

Chapter 3: Existing Conditions

To create a comprehensive bicycle network within the Region 2000 area, the existing resources, physical environment, demographics, destination and resources centers, and supporting policy and community support must be examined. This evaluation includes looking at what current bicycle resources exist, examining key community destinations, which resources are visited most often, examining the area’s population and development characteristics, reviewing current road and support resources in place to support a bicycle network, and lastly, what public demand exists to promote bicycle facilities.

The following information is provided to lay the context by which the proposed Region 2000 Bicycle Plan System Recommendations, presented in Chapter 4, are based.

Trails and Greenways

Within the Region 2000 jurisdictions lies a wealth of multi-use trails, park facilities, and single trail mountain bike trails. These resources range in difficulty, length, and surface treatment. Included within the biking trail options are multi-use (MU), consisting of hard surface, at a minimum 10 feet wide, and generally flat; combined hiking/biking (HB), comprised of earthen surfaces and generally have slightly steeper grades; and single track mountain biking (B), narrow, earthen surfaces with varying grades and difficulty levels. The following provides an overview of some of the resources within the region. More detailed information on all of these resources is available at locality websites.

Existing Multiuse Trails

The James River Heritage Trail (JRHT) and Blackwater Creek Bikeway represent a recreational oasis in the middle of the City of Lynchburg that expands to the Amherst County. The combination of these greenways, comprised of both hard surface and smaller packed surface trails, combine to provide approximately nine (9) miles of a fully accessible hard surfaces trails for bikers, walkers, roller skaters, stollers, and wheelchair users of all ages and physical capabilities along with over 15 miles of connected earthen trails that range from combination of hiking/biking to hiking only trails. It is the development and expansion of this trail network that has spawned citizen, business, and local government support for expanded bicycle and pedestrian resources throughout Region 2000.

Biking Trails within the JRHT/Blackwater Bikeway Include:

- Blackwater Creek Bikeway 3 miles, MU
- Riverwalk 2.3 miles, MU
- Kemper Street Trail 1 mile, MU
- Point of Honor Trail 1.7 miles, MU
- Creekside Trail 5 miles, HB
- Jefferson Park Trail .5 miles, HB
- Beaver Trail 1.6 miles, HB
- Elmwood Trail .4 miles, HB



A local cyclist prepares to enjoy the Blackwater Creek Bikeway at the Ed Page Entrance



Located in the heart of Lynchburg, the Kemper Station Trail connects to the greater greenway network



Blackwater Creek Bikeway; Ed Page Entrance

Additional opportunities within the CVMPO area for cycling along multi-use trails can be found at Peaks View Park, Sandusky Park, and Heritage High School. Within Peaks View Park the Ivy Creek Greenway and Ivy Creek Trail combine to offer 2.5 miles of family-friendly cycling.

Within the rural areas of Region 2000 is an array of multi-use trails offering bicycling opportunities. Most of these trails are recreational trails located within county recreational park facilities such as Falling Creek Park in Bedford, Timbrook Park in Campbell County, and Coolwell Park in Amherst County. While most of these internal park trails do not serve as transportation corridors, the parks serve as destination hubs for area residents and present the opportunity to expand these trails as components of transportation corridors.

The Virginia Blue Ridge Railway Trail, located along the northern Amherst County border is a crushed rock multi-use trail, which includes equestrian use, when complete will traverse seven miles through both Amherst and neighboring Nelson Counties along the Piney and Tye rivers. Currently 4 ½ miles of the trail is complete and a trail head, with parking room for horse trailers, is located in Piney River.

Source: BikeWalk VA



VA Blue Ridge Railway Trail

Proposed Multiuse Facilities

Each of the Region 2000 localities has dedicated land, developed master plans, and begun varying degrees of development towards public park facilities that will benefit residents of Region 2000. Within the master plans of each of these planned and/or currently under development parks, which include four regional parks in Bedford County, and five parks within Campbell County, and one county park in Appomattox, is the inclusion of a multiuse trail that meets the walking, bicycling, and recreational needs of multi users.



Area of the future Appomattox trail

Appomattox Heritage and Recreational Trail – Appomattox County, through an awarded VDOT Enhancement Grant and local match funds, is currently developing an approximate 1.6 mile multi-use trail that will connect the Town of Appomattox to the Appomattox County Community Park. This 1.6 mile trail represents a portion of the envisioned Appomattox Heritage and Recreational Trail loop that will connect the Town, Appomattox Community Park, and Appomattox Court House National Historical Park

Within the City of Lynchburg a number of multiuse trail expansions that will be vital transportation corridors and recreational resources are in the master planning phase. This includes an extension of the Blackwater Creek Trail system that when completed will provide a valuable transportation linkage between the Sandusky and Lynchburg College areas with downtown, midtown, and Boonsboro areas of Lynchburg.

Riversedge Park – Located in Madison Heights along the James River across from downtown Lynchburg, when completed, this park will include a public fishing pier and a multiuse trail that will connect to the existing James River Heritage Trail network. Currently located at the park and available for use is a public boat ramp.



Boat ramp at Riversedge Park

Mountain and Single Track Trails

Within and just outside the CVMPO area there are numerous off-road trails and single-track mountain biking trails. The most commonly known of these trails include the Peaks View Park Trails (approximately 10 miles), Blackwater Creek Nature Trails (13 miles of multiple trail loops), and the recently completed Falling Creek Park, located outside of the MPO area in the Town of Bedford, (approximately 8.5 miles). Each of these trail systems offer varying degrees of riding options from easy to advanced. Other trails include the Heritage Trail System (approximately 5 mile), the Liberty Mountain Trail System (approximately 20 miles) which consist of more advanced level trails, and the approximate 20 miles of trails located within the 3,250 acre Sweet Briar College.

While these single track recreational trails are not often considered as transportation routes, they serve as key destinations in their current configuration and present opportunities for creating corridor connections to additional resources or expansion of some portion of these systems into multiuse facilities.

Falling Creek Park - Located in Bedford County, this community park offers a wide range of recreational opportunities including hiking and biking along the approximate 8.5 miles of trails and an 18-hole disk golf course. Falling Creek is the location of the annual Fat Tire Frenzy and Bike Festival, a mountain bike race series that is a part of the Virginia Off Road Series.



Falling Creek Park Trail

Region 2000 On-Road Bicycle Conditions

As is being seen around the nation, road biking for recreational and transportation purposes is becoming increasingly popular within Region 2000. There are numerous bicycle groups, two thriving bicycle shops, regularly coordinated bicycle runs, and an ever increasing number of local citizens who utilize the area road system for both transportation and recreational purposes. With the increased interest in cycling, more local residents are taking to their bicycles as a means to access work, shopping, school and other daily commutes.

Unless explicitly prohibited by law, all roads can be used by cyclist for transportation purposes. Roads usually included within the “explicitly prohibited” list include interstates and other high volume, high speed, limited access roads. Within the entire Region 2000 area, there are only three roads that legally can not be used and should not be used by bicyclists, the Lynchburg Expressway (U. S. 501 Business), the U. S. 29 Bypass, and U. S. 460.

Currently within the Region 2000 area, there exist very few examples of specific on-road accommodations, such as signage, marking, or specific designated lanes, designed to alert motorist to anticipate cyclists or to provide cyclists specific riding guidance. As such, while the use of bicycles along the road network has increased greatly, the safety for area cyclists and motorist is compromised by a combination of lack of road accommodations and limited cycling education by motorist and some cyclist.



Bike route sign along Rivermont Ave.

Some of the limited bicycling road accommodation, or verification motorist should be on the look out for road cycling, within Region 2000 is this Bike Route sign located along Rivermont Avenue, near Randolph College, in the City of Lynchburg.

While there are virtually no specific signed or designated on-road bicycle accommodations within Region 2000, including both the CVMPO area and the rural areas, there exists numerous roads that present cycling corridor opportunities. These roads, with their current configuration, can and do provide a comfortable bicycle riding experience. These roads consist of neighborhood roads that have limited vehicular traffic or minor arterial roads that have adequate road width or shoulder width to facilitate share the road or possible bicycle lane development opportunities.



