipated Expansion Vehicles					
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>OmniLink Fleet</b>						
<b>AM Peak Period:</b>						
Expansion Vehicles	0	0	4	0	12	0
Expansion Spare Vehicles	0	0	1	0	3	0
<i>Base Pullout Vehicles</i>	18	18	18	22	22	34
<i>Base Strategic Vehicles</i>	1	1	1	1	1	1
<i>Base Spare Vehicles</i>	4	4	4	5	5	8
<i>Revised Total Active Fleet</i>	23	23	28	28	43	43
Revised Total Spare Ratio	21%	21%	21%	22%	22%	23%
<b>PM Peak Period:</b>						
Expansion Vehicles	0	0	4	0	12	0
Expansion Spare Vehicles	0	0	1	0	3	0
<i>Base Pullout Vehicles</i>	18	18	18	22	22	34
<i>Base Strategic Vehicles</i>	1	1	1	1	1	1
<i>Base Spare Vehicles</i>	4	4	4	5	5	8
<i>Revised Total Active Fleet</i>	23	23	28	28	43	43
Revised Total Spare Ratio	21%	21%	21%	22%	22%	23%
<b>Total Expansion Vehicles, Including Spares</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>15</b>	<b>0</b>

In July 2010, PRTC contracted with Apollo Video Technology to provide video surveillance cameras for 15 buses used in Metro Direct service, the same system now used on PRTC's OmniLink buses. Also in July 2010, PRTC contracted with MACRO for the preparation of technical specifications for a CAD/AVL system, with additional funding authorized in November 2010 to complete the technical specifications and begin acquisition.

In FY 2012, PRTC plans to complete implementation of its high technology bus enhancement system. Total remaining project costs are estimated to be \$4.66 million.

## **Western Maintenance Facility**

Currently, PRTC has one bus maintenance and storage facility, which is located at the PRTC Transit Center. Constructed in 1996 to 1997, the maintenance facility consists of six service bays plus a steam pit, and the storage yard has the capacity for 128 buses. However, PRTC's current fleet consists of 133 buses. PRTC is constrained by the site from being able to add any more bus storage. To address the storage capacity problem, PRTC has been storing its contingency bus fleet off-site but in close proximity to the Transit Center for the last several years. Thus, PRTC is at practical capacity with regards to bus storage. In addition to the bus storage capacity issue, the number of available maintenance bays at the facility has also become a limiting factor.

PRTC has several OmniRide routes (Manassas Metro Direct, Linton Hall Metro Direct, Cross County Connector) and two OmniLink routes (Manassas and Manassas Park) that begin service on the western side of Prince William County, but all the buses for these services leave from and return to the bus storage yard in Woodbridge not in revenue service (or deadheading). To make room for new vehicles, reduce deadheading costs (miles and fuel), and expand its maintenance capacity, PRTC's short and long range plans call for the construction of a second maintenance facility on the western side of the service area. The intent is to store and maintain the buses used for services on the western side of the service area near where they begin revenue service.

PRTC has been actively pursuing the development of this western maintenance facility for the past several years. PRTC has worked with Prince William County's Economic Development Office in identifying the zoning and Comprehensive Plan requirements for those areas that a bus facility could be located. PRTC has hired a "contract manager" to help shepherd the project from start to finish, beginning with an analysis of alternative sites and then NEPA compliance / design work.

PRTC intends to construct the facility in FY 2015, so that it will be operational in FY 2016. Between now and the start of construction, PRTC will continue to seek federal and state construction dollars through the metropolitan and state transportation planning processes. If all the required funding is not in-hand by FY 2014, PRTC is prepared to supplement the funding by debt financing.

The total estimated cost for the western maintenance facility is \$17.8 million, consisting of \$3.6 million for soft costs and land acquisition / utility relocation and \$11.9 million for construction. To date, funding totaling \$5.8 million is in place. Additional funding required for the facility over the six-year TDP period includes \$100,000 in FY 2013 for land acquisition and utility relocation and an additional \$11.9M for construction in FY 2015.

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## Interest Expense and Debt Service

PRTC strives to operate on a “pay-as-you-go” basis, avoiding debt financing to the greatest extent possible. However, given mission-critical capital expenditures during these times of financial austerity, PRTC has found it essential to use debt financing, from time to time. Thus, the TDP includes the need for debt service over the course of the six-year TDP.

In late 2006, PRTC took out a loan from VRA to fund expansion of the vehicle yard and development of a commuter lot adjacent to the PRTC Transit Center. Construction of these projects has been completed, culminating with the opening of the commuter lot in April 2010. Debt service on the VRA loan will stretch over the TDP period.

In addition to debt service on the VRA loan, the TDP conservatively assumes new debt financing will be required to complete construction of the western maintenance facility and for a portion of the OmniLink vehicle replacements. Total estimated costs for interest expenses and debt service over the six-year TDP total \$3.12 million. However, debt service for these important projects will extend well beyond the six-year TDP.

### 4.2.3 OPERATING CAPITAL NEEDS

The TDP includes several on-going operating capital needs in each year of the TDP, including:

- Bus shelters
- Computer hardware/software
- Office furniture and equipment
- Transit center improvements

The costs of these operating capital items over the six-year TDP period total \$2.95 million, with the majority of the costs associated with continuing PRTC’s bus shelter program. To achieve the aim of seeing more bus shelters installed in the PRTC service area, the bus shelter siting and lighting plan was adopted in 2007 and is amended annually. Bus shelter needs over the TDP period include bus shelters (design, construction and installation), solar-powered shelter lights per year and periodic shelter inventory purchases.

## 4.3 FUNDING REQUIREMENTS

Operating and capital cost estimates were estimated for the facility and equipment needs identified in the sections above.

### 4.3.1 TRANSIT SERVICE ESTIMATED COSTS

Tables 4-14 and 4-15 below identify PRTC’s Service Aspirational Needs Plan over the six-year TDP period. The tables identify service needs by service change category, additional peak buses and annual bus hours to supply the service, and estimated annual operating and maintenance (O&M) costs associated with each service initiative in current FY 2012 dollars.

**Table 4-14: PRTC Transit Needs Plan Operating Funding Requirements  
OmniRide and Metro Direct Routes**

	Impact of Proposed Changes		
	Peak Vehicles Required	Annual Rev-Hours	Annual Operating Cost (FY 12\$)
<b>Short-Term Service Changes (FY 2012 - FY 2017)</b>			
<b>Modified Routes Serving I-95/395</b>			
1. Prince William Metro Direct: Saturday Service	0	715	\$ 83,100
2. Tysons Express	0	-569	\$ (66,100)
3. East County-Springfield OmniRide (modified Prince William Metro Direct)	1	1,275	\$ 148,300
4. Dale City - Washington/Navy Yard	1	1,517	\$ 176,400
<b>New Routes Serving I-95/395</b>			
1. Central/East County-Alexandria OmniRide	4	2,372	\$ 275,800
<b>Modified Routes Serving I-66</b>			
1. Ph 1 & 2: Gainesville-Tyson Central 123 (modified Linton Hall Metro Direct)	-1	-556	\$ (64,600)
2. Ph 3: Gainesville-Tyson Corner (modified Linton Hall Metro Direct)	0	1,016	\$ 118,100
3. Manassas OmniRide	-2	-1,617	\$ (188,000)
4. Ph 1: Manassas-Tysons (modified Manassas Metro Direct)	0	0	\$ -
5. Ph 2: Manassas-Tysons (modified Manassas Metro Direct)	1	1,785	\$ 207,600
<b>New Routes Serving I-66</b>			
1. Phase 1: Gainesville-DC OmniRide	4	4,197	\$ 488,100
<b>Ambient Growth Needs</b>			
1. OmniRide: FY 2012	0	2,550	\$ 296,500
2. OmniRide: FY 2013	0	2,550	\$ 296,500
3. OmniRide: FY 2014	0	2,550	\$ 296,500
4. OmniRide: FY 2015	0	2,550	\$ 296,500
5. OmniRide: FY 2016	6	10,200	\$ 1,186,100
6. OmniRide: FY 2017	2	3,825	\$ 444,800

