

# Natural and Built Environments



Rockbridge County • Kelsey Johnson

# Natural and Built Environments

## Overview

How communities are planned, designed and built has a major influence on health. The natural and built environment encompass objective and subjective features of the physical space where people live, work, and play. Such factors contribute to the conditions and opportunities that enable individuals to live long and healthy lives.

## Natural Environment

The natural environment can be defined as non-human-made surroundings and conditions in which all living and nonliving things exist (1). Access to nature has been related to lower levels of mortality and illness, higher levels of outdoor physical activity, restoration from stress,

**“Where we live influences how well we live. You might say that our zip code can be more important than our genetic code.”**

Robert Wood  
Johnson Foundation

a greater sense of well-being, and greater social capital (2). Given the importance of contact with nature for well-being, the American Public Health Association supports the

protection and restoration of nature in environments where people live, work, and play. Rural Virginia’s natural assets support a high quality of life, attracts tourists, and sustains the well-being of Virginia’s residents and guests. Protecting and preserving Virginia’s natural environment, helps meet important goals for water quality, wildlife habitat, recreation, and overall quality of life.

The preservation of Virginia’s natural environment, especially in rural areas has created desirable destinations, that contribute to the economic vitality of the region. A great example of this balance between preservation and economic development is The Crooked Road, Virginia’s Heritage Music Trail. The Crooked Road is a 330-mile driving trail through the mountains of Southwest Virginia connecting nine major venues and over 60 affiliated sites and festivals that visitors can enjoy every day of the year. The Crooked Road began as an idea in January, 2003. The concept of a heritage music trail was positively received by communities, musicians, music venues, and tourism organizations along the proposed route. As a result, The Crooked Road emerged running through 19 counties, four cities, over 50 towns, five regional planning districts, two tourism



organizations, and a large number of music venues. The Crooked Road: Virginia’s Heritage Music Trail is a 501(c)3 non-profit organization founded in 2004 with the mission to support economic development in Southwest Virginia by promoting the region’s rich heritage of traditional music (3).



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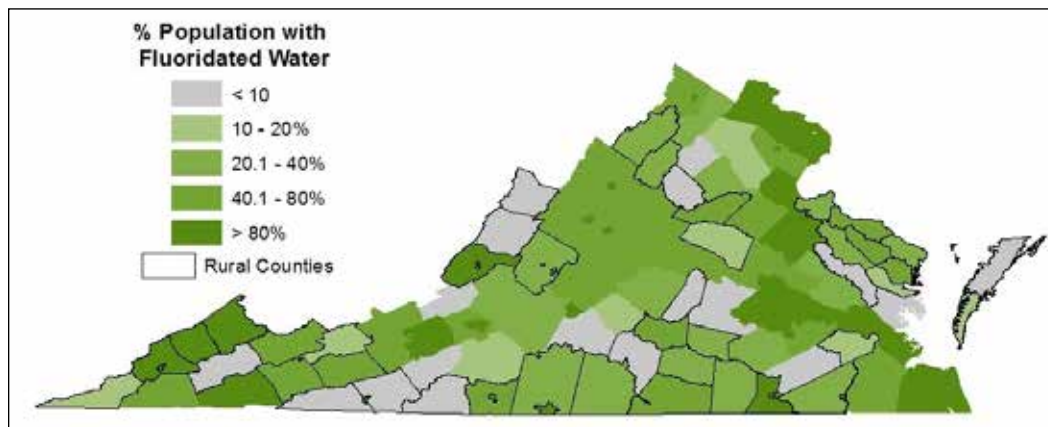
## Built Environment

The built environment significantly affects the public’s health. The connection between health and the built environment dates back to the 19th century at the height of the industrial revolution where physical space became limited, living conditions worsened, and life expectancy decreased (4). Even today with the prevalence of chronic diseases, there remains an important connection between population health and the built environment. The built environment includes all physical parts of where people live and work: homes, buildings, streets, open spaces, and infrastructure. The health of individuals and communities is closely tied to the built environment. Neighborhood amenities such as recreational facilities, libraries, playgrounds and sidewalks offer opportunities to socialize, play, exercise and enjoy the neighborhood(5). There is evidence to support these forms of community engagement contributing to physical health, mental health, and human development (5). People who live close to parks or mountains, have a beautiful neighborhood, or have a safe neighborhood spend more time walking outside. The evidence indicates that improving neighborhood roads and walkways for pedestrians and cyclists, and installing play equipment in parks may increase physical activity levels in adults and children (5).