North Main Street, Town Amherst presents restriping potential



Indian Hill in Lynchburg represents a road with adequate width and limited vehicular traffic to accommodate cyclists

Picture by Designforum, Inc.



Old Courthouse Road, Appomattox



Court Street, Town of Appomattox presents share road

While these roads present bicycling corridor opportunities, there exists a crucial need to promote motorist and cycling education and install signage to improve cyclist safety.

Support Facilities

To facilitate broad use of bicycling as a transportation option, along with safe travel corridor, there must be support facilities, such as bicycle parking areas and bicycle rental facilities, available.

To facilitate the use of the biking resources to all residents and in recognition of the value of the Blackwater Creek Bikeway, the City of Lynchburg in 2006 was one of five localities in the country to participate in the Dasani Blue Bike Program. Dasani Water Corporation, a subsidiary of Coca Cola, in partnership with the Rails to Trails Conservancy, donated to the City 20 Trek Classic Cruisers and bike lockers so that all citizens could access the trail network. The Dasani Blue Bikes are located near the Kemper Station Trail and are available free to area residents during daylight hours.



Dasani Blue Bikes along Kemper Station Trail



This cigarette receptacle represents one of the better bicycle parking options at River Ridge Mall in Lynchburg

Within the region bicycle racks are found primarily at public facilities. A local examination revealed that bicycle racks are in general located at public spaces such as schools, libraries, and parks. However, with the exception of some local YMCAs, in general field study revealed there is virtually no bicycle racks located in private business or commercial facilities within the area. Commercial areas such as River Ridge Mall, Ward Crossing and Ward Crossing West along Wards Road, and the town centers of Altavista, Appomattox and Amherst, showed no bicycle racks. In each of these commercial locations there do exist poles, trees, or other structures that can be used to park a bike. However, by having no bicycle parking bicycling is basically excluded as a transportation option to most community locations.

The design, age, and condition of the racks viewed vary considerably. Most of the sites consisted of old, less desirable grid-style bicycle racks. These racks are designed to hold multiple bikes, provide limited security, and in general provide limited bicycle support that can cause bicycle/wheel damage.



Bicycle rack located at the Jones Memorial Library



Wave bike rack at the Altavista YMCA

The more desirable bike rack design options, such as the inverted U or wave design, are being installed within the area and represent the type utilized at the Kemper Street Station, the YMCA in Altavista, and newer installations at local parks. These types of racks are preferred as they provide more stability for the bikes and more options to lock the bicycle frame.

Destinations and Points of Interest

Within the larger Region 2000 area there are many valuable cultural, historic, and natural resources. These resources are spread across the region with some located within the larger rural Region 2000 area and then there is the CVMPO area which provides more densely located service and resource centers.

Some of the more significant points of interest that serve to distinguish the region, and include regional, state, and nationally significant sites include:

Appomattox Court House National Historical Park

The Appomattox Court House National Historical Park, listed on the National Register of Historic Places, memorializes the April 9, 1865 surrender by General Robert E. Lee, commander of the Confederate Army of Northern Virginia, to Lieutenant General Ulysses S. Grant, commander of the Federal armies. This surrender marked the effective end of the Civil War. The events leading towards the surrender and the actual surrender grounds are preserved and depicted within the grounds of the National Historical Park.



Appomattox Court House NHP

Source: www.dday.org



D-Day Memorial

The National D-Day Memorial

This monument in Bedford City was built as the Nation’s monument to those who invaded Normandy in 1944. The National monument is located in Bedford because more people per capita were lost in the D-Day battle from this area than any other in the United States.

George Washington and Jefferson National Forest

Located in the western portion of Amherst and Bedford Counties, this National Forest includes the nationally recognized Appalachian Trail and the Blue Ridge Parkway. This area is a primary destination point for outdoor enthusiasts. Included within the vast area are Otter Creek, Cliffs of Otter Campgrounds, and the approximate 7,500 acre section that comprises the Mount Pleasant National Scenic Area.

James River Canal-Restored Lock

This lock was built as part of the James River and Kanawha Canal System between 1848-1849. These canals served as main commerce arteries in the early 19th Century and were designed to control the river depth to guide barges as they moved up stream.

Smith Mountain Lake State Park

Located on the north edge of Smith Mountain Lake and the Staunton River, this approximate 1,500 acre State-owned park provides recreation almost year round for local, regional, and state residents. The park features 500 feet of public beach, a public boat ramp, and camping sites.



Avoca Museum

Avoca Museum

This Victorian house, listed on the National Register of Historic Places, built in 1901 is maintained as a historical museum. The property is used for educational and recreational purposes and accounts the historical and cultural character of the region.

Buffalo Creek Natural Area

This natural area, located approximately two miles west of Evington, in Campbell County, is a local destination for nature study and walking/hiking. This area presents a primary hub for a connection trail system within the region.

Source: www.tourappomattox.com



Holiday Lake located within the State Forest

*Buckingham Appomattox State Forest/
Holiday Lake State Park*

This 19,535 acre natural forested area includes Holiday Lake State Park, a component of the Virginia State Park system that includes camping, hiking and canoe, swimming and fishing opportunities within the 150 acre lake. Throughout the area are a multitude of trails available for hiking, biking, and horseback riding. Holiday Lake State Park includes an educational facility and host 4H programs.

Photo by Susan Pugh/The News & Advance



James River Foot Bridge

James River Foot Bridge/Appalachian Trail

This 632-foot pedestrian bridge, the longest pedestrian-only bridge along the Appalachian Trail, is accessed in Amherst County just north of U.S. 501 and Virginia 130. The bridge serves as both a destination for day and overnight hikers along the AT.

Region 2000 Towns

As noted in Chapter 1, Region 2000 has a number of incorporated towns and villages that serve as population hubs and community service centers. Located within these areas, beyond the commercial and governmental services, is often the location of schools, museums, and other cultural resources that assure these areas as primary trip and visitor generators for the area.



Main Street, Town of Appomattox



English Park, Town of Altavista

CVMPO Destinations

The CVMPO represents the urbanized area of the larger Region 2000 area. Within the urbanized population center numerous residential, cultural, business, commercial, educational, health, and natural resources are located. As a result the MPO represents the primary economic and cultural engine of the region. It is the location of these resources found within the region’s urban core that have contributed to the following accolades having been bestowed on the area:

- *National Geographic Adventure*, 2007, ranked Lynchburg as one of the top 50 “Small Towns to Live and Play”;
- *Forbes* ranks the Lynchburg Metropolitan Statistical Area (MSA) 24th of 200 metropolitan areas in 2008 in its, “Best Places for Business and Careers”; and
- The Milken Institute in its 2008 Best Performing Cities Index ranked the Lynchburg metro 71 of the 200 largest metro areas in the nation, up 39 positions from 2007 and second in Virginia behind the Washington-Arlington-Alexandria region.

Some of the primary activity centers, recreational destinations, and other points of interest that collectively create the unique atmosphere of the Region 2000 located in the CVMPO area are highlighted on **Figure 3.1**. Highlighted resources include Thomas Jefferson’s Poplar Forest, Blackwater Creek Natural Area, Riveredge Park, the Awareness Garden and City Stadium. Also included within the map is the location of primary shopping areas, hospitals, public schools, as well as Liberty University and Lynchburg College. Access to these resources form the foundation of many daily transportation trips by area residents and also serve as key destination points for visitors from outside the region.



