



## Principle 6: Reduce the Impact of the Car

Reducing the impact of the automobile means providing more transportation choice and developing in ways that reduce the need for and length of car trips. It also means designing roads and transportation facilities that meet the needs of people as well as cars and that are attractive as well as functional.

### *What's Good or Getting Better*

- Botetourt County is participating with the Virginia Department of Transportation (VDOT) in a pilot project to integrate transportation and land use planning.
- Many trails and greenways are planned or proposed, some passing through multiple jurisdictions or linking major sites.
- The Natural Resource Assessment and Greenway Plan for the Central Shenandoah Valley will provide a framework for developing a series of interconnected green spaces and trails.
- Harrisonburg has some bicycle lanes, with extensive plans for more.
- VDOT's Rural Rustic Roads program has enabled the paving of gravel roads in rural areas without widening, in return for local commitment not to allow growth along the road.
- The state is reassessing its road standards.

### *In This Chapter*

- *Alternatives to the Car*
- *Trails and Greenways*
- *Assessment of Road Standards*

### *Causes for Concern*

- VDOT plans to widen I-81 through the entire region.
- No serious consideration has been given to rail alternatives or to impact on scenic quality and community character.
- Most local comprehensive plans, capital improvement plans, and transportation plans include few, if any, non-road elements.
- Development patterns that respond only to the car reduce opportunities for walking, biking, and public transportation.
- Most trails or greenways remain only proposals.
- The region lacks significant examples of integrated bike routes.
- There are no completed major trails or greenways in the region.
- Sidewalks remain a difficult element to fund, particularly as retrofits.

# Principle 6: Reduce the Impact of the Car: Alternatives to the Car



## Botetourt and VDOT Embark on Pilot Project

Botetourt County will participate in a pilot project with VDOT to better integrate land use and transportation planning as it updates its comprehensive plan.

## Alternatives to the Car

Alternatives to using the car range from public transportation to walking to biking. These are discussed below.

### Public Transportation

The Valley region is not densely enough populated to have extensive public transportation systems. Limited local transportation services exist in the region (see Figure 6-1), but mostly to serve special populations.

Nationwide, the public transportation network continues to decline. Bus service between cities is slow and does not go to every locality. Furthermore, bus stations have been relocated outside of central cities so that anyone using them must be driven there or take a cab. Rail service (Amtrak) continues

to be a public debate at the national level.

The Valley's passenger train service is very limited. The Amtrak Cardinal runs between Washington, D.C., and Chicago on Sundays, Wednesdays, and Fridays. Although it passes through Rockbridge, Alleghany, Bath, and Augusta coun-

### Positive Examples

**Winchester Plans Expanded Bus Service.** The City of Winchester operates 6 bus routes. With Winchester and Frederick recently designated an MPO (Metropolitan Planning Organization), plans are to eventually expand service into Frederick County.

**Staunton Trolley Links Close-In Destinations.** In 2001, the City of Staunton began a trolley service downtown. The trolley far exceeded projections and the route has since been expanded to serve the library, the park, and a commercial/residential corridor.

**CATS Adds Fixed Route.** CATS (Coordinated Area Transportation System) in late 2002 established a "250 Connector" fixed-route service to complement its on-demand pick up service. The connector route stops at major destinations in downtown Waynesboro, downtown Staunton, and Fishersville.

Figure 6-1.  
Public Transportation in the VCC Region  
(Cities included with Counties)

County	Public Transportation	Service Provider
Alleghany	Yes, Limited	RADAR
Augusta	Yes, Limited	CATS, Trolley
Bath	None	
Botetourt	None	
Frederick	Yes, Limited	Winchester
Highland	Yes, Limited	CATS
Page	None	
Rockbridge	None	
Rockingham	Yes, Limited	CART
Shenandoah	None	
Warren	None	

Notes: Most of these transportation routes are centered in the cities and many are geared toward serving special populations. Source: Virginia Department of Rail and Public Transportation with additions from local input.



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ties, the only stops in the region are in Staunton and Clifton Forge.

### Walking and Biking

The Virginia Department of Transportation (VDOT) spends its \$3.4 billion budget overwhelmingly on the state's highway system.

In April 2003, Virginia Transportation Secretary Whitt Clement presented an initiative to revise VDOT's bicycling and pedestrian standards so that bicyclists and walkers would receive the same consideration as cars and trucks. He proposed that bike lanes, sidewalks, share-use path or other accommodations be part of the design of new highways and major reconstruction projects unless circumstances preclude it or local governments ask that they be excluded.

### Walking

Walking is the most available and least expensive method of getting from place to place. But pedestrians need public rights of way, such as sidewalks, and also destinations within proximity. To what degree are these provided in the Valley? There are few indications that much attention has been given to pedestrian access.