**Table 4-15: PRTC Transit Needs Plan Operating Funding Requirements  
OmniLink and Cross County Connector Routes**

	Impact of Proposed Changes		
	Peak Vehicles Required	Annual Hours	Annual Operating Cost (FY 12\$)
<b>Short-Term Service Changes (FY 2012 - FY 2017)</b>			
<b>Eastern Prince William County: Ambient Growth Needs</b>			
1. Dale City	1	3,657	\$ 425,200
2. Dumfries	1	3,652	\$ 424,600
3. Woodbridge/Lake Ridge	2	7,107	\$ 826,400
<b>Service Level Improvements/Alignment Modifications</b>			
1. Dale City	2	5,478	\$ 637,000
2. Dumfries	2	5,488	\$ 638,100
3. Woodbridge/Lake Ridge	4	10,979	\$ 1,276,700
4. Manassas	2	10,608	\$ 1,233,500
5. Route 1	2	6,024	\$ 700,400
6. Cross County Connector	1	2,693	\$ 313,100



Based on PRTC's current contract with First Transit, the FY 2012 fixed rate of \$94.28 per revenue hour has been applied to all fixed-route services. While the contract includes both fixed and marginal rates, for budgeting purposes, the full fixed rate is being assumed for all hours. Additionally, fuel costs have been included in the hourly rate at \$22.00, for a total cost per revenue hour of \$116.28.

#### 4.3.2 FACILITY AND EQUIPMENT ESTIMATED COSTS

Table 4-16 identifies PRTC's capital improvement program needs over the six-year TDP period. These needs are categorized under mid-life vehicle overhaul program, vehicle replacement program, service expansion vehicles, vehicle technology and other equipment, and facilities and passenger amenities. Costs are estimated in year-of-expenditure dollars.

**Table 4-16: PRTC Facility and Equipment Needs Plan Funding Requirements**

Facility or Equipment Need	Capital Cost Impact (Year of Expenditure \$)
<b>Mid-Life Vehicle Overhaul Program</b>	
1. 40' and 45' OmniRide Buses	\$13,326,642
2. Line Inspections	\$1,217,100
3. Powetrain Replacements and Extended Warranties	\$1,575,100
<b>Vehicle Replacement Program</b>	
1. 40' and 45' OmniRide Buses	\$31,824,223
2. 30' OmniLink Buses	\$8,999,836
<b>Service Expansion Vehicles (Including Spares)</b>	
1. 40' and 45' OmniRide Buses	\$14,087,876
2. 30' OmniLink Buses	\$8,692,069
<b>Capital Improvement Program</b>	
1. High Tech. Bus Enhancement System	\$4,665,000
2. Western Maintenance Facility	\$12,000,000
3. Interest Expenses and Debt Service	\$3,122,300
<b>Operating Capital Program</b>	
1. Bus Shelters	\$1,703,300
2. Computer Hardware/Software	\$593,200
3. Office Furniture & Equipment	\$93,600
4. Transit Center Improvements	\$556,100
<b>Total TDP Period Cost</b>	<b>\$102,456,347</b>

## CHAPTER 5 – SIX-YEAR TRANSIT SERVICE PLAN

This chapter identifies the cost-feasible service needs that are recommended for inclusion in the TDP time period (FY 2012 through FY 2017). An unconstrained list of potential service was identified in the prior chapter of this TDP. Recommended improvements presented in this chapter are financially constrained, based on anticipated funding availability during the TDP time period. Chapter 6 details the TDP Capital Investment Program and Chapter 7 establishes the Financial Plan for PRTC's Six-Year TDP.

Given the current economic climate and financial limitations, the six-year plan retains all current service, but includes no service expansions beyond already approved service enhancements to reconfigure existing routes between Gainesville and Washington. Additionally, a minimal number of contingency hours for schedule adjustments is also included to avert overcrowding and sustain on-time performance, but only to the extent that is possible without additional buses. Finally, the Tysons Express route will experience a travel time savings beginning in the second quarter of FY 2013 when the I-495 HOT lanes open.

Following is a description of the resulting changes in revenue hours over the six-year TDP period. Table 5-1 presents a listing of associated bus-hours, bus requirements and annual gross operating costs.

### 5.1 OMNIride CONTINGENCY HOURS

As discussed in Chapter 4, ideally PRTC's budget would include 15 daily contingency hours to proactively remedy overcrowding and running time issues. PRTC's FY 2012 budget conservatively incorporates only 10 daily contingency hours. Based on the contract cost plus fuel costs per revenue hour, the gross operating cost for these 10 hours in FY 2012 is estimated at \$296,500.

### 5.2 GAINESVILLE TO WASHINGTON OMNIride SERVICE

As discussed in Chapter 4, in July 2010 PRTC management presented a package of service enhancements to PRTC commuter service between Gainesville and Washington. In addition to better meeting the commute needs of PRTC riders, the service enhancements also allow PRTC to begin earning additional HOV federal formula funds associated with operating over the recently extended I-66 HOV lanes from Prince William Parkway to US 29. This package includes the phased reconfiguration of the Linton Hall Metro Direct route, eliminating two AM and two PM Manassas OmniRide trips serving the Pentagon, and implementing a new Gainesville to Washington OmniRide route.

In October 2010, PRTC implemented the first phase of this service enhancement package. Phase 1 consisted of adding two trips per day (one in the AM and one in the PM) between Gainesville and the West Falls Church Metro Station operated in an express mode, rather than traveling on local streets between the Limestone Commuter Lot and Prince William Parkway. By using contingency hours and a contingency bus, this change was accomplished with no fiscal impact to PRTC's FY 2011 budget.

**Table 5-1: Six-Year Service Improvements and Costs**

Proposed Year	Route	Description of Proposed Change	Change in Service Statistics			FY 2012		FY 2013		FY 2014		FY 2015	FY 2016	FY 2017
			Total 1-Way Trips per Service Day	Peak Vehicles Required	Daily Revenue-Hours	Annual Rev.- Hrs.	Annual O&M Costs	Annual Rev.- Hrs.	O&M Costs	Annual Rev.- Hrs.	O&M Costs	O&M Costs	O&M Costs	O&M Costs
FY 2012	OmniRide ambient growth	Compensate for increasing running times	n/a	0	10.00	2,550	\$ 296,500	2,550	\$ 305,400	2,550	\$ 322,400	\$ 332,100	\$ 342,100	\$ 352,300
<b>FY 2012 Total</b>			<b>n/a</b>	<b>0</b>	<b>10.00</b>	<b>2,550</b>	<b>\$ 296,500</b>	<b>2,550</b>	<b>\$ 305,400</b>	<b>2,550</b>	<b>\$ 322,400</b>	<b>\$ 332,100</b>	<b>\$ 342,100</b>	<b>\$ 352,300</b>
FY 2013	Tysons Express	Travel time savings due to HOT lanes	n/a	n/a	-2.23	n/a	n/a	-426	\$ (41,400)	-569	\$ (58,600)	\$ (60,400)	\$ (62,200)	\$ (64,100)
FY 2013	Linton Hall Metro Direct	Cut 2 trips; modify alignment	-2	-1	-2.18	n/a	n/a	-417	\$ (55,600)	-556	\$ (78,100)	\$ (80,400)	\$ (82,900)	\$ (85,300)
FY 2013	Manassas OmniRide	Cut 4 trips originating at Pentagon	-4	-2	-6.34	n/a	n/a	-1,212	\$ (155,100)	-1,617	\$ (218,000)	\$ (224,500)	\$ (231,200)	\$ (238,100)
FY 2013	Gainesville-DC OmniRide	New route from Cushing P&R to DC	8	4	16.46	n/a	n/a	3,147	\$ 389,400	4,197	\$ 547,900	\$ 564,200	\$ 581,200	\$ 598,600
<b>FY 2013 Total</b>			<b>2</b>	<b>1</b>	<b>5.71</b>	<b>n/a</b>	<b>n/a</b>	<b>1,092</b>	<b>\$ 137,300</b>	<b>1,456</b>	<b>\$ 193,200</b>	<b>\$ 198,900</b>	<b>\$ 204,900</b>	<b>\$ 211,100</b>
FY 2014	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n.a	n/a	n/a	n/a	n/a
<b>FY 2014 Total</b>			<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
FY 2015	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n.a	n/a	n/a	n/a	n/a
<b>FY 2015 Total</b>			<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
FY 2016	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n.a	n/a	n/a	n/a	n/a
<b>FY 2016 Total</b>			<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
FY 2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n.a	n/a	n/a	n/a	n/a
<b>FY 2017 Total</b>			<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