Liberty University Football Stadium



Community Market



Public boat ramp at Riveredge Park



Wards Crossing West

Source: www.poplarforest.org

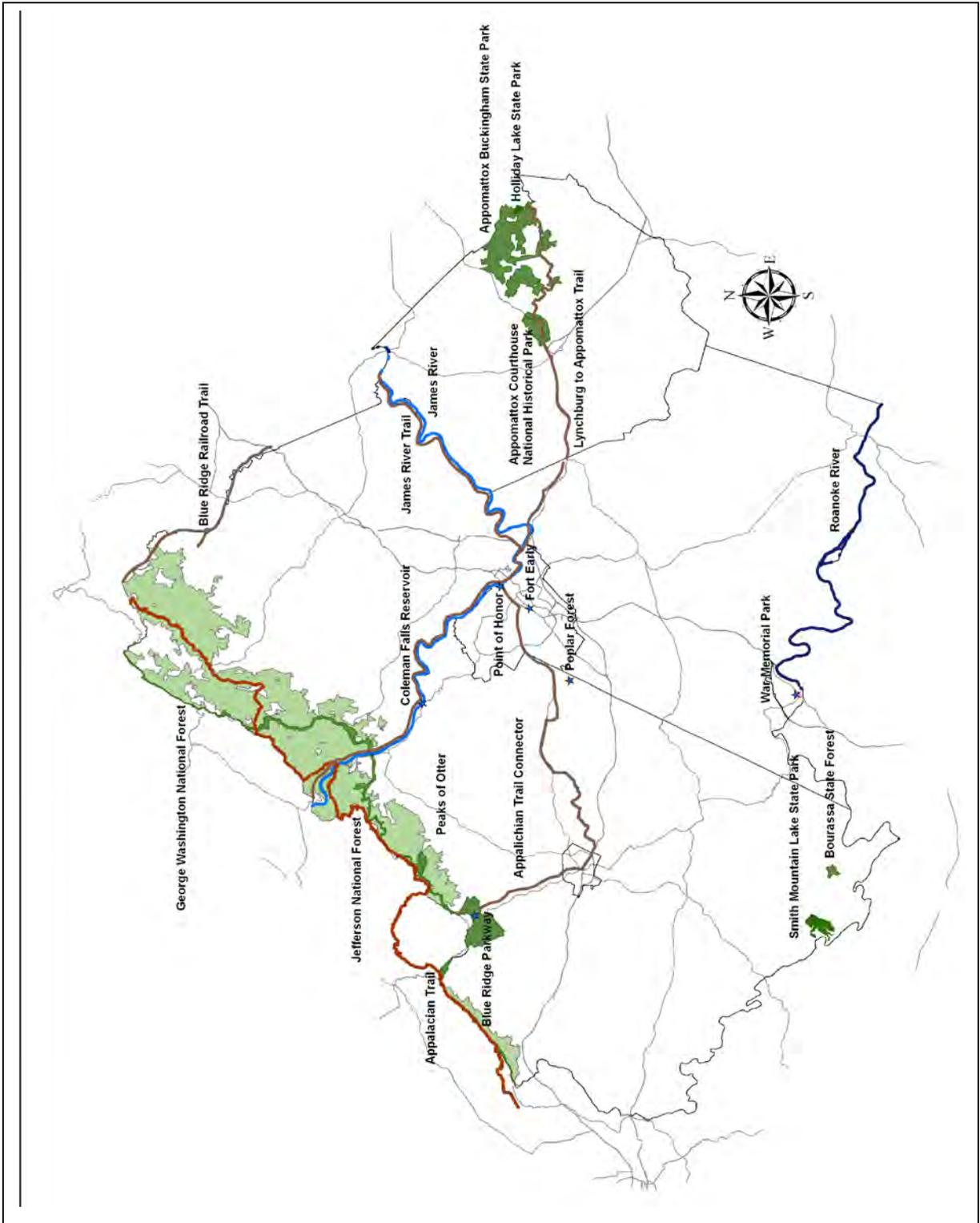


Poplar Forest



Awareness Garden

Figure 3.1
Region 2000 Points of Interest



Source: Virginia's Region 2000 Local Government Council, 2009

Demographics

As noted in Chapter 1, the entire planning region has a 2000 Census population of 228,616 (Weldon Cooper, 2009) and the urbanized, or MPO area, represents the primary population and business core of Region 2000 area. Of the approximate 230,000 residents, 135,038 residents or 59% of the population lives within MPO boundary.

Population Trends

The Region 2000 area has seen considerable population increase over the last decade. This has been particularly true for Bedford County, with an approximate 32 percent population increase, and to a lesser degree Amherst and Appomattox counties (11.6 and 11.4 percent respectively). **Table 3.1** provides an overview of growth within the entire Region 2000 area, of which the MPO is a portion.

Table 3.1
Region 2000 Locality Population Growth (1990 - 2007)

Region	1990	2000	2007	% Change 1990-2000	% Change 2000 - 2007	% Change 1990 - 2007
Amherst Co.	28,578	31,894	32,223	11.60	1.03	12.75
Appomattox Co.	12,298	13,705	14,199	11.44	3.60	15.46
Bedford Co.	45,656	60,371	66,750	32.23	10.57	46.20
Campbell Co.	47,572	51,078	52,840	7.37	3.45	11.07
Bedford City	6,073	6,299	6,286	3.72	-0.21	3.51
Lynchburg	66,049	65,296	71,282	-1.14	9.17	7.92
Region 2000	206,226	228,616	243,580	10.87	6.53	18.11

Source: U. S. Census Bureau

Population projections indicate that the region will see continued growth. The Virginia Employment Commission (VEC) population projections for the year 2010 and 2020 place the Planning District 11 area population around 243,276 and 258,139 persons respectively. The VEC growth projection data also suggests that the majority of growth will continue to be located within the urban area but to a larger degree within the areas outside the City of Lynchburg.

Development Patterns

With the majority of the land use within the Region 2000 being rural residential, agricultural and forested, the majority of current and future development is expected to be focused within the larger CVMPO area, the County town and village centers, and along primary transportation corridors.

Each of the participating localities though their Comprehensive Plans have identified primary growth areas that support this development pattern. Amherst anticipates growth along US 29, within the Madison Heights area, and within and around the Town of Amherst. Appomattox County anticipates and has developed designated growth areas to include the Town of Appomattox and Pamplin and key village centers within the County. Bedford County, anticipating the largest population increase of all the localities, anticipates growth to continue within the MPO areas of Forest and Vinton and the Smith Mountain Lake area. Lastly, Campbell County is expected to see the largest growth and development to continue within the CVMPO areas of Timberlake and Candler's Mountain roads. Campbell County also anticipates continued growth within the Leesville Lake area (*Rural Long Range Transportation Plan-Technical Report, Region 2000*).

