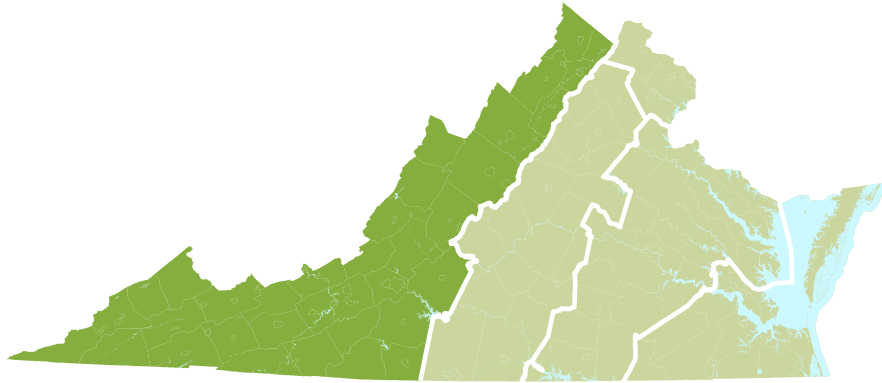


REGION 1: VALLEY AND RIDGE



The western region of Virginia is an area of interstate commerce nestled among the scenic beauty of the Shenandoah and Blue Ridge Mountains. The coal, agriculture, logging, and food processing industries generate goods and commodities that are transported throughout the nation. The area provides several corridors for road and rail freight movement, providing connections between Ohio, West Virginia, Tennessee, Kentucky, and North Carolina with many warehouses and distribution centers along the way. In addition, many natural, cultural, historic, and recreational resources of national importance draw tourists from across the nation to the area.

Across the state, Virginia's population is aging, and this is particularly true in the rural and suburban areas. The commuting patterns in the northern counties of the Valley and Ridge Region toward the Northern Virginia employment centers will continue as the population grows. As the population ages and as congestion worsens, residents and commuters in this region will increasingly rely on public transportation alternatives and teleworking. Freight commerce will continue, and the emergence of green technology to foster clean and sustainable communities will intensify support for strategies that promote high-occupancy travel and the utilization of railways for passenger and freight movement.

PDCs in the Valley and Ridge Region

- Lenowisco
- Cumberland Plateau
- Mount Rogers
- New River Valley
- Roanoke Valley - Alleghany Regional Commission
- Northern Shenandoah Valley Regional Commission
- Virginia Region 2000 Local Government Council
- West Piedmont

Strategies for the Valley and Ridge Region

- Construct I-73
- Provide Safety Improvements
- Enhance Demand Response Transit
- ITS
- Expand Freight Rail Service
- Begin Passenger Rail Service
- Increase Park and Ride Capacity
- Increase and Improve Bicycle and Pedestrian Facilities

To address anticipated trends, transportation investments that support intermodal freight commerce can support the continued economic vitality of the region. Providing spot improvements at interchanges and adding truck climbing lanes will increase safety and alleviate bottlenecks. Introducing or increasing demand response transit and continuing to invest in intra-city transit can improve mobility, connectivity and accessibility of Virginia's transportation system. Further investment in transportation demand management techniques and expansion of the Park and Ride facilities will provide alternatives to single occupant vehicles, potentially reducing congestion while promoting environmental stewardship.

MULTIMODAL FACILITIES AND SERVICES: VALLEY & RIDGE REGION

Fixed Route (FR) & Demand Response (DR)

Transit (12):

- Blacksburg Transit (FR/DR)
- Bristol Transit (FR/DR)
- District Three Public Transit (FR)
- Four County Public Transit (FR/DR)
- Graham Transit (FR)
- Harrisonburg Department of Public Transit (FR/DR)
- Mountain Empire Older Citizens Transit (DR)
- Pulaski Area Transit (FR)
- RADAR (RF/DR)
- Valley Metro (FR/DR)
- Virginia Regional Transit (FR/DR)
- Winchester Transit (FR/DR)

Human Service Transportation (19):

- Friendship Industries
- Goodwill Industries of The Valleys
- Grafton
- Junction Center for Independent Living
- Mount Rogers Community Services Board
- New River Valley Community Services
- Northwestern Community Services
- Piedmont Community Services
- Pleasant View
- Rockbridge Area CSB
- Rockbridge Area Occupational Center, Inc.
- Rockbridge Area Transportation System

- Shen-Paco Industries
- Shenandoah Area Agency on Aging
- Southern Area Agency on Aging
- Stepping Stones
- The Arc of Harrisonburg/Rockingham
- Valley Program for Aging Services
- Vector Industries

Transportation Demand Management (3):

- Central Shenandoah MPO
- RIDE Solutions
- Valley Commuter Assistance Program

Freight Rail (1):

- Norfolk Southern Crescent Corridor

Short Line (3):

- Chesapeake Western Railroad
- Shenandoah Valley Railroad
- Winchester and Western Railroad

Passenger Rail (2):

- Amtrak Crescent Route
- Amtrak Northeast Corridor

Port Facilities (1):

- Virginia Inland Port

Airports (21):

- Blue Ridge
- Bridgewater Air Park
- Eagle's Nest
- Front Royal-Warren County
- Grundy Municipal
- Ingalls Field
- Lee County
- Lonesome Pine
- Luray Caverns
- Mountain Empire
- New London
- New Market
- New River Valley
- Roanoke Regional
- Shenandoah Valley Regional
- Smith Mountain Lake
- Tazewell County
- Twin County
- Virginia Highlands
- Virginia Tech
- Winchester Regional

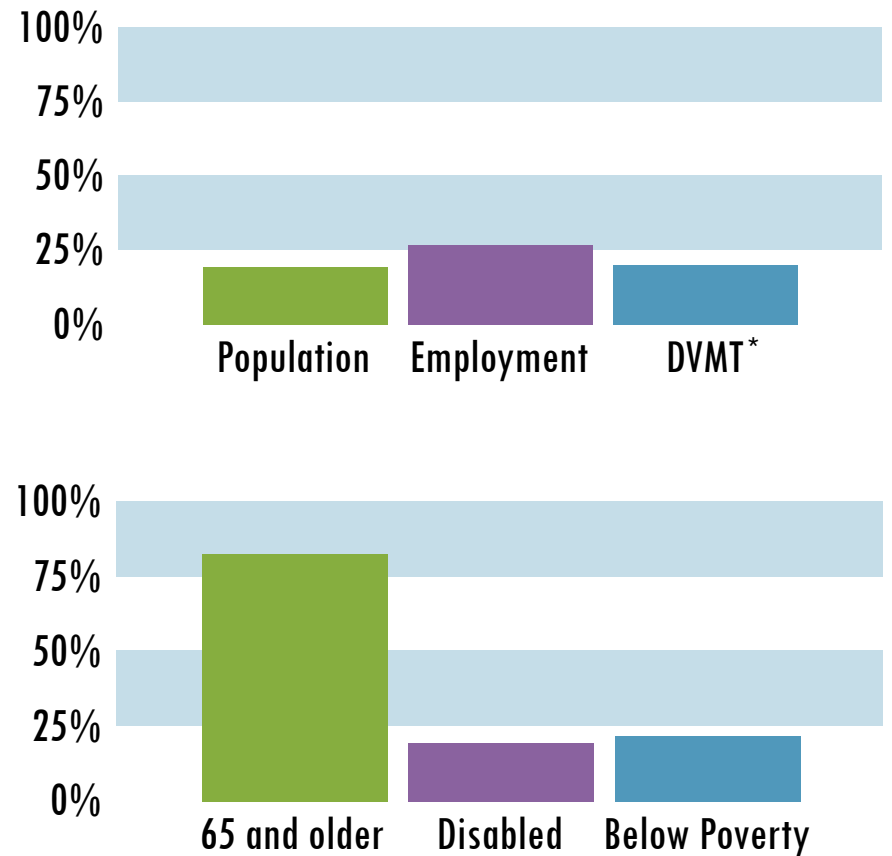
TRANSPORTATION FACILITIES AND SERVICES

The Norfolk Southern Crescent Corridor runs along the Appalachian Mountains in the western part of the state and is generally defined by I-81, a multi-lane interstate that stretches from Tennessee to New York, with a large portion paralleling the Appalachian Mountains in Virginia. Nationally, the interstate serves as a major trucking and freight corridor along the east coast and provides an interstate connection between Virginia and cities such as Harrisburg, Pennsylvania and Syracuse, New York and also provides connection to the southern United States. I-81 is one of the top eight truck routes in the US and the most important and heavily used trucking corridor in Virginia. I-81 carries tourists, travelers, a growing number of intra-valley commuters, and more than a third of all college students in Virginia.