First, the standard development pattern in the region reinforces a cycle of increased car use and decreased walking.. Large single-use sites separated by extensive parking lots, access roads, and deep setbacks frustrate walkers. Likewise, along most roads, houses are connected to roadways but not to sidewalks. As customers, employees, and visitors are expected to arrive by car, it has become difficult to do anything else. The rural nature of



*Staunton has train service three times a week.*

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they are a local responsibility. Generally, new sidewalks are not supported by state road funds. Some localities require developers to build sidewalks along new developments. Completing gaps to ensure a continuous network, however, can be difficult. If a locality wants to add sidewalks in a built-up area, it must fund the project. Maintenance also is costly. VDOT does not maintain sidewalks except in limited cases near schools or other facilities. As a result, many communities have had sidewalk projects languish, unfunded,

on their transportation plan wish list for years. The Town of Mt. Crawford's efforts to improve its sidewalks are a case in point, as they try again to get a federal grant for the project.

### *Biking*

There are no major bicycle trails in the region or bicycle lanes that can serve as commuter routes except in Harrisonburg. Some of the planned trails in the region could serve to link destinations and could thus serve as pedestrian and biking routes. Examples include Winchester's planned trail system and some of the projects in the CSPDC Greenways Plan.

For recreational bikers, the beauty and rural nature of the region attracts considerable activity and there are numerous routes for this purpose. Bike Virginia hosts rides in the region and recently a professional bike race was held in Waynesboro, Massanutten and nearby county locations.

### *Comprehensive Bike Plans*

In the Shenandoah Valley, only the college town of Harrisonburg appears to be planning to address the needs of bikers. The Harrisonburg Bicycle Plan includes 23 sections that connect James Madison University, Eastern Mennonite University, and residential and commercial areas. Some roads already have dedicated bike lanes.

### *Making the Connections?*

*Are unhealthy trends, such as obesity, related to community design?*

*“Communities that encourage physical activity help people be healthy,” US News and World Report quotes Rich Killingsworth, director of Active Living by Design, a national program located at Southern Village in Chapel Hill, NC. Pair this with a report from the Virginia Department of Health: more than half of all Virginians (57%) are overweight or obese, including 17 percent of fourth graders.*

*The April 2003 report attributes this to overeating and inactivity. Other studies cite the great popularity of walking and bicycling for recreation. But few residents can strike off on a jaunt from their front door.*

*Even walking or biking for pleasure can require a drive in the car.*



## Principle 6: Reduce the Impact of the Car: Trails and Greenways

### Trails and Greenways

There are few examples of constructed trails or greenways in the region, and most of these are for recreation, not for transportation. See Chapter 3 for additional discussion of trails and greenways, which often have walking and biking components.

The VCC region has many hiking trails, most notably the Appalachian Trail, but few local walking trails. The Chessie Trail, which runs along the Maury River from Lexington through Rockbridge County to Buena Vista is probably the longest. Figure 6-2 notes the general status of trails and greenways in the region.

An important milestone in the region is the development of a comprehensive greenways plan for all of the localities (five counties and five cities) in the Central Shenandoah Planning District Commission (CSPDC). This Natural Resource Assessment and Greenway Plan for the Central Shenandoah Valley (to be completed in 2003) will provide a framework for developing a series of interconnected green spaces and trails. It will identify and map existing and planned trails and greenways and blueways, key natural features, and cultural and historical sites, and will make recommendations for future projects.

Already the process has identified some impressive proposals by a number of localities to develop greenways or other trails that will connect destinations. Some of these are highlighted.

For information contact the Central Shenandoah Planning District Commission in Staunton, at (540) 885-5174 or [www.cspdc.org](http://www.cspdc.org).

### Proposed Trails and Greenways

The CSPDC's Greenways Plan for the Central Shenandoah Valley contains many proposals. Region-wide recommendations relating to transportation

Figure 6-2.  
**Trails & Greenways in VCC Communities**

County	Greenway or Trail	Project
Alleghany	Proposed	Jackson River Scenic Trail
Augusta*	No	
Bath*	No	
Botetourt	Yes	Trails in Cty. Center at Green Field
Frederick	No	
Highland*	No	
Page	No	
Rockbridge*	Yes	Chessie Trail Lexington to Buena Vista
Rockingham*	No	
Shenandoah	No	
Warren	No	
<b>Cities</b>		
Buena Vista*	Yes	Chessie Trail (shared); proposed
Covington	No	
Harrisonburg*	Proposed	Blacks Run
Lexington*	Yes, more proposed	Chessie Trail (shared); Woods Creek proposed
Staunton*	No	
Waynesboro*	Proposed	
Winchester	Yes	Abrams Creek Tr.; Green Circle Trail System proposed
<b>Towns</b>		
Luray	Yes	Luray-Hawksbill Creek Greenway
<b>Total</b>	<b>6</b>	

**Note:** \* Participating in the Natural Resource Assessment & Greenway Plan for the Central Shenandoah Valley to be completed July 31, 2003  
**Source:** VCC research, (request fro information from localities); draft Natrual Resource Assessment and Greenway Plan for the Central Shenandoah Valley.