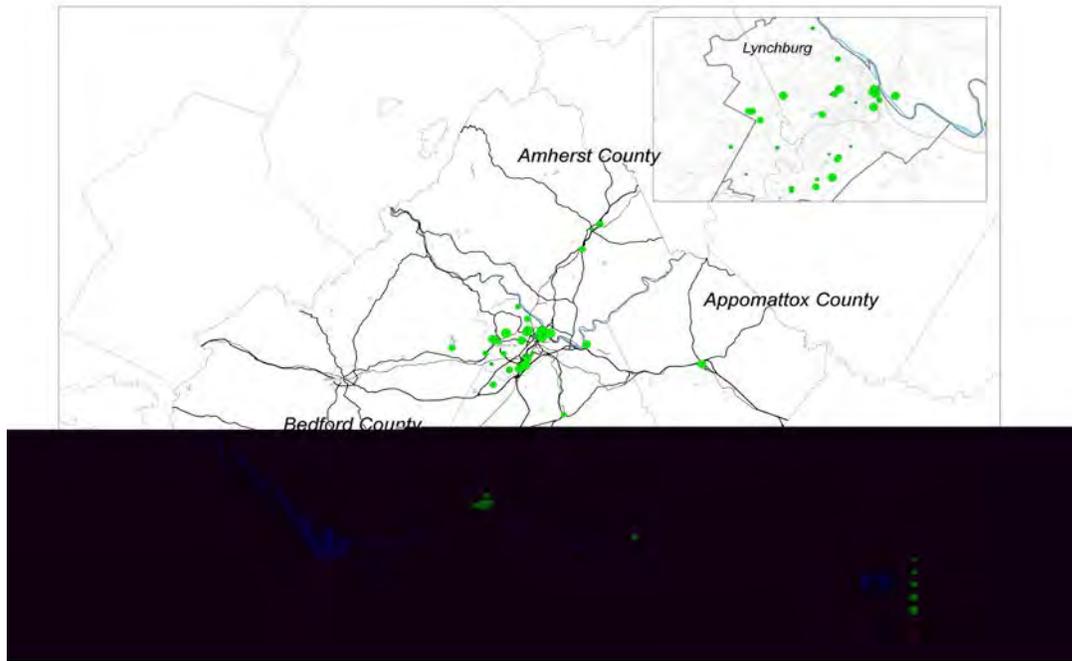
CVMPO Development Hub

The *Central Virginia Regional Action Plan for Coordinated Land Use and Transportation Planning* (Region 2000, 2007) noted that the City of Lynchburg, as the central core of the CVMPO region, represents approximately 60 percent of regions major traffic flow and ranks in the top 50 percent of the 396 MPOs in the Country in terms of the percentage of population located within its central core,

being 67%. Each of these statistics highlights the degree to which, in general, the region has been able to integrate land use and planning. The statistics do not however reflect the transportation challenges and the ability of residents and visitors to access the resources in any method other than a motor vehicle.

Development of both residential and shopping development is closely tied to the location of primary employment within a region. This rule of thumb is no exception within the greater Lynchburg area. Of the 19 businesses within Region 2000 that employ at least 500 persons 16 or 84% are located in the MPO region (*Rideshare*; Virginia's Region 2000, 2006). Within the MPO boundaries, as presented in **Figure 3.2**, is located the largest concentration of primary employers. Further, this same area also includes the largest concentration of industrial parks within the Region.

Figure 3.2
Concentration Region 2000 Major Employers



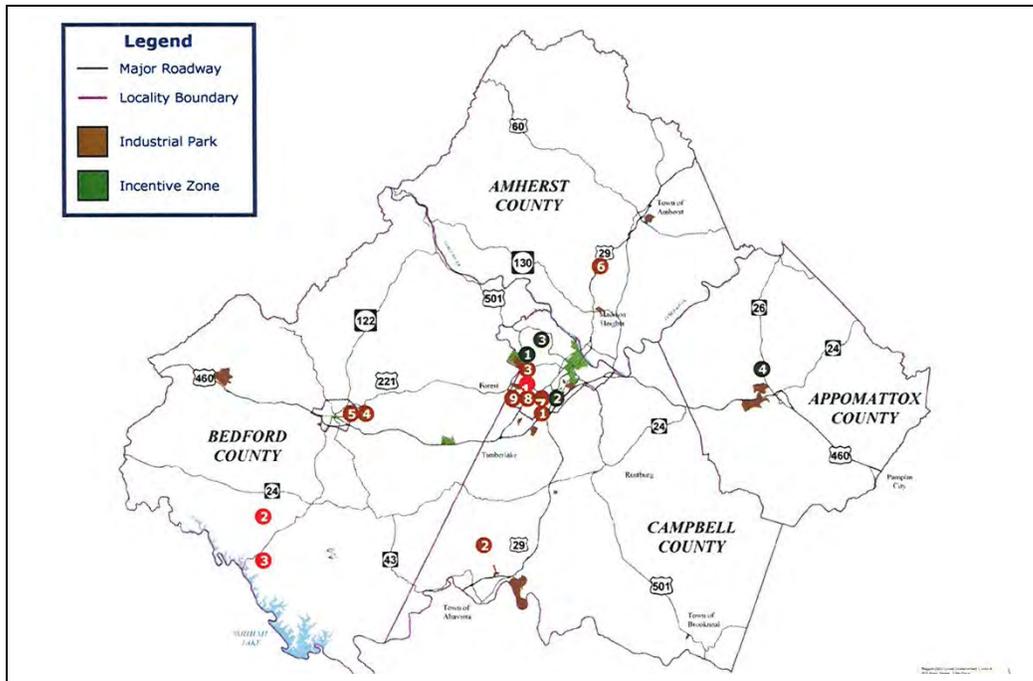
Source: *How Are We Growing – Growth Patterns within Virginia's Region 2000*; Virginia's Region 2000, 2008

Some of the major employers within the Region 2000 area include (those denoted with a * are located within the CVMPO area):

- | | | |
|---------------------------|-----------------------------------|-------------------------|
| *Areva | *BWX Technologies Inc. | *Centra Health |
| *BFG Industries Inc. | *Central Virginia Training Center | Intermet Foundries Inc. |
| *Buffulo Air Handling Co. | Tri Tech Laboratories | *Genworth Financial |
| *Fleet Laboratories | *Frito-Lay, Inc | *J-Crew |
| *Liberty University | *R R Donneley | *Tyco Electronics |
| *Barr Laboratories | *Southern Air, Inc. | |

The Region 2000 growth study also showed that the largest current or planned commercial shopping destinations are similarly located within the CVMPO region or town center.

Figure 3.5
Major Retail Centers Since 2000



Source: *How Are We Growing – Growth Patterns within Virginia's Region 2000*; Virginia's Region 2000, 2008

Each of these development, transportation and population growth patterns within the Region 2000 area highlights the increased need and opportunity to develop a comprehensive alternative transportation system that includes both on-road and off-road bicycle facilities.

Coordination with Transit

The Greater Lynchburg Transit Company (GLTC) provides public transportation within the Region 2000. Currently, GLTC service is limited to within the CVMPO region. The majority of the GLTC service area is located within the City of Lynchburg with limited service to the Madison Heights area of Amherst County and the Forest area of Bedford and Campbell counties. GLTC currently runs 14 routes and has an active fleet of 37 buses and trolley and 5 paratransit buses. These lines collectively provide active road service along 82 miles of roadway, representing 19 percent of the total roadway miles in the City (Region 2000, 2007). Information on GLTC routes and general services can be obtained at <http://www.gltconline.com>.



Bike rack Lynchburg City bus

GLTC supports the use of bicycles and alternative transportation to expand transportation opportunities within the region. Within the 37 bus fleet, 27 are equipped with bike racks. Known as GLTC's "Bikes on Buses" program riders can load their bikes on the available racks as a component of their regular fare. The ability to provide on-road bicycle facilities within the region will have great

impact of expanding rider access to GLTC and community resources. To that end, GLTC, in partnership with the City of Lynchburg, Region 2000, and the CVMPO is currently completing a comprehensive bus stop study to evaluate pedestrian access. The coordination of the transit system and the development of bicycle accommodations is a vital link in assuring a comprehensive alternative transportation network within the current GLTC service area.

Within the Region 2000 rural areas there is very limited public transportation options. There are a number of private and non-for-profit agencies that offer transportation solutions but, most of the services are demand service arrangements available to specific target populations. The lack of public transportation for Town and County residents represents another reason that development of safe alternative transportation system is so vital in meeting the needs of multiple transportation users.

Coordination with Pedestrian Facilities

In general, all transportation options, be it by car, bus, train, assistive mobility device, or bicycle, include a portion of the travel experience as a pedestrian. Access to sidewalks, cross-walks, signage and pedestrian signals that assure safe separation from pedestrians and motorist is an essential component of a comprehensive transportation network. Bicyclists, by the nature of their travel experience, as with those walking and utilizing wheelchairs and other devices, must often utilize the same pedestrian facilities for safe road crossing and destination access.



A user-friendly pedestrian street in Lynchburg

Through a combination of funding and partnerships, which include VDOT, the CVMPO, FHWA, and area localities, a number of planning documents which highlight the location of sidewalks has been developed. Specifically, the Towns of Amherst, Appomattox and Altavista and the Cities of Bedford and Lynchburg have detailed evaluation of the existing sidewalk network within these localities. More information on these documents is highlighted under Plans and Policies within this chapter. In addition, the CVMPO is currently completing the same level of sidewalk evaluation within the remainder of the CVMPO area.