Other major highways that support mobility in the Valley and Ridge Region are US Route 11 which serves as a local parallel to I-81, and US 220, a scenic, mountainous roadway that provides key access to West Virginia, serves as a logging route and provides access to tourist activities including multiple ski resorts. The corridor also provides access between I-81 and I-64, running between Roanoke and Clifton Forge. This part of the route is frequently used as a shortcut by freight and passenger traffic alike wishing to travel from northbound I-81 to westbound I-64 or from eastbound I-64 to southbound I-81.

There are 12 transit services operating within the Valley and Ridge Region providing fixed route and demand response services, along with express transit options that operate along the I-81 corridor, connecting larger urban areas. Transit services such as the Valley Connector, offer service to both Washington DC and Dulles Airport and the Smartway Bus operated by Valley Metro, offers service between Blacksburg and Roanoke. To fill critical mobility gaps for Virginians who do not have access to a personal automobile and live outside of public transit service areas, 19 human service agencies exist in the Valley and Ridge Region, two in the Bristol district, five in the Salem district, and 12 in the Staunton district. In addition to the above identified transit services, Rockbridge County, the City of Lexington

Figure 35: Valley and Ridge Regional Characteristics Percent Change (2010 - 2035)



and the Town of Buena Vista are in the process of determining the feasibility of transit services to serve their citizens. The City of Radford and Radford University are also collaborating on a study to determine the feasibility of transit services.

US Bike Route 76, a major national bike route, also runs in the Valley and Ridge Region, offering another modal option. Norfolk Southern's Crescent Corridor provides access to the Virginia Inland Port. Norfolk Southern rail

* DVMT: Daily Vehicle Miles Traveled (2006-2035)

lines run along the entire I-81 corridor, supporting its role as a major freight corridor. The Valley and Ridge Region has three Transportation Demand Management agencies that help to promote strategies like carpooling, vanpooling, work-from home initiatives and flexible work hours in the Front Royal, Central Shenandoah, and Roanoke areas (Valley Commuter Assistance Program, Central Shenandoah MPO, and RIDE Solutions).

The Valley and Ridge Region has two commercial and 19 other general aviation airports throughout the region. Roanoke Regional Airport in Roanoke County and Shenandoah Valley Regional Airport in Augusta County provide passenger air travel with service on major commercial airlines. The region's many air facilities serve a variety of passenger and freight needs. The on-ground transportation connection between the airport and a passenger's or good's final destination is critical to the serviceability and success of the region's airports.

CHARACTERISTICS

The Socioeconomic and Travel Demand Forecasts for Virginia and Potential Policy Responses report completed by VTRC identifies a number of trends that will impact transportation in the future. Increases in population will impact the amount of traffic on the roadway and demand for transportation alternatives, impacting commuters and those traveling through Virginia. This trend will impact both passenger and freight traffic along the highway.

Figure 35 illustrates the percent change in population, employment and DVMT between 2010 and 2035 for the Valley and Ridge Region. This data is also outlined in Table 12 by PDC.

Population: Table 12 shows the increases in population projections to 2035 for each planning district impacting the Valley and Ridge Region. All areas are expecting increases in population between 2010 and 2035, however at differing rates. For example, the Northern Shenandoah Valley area is expecting approximately 37% growth, the highest in the region. Region 2000

and the New River Valley and Roanoke Valley-Alleghany planning districts are all expecting growth slightly above 17%. The remaining jurisdictions have projected growth rates in the single digits. In all, the region is expecting approximately 15% growth, but its share of the total state population will decline by approximately 4% from 25% in 2010 to 21% in 2035.

Employment: Like population, employment in all areas of the region is projected to increase between 2010 and 2035. However, employment growth in the region is projected to be much higher than population growth and more evenly distributed. The average employment rate increase for the region is 23%. The Cumberland Plateau and West Piedmont planning districts are expecting significantly less growth than the average, whereas the Northern Shenandoah Valley planning district is expecting significantly higher employment growth. Also like population, the region's share of the total state employment will decline by approximately 3.5%.

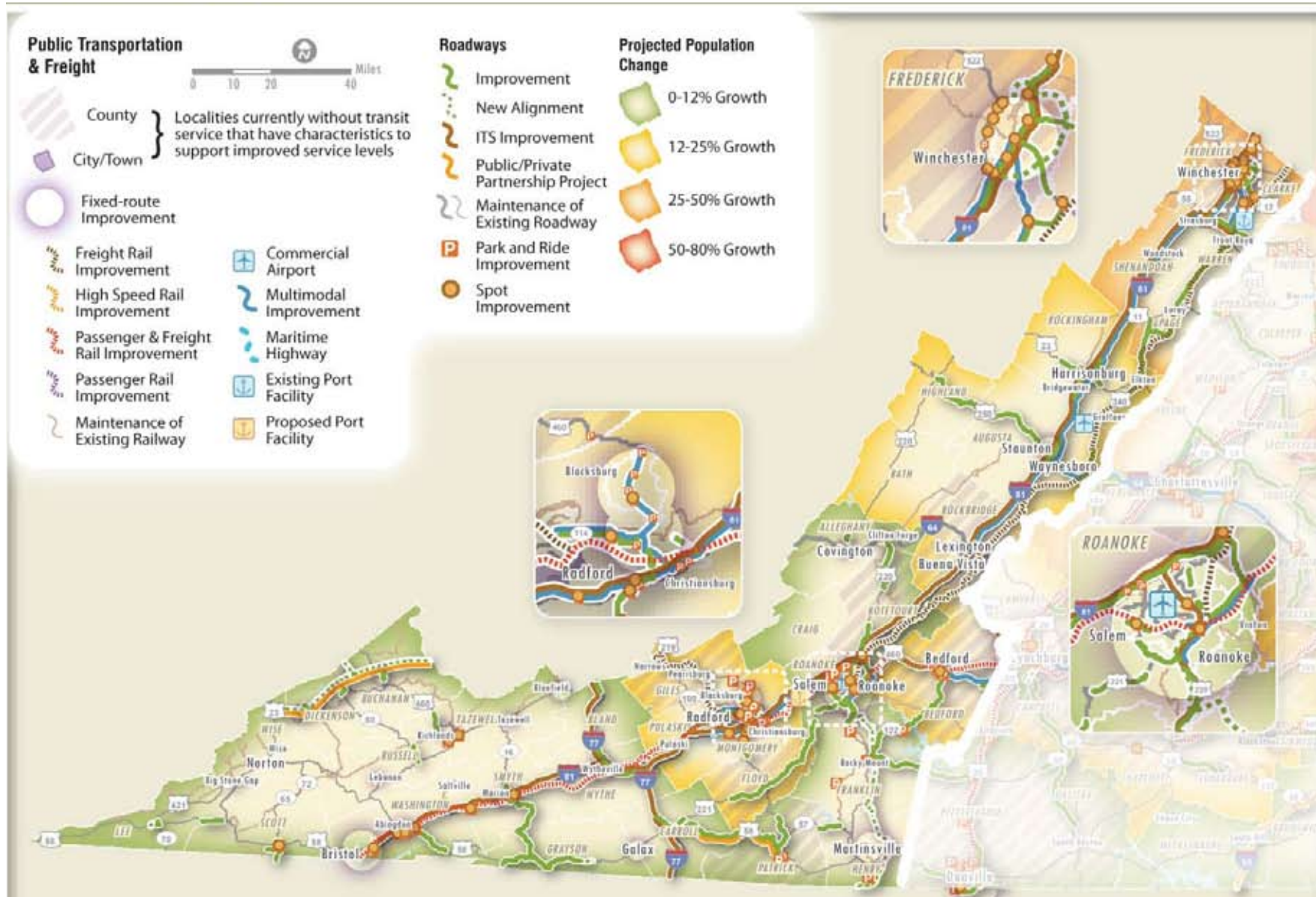
Daily Vehicle Miles Traveled: The average increase of DVMT for planning districts in the Valley and Ridge Region is approximately 17% between 2006 and 2035. All but three districts are expecting a 25% or more increase in DVMT, with the New River Valley planning district expecting the most growth at 52%. Two of the remaining planning districts are projecting DVMT growth at slower rates; Roanoke Valley (14%) and Central Shenandoah (1%). However, Mount Rogers planning district is expecting a decrease in DVMT by approximately 23%.