The six-year TDP includes the additional service changes required to complete the proposed service enhancements, as detailed below.

- **Linton Hall Metro Direct:** Beginning in the second quarter of FY 2013, the six-year service plan includes eliminating the two additional express trips per day that were implemented in October 2010. The hours and bus would instead be utilized for concurrent implementation of the new Gainesville to DC route described below. This modification would take the route back to service levels of four peak direction trips in both the AM and PM peak periods, using four 45' commuter buses. The savings realized from the elimination of the two express trips equates to an annual savings of approximately 417 revenue hours in FY 2103 and 555 revenue hours in FY 2014 through FY 2017.

The trigger for this change will be the completion of the Cushing Road Commuter Lot in Prince William County. The route will be modified to exit I-66 to serve the Cushing Road Commuter Lot, and re-enter I-66 via a transit connection between the lot and the I-66 eastbound entrance ramp.

- **Manassas OmniRide:** Based on a 2010 rider survey, PRTC anticipates a significant shift in ridership patterns from the Manassas OmniRide to the new Gainesville to DC route described below. The trigger for this change will be the completion of the Cushing Road Commuter Lot in Prince William County. Beginning in the second quarter of FY 2013, the six-year service plan includes eliminating four trips and two buses from this route. The hours and buses would instead be utilized for concurrent implementation of the new Gainesville to DC route described below.

PRTC has indicated the most sensible trips to curtail would be the two AM trips routed through DC before stopping at the Pentagon and the two PM trips that solely serve the Pentagon on the origin end. These trips are the exception, not the rule, for how Manassas originating direct bus service is routed. PRTC estimates an annual savings of approximately 1,212 revenue hours in FY 2103 and 1,616 revenue hours in FY 2014 through FY 2017.

- **Gainesville to DC OmniRide:** This new route is included in the six-year service plan beginning in the second quarter of FY 2013 when the Cushing Road Commuter Lot opens. Proposed service levels would be four peak direction trips in both the AM and PM peak periods, using four 45' commuter buses. The proposed alignment is from the Limestone Commuter Lot to the I-66 at US 29 interchange via Linton Hall and US 29, exiting I-66 to serve the Cushing Road Commuter lot, and continuing via I-66 to the State Department, through downtown DC, and east to the Navy Yard.

Bus needs would be met by trimming trips and buses, as previously discussed, from the Linton Hall Metro Direct and the Manassas OmniRide schedules, plus the use of one "contingency fleet" bus. Operating costs would be partially covered by the trips trimmed from these two routes. The remainder of the operating costs would be covered by additional federal and state formula funding earned by operating express trips in the extended I-66 HOV lanes, as well as additional fare revenues.

### 5.3 TYSONS EXPRESS

Based on current construction status of the I-495 HOT lanes, it is anticipated that the HOT lanes will open by the second quarter of FY 2013. PRTC estimates a travel time savings of 15 minutes per trip will be realized at that time. The savings per trip equates to an annual savings of approximately 426 revenue hours in FY 2103 and 569 revenue hours in FY 2014 through FY 2017.

## CHAPTER 6 – CAPITAL IMPROVEMENT PROGRAM

An unconstrained list of potential capital needs was presented in Chapter 4 of this TDP. This chapter of the TDP describes the cost-feasible capital improvements included in the FY 2012 – FY 2017 TDP, consistent with PRTC’s FY 2012 budget and six-year plan. Capital improvement recommendations are categorized into three types: fleet needs, capital improvement projects, and operating capital. The improvements in the FY 2012 – FY 2017 TDP are identified by fiscal year below under each type of capital improvement.

As discussed in Chapter 5, PRTC management proposed two budget proposals for the PRTC Board’s consideration, one with a Prince William County general fund supplement and the other without. With a general fund supplement, PRTC proposes replacing OmniRide buses when they reach 14 years in age, consistent with PRTC’s standard practice. Without a general fund supplement, the buses would remain in service an additional year longer (i.e., 15 years). Conservatively assuming no Prince William County general fund supplement, the TDP assumes replacement at 15 years.

“Pay-as-you-go” funding is largely assumed for the capital improvements, with the sources and amounts for federal and state assistance assuming status quo. There are, however, two exceptions where debt financing is envisioned to make up for currently assumed shortfalls in federal and state assistance, due to the magnitude of the investments. The first exception is the one-time “spike” in bus replacements in FY 2015 (38 OmniRide buses). The second exception is the construction of the western maintenance facility, also in FY 2015.

### 6.1 FLEET PROGRAM

#### 6.1.1 VEHICLE REHABILITATION PROGRAM

Consistent with the discussion in Chapter 4, over the six-year TDP, PRTC anticipates completing a total of 74 mid-life overhauls and associated line inspections, covering the model year 2002 through 2009 MCI buses and the model year 2005 40-foot Gillig buses. PRTC will also continue its practice of completing powertrain (engine and transmission) replacements and purchasing extended warranties on the engines (as transmission replacements include warranties) over the six-year period.

Table 6-1 shows the buses being overhauled in each fiscal year, associated line inspections, powertrain replacements and extended warranties planned over the course of the TDP. Using FY 2011 unit costs inflated by 3% per year, the table also shows the estimated costs of these items. The vehicle rehabilitation costs for the six-year TDP period are estimated to be \$16.12 million. Prior year funding will be used for the vehicle overhauls in FY 2012. Otherwise, the funding for the vehicle overhauls is assumed to be 80% state and 20% local, while the funding for the line inspections, powertrain replacements, and extended warranties is assumed to be 50% state and 50% local.