Town of Amherst

Within the Region 2000 area the majority of sidewalks are located within the Town and City centers. The location of sidewalks within these population centers is a logical location for these necessary transportation facilities given the population density and location of community resources within area towns and cities. The sidewalk evaluations which have taken place show that, in general, there is a fairly comprehensive network of sidewalks within the Region 2000 community cores. However, the general condition and width of existing sidewalks and availability of support facilities, such as marked cross walks, timed signals, and curb cuts, combine to create the majority of

pedestrian difficulties. The ability to target and prioritize facility improvements is the function of each locality alternative transportation planning document.

The available sidewalk information provides another valuable layer of data to assist in transportation facility development decisions. Coordinating the sidewalk inventory and sidewalk development visions in planning bicycle facility recommendations is vital in creating a comprehensive alternative transportation network.

Existing Plans and Policy

Bicycles are transportation vehicles and as such are eligible for use of the roadway system, except where prohibited by law such as along Interstates. As such, all roads are a component of the bicycling network. However, while all roads may be used by cyclist, not all roads present the safest and most comfortable cycling environment. By considering road conditions and destinations there exists the opportunity to establish specific road corridors that present the best options to meet the unique needs of all cyclist types.

There are numerous policies and planning initiatives on the Federal, State, and locally at the regional and jurisdiction level that support the use of bicycles as integral components of the transportation network. The following provides a general overview of these policies and plans that legitimize bicycles as a transportation mode and provides the foundation for implementation initiatives within Region 2000.

Federal Policies

The following highlights two federal policies that support the planning and development of alternative transportation, be it walking, biking, or transit, as integral and vital transportation network elements.

- Federal Highway Administration (FHWA) Virginia Division Office Bicycle and Pedestrian Policy:
The Virginia Division Office of the FHWA in 2001 established a Bicycle and Pedestrian Policy. The policy supports within all new and reconstructed federal-aid transportation projects, except under specific circumstances, the inclusion of pedestrian and bicycle facilities. The policy notes that the agency will assist VDOT through sharing of technology, planning activities, and safety promotion. Further, the FHWA Division policy states: "Bicycle and pedestrian facilities should be funded at the same federal-state ratio as the typical highway improvement...".
- Americans with Disabilities Act:
The Americans with Disabilities Act (ADA) was established in 1990 by the United States Government. This federal legislation is issued and regulated by the Department of Justice and stipulates that all new and altered facilities in the public right of way, such as sidewalks, street crossings, and transit facilities, be accessible to and usable by people with disabilities. Design and construction guidelines are provided by the American with Disabilities Act Accessibility Guidelines (ADAAG).

Commonwealth of Virginia Policies and Plans

The Commonwealth of Virginia through initiated policies, programs, and planning documents developed in the last five years, has highlighted and brought to the forefront the value and need to incorporate alternative transportation planning and implementation within local and regional initiatives. Some key supporting policies and plans include:

- VDOT Policy for Integrating Bicycle and Pedestrian Accommodation:
In 2004 the Commonwealth Transportation Board adopted a new policy that guided the integration of pedestrian and bicycle accommodations within all elements of the roadway project network and acknowledges walking and biking as "fundamental travel modes". The new policy states "VDOT will initiate all highway construction projects with the presumption that the projects shall accommodate bicycling and walking." The alternative transportation policy is applicable to planning, construction, operations, and maintenance, including hazard elimination. The policy does allow exemptions of pedestrian facility inclusion where safety or feasibility warrants preclusion. A complete version the VDOT policy is provided in **Appendix - B**.

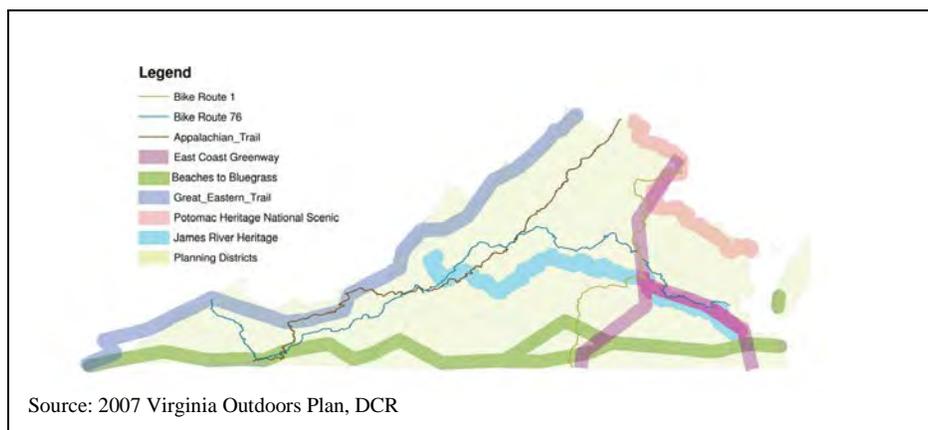
- VDOT Safe Route to School Program**
 The Safe Routes to School Program, SRTS, is a national transportation program created to: enable and encourage children, including those with disabilities, to walk and bicycle to school; make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. In Virginia SRTS funding is available for programmatic or construction opportunities designed to enhance the safety and participation of students in walking and/or biking. Programmatic grants are provided for the purpose of developing SRTS plans and programs within a school or school divisions that can be used to promote walking and biking, provide safety training, or other programmatic type activities. Construction grants provide funds to create physical structures, such as cross walks or sidewalks, to create a safe walking environment.
- Virginia's Outdoor Plan**
 The *Virginia Outdoors Plan* (VOP) is the Commonwealth's official conservation, outdoor recreation, and open space plan. The plan provides guidance to all levels of government and the private sector, meeting the conservation, open space, outdoor recreation, and green infrastructure needs of the State. The VOP also provides specific recommendations for each planning district including Planning District 11, the Region 2000 area. The VOP is not a policy document. However, the document serves as a key planning resource for the State of Virginia and represents the guiding document for various conservation and trail-related funding sources.

The 2007 VOP notes the following elements that support the development of bicycle facilities.

- The need for additional public access to Virginia waters and trails for walking and biking were the two highest outdoor recreation needs indicated through public input.
- Provides a recommendation for state and local partners to place “greater emphasis on providing alternatives to the use of private automobiles for daily activities”.

In response to the demand for increased trails and recreation, DCR established a Greenways and Trails Task Force to develop a statewide trail plan. The statewide trail system developed includes a long-term vision of a five trail network which spans across Virginia. These larger trail systems incorporate a combination of existing trail and planned facilities and include on and off-road connections.

The James River Heritage Trail (JRHT) is the state trail that traverses through the Region 2000 area and includes the existing Lynchburg James River Heritage Trail as a primary system component. The development of the JRHT represents a key development partner for bicycle and trail resources within Region 2000.