Table 12: Valley and Ridge Region Characteristics by PDC

Population	2010 Forecast	2035 Forecast ²⁴	Absolute Change	Percent Change
Lenowisco (1)	91,910	96,803	4,893	5%
Cumberland Plateau (2)	112,940	116,592	3,652	3%
Mount Rogers (3)	190,050	204,663	14,613	8%
New River Valley (4)	170,200	199,490	29,290	17%
Roanoke Valley-Alleghany (5)	266,590	287,762	21,172	8%
Central Shenandoah (6)	277,850	330,428	52,578	19%
Northern Shenandoah Valley (7)	224,660	308,542	83,882	37%
Region 2000 (11)	245,130	288,340	43,210	18%
West Piedmont (12)	245,930	258,456	12,526	5%
Regional Total	1,825,260	2,091,076	265,816	15%
State Total	8,057,350	10,926,181	2,868,831	36%
Employment (Jobs)	2010 Forecast	2035 Forecast	Absolute Change	Percent Change
Lenowisco (1)	40,990	49,430	8,440	21%
Cumberland Plateau (2)	49,270	55,067	5,797	12%
Mount Rogers (3)	108,600	127,453	18,853	17%
New River Valley (4)	94,140	116,894	22,754	24%
Roanoke Valley-Alleghany (5)	194,030	231,188	37,158	19%
Central Shenandoah (6)	173,230	222,831	49,601	29%
Northern Shenandoah Valley (7)	125,510	171,866	46,356	37%
Region 2000 (11)	141,780	180,560	38,780	27%
West Piedmont (12)	118,890	128,640	9,750	8%
Regional Total	1,046,440	1,283,929	237,489	23%
State Total	5,206,470	7,753,739	2,547,269	49%
Daily Vehicle Miles Traveled (DVMT)	Actual VMT in 2006	2035 DVMT Based on Population (in Millions)	Absolute Change	Percent Change
Lenowisco (1)	2,339,690	3.1	760,310	32%
Cumberland Plateau (2)	2,598,506	3.7	1,101,494	42%
Mount Rogers (3)	8,406,318	6.5	-1,906,318	-23%
New River Valley (4)	4,151,411	6.3	2,148,589	52%
Roanoke Valley-Alleghany (5)	7,991,329	9.1	1,108,671	14%
Central Shenandoah (6)	10,295,020	10.4	104,980	1%
Northern Shenandoah Valley (7)	7,715,190	9.8	2,084,810	27%
Region 2000 (11)	6,627,796	9.1	2,472,204	37%
West Piedmont (12)	6,539,111	8.2	1,660,889	25%
Regional Total	56,664,372	66.2	9,535,628	17%
State Total	222,178,082	345.4	123,221,918	55%

24 Forecasts are based upon a calculated mid-range for growth as identified in the 2035 Socioeconomic and Travel Demand Forecasts for Virginia and Potential Policy Responses Report.

Figure 36: Valley and Ridge Region Recommendations Map



PUBLIC TRANSPORTATION RECOMMENDATIONS

In the Valley and Ridge Region, and across the entire state, Virginia's public transportation systems must maintain a state of good repair for fleet vehicles and maintenance equipment. DRPT recognizes and prioritizes state of good repair through its asset management database and funding requirements. State of good repair specifics were discussed in Chapter 3 and funding is discussed in-depth in Chapter 5.

The highest population growth in this region is focused in the north, mainly in the Northern Shenandoah Valley planning district, where the recommendations for transit service improvements are primarily focused on improving options for commuters, including:

- Focused Expansion of Fixed Route Coverage (e.g. local bus service between Winchester and Front Royal)
- Increased Transportation Demand Management
- Increased Demand Response Service

Generally, estimated population growth gradually decreases to the south. The jurisdictions in the middle of the region, including Central Shenandoah, Region 2000, and New River Valley planning districts are expected to experience a moderate amount of population growth. In response to this trend, recommended transit improvements for these jurisdictions are balanced between expanding the current transit options for commuters, and establishing transit service for the rural population and include:

- Increasing Demand Response Services
- Expanding Fixed Route Coverage (e.g. expanding the current routes of services in major cities like Roanoke or Blacksburg)
- Introducing Transportation Demand Management

The remaining areas within the Valley and Ridge Region (Lenowisco, Cumberland Plateau, Mount Rogers, West Piedmont, and Roanoke Valley-Alleghany planning districts) will experience slow population growth. Transit in these areas should be focused on providing services to the rural population, especially older adults, persons with disabilities, and persons with lower incomes. The transit recommendations for these areas focus on:

- Introducing Demand Response Services
- Increasing Human Services Transportation

In addition to the improvements listed above, the following jurisdictions do not currently have transit service but exhibit the population growth characteristics required to support introduced transit service:

- Frederick County
- Rockbridge County
- Lexington City
- Buena Vista City
- Botetourt County
- Bedford County
- Bedford City
- Giles County
- City of Radford
- Floyd County
- Patrick County

Transportation demand management strategies for the Valley and Ridge Region are identified according to geographic setting as in Table 13.

Table 13: TDM Strategies for the Valley and Ridge Region

Geographic Setting	Jurisdictions	TDM Strategies
Small Urban Areas	Roanoke MPO, Bristol MPO, Winchester MPO, Blacksburg- Christiansburg- Montgomery MPO, Kingsport Area MPO	Expand employer outreach, especially in suburban centers
		Primary focus on resident / commute travel
		Promote carpool and vanpool for long-distance commutes to areas outside region
		Promote teleworking to residents
		Develop transit links to urban and suburban employment
		Integrate TDM into the land development processes; encourage mixed-use
		Integrate TDM into local planning, MTPs, PDC Long Range Transportation Plans (LRTP)
		Enhance cross-jurisdictional coordination for TDM
Non-Urban Areas	All other areas	Primarily residence-based programs for commuting within and outside the area
		Promote teleworking to residents
		Establish modest commute outreach in areas with no current program
		Support long-distance commute markets
		Coordinate with neighboring employment areas for outbound commuting
		Integrate TDM into local planning, MTPs, LRTPs

As outlined by Table 14, the transit agencies in the Valley and Ridge Region have the following ITS investment recommendations for the next six years, as identified in the DRPT Statewide ITS Strategic Plan.