**Table 6-1: OmniRide Vehicle Rehabilitation Program**

Model Year	Make	Vehicle Model	OmniRide Vehicle Rehabilitation						
			FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
Vehicle Overhauls									
2002	MCI	D Series - 45 foot	17	7					24
2004	MCI	D Series - 45 foot		8					8
2005	MCI	D Series - 45 foot		1	4				5
2006	MCI	D Series - 45 foot			10				10
2007	MCI	D Series - 45 foot					1		1
2008	MCI	D Series - 45 foot					11		11
2009	MCI	D Series - 45 foot						11	11
2005	Gillig	Phantom - 40 foot		4					4
Total Overhauls			17	20	14	0	12	11	74
Total Cost of Overhauls			FY 2009 Budg	\$4,313,205	\$3,256,401	\$0	\$2,961,185	\$2,795,852	\$13,326,642
Line Inspections									
varies	MCI	D Series - 45 foot	17	16	14	0	12	11	70
varies	Gillig	Phantom - 40 foot	0	4	0	0	0	0	4
Total Line Inspections			17	20	14	0	12	11	74
Total Cost of Line Inspections			\$197,800	\$278,700	\$209,800	\$0	\$166,900	\$171,900	\$1,217,100
Engine Replacements									
varies	MCI	D Series - 45 foot	2	2	2	2	2	2	12
varies	Gillig	Phantom - 40 foot	6	8	7	0	3	2	26
Total Engine Replacements			8	10	9	2	5	4	38
Total Cost of Engine Replacements			\$233,400	\$306,000	\$281,400	\$46,400	\$155,200	\$123,000	\$1,145,400
Transmission Replacements									
varies	MCI	D Series - 45 foot	2	2	2	2	2	2	12
varies	Gillig	Phantom - 40 foot	6	8	7	0	3	2	26
Total Transmission Replacements			8	10	9	2	5	4	38
Total Cost of Transmission Replacements			\$55,200	\$71,000	\$65,800	\$15,100	\$38,800	\$32,000	\$277,900
Extended Warranties									
varies	MCI	D Series - 45 foot	2	2	2	2	2	2	12
varies	Gillig	Phantom - 40 foot	6	8	7	0	3	2	26
Total Extended Warranties			8	10	9	2	5	4	38
Total Cost of Extended Warranties			\$30,100	\$38,800	\$36,000	\$8,200	\$21,200	\$17,500	\$151,800
Total Mid-Life Overhaul Cost			\$516,500	\$5,007,705	\$3,849,401	\$69,700	\$3,343,285	\$3,140,252	\$16,118,842

## 6.1.2 VEHICLE REPLACEMENT AND EXPANSION PROGRAM

The vehicle purchases in this chapter include replacement of OmniRide and OmniLink buses at or beyond the end of their normal useful lives and the purchase of a small number of new OmniRide buses for use in its contingency fleet.

### Vehicle Replacement Program

As discussed in Chapter 4, PRTC's standard practice has been to retain OmniRide buses in the active fleet until they are 14 years old, rather than replacing them as allowed by FTA when they are 12 years old. OmniLink buses, however, are replaced at their federally qualifying retirement age of 10 years.

Given financial constraints, the TDP replacement schedule keeps the OmniRide bus replacements in service an additional year longer than PRTC's "normal" process (i.e., they will be replaced at 15 years instead of 14). Given the long lead time for delivery for these buses (typically 18 to 24 months), funding must be in place two years ahead of the scheduled replacement. Thus, as shown in Table 6-2, a total of 46 OmniRide buses and 22 OmniLink buses would be replaced over the six-year TDP period.

Using FY 2011 unit costs inflated by 3% per year, Table 6-2 also shows the estimated costs of these items. The vehicle replacement costs for the six-year TDP period are estimated to be \$36.49 million. The funding for the OmniRide vehicle replacements is assumed to be 80% federal, with a combination of state and local funding for the 20% non-federal match. Local match for all OmniRide buses would come from Prince William County. However, the matched federal funding is anticipated to fall well short of covering the 38 buses in FY 2015. Therefore, debt financing is assumed to cover a large portion of the estimated costs of these buses. If additional discretionary federal funding is identified in the future for these replacements, the magnitude of the debt financing and/or replacements could happen sooner, with adjustments to the funding assumptions made in subsequent budget processes.

For the OmniLink bus replacements, the funding for the FY 2013 replacements is assumed to be 80% federal, with a combination of state and local funding for the 20% non-federal match, but 80% state and 20% local for FY 2014 and 2015. Local match for OmniLink buses would come from Prince William County, Manassas, and Manassas Park, based on the number of buses operating in the eastern versus the western part of the county.

**Table 6-2: Revenue Vehicle Replacement Schedule**

Model Year	Make	Model	Vehicle Replacements (Funded 2 Years Prior)						
			FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
OmniRide Fleet									
2002	MCI	D Series - 45 foot				38			38
2004	MCI	D Series - 45 foot						8	8
Total OmniRide Vehicles to be Replaced			0	0	0	38	0	8	46
Total OmniRide Vehicle Replacement Costs			\$0	\$0	\$0	\$22,472,379	\$0	\$5,019,147	\$27,491,525
OmniLink Fleet									
2004	Gillig	Low floor - 30 foot		16					16
2005	Gillig	Low floor - 30 foot			2				2
2006	Gillig	Low floor - 30 foot				4			4
Total OmniLink Vehicles to be Replaced			0	16	2	4	0	0	22
Total OmniLink Vehicle Replacement Costs			\$0	\$6,456,240	\$831,240	\$1,712,356	\$0	\$0	\$8,999,836
Total Vehicle Replacement Costs			\$0	\$6,456,240	\$831,240	\$24,184,735	\$0	\$5,019,147	\$36,491,362

## Service Expansion Vehicles

As noted in previous chapters, PRTC retains a small number of retirement-age buses in its “contingency fleet,” which can be moved into the active fleet when necessary to address overcrowding. In recent months, all of PRTC’s contingency buses have been pressed into active service. Therefore, PRTC’s FY 2011 and FY 2012 budgets provide funding to purchase a small number of new MCI contingency buses. PRTC’s FY 2011 budget includes funding for four buses, and the FY 2012 budget includes funding for five more buses, as shown in Table 6-3.

Using FY 2011 unit costs inflated by 3% per year, Table 6-3 also shows the estimated costs of these items. The costs of the expansion vehicles are estimated to be \$2.71 million. The funding is assumed to be 80% federal, with a combination of state and local funding for the 20% non-federal match. Local match for all OmniRide buses would come from Prince William County.

**Table 6-3: OmniRide Revenue Vehicle Expansion Schedule**

	Make	Model	Expansion Vehicles (Funded 2 Years Prior)						
			FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
OmniRide Fleet									
	MCI	D Series - 45 foot	5						5
Total Expansion OmniRide Vehicles			5	0	0	0	0	0	5
Total Expansion Vehicle Costs			\$2,712,920	\$0	\$0	\$0	\$0	\$0	\$2,712,920

## 6.2 CAPITAL IMPROVEMENT PROJECTS

PRTC has identified a number of major capital improvement projects that are essential for the maintenance and enhancement of the system. The capital improvement projects scheduled during the time frame of this TDP are listed in Table 6-4, and described below.

### 6.2.1 HIGH TECHNOLOGY BUS ENHANCEMENT PROGRAM

In FY 2012, PRTC plans to complete implementation of its high technology bus enhancement system. This system includes computer aided dispatch/automated vehicle location (CAD/AVL), automatic next stop announcement system, real-time passenger information (RTPI) system, automated passenger counters (APCs), and video surveillance cameras for the entire fleet.

The total remaining costs of this project are estimated to be \$4.66 million. The funding for consultant services for the project is assumed to be 95% state and 5% local. Funding for implementation of the system is anticipated to be 80% state and 20% local.

### 6.2.2 WESTERN MAINTENANCE FACILITY

As discussed in detail in Chapter 4, PRTC's current bus facility on the eastern side of Prince William County is stretched beyond its practical capacity, encumbering the storage and maintenance of the fleet. To make room for new vehicles, reduce deadheading costs (miles and fuel), and expand its maintenance capacity, PRTC has been actively pursuing the development of a second maintenance facility on the western side of the service area for the past several years. Given its critical nature, PRTC is committed to maintaining the existing schedule for the facility so that it will be operational in FY 2016. Thus, the TDP includes funding for land acquisition and utility relocations in FY 2013 and construction in FY 2015.

This funding of \$100,000 in FY 2013 for land acquisition and utility relocation for the proposed maintenance facility is assumed to be 80% federal and 20% state. An additional \$11.9M for construction of the proposed facility is assumed from federal funds, with the balance being obtained by debt financing.