Regional and Local Plans

There are multiple regional and locality specific plans that promote and support alternative transportation planning and development. The following is a list of some of the primary planning documents but does not constitute a comprehensive list of all planning activities or specific master plans developed to incorporate pedestrian and bicycle accommodations. Some of the local documents include:

- *Central Virginia Planning District Commission Regional Bicycle Plan*
Developed in 2000 by the Local Government Council, known in 2000 as the Central Virginia Planning District Commission, the Regional Bicycle Plan highlights some preliminary routes for creating bicycle connections with the greater Planning District region. This Plan represented the early efforts of developing bicycling connections and represents the basis by which this updated planning effort is based.
- *Region 2000 Greenways and Blueways Plan*
Developed in 2003 the regional plan presents a long-term conceptual plan for the creation of off and on-road connections to key resources throughout the Region 2000 area. The plan presents the benefits to the entire Region 2000 area in economic development and quality of life indicators for connecting through trails, on-road connections, and utilization of the James and Staunton Rivers. The Plan outlines a long-range, multi-year prioritization strategy that identifies within each jurisdiction a priority project to be implemented over a five year period. This regional trail, greenway, and blueways document serves as a primary guiding document for on-road bicycle facilities and the expansion and development of these envisioned multiuse facilities as transportation corridors.
- *Central Virginia Long-Range Transportation Plan – Year 2030*
The Central Virginia Long Range Transportation Plan (LRTP) is a required planning document, updated every five years, developed to guide the metropolitan area in creating an efficient, responsive, and environmentally-sensitive transportation system over the next twenty to twenty-five years. The Plan examines transportation issues and trends and offers a list of specific projects for addressing the area's mobility needs. Providing alternative transportation access through development of on-road and off-road connections is highlighted as a planning goal.
- *Town of Altavista 2035 Transportation Plan* – This comprehensive transportation plan evaluates current and future transportation demands and presents transportation improvements, which includes pedestrian and bicycle accommodations, to meet future needs. The plan outlines a series of bicycle accommodations along the primary travel corridors within the Town.
- *Town of Appomattox Pedestrian and Bicycle Plan* – Adopted in 2009 and serving as the Town's alternative transportation plan, the document outlines existing conditions and future pedestrian and bicycle accommodations to create a pedestrian friendly community.
- *Town of Amherst Pedestrian and Bicycle Plan* - This comprehensive alternative transportation plan outlines a detailed long-term pedestrian and bicycle plan for the entire Town area. Highlighted within the Plan are prioritized sidewalk and bicycle facility opportunities.
- *Comprehensive Plans*
Comprehensive Plans serve as guiding blueprints for a locality and highlight growth, development, transportation, recreation, education, health, and general quality of life visions which serve to guide community decisions, policies, and capital investments. Region 2000 jurisdictions have, through inclusion within their Comprehensive Plans, embraced and set in

motion activities to support and develop trail, bicycling, and public alternative transportation opportunities.

Amherst County

The County's 2008 Comprehensive Plan includes the following:

- "Prepare and implement a comprehensive plan for park and recreation facilities and programs, including a plan for greenways and blueways within the County."
- "Promote ecotourism – hiking, biking, visiting historic places, showcasing garden week, observing wildflowers, and bird watching. Promote trail development and use, through offering incentives to land owners to make their land accessible to these types of activities."
- "Continue work on James River Trial/Rivers Edge Park and Blue Ridge Railway Trail."

Appomattox County

The Comprehensive Plan includes the following goals that provide the support and justification for alternative transportation development within the Appomattox community.

- "Develop alternative transportation methods to better serve county residents and visitors to the County's attractions."

In addition to the Comprehensive Plan, Appomattox County, in partnership with the Town of Appomattox, developed and adopted two planning documents centered on alternative transportation development. *The Appomattox Greenways Masterplan – A Vision for the Future* and *The Appomattox Heritage and Recreational Trail Plan – A Vision of Connectivity* outline a vision format for developing both off and on-road connections within the community.

Bedford County

The Bedford County 2025 Comprehensive Plan, adopted in 2007, throughout the plan highlights the need and value of transportation and land use planning to facilitate protection of resources and increased quality of life for its residents. The following is noted regarding expanding trails and alternative transportation.

- "The non-traditional transportation corridors are important for recreational uses by both residents and tourists that visit the County for its beauty and access to natural and cultural areas. Providing for convenient access to trails that interconnect with County attractions and natural areas will enhance these resources and provide for alternative transportation corridors throughout the County."
- "Develop and adopt a County-wide Transportation Plan with regional links that can include rail and other alternative transportation options based on the densities reflected on the Future Land Use Map."

Campbell County

The recently completed Campbell County 2009 – 2024 Comprehensive Plan and subsequent activities in the County support off-road alternative transportation/trail development.

- Plan notes that the County should consider alternative methods that will assist in guiding land use and may include activities such as landscaping, sidewalks, trails, and other features to promote a visually appealing atmosphere.
- The Plan supports the continued development of County parks to facilitate community health, recreational opportunities, and general increased quality of life.

Lynchburg City

The City of Lynchburg 2002 – 2020 Comprehensive Plan, adopted in 2002, highlights the City's commitment to increasing alternative transportation and recreational opportunities. Some of the goals noted include:

- "Develop and encourage opportunities for the integration of alternative transportation modes, including public transit, bicycle, and pedestrian corridors."
- "Provide the citizens of Lynchburg with safe, efficient, effective, and well-planned transportation systems and facilities that enhance economic development...while preserving the integrity and character of the affected neighborhoods, historic districts, downtown, and natural areas."
- Promote the creation or re-creation of mixed use residential communities that incorporate a mix of housing types with pedestrian-oriented streets...."

Local Area and Site Plans

Within each locality is specific neighborhood, area or site-specific plans that have been or are currently in development that have incorporated pedestrian and bicycle accommodations as key design elements. Often these detailed site and small area plans represent unique opportunities to incorporate bicycle accommodations during the early planning stages and, as such, should be capitalized as vital implementation opportunities. The following list is by no means comprehensive but does highlight some local implementation efforts.

- Wards Road Master Plan – The City of Lynchburg, in partnership with Liberty University and property owners within the Ward Road area, have developed a comprehensive pedestrian plan for the area along Wards Road between Harvard Street and Wards Ferry Road. The comprehensive pedestrian plan, developed as a three-phase project, includes development of a pedestrian crosswalk, signage, safety features, transit stops, and multi-use trail to accommodate safe pedestrian and cyclist movement to the commercial and educational resources and residential areas within this area.
- Bedford County School System Forest Elementary and Forest Middle School Travel Plan - This School Travel Plan, developed as a Virginia Safe Routes to School initiative, has been developed to facilitate safe options for students from neighboring communities to these educational resources. The Plan includes development of new sidewalk from the Forest Middle School along Forest Road extending to Forest Elementary School and then expanding existing sidewalk along Perrowville Road to Farmington Drive. The plan has been developed to allow for students to cycle or walk along the proposed sidewalks between school resources and from the residential areas within the Farmington area.
- City of Lynchburg Parks and Recreation Sandusky Park Trail Extension – This trail master plan should be incorporated into greater trail planning and alternative trail network. This trail extension will be vital in expanding bicycle transportation opportunities.
- CVMPO Sidewalk Inventory – A comprehensive inventory of sidewalk resources is currently available within the City of Lynchburg, a similar inventory all of the existing sidewalks within the entire CVMPO area should be completed by end of 2010. This inventory will provide a clear evaluation of connection opportunities. As a number of counties, such as Bedford, permit the use of sidewalks for bicycles, the sidewalk inventory will highlight existing and future bicycle access routes to county resources.

Community Interest in Bicycling

The level of interest in bicycling can be witnessed on any given day at the parking lots of trail heads and public parks and along rural roads throughout the Region 2000 area. It is not uncommon for it to be difficult to find a parking space at the Ed Page Entrance of the Blackwater Creek Bikeway.

Further, in spite of limited on-road accommodations within the area, there are a number of bicycle clubs and two bicycle shops which thrive in the region. Each of the local bicycle shops serves and facilitates a network of local road cyclist through bike sales, hosting local riding events, and detailed information on local and regional trails. Cycling races, such as the Fat Tire Frenzy and Bike Festival and cycling touring events such as the James River Odyssey, hosted by Virginia Odysseys have become norms in our region.



Residents offer comments at community workshop



Residents provide suggestions for bicycle routes during community workshops

The citizens of Region 2000 further expressed their interest and demand for the creation of safe on-road accommodations by attending a number of public events and participating in an on-line, web-based public survey. Interest by area citizens to increase safe on-road bicycle accommodations and interest in expanding the current multi-use trail network was expressed by the 55 participants at the first two community workshops.