Table 14: ITS Investments for the Valley and Ridge Region

Transit Agency	ITS Investments in the Next 6 Years					
	Transit Operations	Customer Amenities	Service Planning	Fare Collection	Security	Maintenance/Management
Blacksburg Transit		x			x	
Bristol Transit						
District Three Public Transit	x		x			
Four County Transit					x	
Greater Roanoke Transit Company	x		x		x	
Harrisonburg Dept of Public Tran.	x	x	x		x	
Mountain Empire Older Citizens Inc.						
Pulaski Area Transit						
RADAR		x		x	x	x
Town of Bluefield - Graham Transit						
Virginia Regional Transit	x	x	x		x	x
Winchester Transit	x	x	x			

RAIL RECOMMENDATIONS

The rail recommendations for the Valley and Ridge Region shown in Table 15 represent those projects within identified transportation corridors that will increase the freight shipments to and from ports, improve commuter and intercity rail within regions of the Commonwealth and other freight improvement projects identified by Class and shortline railroads in Virginia.

All improvements address one or more of the following:

- Reducing passenger car and truck freight traffic to alleviate highway congestion, reduce energy demands and reduce pollutants
- Increasing freight capacity throughout the Commonwealth to support greater demand for freight rail shipping, growth in the coal industry, and improved capacity at Virginia’s ports
- Improving passenger rail by enhancing system performance and adding capacity

Table 15: Rail Recommendations for the Valley and Ridge Region

Crescent Corridor Project (I-81, I-20, I-40, I-75 and I-85)	
Phase I - Priority Capacity Improvements	Completion of Manassas to Front Royal capacity improvements.
Phase II - Secondary Capacity Improvements	Additional capacity and reliability improvements on the Shenandoah, Piedmont, Manassas, Heartland and Bristol lines.
Phase III - Remaining Capacity Improvements	Remaining capacity, train reliability, and speed improvements on the Shenandoah, Piedmont, Manassas, Heartland and Bristol lines.

I-81/Route 29 Intercity Passenger Rail Project	
Phase I (Lynchburg)	Add one daily train between Washington, DC and Lynchburg Kemper Street Station as a demonstration project for three years beginning in 2009.
	Increase commuter capacity in the VRE service area.
	Complete the capacity study for the entire project corridor from Washington, DC to Bristol and Lynchburg.
	Increase capacity for a second train to Lynchburg with construction of second main line track between Nokesville and Calverton.
Phase III (Bristol) and IV (Richmond)	Provide train service from Bristol to Richmond and from Bristol to Washington, DC.

HIGHWAY RECOMMENDATIONS

The Valley and Ridge Region is distinctly rural in character with the I-81 corridor serving as the “backbone” of the region. The corridor stretches from Bristol on the Virginia/Tennessee border to the south up to Winchester near the Virginia/ West Virginia border in the north. The recommendations for this region focus on providing access to maintain the area’s economic vitality and to move people and goods across and through the unique geography of the Appalachian Mountains. The geography of the region also impacts the safety of the roadways and the following recommendations aim to address those concerns as well. Park and Ride improvements are also recommended to serve the large number of people commuting between Winchester-Northern Virginia, Roanoke–Blacksburg-Lynchburg and Bristol-Tennessee.

Park and Ride Recommendations: The Valley and Ridge Region currently has approximately 40 Park and Ride facilities. Eight new facilities have been identified as needed, five of which will be located within the Town of Blacksburg. In addition, Park and Ride facilities in Botetourt County, Roanoke and Montgomery Counties are recommended for expansion. These facilities are identified in Figure 36.

Other Recommendations: In addition to the Park and Ride recommendations, the multiple highway recommendations are included in Figure 36 and listed in Tables 16 to 20. The Highway Recommendation Table Reference Guide (Figure 37) provides explanation of the multiple elements included in the highway recommendation tables.

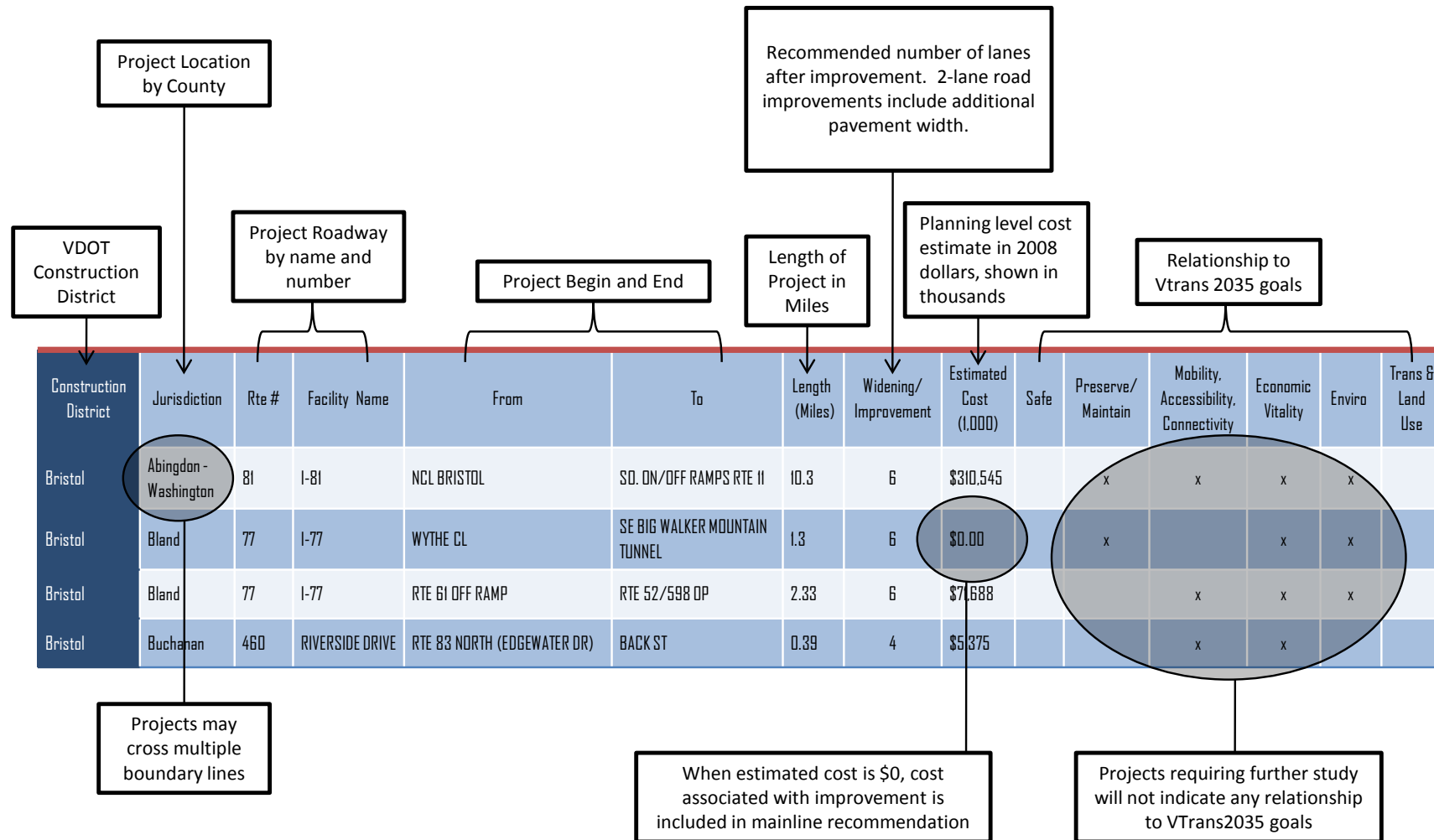
How the Recommendations are Organized: The highway recommendations identified in the following pages address the performance measures presented in Chapter 4. These include: congestion; roadway capacity; safety; and maintenance. The highway recommendations support the goals established in VTrans2035: Safety and Security; System Maintenance and Preservation; Mobility, Accessibility and Connectivity; Economic Vitality; Environmental Stewardship; and Coordination of Transportation and Land Use.²⁵ The recommendations have been related to these goals in the tables that follow. Recommendations are presented in the following categories:

- Recommendations to Existing Facilities – These recommendations represent improvements to the current roadway network. It is assumed any structures or interchanges that fall within the limits of the recommendation will be improved along with the roadway. It should also be noted that any recommendations identified as an improvement to 2 lanes denotes additional lane width to an existing 2-lane roadway.
- Recommendations to New Locations – These recommendations represent new facilities that would be added to the roadway network.
- Recommendations for Further Study – These are recommendations where a need has been identified, but alternatives are still being analyzed.
- Other Recommendations – recommendations that do not fall into the above categories. Examples include interchange and intersection improvements, standalone bridge replacements, re-striping and access management.
- ITS Recommendations – Intelligent Transportation System recommendations (as described in Chapter 4).
- Park and Ride Recommendations – These are recommendations for new Park and Ride lots or expansion to existing Park and Ride lots. Specifics for Park and Rides are not provided as each location will need to be studied to identify an appropriate location and level of demand.

²⁵ Not all VTrans2035 goals were tied to specific recommended improvements. For the VTrans2035 goals of Linking Land Use and Transportation, Program Delivery, Environmental Stewardship, VDOT addresses compliance at the program level as discussed in Chapter 4 of the VSTP.

Figure 37: Highway Recommendation Table Reference Guide

Highway Recommendation Table Reference Guide*



*It is recognized that with any highway project there is a potential for community concerns that will need to be addressed prior to projects advancing.

Table 16-1: Valley and Ridge Region Recommendations to Existing Facilities

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/Improvement	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Bristol	Bland	77	I-77	WYTHE CL	SE BIG WALKER MOUNTAIN TUNNEL	1.3	6	\$39,125		x		x	x	
Bristol	Bland	77	I-77	RTE 61 OFF RAMP	RTE 52/598 OP	2.33	6	\$71,688			x	x	x	
Bristol	Buchanan	460	RIVERSIDE DRIVE	RTE 83 NORTH (EDGEWATER DR)	BACK ST	0.39	4	\$5,375			x	x		
Bristol	Buchanan	460	RIVERSIDE DRIVE	BACK ST	.12 MI NO. SCL GRUNDY	1.25	4	\$18,199			x	x		
Bristol	Dickenson	80	SANDLICK DR	SCL HAYSI	RTE 83 SOUTH	0.27	2	\$1,463	x		x	x	x	
Bristol	Dickenson	83	CUMBERLAND SCENIC HIGHWAY	RTE 1014	RTE 1001	0.61	3	\$4,942	x		x	x	x	
Bristol	Dickenson	83	MAIN ST	RTE 63 EAST	RTE 80 EAST	1.09	2	\$6,223	x		x	x	x	
Bristol	Dickenson	83	SANDLICK DR	RTE 80 WEST	RTE 63 EAST	0.34	2	\$1,913			x	x	x	
Bristol	Grayson	16	TROUTDALE HIGHWAY	RTE 58 NORTH	SMYTH CL	8.74	2	\$56,017				x		
Bristol	Grayson	58	HIGHLANDS PKWY - TROUTDALE HIGHWAY - WILSON HIGHWAY	RTE 751 EAST	RTE 703	26.11	2	\$169,414		x		x		
Bristol	Lee	58	TRAIL OF THE LONESOME PINES - MAIN ST	RTE T-1206	.17 ME RTE 648	0.82	2	\$5,112	x		x	x	x	
Bristol	Lee	58	JONES ST	RTE 58 ALT	RTE T-1204	0.26	3	\$2,106	x			x	x	
Bristol	Lee	58	JONES ST	RTE T-1204	ECL JONESVILLE	0.48	2	\$2,991	x		x	x	x	

Table 16-2: Valley and Ridge Region Recommendations to Existing Facilities

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/Improvement	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Bristol	Lee - Scott	58	WILDERNESS RD - DUFF PATT HIGHWAY	RTE 612 WEST	RTE 1500	5.26	3	\$40,832	x			x		
Bristol	Russell	80	THE REDBUD HIGHWAY	RTE 19 EAST	RTE 67	4.5	2	\$30,808	x		x	x	x	
Bristol	Scott	71	EAST JACKSON STREET	RTE T-904	ECL GATE CITY	0.85	2	\$6,357		x		x	x	
Bristol	Smyth	16	SUGAR GROVE HIGHWAY	GRAYSON C.L.	RTE 689	12.99	3	\$184,374		x	x	x		
Bristol	Smyth	16	SO. COMMERCE STREET	RTE 689	.06 MI NO. SCL MARION	2.18	2	\$13,831	x		x	x		
Bristol	Smyth	16	B F BUCHANAN HIGHWAY - PARK BLVD	NCL MARION	RTE 348	2.52	2	\$19,461			x	x	x	
Bristol	Smyth	107	WHITETOP RD	NB RAMP RTE 1 - 81	RTE 11	0.32	2	\$3,355			x	x	x	
Bristol	Washington	58	JEB STUART HIGHWAY	ROUTE 677	RTE 712 NORTH	5	4	\$55,409	x	x	x	x		
Bristol	Washington	58	JEB STUART HIGHWAY	RTE 712 NORTH	RTE 1202	3.94	4	\$40,144			x	x		
Bristol	Wise	23	MAIN ST	RTE 83	RTE 23 BYP N.(POUND)	1.22	4	\$14,368		x		x	x	
Bristol	Wythe	77	I-77	NCL WYTHEVILLE	BLAND CL	4.57	4	\$47,021				x		
Bristol	Wytheville	77	I-77	RTE I-81 WEST	NCL WYTHEVILLE	0.82	6	\$38,135		x		x	x	

Table 16-3: Valley and Ridge Region Recommendations to Existing Facilities

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/Improvement	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Bristol	Wytheville - Wythe	81	I-81	RTE I-77 NORTH	OFF RAMP TO 619	10.59	8	\$321,037		x	x	x		
Salem	Bedford	122	MONETA RD	RTE 801	SCL BEDFORD	9.79	2	\$74,152		x	x			
Salem	Bedford	460	W LYNCHBURG SALEM TNPK	BOTETOURE CL	RTE 831 WEST	10.81	4	\$69,703				x		
Salem	Bedford	501	LEE JACKSON HIGHWAY	RTE 761 (HOLCOMB ROCK RD)	AMHERST CL	12.97	2	\$90,641		x				
Salem	Botetourt	11	LEE HIGHWAY	.41 MI NORTH ROANOKE CL	RTE 220	2.42	4	\$46,630	x	x	x		x	
Salem	Botetourt	81	I-81	RTE 220 ALT	RTE 779 Overpass	1.41	6	\$94,065		x	x	x		
Salem	Botetourt	220	CLOVERDALE ROAD	RTE 11	RTE I-81	0.07	6	\$1,542	x		x	x	x	
Salem	Carroll	77	I-77	RTE 58	RTE 620	4.18	6	\$115,353			x	x	x	
Salem	Carroll	221	FLOYD PIKE	RTE 58	RTE 100	1.44	4	\$13,201			x	x	x	
Salem	Floyd	8	LOCUST ST	NCL FLOYD	RTE 748	0.5	4	\$7,125	x		x	x	x	
Salem	Floyd	221	FLOYD HIGHWAY SOUTH	RTE 787	RTE T-1004	11.24	2	\$76,887				x		
Salem	Floyd - Roanoke	221	BENT MOUNTAIN ROAD - FLOYD HIGHWAY NORTH	RTE 615 NORTH	RTE 708(IVY RIDGE RD)	22.26	2	\$170,448		x		x		
Salem	Franklin	40	OLD FRANKLIN TURNPIKE	ECL ROCKY MOUNT	RTE 876E	5.92	2	\$50,001	x	x	x	x	x	