## 6.2.3 INTEREST EXPENSE AND DEBT SERVICE

As discussed in Chapter 4, while PRTC strives to operate on a “pay-as-you-go” basis, PRTC has found it essential to use debt financing from time to time. The six-year TDP includes funding for debt service on the VRA loan used to construct the new park and ride lot and expand the vehicle storage lot at the current bus facility, as well as new debt financing to complete construction of the western maintenance facility and for a portion of the OmniLink vehicle replacements. Total estimated costs for interest expenses and debt service over the six-year TDP total \$3.12 million.

The interest expenses on interim SunTrust notes and debt service on the VRA loan are assumed to be locally funded. Debt service on the Western Maintenance Facility and OmniRide replacement vehicles is assumed to be funded with a combination of state and local funds.

**Table 6-4: Capital Improvement Projects**

	Land Acquisition/Engineering/Construction/Other						
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
High Tech. Bus Enhancement System - Consulting	\$ 302,700						\$ 302,700
High Tech. Bus Enhancement System - Implementation	\$ 4,362,300						\$ 4,362,300
Western Maint. Facility - Land Acq./Utility Relocat.		\$ 100,000					\$ 100,000
Western Maint. Facility - Construction				\$ 11,900,000			\$ 11,900,000
Interest Expense on Interim SunTrust Notes	\$ 50,300	\$ 62,000					\$ 112,300
Debt Service - Western Maint. Facility				\$ 116,100	\$ 760,600	\$ 759,300	\$ 1,636,000
Debt Service - VRA Loan			\$ 55,400	\$ 370,000	\$ 366,700	\$ 362,700	\$ 1,154,800
Debt Service - Bus Purchases				\$ 25,600	\$ 21,600	\$ 172,000	\$ 219,200
<b>Total Costs</b>	<b>\$ 4,715,300</b>	<b>\$ 162,000</b>	<b>\$ 55,400</b>	<b>\$ 12,411,700</b>	<b>\$ 1,148,900</b>	<b>\$ 1,294,000</b>	<b>\$ 19,787,300</b>

## 6.3 OPERATING CAPITAL PROJECTS

Operating capital items included in PRTC’s FY 2012 budget and six-year plan include funding for on-going capital items in each year of the TDP. Funding is included for these expenditures over the six-year TDP period for bus shelters, computer hardware/software, office furniture and equipment, and improvements to the transit center, as listed in Table 6-5.

The costs of these operating capital items over the six-year TDP total \$2.95 million, with the majority of the costs associated with continuing PRTC’s bus shelter program. The primary funding sources assumed for these items are federal and state capital funding, with non-federal match funding from state and/or local sources.

**Table 6-5: Operating Capital Items**

	Operating Capital						
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	TDP Total
Bus Shelters	\$ 297,500	\$ 236,900	\$ 313,600	\$ 253,500	\$ 330,700	\$ 271,100	\$ 1,703,300
Computer Hardware/Software	\$ 160,500	\$ 104,000	\$ 103,300	\$ 45,400	\$ 106,000	\$ 74,000	\$ 593,200
Office Furniture & Equipment	\$ 14,600	\$ 15,000	\$ 15,400	\$ 15,800	\$ 16,200	\$ 16,600	\$ 93,600
Transit Center Improvements	\$ 288,600	\$ 91,100	\$ 42,300	\$ 43,500	\$ 44,700	\$ 45,900	\$ 556,100
<b>Total Costs</b>	<b>\$ 761,200</b>	<b>\$ 447,000</b>	<b>\$ 474,600</b>	<b>\$ 358,200</b>	<b>\$ 497,600</b>	<b>\$ 407,600</b>	<b>\$ 2,946,200</b>

## CHAPTER 7 – 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 for annual operating and maintenance costs, and funding requirements and funding sources for bus and service vehicle purchases.

PRTC's FY 2012 budget and six-year plan inaugurates the practice of preparing a budget in conjunction with the TDP. In accordance with DRPT requirements, the "out-years" portion of PRTC's multi-year budget is financially constrained and covers a six-year period. Historically, PRTC budgets covered a five-year period and were not financially constrained beyond the first year.

PRTC management prepared two six-year budget proposals for consideration by the PRTC Board. Each is identical for FY 2012, but differs in the out-years (FY 2013 through FY 2017). The first includes a proposed Prince William County general fund supplement with, on average, eight percent fare increases in FY 2013, FY 2015, and FY 2017. The second does not assume a general fund supplement by Prince William County, but assumes a larger fare increase of 10 percent, on average, in FY 2013, FY 2015, and FY 2017. The two options also differ in their assumptions regarding the year that OmniRide buses would be replaced, as discussed in Chapter 6. The TDP conservatively assumes the budget proposal without a Prince William County general fund supplement.

### 7.1 SERVICE OPERATIONS AND MAINTENANCE

PRTC's FY 2012 budget for service operations and maintenance costs totals \$27.452 million. The break-out of these costs is as follows:

- Contract Admin Services, Contractor Incentives, Fuel and Wi-Fi - \$20.080 million (73.1%)
- Personal Services - \$3.189 million (11.6%)
- Employee Benefits - \$1.095 million (4.0%)
- Contractual Services - \$1.752 million (6.4%)
- Other Services - \$1.335 million (4.9%)

Revenues for PRTC services come from six primary sources. For FY 2012, the break-out of these revenues is as follows:

- Farebox revenues - \$10.233 million (37.3%)
- Reimbursements from VRE - \$0.081 million (0.3%)
- Federal grants - \$3.187 million (11.6%)
- State grants - \$4.464 million (16.3%)
- Local subsidy - \$9.361 million (34.1%)
- Other local funding (non-jurisdictional) - \$0.128 million (0.5%)

Of the federal grants, nearly 93% is from FTA Section 5307 funds for capital cost of contracting. The remainder is from CMAQ ridesharing funds. For state grants, approximately 85% is from state operating assistance, with the remainder coming from a variety of state sources. Notably, in FY 2012, 8% of the state funding is for the Tysons Express route, which will benefit from I-495 HOT lanes traffic mitigation funding until the HOT lanes are completed in FY 2013.

Under the “no general fund supplement” proposal assumed for the TDP, the sole source of the local subsidy for PRTC is 2% motor fuels tax revenue from each member jurisdiction. The member jurisdictions are:

- Prince William County
- City of Manassas
- City of Manassas Park
- Stafford County
- Spotsylvania County
- City of Fredericksburg

All of the member jurisdictions fund a portion of PRTC’s administrative costs. In FY 2012, approximately 94% of the local subsidy is from Prince William County, as its subsidy goes towards all OmniRide routes, the eastern OmniLink routes, rideshare/marketing and PRTC administration. The City of Manassas and City of Manassas Park will contribute 2.5% and 1.8%, respectively. Their subsidies go towards their OmniLink routes, in addition to administration and rideshare/marketing. Collectively, Stafford County, Spotsylvania County and the City of Fredericksburg will contribute 1.2% towards PRTC administration.

Key expense and revenue assumptions utilized in the TDP Financial Plan for annual service operations and maintenance (O&M) costs (Table 7-1) are as follows:

- A combined two percent staff COLA/merit reserve which may or may not ultimately be included in the FY 2012 budget depending in part on how PRTC’s member jurisdictions choose to handle COLA/merit accommodations for their staffs in FY 2012.
- One additional full-time equivalent position for facilities maintenance support.
- Annual O&M costs for commuter and local route service during the TDP time period are based on a rate of \$116.28 per revenue bus-hour, including contractor and fuel costs (FY 2012 dollars). This is the estimated incremental cost for adding new service. Costs in Table 7-1 reflect Year of Expenditure (YOE) dollars. A 3.0% annual inflation rate has been assumed during the TDP six-year time period.
- Farebox revenues are generally assumed to increase at the same rate of growth as revenue bus-hours during the TDP’s six year time period. As previously noted, this financial plan assumes a 10% increase in fares in FY 2013, FY 2015 and FY 2017.
- FTA Section 5307 capital cost of contracting funds are assumed to increase 3% per year.
- State operating assistance, which varies from year to year, is assumed to increase approximately 3% per year.