During these workshops, participants used area maps to show where they wanted to ride, where primary roads of concern were located, and what key routes they felt should be included within a regional network. Participants noted the importance of including education and outreach on the rights of cyclist to be on the local road system and on proper road use by cyclists and motorists as a key component of any planning and successful biking effort.

Another source of gaining public input was through information received from an on-line survey. The 18 question survey, 14 bike related questions and 4 optional questions for demographic purposes only, was made available through the Virginia's Region 2000 website. The survey was available through March, 2009 and was advertised through newspaper articles, newsletters, web mailing, and a morning radio show.

During the survey input period, a total of 247 surveys were received. It should be noted that the provided survey was not intended to create scientific data and was not designed to provide uniformly objective results but rather gather information about general habits and opinions. The results from the 247 surveys showed that:

- 85% indicated lack of designated bike lanes/routes discouraged them from cycling more often;
- 78% rated the overall level of service for safety on local roads as poor; and 52% rated connectivity of roads for cyclists as poor;

- 67% indicated they rode on the Blackwater Creek Bikeway often;
- Over 90% indicated that providing more bike paths or wider shoulders would increase the likelihood of riding a bicycle more often; specifically 94% indicated more bike paths or wider shoulders; 84% indicated safer road conditions, and 68% noted improved driver behavior/attitude would increase likelihood.
- All 247 respondents indicated that funding should be sought to support bicycle accommodations, with the highest support indicated supporting state and federal grants (81%), dedicated percentage of local transportation funds (74%), private funding through foundations (68%), and funds from existing local city and county taxes (64%).

In addition to responses from specific questions, the survey provided an opportunity for respondents to provide an open-ended response to the question "As a cyclist or local citizen, what aspects of the existing recreation and roadway network do you like?". One hundred seventy-five (175) of the total 247 survey respondents provided a response to this question. In general the responses revolved around positive comments relating to the trail system and the need and desire to see it expanded; the lack of road accommodations in the area to safely use bicycles for transportation purposes; and the lack of understanding on the rights of cyclist and the need to expand education.

The following area some direct comments received.

"The local trails are great for recreation, but I would like to see more support for bike lanes for commuting purposes."

"I love to ride recreationally on Blackwater and James River Heritage trails...they don't serve any useful transportation purpose though."

"Blackwater Creek Trail is great. I would like to see it extended. I would also like to see much more attention given to safer bicycle and pedestrian facilities along roadways and in commercial districts. For example, there is no safe way to cross Forest Road in the Graves Mill Center area."

"There is no roadway network for bikes. I would love to ride to work more often, but it is too dangerous. I have to drive from Timberlake road to Blackwater Creek Trails to do any decent safe riding."

A summary of survey results and comments received are presented in **Appendix C**.

It should be noted that the public demand for bicycle accommodations within the region was even higher when one factors in the public input and comments received during the individual transportation plans developed for the Towns of Appomattox, Altavista, and Amherst and the City of Bedford. Within each of the detailed alternative transportation and long-range planning efforts, public comment and desire for increased pedestrian accommodations was commonly expressed. Details of the comment and outreach procedures for these documents can be found within these locality specific planning documents.

Region 2000 Roadway Characteristics

It is roadway conditions that constitute the comfort and safety of a cyclist utilizing the roadway system for transportation purposes. The roadway conditions that must be considered to evaluate the comfort and accessibility of a road to accommodate most cyclists include a number of parameters. These parameters include specific physical features of the road, such as pavement width, grade, curb and gutter, and asphalt condition, as well road use conditions such as speed, volume, and nature of vehicular traffic. Each of these features are quantified and utilized to provide unique characteristics along a road corridor to be evaluated and used to establish bicycle accommodation current

characteristics and to establish improvement recommendations. It is important to note that physical features and road use characteristics may change considerably from one portion of the same corridor to another.

Detailed road characteristics for bicycle corridor recommendations (see Chapter 4) are presented in **Appendix D –Region 2000 Bicycle Plan Road Characteristics**.

Developing a bicycle network that functions with both current and planned roadway conditions and establishes roadway system adjustments, in the most feasible and safe opportunities is the basis for the Region 2000 Bicycle Plan.

Roadway Deficiencies

While cycling has become a popular activity in Region 2000 and many of the local roads serve as recreational routes, overall, the road conditions within the greater Region 2000 area do not support comfortable riding conditions for most cycling levels. Current road conditions, with the lack of signage and other on-road bicycle accommodations, support road cycling by only the most experienced cyclists. The majority of area bicyclists are therefore limited to the use of the many multi-use trails and single-track dirt tracks for recreation and thusly do not have the adequate resources to fully use the trail network as a transportation option to access work and other daily activities. Further, along many of the winding, narrow, two-lane roads that predominate the area, even the more experienced, Group A cyclists express safety concerns, especially along the higher volume, higher speed corridors.

The following represent the primary roadway and area conditions which hinder bicycle transportation in the area.

- **Lack of on-road bicycle facilities:** As noted earlier, within the general Region 2000 area, the CVMPO area, or the individual towns there are virtually no existing roadways that are designed for or provide acknowledgement of bicycle use.
- **Area geography:** The entire Region 2000 is characterized by rolling and sometimes steep hills and terrain. It is this geography that adds to the beauty and unique features of the area. However, this geography poses a considerable challenge to many would be cyclists. While the geography of the region can not be changed, there exist an opportunity to guide cyclist along routes that limit the use of some of the more physically challenging roads and in creating alternative transportation network that takes advantage of the natural and infrastructure resources that are available.
- **Narrow roads:** The area is predominated by winding, narrow, and limited site distance roads. Further, many of these roads have very limited shoulder width and are often bordered by steep drainage ditches, or lined with mailboxes, woods, or curb and gutter. Additionally, a number of roads are lined with utility poles that are located on the edge of the road providing very little clearance space for cyclists. Each of these conditions presents potentially dangerous conditions for advanced bicyclist and combines to completely hinder comfortable road use by less experienced riders. Further, many of these physical barriers, such as utility poles and steep areas, cause considerable challenges to road widening or other physical road adjustments.
- **Distance between community hubs:** As defined in general as a rural area, there is considerable open space and distance between the commercial and community centers located within the City/CVMPO and area towns. While the area geography and travel distance to work and resources for residents can not be changed, this does not limit the need to expand the core alternative transportation resources within the community centers not the need to create bicycle facilities along the most relevant transportation corridors. Further, given the distance

of community centers, the need to expand alternative transportation options is vital to protect the rural character that defines the region.

- **Automobile traffic:** Automobile traffic is an obvious obstacle for persons riding a bicycle. The potential conflict is heightened along the roads with high traffic volume and higher speeds. Area traffic and speed combined with the narrow and winding nature of many of the roads create additional hazards.
- **Cyclist and Motorist Education:** A key obstacle is the lack of understanding by motorists that a bicycle is a legal roadway vehicle and the lack of proper road use knowledge by bicycle riders. Often there is a sense that there is a motorist versus cyclist local mentality. There exist a genuine need in the area to expand education and communication between motorist and cyclist, and a need to expand basic bicycle use education.
- **Lack of connectivity to existing multi-use trail network:** The existing greenway system represents a vital connection network that runs adjacent to and connects numerous residential, business, and recreational resources within the CVMPO area. Further, the grade and surface of the system provides the widest range of comfort to multiple user groups. The ability to safely access this system via the road network to expand the transportation value of these valuable multi-use trails to additional areas within the region is an expressed goal within area plans, citizens, and local governments.

Region 2000 Bicycle Level of Service (BLOS)

As noted within Chapter 2, the Bicycle Level of Service (BLOS) is a cycling rating system which represents an estimated comfort level for a cyclist on a particular road. The evaluation is based on an evaluation of physical features and road use, such as car speed and volume, to establish the rating. The rating is based on a rating system that ranges from A to F, where A represents the highest level of comfort and least perceived conflict for a cyclist. An off-road or adjacent road multiuse system would be the best example on an A rating.