Table 16-4: Valley and Ridge Region Recommendations to Existing Facilities

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/Improvement	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Salem	Henry	57	FAIRYSTONE PARK HIGHWAY	PATRICK CL	RTE 674	3.89	4	\$36,760	x		x	x	x	
Salem	Henry	57	FAIRYSTONE PARK HIGHWAY	RTE 674	RTE 57 ALT	1.97	4	\$21,898	x		x	x		
Salem	Montgomery	8	WEBBS MILL ROAD	FLOYD CL	RTE 616	4.05	2	\$29,039	x		x	x		
Salem	Montgomery	8	WEBBS MILL ROAD	RTE 616	RTE 669	0.83	4	\$12,096	x		x	x		
Salem	Montgomery	8	RINER ROAD	RTE 669	SCL CHRISTAINSBURG	4.37	4	\$45,024			x	x		
Salem	Montgomery	114	PEPPERS FERRY ROAD	ENT RADFORD ARSONAL	RTE 460 BUS	6.5	4	\$69,248	x		x	x		
Salem	Patrick	8	WOOLWINE HIGHWAY	RTE 58 NORTH	RTE 40	10.11	2	\$60,212				x		
Salem	Pulaski	11	BROAD ST - LEE HIGHWAY	RTE T-746	.19 MI EAST RTE 747	4.67	4	\$50,789	x		x	x		
Salem	Pulaski	600	BELSPRING ROAD	RTE 114	RTE 623	1.22	2	\$8,526	x		x	x	x	
Salem	Roanoke	11	WILLIAMSON ROAD	LIBERTY ROAD	10TH STREET	0.51	4	\$8,934	x				x	

Table 16-5: Valley and Ridge Region Recommendations to Existing Facilities

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/ Improvement	Estimated Cost (1,000)	Safe	Preserve/ Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Salem	Roanoke	11	WILLIAMSON ROAD	NCL ROANOKE	RTE 1821	1.4	4	\$26,501			x		x	
Salem	Roanoke	220	FRANKLIN ROAD	FRANKLIN CL	SCL ROANOKE	6.46	6	\$79,115		x	x	x		
Salem	Roanoke	221	BENT MOUNTAIN ROAD	ROUTE 1999	RTE 688 (COTTON HILL RD)	4.75	4	\$46,883		x	x			
Salem	Roanoke	221	BENT MOUNTAIN ROAD	RTE 688 (COTTON HILL RD)	RTE 735 (COLEMAN RD)	0.86	4	\$8,041			x			
Salem	Roanoke	419	ELECTRIC ROAD	WCL ROANOKE	RTE 221 (BRAMBLETON RD)	2.21	6	\$80,447	x	x	x		x	
Salem	Roanoke - Botetourt	460	ORANGE AVENUE	11TH STREET	RTE 738 EAST INT.	5.04	6	\$69,480			x	x		
Salem	Roanoke - Botetourt - Salem	81	I-81	RTE 112	RTE 220 ALT	13.16	8	\$396,905		x	x	x		
Salem	Roanoke-Salem	81	I-81	RTE 647	RTE 112	4.99	6	\$69,590		x	x	x		
Salem	Rocky Mount	122	MONETA RD - BOOKER T WASHINGT ON HIGHWAY	RTE 40	RTE 801	26.89	4	\$418,096	x	x	x	x		
Salem	Salem	11	APPERSON DRIVE	COLORADO STREET	ECL SALEM	2.02	4	\$36,473			x			
Salem - Staunton	Botetourt - Allegheny	220	MARKET AVE	RTE 43Y(OR 870)	RTE 60 BUS	14.05	4	\$215,358		x	x			
Staunton	Allegheny	60	GRAFTON ST	RTE 220	I-64	0.66	4	\$9,601			x	x	x	

Table 16-6: Valley and Ridge Region Recommendations to Existing Facilities

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/Improvement	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Staunton	Alleghany	220	N. ALLEGHANY AVENUE	COVINGTON NCL	RTE 687	1.61	2	\$10,526				x	x	
Staunton	Augusta	81	I-81	RTE 262	RTE 250	2.45	6	\$81,189	x		x	x		
Staunton	Augusta	81	I-81	RTE 250	RTE 275	2.72	8	\$75,802	X		X	X		
Staunton	Augusta	81	I-81	RTE 275	RTE 612	2.08	6	\$48,751	x		x	x		
Staunton	Augusta	340	EAST SIDE HIGHWAY	.42 MI NORTH RTE 611	RTE 612	3.13	2	\$20,591	x		x			
Staunton	Augusta	250	CHURCHVILLE AVENUE	RTE 42 EAST	WCL STAUNTON	4.93	2	\$46,654		x	x			
Staunton	Clarke	340	LORD FAIRFAX HIGHWAY	RTES 522/277	.12 MI SOUTH RTES 50/17	3.8	4	\$50,119			x			
Staunton	Clarke	522	FRONT ROYAL PIKE	RTES 340/277	0.13 MI SOUTH RTES 340/277	1.78	6	\$30,650		x		x	x	
Staunton	Frederick	7	BERRYVILLE PIKE	ECL WINCHESTER	CLARKE CL	3.69	6	\$42,347		x		x		
Staunton	Frederick	50	JOHN S MOSBY HIGHWAY	ECL WINCHESTER	CLARKE CL	5.59	6	\$101,947	x	x			x	
Staunton	Frederick	81	I-81	RTE 277	RTE 37	3.05	6	\$57,664			x	x		
Staunton	Frederick	81	I-81	RTE 7	RTE 672	5.58	6	\$156,889			x	x		
Staunton	Frederick - Winchester	81	I-81	RTE 37	RTE 7	5.63	8	\$172,205	x			x		

Table 16-7: Valley and Ridge Region Recommendations to Existing Facilities

Construction District	VTrans2035 Goals Addressed													
	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/Improvement	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Staunton	Harrisonburg	33	EAST MARKET STREET	VINE STREET	RTE I-81	0.61	6	\$16,429		x	x	x	x	
Staunton	Harrisonburg - Rockingham	81	I-81	NORTH RIVER BRIDGE	RTE 11 CONN RAMP	12.27	6	\$448,493			x	x		
Staunton	Highland	250	HIGHLAND TNPK	ECL MONTEREY	AUGUSTA CL	18.51	2	\$127,183		x				
Staunton	Page	340	MAIN ST - BUSINESS RTE 340	RTE 340	SCL LURAY	11.6	2	\$84,136			x	x		
Staunton	Page	340	US HWY 340	RTE T-602	RTE 211	11.23	4	\$92,841		x	x	x		
Staunton	Page - Rockingham	340	STUART AVE - N. EAST SIDE HIGHWAY	NCL ELKTON	SCL SHENANDOAH	4.32	2	\$29,796			x	x	x	
Staunton	Page - Warren	340	US HWY 340 - STONEWALL JACKSON HIGHWAY	NCL LURAY	RTE 619	21.67	2	\$156,219	x	x	x	x		
Staunton	Rockingham	33	RAWLEY PIKE	RTE 613	RTE 701 WEST	4.11	2	\$33,633	x		x	x		
Staunton	Rockingham	33	RAWLEY PIKE	RTE 701 WEST	WCL HARRISONBURG	1.59	4	\$17,532			x	x	x	
Staunton	Rockingham	33	SPOTSWOOD TRAIL	UNIVERSITY BOULEVARD	RTE 276	3.36	6	\$43,320	x			x	x	