**Table 7-1: TDP Financial Plan for Service Operations and Maintenance**

<b>TDP Financial Plan for:</b>						
<b>Service Operations &amp; Maintenance Costs</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Projected Costs</b>						
Contract Admin Services + Contractor Incentives + Fuel + Wi-Fi	\$ 20,079,600	\$ 20,842,000	\$ 21,985,300	\$ 22,644,900	\$ 23,324,500	\$ 24,023,900
Personal Services	\$ 3,189,400	\$ 3,301,100	\$ 3,301,600	\$ 3,486,400	\$ 3,742,300	\$ 3,890,000
Employee Benefits	\$ 1,095,500	\$ 1,208,100	\$ 1,278,400	\$ 1,387,800	\$ 1,488,400	\$ 1,614,400
Contractual Services	\$ 1,752,400	\$ 1,716,900	\$ 1,756,500	\$ 1,805,200	\$ 1,859,100	\$ 2,040,300
Other Services	\$ 1,335,500	\$ 1,304,600	\$ 1,465,700	\$ 1,479,100	\$ 1,590,100	\$ 1,640,800
<b>Total Projected Costs</b>	<b>\$ 27,452,400</b>	<b>\$ 28,372,700</b>	<b>\$ 29,787,500</b>	<b>\$ 30,803,400</b>	<b>\$ 32,004,400</b>	<b>\$ 33,209,400</b>
<b>Anticipated Revenues</b>						
Farebox (Net of returned checks)	\$ 10,233,400	\$ 11,270,100	\$ 11,664,600	\$ 12,867,800	\$ 13,262,300	\$ 14,598,800
Reimbursements from VRE	\$ 80,600	\$ 83,100	\$ 85,600	\$ 88,200	\$ 90,800	\$ 93,500
Federal						
FTA Section 5307 (Capital Cost of Contracting)	\$ 2,946,700	\$ 3,032,200	\$ 3,120,200	\$ 3,210,900	\$ 3,304,300	\$ 3,400,500
CMAQ Ridesharing	\$ 240,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 240,000
State						
Operating Assistance	\$ 3,807,000	\$ 3,946,800	\$ 4,083,500	\$ 4,223,800	\$ 4,303,500	\$ 4,392,100
Ridesharing	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000
TEIF/Technical Assistance	\$ 81,000	\$ -	\$ 56,000	\$ -	\$ 56,000	\$ -
Transportation Intern Program	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500
State Match to Federal Rideshare	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
State Other (Tysons)	\$ 357,300	\$ 186,000	\$ -	\$ -	\$ -	\$ -
Local						
Prince William County	\$ 8,839,979	\$ 8,735,428	\$ 9,628,461	\$ 8,953,895	\$ 9,478,948	\$ 9,181,313
Stafford County	\$ 60,500	\$ 56,800	\$ 58,200	\$ 63,100	\$ 69,000	\$ 75,700
City of Manassas	\$ 234,282	\$ 239,065	\$ 252,875	\$ 260,525	\$ 274,816	\$ 284,678
City of Manassas Park	\$ 173,139	\$ 176,607	\$ 186,764	\$ 192,280	\$ 202,736	\$ 209,609
City of Fredericksburg	\$ 22,600	\$ 21,200	\$ 21,800	\$ 23,600	\$ 25,800	\$ 28,300
Spotsylvania County	\$ 29,800	\$ 61,700	\$ 63,200	\$ 68,400	\$ 75,100	\$ 82,300
Other Local (Non-Jurisdictional)						
Advertising Revenue	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Interest	\$ 2,600	\$ 5,200	\$ 7,800	\$ 10,400	\$ 13,000	\$ 15,600
Miscellaneous Revenue (Related to Tysons)	\$ 25,000	\$ -	\$ -	\$ 282,000	\$ 289,600	\$ 288,500
<b>Total Projected Operating Revenues</b>	<b>\$ 27,452,400</b>	<b>\$ 28,372,700</b>	<b>\$ 29,787,500</b>	<b>\$ 30,803,400</b>	<b>\$ 32,004,400</b>	<b>\$ 33,209,400</b>

- For the Tysons Express route, I-495 HOT lanes mitigation funding is assumed to cease in mid-FY 2013, at which time PRTC would assume its operating costs. This “bridge” funding from PRTC would be required from mid-FY 2013 through FY 2014, at which time revenues from the I-95 HOT lanes construction project are assumed to continue the service (reflected in the budget as other local funding). The total local subsidy from Prince William County in FY 2013 and FY 2014 is estimated to total \$484,500. These costs would be partially off-set by the revenue hour savings discussed in Chapter 5 and the higher OmniRide fare for the service.

Using the assumptions presented above, funding requirements from member jurisdictions’ motor fuels tax revenues will total \$67.87 million from FY 2012 through FY 2017. While the change in the local subsidy will vary significantly from year to year, on average it would grow only 1% per year over the TDP time period.

It is important to note that funding requirements shown in Table 7-1 are based on several assumptions that may or may not occur. These assumptions will need to be revisited and revised in each year’s budget process. Similarly, projects identified in the six-year TDP period can be moved forward or back, depending on availability of funding.

## 7.2 VEHICLE REHABILITATION PROGRAM

As detailed in Chapter 6, the TDP includes the following for the rehabilitation of OmniRide vehicles:

- **FY 2012** – 17 mid-life overhauls and line inspections and eight powertrain replacements and extended warranties
- **FY 2013** – 20 mid-life overhauls and line inspections and 10 powertrain replacements and extended warranties
- **FY 2014** – 14 mid-life overhauls and line inspections and nine powertrain replacements and extended warranties
- **FY 2015** – Two powertrain replacements and extended warranties
- **FY 2016** – 12 mid-life overhauls and line inspections and five powertrain replacements and extended warranties
- **FY 2017** – 11 mid-life overhauls and line inspections and four powertrain replacements and extended warranties

Thus, a total of 74 OmniRide vehicles are anticipated to be overhauled, and 38 are anticipated to receive new powertrains over the TDP’s six year time period.

The TDP assumes 80% state and 20% local reimbursement for bus overhauls. For line inspections, engine and transmission replacements, and extended warranties, the TDP assumes 50% state and 50% local reimbursement. Costs and funding for vehicle rehabilitation are shown in Table 7-2.

**Table 7-2: TDP Financial Plan for Vehicle Rehabilitation**

TDP Financial Plan for: Bus Maintenance (Rehabilitation Program)		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>Projected Expenses</b>							
OmniRide Bus Overhauls			\$ 4,313,205	\$ 3,256,401	\$ -	\$ 2,961,185	\$ 2,795,852
Line Inspections	\$ 197,800	\$ 278,700	\$ 209,800	\$ -	\$ 166,900	\$ 171,900	
Engine Replacements	\$ 233,400	\$ 306,000	\$ 281,400	\$ 46,400	\$ 155,200	\$ 123,000	
Transmission Replacements	\$ 55,200	\$ 71,000	\$ 65,800	\$ 15,100	\$ 38,800	\$ 32,000	
Extended Warranties	\$ 30,100	\$ 38,800	\$ 36,000	\$ 8,200	\$ 21,200	\$ 17,500	
<b>Total Projected Expenses</b>	<b>\$ 516,500</b>	<b>\$ 5,007,705</b>	<b>\$ 3,849,401</b>	<b>\$ 69,700</b>	<b>\$ 3,343,285</b>	<b>\$ 3,140,252</b>	
<b>Anticipated Revenues</b>							
State Reimbursement	\$ 258,250	\$ 3,797,814	\$ 2,901,621	\$ 34,850	\$ 2,559,998	\$ 2,408,882	
Local Reimbursement - PWC	\$ 258,250	\$ 1,209,891	\$ 947,780	\$ 34,850	\$ 783,287	\$ 731,370	
<b>Total Anticipated Revenues</b>	<b>\$ 516,500</b>	<b>\$ 5,007,705</b>	<b>\$ 3,849,401</b>	<b>\$ 69,700</b>	<b>\$ 3,343,285</b>	<b>\$ 3,140,252</b>	

1. Assumes 80% state and 20% local reimbursement for bus overhauls.
2. Assumes 50% state and 50% local reimbursement for line inspections, engine and transmission replacements, and extended warranties.