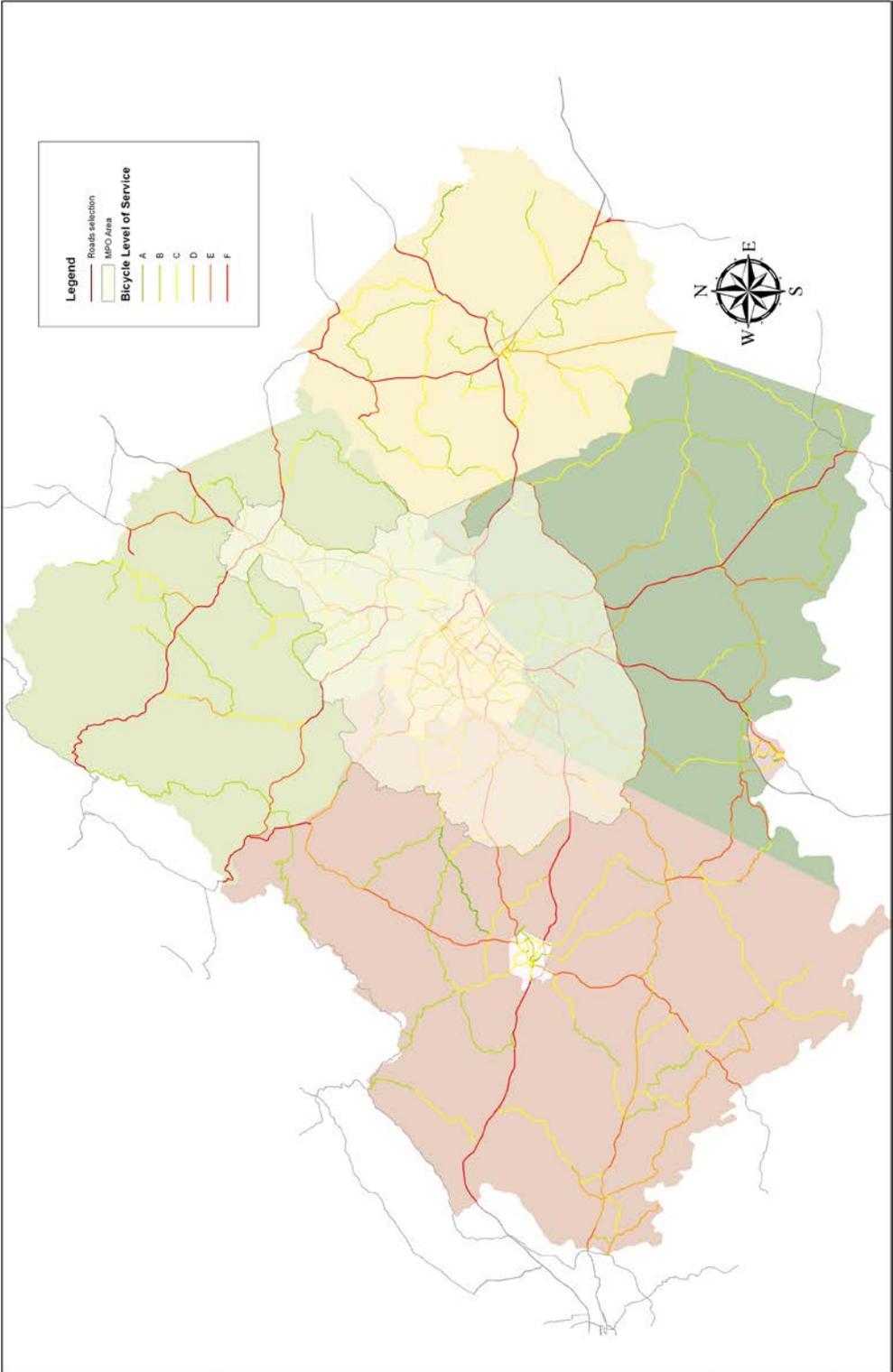
In Virginia the BLOS has been evaluated and mapped by VDOT. **Figure 3.6** depicts the current evaluated BLOS routes within the Region 2000 area. As can be seen when evaluating the map, there are a high degree of roads, especially within the MPO area and along primary transportation corridors that are rated C and below. The low rating of many of these roads is the combination of having no bicycle accommodations, the narrow and winding nature of many of the roads, and the increased vehicular traffic along the roads. The map does however, show that along a number of the rural, lower volume roads existing conditions that can facilitate fairly comfortable road travel. The map does clearly highlight, given the high number of warm, or low service level, colors, the need to provide necessary accommodations to facilitate the utilization of bicycles as a viable transportation option within the area.

Bicycle Accidents and Motorist Conflict

Ensuring user safety is the ultimate goal and primary design and facility development parameter for all transportation facilities. As such, information on accidents or known conflict areas presents key indicators of necessary improvements of an existing system or development of facilities to eliminate known dangers. To this end, the Virginia Department of Motor Vehicles (DMV) maintains accident data relating to vehicular, bicycle, and pedestrian incidents. This information is evaluated and serves as a vital decision tool for road, signage, signaling, sidewalk, and other transportation facility improvements.

With the increased participation in bicycling as a viable mode of transportation comes statistics that support the need to increase facilities to accommodate safe use. According to a recent study completed by BikeWalk Virginia titled [Benchmark Study Report of Biking and Walking Resources in Virginia Part II – Relationship between Injuries, Deaths, and Locality Bicycle and Pedestrian](#)

Figure 3.6
Region 2000 Bicycle Level of Service (BLOS) Map



Source: Virginia Department of Transportation, 2009

Resources (2009), DMV 2008 accident data noted that 716 bicyclists were injured and 14 killed and 1675 pedestrians were injured and 76 killed in vehicle/pedestrian crashes in Virginia respectively. Table 3.2 provides a summation of bicycle crash injury and fatality data from 2001 – 2008 for Region 2000 localities. While the accident numbers for this period may not appear high for the Region 2000 area, it is important to recognize that not all incidents are properly recorded and further near accident events are most likely never reported. Most importantly, only one injury or death as a result of bicycle and vehicular conflict is too many. It should be noted that the numbers noted in **Table 3.2** are for the entire jurisdiction and the data did not specify if the incidents were within the urban or rural portions of the locality

**Table 3.2
Bicycle Injuries (I) and Fatalities (F) in Crashes by Jurisdiction
2001 - 2008**

Jurisdiction	2001		2002		2003		2004		2005		2006		2007		2008	
	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F
Amherst County	1				2		2		2							
Appomattox County					1				1		1					
Bedford County			1		1		1		1				2	1		
Campbell County					2		1		1		3				1	
Lynchburg City	6		13		11		3		10		6		12		7	

Source: Virginia Department Motor Vehicles; <http://www.dmv.state.va.us>

The greater Region 2000 area is not without unfortunate incidents in recent years which have brought to the forefront the need to expand bicycle facilities and education aimed at cyclist and motorist. The tragic death of the late John H. Bell, M.D., a Lynchburg cardiothoracic surgeon, due to a bicycle accident along U. S. Route 501 in May, 2007 served as a tragic reminder of the dangers and reality faced by cyclists along the road network. Many local residents ride bicycles along roads in Region 2000 on a daily basis. Thankfully similar tragedies are rare; however, almost every cyclist can provide a story of a close call accident or an incident where they received a negative cycling comment by a motorist. The following headline ran in the July 14, 2009 edition of the local newspaper, The News & Advance. The article focused on a specific motorist/cyclist incident that took place in our area and highlighted the general nature of the cyclist/motorist conflict, that being a misunderstanding of the use of the road network, an uncertainty of the safe and proper methods to share the roadway, and assurances by each road user they belong and are entitled to equal network use. The reduction of motorist/cyclist conflict, while promoting the healthy use of cycling for transportation and recreational purposes is the heart of the Region 2000 Bicycle Plan.

“Campbell County judge laments lack of civility on area roads”

Source: News & Advance, 2009; article by Chris Dumond