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include developing a trail and greenway plan as part of each local government's comprehensive planning process; determining appropriate roads for bicycle routes and developing adopted local pedestrian and bikeway plans to include in VDOT's transportation plans; and supporting alternatives to large-scale expansion of Interstate 81 such as rail transportation improvements.

Listed below are just some of the important trails projects in the plan that are likely to go forward:

- A 10-mile river/trail system in the Rockbridge area, linking Brushy Hills, Woods Creek Trail, Jordans Point Park, the Chessie Trail, Maury River Walk, Glen Maury Park, and the Blue Ridge Parkway
- Opening the Blue Ridge Tunnel to link trails on either side of the Blue Ridge Mountains
- Waynesboro's Greenway Plan that will link schools, neighborhoods, parks and natural resources to the downtown area
- Staunton to Harrisonburg Rail-with-Trail, a proposed trail to run along the Shenandoah Valley Railroad
- Blacks Run Greenway, an 11-mile greenway through downtown Harrisonburg linking parks, schools, and residential and commercial areas with walking and biking trails. Liberty Park, under construction, will serve as a gateway.
- Harrisonburg Bicycle Plan
- North River Trail, a proposed trail to run along the abandoned Chesapeake and Ohio Railroad from North River Gorge in Augusta County to Bridgewater in Rockingham County

### *Luray Garners Popular Support and Funding for Its Greenway*



*Additional phases will add to Luray's Greenway.*

The greenway along Hawksbill Creek in Luray is an excellent example of multi-layered connections that greenways can make. When complete, the trail will be 3.8 miles long and will link the high school, elementary school, the recreational park, the park n'ride lot, and the library. The trail goes through a riparian area enrolled in the Conservation Reserve Enhancement Program and planted with trees. The trail has received great public support, funding from varied sources, and generous donations of benches and trail amenities.



## Principle 6: Reduce the Impact of the Car: Road Standards and Design

### *Road Standards and Design*

Road design can help reduce the negative impacts of the car. On the grand scale, the upcoming improvements to Interstate 81 will literally change the landscape of the region. On the local level, some important decisions at the state level influence how roads fit into overall develop patterns.

#### *Interstate 81 Upgrading*

Significant reconstruction is planned for Interstate 81. Concept studies were presented to the Commonwealth Transportation Board in 1998. In March 2003, the Commonwealth Transportation Board voted to move two proposals for upgrading I-81 to the next stage of review. STAR Solutions' \$8.19 billion plan would double the number of lanes on I-81 and pay for the project with electronic tolls and would include separate on and off ramps for cars and trucks. Fluor Virginia, Inc. submitted a \$1.8 billion plan to add two car-only lanes and use only the median area of the I-81. A decision may not be made until 2006 at the earliest. VDOT also is looking at building a rail line along the interstate. In the meantime, VDOT is planning to study the environmental impacts of widening I-81. This study could cost \$37 million and take three to five years to complete.

### *Local Roads*

Typically, a state department of transportation adopts federal standards and has its own standards as well. These standards unintentionally can override non-transportation goals such as pedestrian access, aesthetics, protection of natural assets, and neighborhood health. For example, VDOT standards would have to be deviated from in order to build so-called neotraditional developments which emphasize walkability. The uncertainty of approval means that very few such projects get built.

The Virginia Commission on Growth and Economic Development was charged with looking into how VDOT street standards could be modified to accommodate innovative types of development, to accommodate open space and cluster subdivisions, and to accommodate "low impact development (LID), which aims at protecting water quality. Because VDOT was to begin reviewing its street standards in 2003 (stakeholder comment period was in the spring), the Commission left the matter to be addressed through this administrative process.

One issue is road width. Some argue that wide straight roads with wide turning radii encourage speeding and discourage pedestrians. VDOT road width requirements are tied to estimated vehicle trips per day (vpd) and the design speed. For example, an urban road (curb and gutter) can be 28 feet wide up to 400 vpd but must be at least

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For example, an urban road (curb and gutter) can be 28 feet wide up to 400 vpd but must be at least 36

feet wide between 401 to 4000 vpd. It must be even wider if the design speed is 40 mph.

### Rural Rustic Roads Program

In 2002, the General Assembly passed the Rural Rustic Roads Program, which permits low-traffic dirt roads to be hard surfaced without any additional improvements. In return, the localities must promise

to curb development along those roads. Previously, roads like these could not be paved unless they also were upgraded (i.e., widened and improved to meet all standards). The new state program was tested in six locations in Augusta County. The cost savings were substantial: the six paving projects were completed for \$405,000, compared to an original cost projection of \$3.3 million.

Residents have long fought for such flexibility. Just the year before, Rockbridge County residents fought successfully under the old



*The road between these houses is narrower than most and does not dominate the site.*

Some localities have approved developments with smaller than usual road widths. For example, MeadowPointe in Harrisonburg (left) and Red Oaks in Staunton are under construction.