### 7.3 VEHICLE REPLACEMENT AND EXPANSION PROGRAM

As detailed in Chapter 6, the TDP includes anticipated purchases of the following for PRTC vehicle replacement and expansion:

- **FY 2012** – Five expansion 45' commuter buses
- **FY 2013** – 16 replacement 30' local buses
- **FY 2014** – Two replacement 30' local buses
- **FY 2015** – 38 replacement 45' commuter buses and four replacement 30' local buses
- **FY 2016** – None
- **FY 2017** – Eight replacement 45' commuter buses

Thus, a total of 73 buses are anticipated to be purchased over the TDP's six year time period.

The TDP generally assumes the OmniRide replacement buses will be funded with a combination of federal Section 5309, state and local funding sources. However, given the unusual "spike" in the fleet replacement program in FY 2015, when 38 vehicles will reach retirement age at the same time, the TDP assumes partial debt financing in the amount of \$17 million. The OmniRide expansion and OmniLink replacement buses are assumed to be funded with a combination of federal (Section 5309 or CMAQ), state and local funding sources. Costs and funding for vehicle replacement and expansion are shown in Table 7-3.

### 7.4 CAPITAL IMPROVEMENT PROJECTS

As detailed in Chapter 6, the TDP includes a number of capital improvement projects. These projects include:

- **FY 2012** – Completion of the high technology bus enhancement program
- **FY 2013** – Western maintenance facility (land acquisition and utility relocations)
- **FY 2015** – Western maintenance facility (construction)
- **FY 2014 through FY 2017** – Interest expenses and debt service

The TDP assumes the high technology bus enhancement program will be completed with state and local match funds. The land acquisition and utility relocation costs for the western maintenance facility are assumed to be funded with federal CMAQ and state match funds. The construction of the western maintenance facility is assumed to be funded with a combination of federal (e.g., CMAQ), state, local and debt financing. Because the completion of the western maintenance facility is so critical to PRTC's continued operations, the TDP assumes \$8.65 million in debt financing. Debt service for the western maintenance facility assumes state and local funding. Costs and funding for these projects are shown in Table 7-4.

**Table 7-3: TDP Financial Plan for Vehicle Purchases**

TDP Financial Plan for: Fleet Replacement/Contingency/Expansion		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>Number of Vehicles</b>							
Replacement							
OmniRide		0	0	0	38	0	8
OmniLink		0	16	2	4	0	0
Contingency/Expansion							
OmniRide		5	0	0	0	0	0
<b>Total Number of Vehicles</b>		<b>5</b>	<b>16</b>	<b>2</b>	<b>42</b>	<b>0</b>	<b>8</b>
<b>Projected Expenses</b>							
Replacement							
OmniRide		\$ -	\$ -	\$ -	\$ 22,472,379	\$ -	\$ 5,019,147
OmniLink		\$ -	\$ 6,456,240	\$ 831,240	\$ 1,712,356	\$ -	\$ -
Contingency/Expansion							
OmniRide		\$ 2,712,920	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Projected Expenses</b>		<b>\$ 2,712,920</b>	<b>\$ 6,456,240</b>	<b>\$ 831,240</b>	<b>\$ 24,184,735</b>	<b>\$ -</b>	<b>\$ 5,019,147</b>
<b>Anticipated Revenues</b>							
OmniRide Replacement Buses:							
Federal Reimbursement (80%)		\$ -	\$ -	\$ -	\$ 4,362,639	\$ -	\$ 4,015,315
State Reimbursement		\$ -	\$ -	\$ -	\$ 872,528	\$ -	\$ 847,283
Local Reimbursement - PWC		\$ -	\$ -	\$ -	\$ 218,132	\$ -	\$ 156,546
Debt Financing		\$ -	\$ -	\$ -	\$ 17,019,103	\$ -	\$ -
OmniRide Contingency/Expansion Buses:							
Federal Reimbursement (80%)		\$ 2,170,336	\$ -	\$ -	\$ -	\$ -	\$ -
State Reimbursement		\$ 474,067	\$ -	\$ -	\$ -	\$ -	\$ -
Local Reimbursement - PWC		\$ 68,517	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Financing		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OmniLink Replacement Buses:							
Federal Reimbursement		\$ -	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -
State Reimbursement		\$ -	\$ 3,964,992	\$ 664,992	\$ 1,369,885	\$ -	\$ -
Local Reimbursement		\$ -	\$ 888,748	\$ 166,248	\$ 342,471	\$ -	\$ -
Carryover Local		\$ -	\$ 2,500	\$ -	\$ -	\$ -	\$ -
<b>Total Anticipated Revenues</b>		<b>\$ 2,712,920</b>	<b>\$ 6,456,240</b>	<b>\$ 831,240</b>	<b>\$ 24,184,758</b>	<b>\$ -</b>	<b>\$ 5,019,144</b>

1. FY 2012 OmniRide expansion buses to be funded with matched FY 2011 CMAQ funds (\$1,000,000) and matched FY 2011 Section 5309 funds (\$1,712,920).
2. FY 2015 OmniRide replacement buses assumed to be funded with FY 2012, FY 2013, and FY 2014 matched Section 5309 funds, with balance debt financed.
3. FY 2017 OmniRide replacement buses assumed to be funded with matched FY 2015 and FY 2016 Section 5309 funds.
4. FY 2013 OmniLink replacement buses assumed to be funded with matched CMAQ funds (\$2,000,000). Non-federal match assumed to be 80% state and 20% local funds.
5. Balance of FY 2013 and FY 2014 and FY 2015 OmniLink replacement buses assumed to be 80% state and 20% local funds.
6. Local share of replacement bus allocation is based on number of buses to be operated for Western service vs Eastern service. Assumes that of total 23 buses in OmniLink fleet; 5 (4 during peak plus 1 spare) or 22% operated in Western service and 18 or 78% operated in Eastern service.