Table 16-8: Valley and Ridge Region Recommendations to Existing Facilities

Construction District									VTrans2035 Goals Addressed					
	Jurisdiction	Rte #	Facility Name	From	To	Length (Miles)	Widening/Improvement	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Environment	Trans and Land Use
Staunton	Rockingham	340	S. EAST SIDE HIGHWAY	RTE 649	RTE 754	2.97	2	\$19,718				x	x	
Staunton	Staunton	250	CHURCHVILLE AVENUE	THORNROSE AVENUE	AUGUSTA STREET	0.32	3	\$4,378	x					
Staunton	Warren	522	FRONT ROYAL PIKE - WINCHESTER RD	RTE I-66	CLARKE CL	5.77	6	\$53,631		x		x		
Staunton	Waynesboro	340	DELPHINE AVENUE	MAIN STREET	4TH STREET	0.57	4	\$28,500			x		x	

Table 17: Valley and Ridge Region Recommendations to Existing Facilities Identified for Further Study

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length (miles)	Widening/ Improvement	Estimated Cost (1,000)	VTrans2035 Goals Addressed*					
									Safe	Preserve/ Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Enviro	Trans & Land Use
Salem	Botetourt	220	ROANOKE RD	ROUTE 11	RTE T-630	8.53	6	\$97,952						
Salem	Botetourt	220	BOTETOVRT RD	RTE T-630	1 MILE NORTH OF RTE 1204	1.26	4	\$6,144						
Salem	Floyd - Patrick - Carroll	58	DANVILLE PIKE - JEB STUART HIGHWAY	RTE 820	ROUTE 600	15.75	4	\$156,848						
Salem	Patrick	58	JEB STUART HIGHWAY	E RTE 58 BYPASS	W RTE 58 BUSINESS	13	4	\$136,257						
Salem	Roanoke	419	ELECTRIC ROAD	RTE 221(BRAMBLETON AVE)	RTE 685(KEAGY RD)	2.23	6	\$55,320						
Salem	Roanoke - Botetourt	220	CLOVERDALE ROAD	RTE 460	ROUTE 11	5.04	6	\$51,837						
Staunton	Augusta	250	HANKEY MT HIGHWAY	HIGHLAND CL	2.5 MI WEST RTE 716	1.98	3	\$17,125						
Staunton	Augusta	250	HANKEY MT HIGHWAY	2.5 MI WEST RTE 716	RTE 728	9.08	2	\$61,681						
Staunton	Augusta	250	HANKEY MT HIGHWAY - CHURCHVILLE AVENUE	RTE 728	RTE 42 EAST	5.93	2	\$40,506						

*Recommendations have not been related to VTrans2035 goals as projects require further study

Table 18: Valley and Ridge Region Recommendations to New Locations

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Length(Miles)	Widening/ Improvement	Estimated Cost (1,000)	VTrans2035 Goals Addressed					
									Safe	Preserve/ Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Enviro	Trans & Land Use
Bristol	Buchanan	460	RELOC RT 460	KENTUCKY S.L.	COAL FIELDS EXPWY	8.72	4	\$530,182			x	x	x	
Bristol	Grayson	58	INDEPEND BYP	ROUTE 703	RTE 888	3.21	4	\$93,200			x	x	x	
Bristol	Lee	58	JONESVILLE BYP	ROUTE 58 W.	ALT ROUTE 58 N.	3.8	4	\$41,254			x			
Bristol	Lee	58	PENNINGTON GAP BYPASS	0.41 MW WCL PENNINGTON GAP	.50 MILE EAST OF ECL PENNINGTON GAP	3.52	4	\$158,400			x			
Bristol	Scott	224	MOCASSIN GAP BYPASS	ROUTE 58/23	ROUTE 72	1.02	4	\$16,000	x		x			
Bristol	Washington	140	RTE 140 EXT	N.C.L. ABINGDON	RT 19	1.1	4	\$65,943	x		x		x	
Bristol	Wise	58	BIG STONE GAP BYPASS	0.8MW WCL BSG	ROUTE 23	0.72	4	\$90,826	x		x			
Bristol	Wise-Dickenson	561	COAL FIELDS EXP	RTE 23 BYPASS	BUCHANAN C.L.	26.4	4	\$1,200,000			x	x		
Salem	Henry-Franklin-Roanoke	73	I-73	NORTH CAROLINA SL	I-581/RTE 220	63.04	4	\$3,921,037	x		x	x		
Staunton	Frederick	37	WINCHESTER BY-PASS	RTE 37 W	RTE I-81 N	2.4	4	\$96,953	x		x			
Staunton	Frederick	37	WINCHESTER BY-PASS	Rte. 642	RTE I-81 NORTH	14.88	4	\$449,245	x		x			

Table 19-1: Valley and Ridge Region Other Recommendations

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Improvement Description	Estimated Cost (1,000)	VTrans2035 Goals Addressed					
								Safe	Preserve /Maintain	Mobility, Accessibility, Connectivity	EconomicVitality	Enviro	Trans & Land Use
Bristol	City of Bristol	81	I-81			Exit 7 - additional capacity needed on ramps and cross streets. Poor access control adjacent to on/off ramps. Limited ROW.	\$20,000						
Bristol	Scott	23		TENNESSEE SL	SCL WEBER CTY	Provide safety improvements along corridor (heavy traffic from Tennessee)	\$5,000	x					
Bristol	Scott	23		RTE T-1106 NORTH	W RTE 23 BUS ON RAMP	Signal improvement along corridor to provide congestion relief. Recommendation E-2 from Kingsport 2030 CLRP	\$225	x					
Bristol	Scott	23				Construct grade separated interchange at intersection of Route 23 and Route 224/58.	\$40,000	x		x			
Bristol	Scott	58	HILTON RD			Phase II of Moccasin Gap Bypass project. Provide grade separated interchange at 224/58.	\$42,000	x		x			
Bristol	Scott	70		E BUS RTE 23	W RTE 23 BUS ON RAMP	Signal improvements along corridors to provide congestion relief. Recommendation E-2 from Kingsport 2030 CLRP	\$45						
Bristol	Smyth	81	I-81			Improve interchange at Exit 35	\$0	x		x			
Bristol	Smyth	81	I-81			Improve interchange at Exit 47	\$0	x		x			
Bristol	Tazewell	19	Trail of the Lonesome Pine	RTE 609	RTE 460	Install additional advance warning sign and convert existing flashers to actuated warning flashers	\$37						
Bristol	Tazewell	460		BUCHANAN CL	ROUTE 806	Provide safety improvements along corridor. Poor horizontal curvature. Widening will be very costly.	\$10,000	x					
Bristol	Tazewell	460				Construct left turn lane at Route 460 / 19 interchange (Claypool Hill) to alleviate safety and capacity issues.	\$500	x		x			
Bristol	Town of Abingdon	81	I-81			Rural diamond interchange design at Exit 17 cannot adequately handle the current level of traffic. Significant congestion. Poor access management adjacent to on/off ramps. Interchange and cross street need to be modified and upgraded.	\$20,000	x		x			x
Bristol	Washington	81	I-81			Improve interchange at Exit 14	\$0	x		x			