**Table 7-4: TDP Financial Plan for Capital Improvement Projects**

TDP Financial Plan for:		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Land Acquisition/Engineering/Construction/Other							
<b>Projected Expenses</b>							
High Technology Bus Enhancement System							
Consulting	\$ 302,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Implementation	\$ 4,362,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Western Maintenance Facility							
Land Acquisition/Utility Relocation	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ -	\$ -	\$ -	\$ 11,900,000	\$ -	\$ -	\$ -
Interest Expense on Interim SunTrust Notes	\$ 50,300	\$ 62,000	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service							
Western Maintenance Facility	\$ -	\$ -	\$ -	\$ 116,100	\$ 760,600	\$ 759,300	\$ -
VRA Loan	\$ -	\$ -	\$ 55,400	\$ 370,000	\$ 366,700	\$ 362,700	\$ -
Bus Purchases	\$ -	\$ -	\$ -	\$ 25,600	\$ 21,600	\$ 172,000	\$ -
<b>Total Projected Expenses</b>	<b>\$ 4,715,300</b>	<b>\$ 162,000</b>	<b>\$ 55,400</b>	<b>\$ 12,411,700</b>	<b>\$ 1,148,900</b>	<b>\$ 1,294,000</b>	
<b>Anticipated Revenues</b>							
Federal Reimbursement	\$ -	\$ 80,000	\$ -	\$ 2,600,000	\$ -	\$ -	\$ -
State Reimbursement	\$ 3,777,400	\$ 20,000	\$ -	\$ 603,500	\$ 397,600	\$ 517,200	\$ -
Local Reimbursement							
PWC	\$ 363,228	\$ 61,300	\$ 54,800	\$ 546,800	\$ 732,100	\$ 757,500	\$ -
Manassas	\$ 1,100	\$ -	\$ 400	\$ 6,900	\$ 11,400	\$ 11,400	\$ -
Manassas Park	\$ 800	\$ -	\$ 200	\$ 4,500	\$ 7,800	\$ 7,900	\$ -
Debt Financing - Western Maintenance Facility	\$ -	\$ -	\$ -	\$ 8,650,000	\$ -	\$ -	\$ -
Carryover Local							
PWC	\$ 565,772	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Manassas	\$ 4,100	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -
Manassas Park	\$ 2,900	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Anticipated Revenues</b>	<b>\$ 4,715,300</b>	<b>\$ 242,000</b>	<b>\$ 55,400</b>	<b>\$ 15,011,700</b>	<b>\$ 1,148,900</b>	<b>\$ 1,294,000</b>	

1. FY 2012 high technology bus enhancement system consulting to be funded 95% state and 5% local.
2. FY 2012 high technology bus enhancement system implementation to be funded 80% state and 20% local.
3. Interest expense is 100% local.
4. FY 2013 western maintenance facility to be funded with FY 2010 matched CMAQ funding (80% federal; 20% state).
5. FY 2015 western maintenance facility assumed to be funded with \$1,250,000 earmark, FY 2013/2014 CMAQ (\$2,000,000) and the balance debt financed.
6. FY 2015 debt service on western maintenance facility assumed to be funded 50% state and 50% local.
7. Local share of VRA loan (related to commuter lot and yard expansion at transit center) based on number of buses.
8. Assumes that of 18 OmniLink buses, 14 or 78% of bus fleet related to eastern service 4 or 22% related to western service. Computed percentages: PWC (98.89%), Manassas (0.75%), and Manassas Park (0.36%).
9. Local share of Western Facility allocation is based on number of buses to be stored at that facility. Assumes that of 31 buses stored at Western Facility, 26 or 84% related to OmniRide service and 5 or 16% related to OmniLink service.



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## 7.5 OPERATING CAPITAL PROGRAM

As detailed in Chapter 6, PRTC's FY 2012 budget and six-year plan include funding for on-going capital items in each year of the TDP. This program includes funding in each year of the TDP for:

- Bus shelters
- Computer hardware/software
- Office furniture and equipment
- Transit center improvements

The TDP assumes a combination of federal Section 5307 funds for enhancements and safety/security with state and local matching funds and state capital with local matching funds. Costs and funding for these on-going capital items are shown in Table 7-5.

**Table 7-5: TDP Financial Plan for Operating Capital Program**

<b>TDP Financial Plan for: Operating Capital Items</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Projected Expenses</b>						
Bus Shelters	\$ 297,500	\$ 236,900	\$ 313,600	\$ 253,500	\$ 330,700	\$ 271,100
Computer Hardware/Software	\$ 160,500	\$ 104,000	\$ 103,300	\$ 45,400	\$ 106,000	\$ 74,000
Office Furniture & Equipment	\$ 14,600	\$ 15,000	\$ 15,400	\$ 15,800	\$ 16,200	\$ 16,600
Transit Center Improvements	\$ 288,600	\$ 91,100	\$ 42,300	\$ 43,500	\$ 44,700	\$ 45,900
<b>Total Projected Expenses</b>	<b>\$ 761,200</b>	<b>\$ 447,000</b>	<b>\$ 474,600</b>	<b>\$ 358,200</b>	<b>\$ 497,600</b>	<b>\$ 407,600</b>
<b>Anticipated Revenues</b>						
FTA Section 5307 (enhancements; safety/security)	\$ 58,200	\$ 58,700	\$ 60,500	\$ 62,300	\$ 64,200	\$ 67,400
State Match on Section 5307 (50% of 20%)	\$ 7,275	\$ 7,338	\$ 7,563	\$ 7,788	\$ 8,025	\$ 8,425
Local Match on Section 5307 (50% of 20%)						
PWC	\$ 7,183	\$ 7,246	\$ 7,471	\$ 7,696	\$ 7,933	\$ 8,333
Manassas	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53
Manassas Park	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39
State Capital	\$ 373,325	\$ 216,263	\$ 229,838	\$ 171,413	\$ 240,875	\$ 195,475
Local Match on State Capital						
PWC	\$ 304,568	\$ 148,136	\$ 160,354	\$ 103,072	\$ 168,363	\$ 120,746
Manassas	\$ 4,063	\$ 2,874	\$ 2,952	\$ 1,988	\$ 2,967	\$ 2,364
Manassas Park	\$ 2,944	\$ 2,052	\$ 2,131	\$ 1,453	\$ 2,195	\$ 1,715
Stafford	\$ 1,900	\$ 1,750	\$ 1,500	\$ 1,000	\$ 1,200	\$ 1,250
Fredericksburg	\$ 700	\$ 650	\$ 550	\$ 350	\$ 450	\$ 450
Spotsylvania	\$ 950	\$ 1,900	\$ 1,650	\$ 1,050	\$ 1,300	\$ 1,350
<b>Total Anticipated Revenues</b>	<b>\$ 761,200</b>	<b>\$ 447,000</b>	<b>\$ 474,600</b>	<b>\$ 358,200</b>	<b>\$ 497,600</b>	<b>\$ 407,600</b>

## CHAPTER 8 – TDP MONITORING AND EVALUATION

This TDP has presented a comprehensive evaluation of PRTC's service and cost characteristics. Key elements that have been addressed in this TDP include:

- Goals, objectives and performance standards to guide further development of PRTC services;
- A detailed evaluation of existing service characteristics;
- A peer agency review that compares PRTC service and financial characteristics to other similar-sized systems;
- A summary of rider survey results from the 2008 MWCOG transit rider survey;
- Aspirational service and facility improvement needs, for consideration in the TDP;
- Financially constrained service and capital improvements proposed over the six-year TDP period, identified by year; and
- Funding requirements and potential funding sources for the financially constrained service and capital improvements.

This TDP reflects an initial step in future service improvements for PRTC. 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.

### 8.1 COORDINATION WITH OTHER PLANS AND PROGRAMS

Goals and objectives from this TDP should be reviewed and incorporated into the Comprehensive Plans for Prince William County, the City of Manassas, and the City of Manassas Park and included in the annual budgets for these jurisdictions. Close and continuous coordination must also continue with the Metropolitan Washington Council of Governments (MWCOG) and other regional transit systems, such as WMATA, the Fairfax Connector, Arlington Transit, and others. The service plans set forth for PRTC in this TDP should also be included in the region's Constrained Long-Range Plan (CLRP) and eight-year Transportation Improvement Program (TIP).

### 8.2 SERVICE PERFORMANCE AND MONITORING

This TDP identifies specific systemwide service performance benchmarks to ensure PRTC's existing performance characteristics do not degrade substantially. Corrective measures are to be taken if these monitoring efforts identify service performance degradation (e.g., through route alignment adjustments, headway and/or span of service adjustments). This TDP recommends a monitoring program that could be used for periodic service evaluation as described in Chapter 2.

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### 8.3 ANNUAL TDP MONITORING

The DRPT requires 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 table presented in Chapter 7 of this TDP. This table should be extended one more fiscal year to maintain a six-year planning period.