Table 19-2: Valley and Ridge Region Other Recommendations

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Improvement Description	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Enviro	Trans & Land Use
Bristol	Washington	81	I-81			Improve interchange at Exit 19	\$0	x		x			
Salem	Bedford	460	E LYNCHBURG SALEM TNPK	RTE 668 WEST	RTE 811	Provide paved shoulder lane and implement access management along corridor.	\$3,000	x		x		x	x
Salem	Bedford	501	LEE-JACKSON HIGHWAY			Relocate intersection with Route 647 to improve safety/sight distance and provide turn lane.	\$500	x		x			
Salem	Botetourt	81	I-81			Comprehensive improvements to existing Exit 150 interchange to address congestion, safety and access management problems.	\$100,000	x		x			x
Salem	Botetourt	81	I-81			Improve Troutville interchange per MPO CLRP. Cost included in widening project on I-81.	\$0	x		x			
Salem	City of Bedford	460	BLUE RIDGE AVENUE			Restripe ramp from Business 460 to 460 (westbound) and add additional lane	\$1,000	x		x			
Salem	City of Roanoke	581	I-581			Improve interchange at Elm Ave.	\$10,000	x		x			
Salem	City of Roanoke	581	I-581			Valley View Interchange Phase II - UPC 16595 - Upgrade interchange. Existing interchange provides partial access and does not facilitate all movements.	\$70,000	x		x			
Salem	City of Salem	11	APPERSON DRIVE			Intersection improvement at Electric Road (Route 419) per Roanoke MPO CLRP.	\$6,485	x		x			
Salem	Montgomery	8	WEBBS MILL RD			Add turn lanes at Intersection of Riner (Rte 8) & Fairview Church Rd (Rte 669)	\$250	x		x			
Salem	Montgomery	8	RINER RD			Add turn lanes at the intersection of Riner (Rte. 8) and Smith Creek Rd. (Rte. 675) per MPO 2030 CLRP.	\$250	x		x			
Salem	Montgomery	81	I-81			Improve I-81 (Route 177) interchange due to ramp deficiencies and pending development. Recommendation from Montgomery County.	\$0	x		x	x		
Salem	Montgomery	114	PEPPERS FERRY BLVD			Construct turn lanes at intersection of Peppers Ferry (Rte. 114) and Rolling Hills (Rte. 1286) per MPO 2030 CLRP.	\$250	x		x			

Table 19-3: Valley and Ridge Region Other Recommendations

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Improvement Description	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Enviro	Trans & Land Use
Salem	Montgomery	460		RTE 114 EB ON RAMP	BUS RTE 460 WB OFF RAMP	Add ramp for southbound Route 460 to westbound Rout 460 business per MPO 2030 CLRP.	\$340	x		x			
Salem	Roanoke	419	ELECTRIC ROAD	RTE 904(ST ARKEY RD)	RTE 221 (BRAMBLET ON AVE)	Create acceleration lanes, upgrade signals to mast arms, provide sidewalks, remove guardrail, install intersection lighting, install plowable pavement markers, lengthen turn lanes, close roads	\$100	x		x		x	
Salem	Town of Blacksburg	460				CLRP recommendation for grade separated interchange on 460 Bypass at Southgate Drive.	\$16,000			x			
Salem	Town of Christiansburg	81	I-81			Improve I-81 / Main St. (Route 8) interchange for operations per MPO CLRP.	\$3,000	x		x			
Staunton	Augusta	64	I-64			Improve Interchange at Rt. 285	\$37,000	x		x			
Staunton	City of Harrisonburg	33	EAST MARKET STREET	I-81	UNIVERSITY BOULEVARD	Construct turn lanes and provide pedestrian accommodations per 2030 CLRP	\$280	x		x		x	
Staunton	Clarke	340	LORD FAIRFAX HIGHWAY			Provide Safety Improvements at intersection of Routes 340/17/50.	\$5,000	x					
Staunton	Clarke	522	FRONT ROYAL PIKE			Provide Grade Separated Interchange at Route 340	\$30,000	x		x			
Staunton	Frederick	37				New interchange to improve Rte 11 #25	\$30,000						
Staunton	Frederick	37				Improve interchange at Rte 50 #28	\$2,000						
Staunton	Frederick	37				Construct new diamond interchange with realignment of Merrimans Lane #27	\$10,000						
Staunton	Frederick	37				Improve interchange at Rte 522 #29	\$25,000						
Staunton	Frederick	37				Improve interchange to allow medical center access to western campus #29A	\$2,000						

Table 19-4: Valley and Ridge Region Other Recommendations

VTrans2035 Goals Addressed

Construction District	Jurisdiction	Rte #	Facility Name	From	To	Improvement Description	Estimated Cost (1,000)	Safe	Preserve/Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Enviro	Trans & Land Use
Staunton	Frederick	81	I-81			Replace 3 lane bridge and relocate Waverly Rd. per MPO CLRP.	\$9,300		x	x			
Staunton	Frederick	81	I-81			Construct new grade separated interchange with Rte 37 expansion per WinFred2030 CLRP	\$96,000						
Staunton	Frederick	81	I-81			Improve Interchange at Exit 310 (Route 37) as recommended in Win-Fred 2030 CLRP.	\$69,920	x		x			
Staunton	Frederick	81	I-81			Construct new grade separated interchange at I-81/Battaille Dr.	\$59,000			x			
Staunton	Frederick	81	I-81			Improve to directional interchange at I-81/Routes 17/50/522 as recommended in Win-Fred 2030 CLRP	\$109,000	x		x			
Staunton	Frederick	81	I-81			Improve Interchange at I-81 / Route 7 as recommended in Win-Fred 2030 CLRP.	\$49,000	x		x			
Staunton	Frederick	81	I-81			Improve interchange at I-81 / Route 11 per MPO 2030 CLRP.	\$58,000	x		x			
Staunton	Frederick	81	I-81			Ramp intersection turn lane improvements at I-81 / Route 669 interchange per 2030 CLRP.	\$700	x		x			

Table 20: Valley and Ridge Region Highway ITS Recommendations
 (A description of ITS project types can be found on pp. 59-60)

Route	Limits	Short-Term (0-7 years)	Mid-Term (8-15 years)	Long-Term (16-25 years)	Other	VTrans2035 Goals Addressed					
						Safe	Preserve/ Maintain	Mobility, Accessibility, Connectivity	Economic Vitality	Enviro	Trans & Land Use
I-64	Entire Length	Core Infrastructure	ICM	SLCS		x		x		x	
I-64			ATM	Intellidrive		x		x		x	
I-64	MP 87 to MP 136		Traveler Information	Intellidrive	Climbing lanes from MP 97 to MP 104	x		x		x	
I-64			ATM			x		x		x	
I-64			CVO			x		x		x	
I-66	Rt.15 to I-81		Traffic Detection & Monitoring	Intellidrive		x		x		x	
I-77	Entire Length	Fog Detection	ATM			x		x		x	
I-77		Install fiber & power	Improved Tunnel Operations	Intellidrive		x		x		x	
I-77		Fund installation of stopgates				x		x		x	
I-81	MP 1 to MP 324		Traveler Information	Intellidrive		x		x		x	
I-81			ATM			x		x		x	
I-81			CVO			x		x		x	
US 220			Traveler Information			x		x		x	
US 220			ATM			x		x		x	