## Intersection between Health and Built Environment Case Study: Water Fluoridation

Community water fluoridation is consistently found to be one of the most effective means of preventing tooth decay. According to a 2016 Journal of Public Health Dentistry article, every \$1 spent on fluoridation saves \$38 in dental treatment costs in a community with a population of more than 20,000. However, it is proportionally much more expensive to fluoridate small community water supplies than large ones. For communities with fewer than 5,000 people, the ratio is \$6 saved to every \$1 spent. In addition, most of the 12.6 % of US residents with private wells are located in rural areas. These wells are typically unfluoridated.

## Intersection between Health and Built Environment Case Study: Water Fluoridation



The Centers for Disease Control and Prevention (CDC) Community Water Fluoridation website includes maps, safety guidelines, and state statistics. The CDC's My Water's Fluoride website provides information on the fluoridation status of local community water supplies. Water Fluoridation and Dental Health Indicators in Rural and Urban Areas of the United States reports on the availability of fluoridated water in both rural and urban settings and compares fluoride availability to the dental health of adults and children.

### Leading Practices and Approaches

Whenever possible, examples of leading practices and approaches were taken from rural Virginia communities. Otherwise, examples were gathered from localities with comparable demographic characteristics.



Virginia Tourism

### Virginia Creeper Trail

The 34.3-mile Virginia Creeper Trail was named after the steam engine that crept up the rails into the Iron Mountains. A plant called Virginia creeper grew along its tracks. By the 1970s, many railroads were abandoned and in 1986, the Rails-to-Trails Conservancy began converting old railroad beds into trail systems for hikers and bikers. There are 11 access points that lead hikers and bikers to towns, the two most popular trailheads located in Abingdon and Damascus. Offering bike rental, horseback riding, and fishing the Virginia Creeper Trail attracts outdoor enthusiasts throughout the region. The trail now boasts two breweries and wineries along the way, for those looking to take a break or mark their victorious end. In the 30 years since its opening, the Virginia Creeper Trail remains one of the country's premier rail-trails, honored as the inductee into the 2014 Rails-to-Trails Conservancy's Hall of Fame.

### Virginia Main Street, Virginia Department of Housing and Community Development

**Need addressed:** Since 1985, the Virginia Main Street (VMS) program has been helping localities revitalize downtown commercial districts using the National Main Street Center's successful Main Street Approach.

**Approach:** VMS is a comprehensive, incremental approach to revitalization built around a community's unique heritage and attributes. Using local resources and initiatives, Main Street helps communities develop their own strategies to stimulate long term economic growth and pride in the traditional or commercial districts, also known as, downtowns.

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**Outcome:** In 2019, the VMS program recognized 26 Designated Main Street Communities, one Virginia Downtown and over 80 Commercial District Affiliates throughout the Commonwealth. VMS awarded six downtown investment grants, (\$102,196), five financial feasibility studies (\$125,000), six commercial district affiliate grants (\$41,565) and 16 scholarships (\$16,000).

### Go Virginia

Go Virginia is a bipartisan, business-led economic development initiative that is changing the way Virginia's diverse regions collaborate on economic and workforce development activities.

### Opportunity Zones Virginia

In Virginia, Governor Northam tasked the Department of Housing and Community Development (DHCD) and the Virginia Economic Development Partnership (VEDP) with gathering local, state and other stakeholder input to nominate 212 tracts as Opportunity Zones. Investors receive tax benefits over a long horizon for equity investments in Qualified Opportunity Zone businesses and property.

## Opportunities for Growth

### 1. Employ Health in All Policies (HiAP)

- HiAP is a formal process for integrating health considerations into policies across multiple sectors with the goal of addressing the many social drivers that influence health outcomes.
  - The *National Prevention Strategy* describes the need for this cross-sector approach to meet the goal of increasing the number of Americans who are healthy at every stage of life.

### 2. Expand and improve bicycle and pedestrian infrastructure.

- Allocate municipal funding to support and ensure infrastructure is in place to make bicycling or walking viable modes of travel. This approach can promote health by providing added opportunities for physical activity from transportation.



Galax • Cameron Davidson

- Benefits include:
  - Cost savings: Bicycle paths and complete sidewalks are comparatively less expensive than building new roadway infrastructure. While still a large investment, their narrower widths make them a much smaller price tag per linear foot.
  - Increase public health and safety: The Benchmarking Report on Bicycling and Walking in the United States (2018) reports that bicyclist and pedestrian fatalities, "may be reduced through proactive infrastructure, policy, education and other community investments in bicycling and walking."
  - Economic Development: More people regardless of generation are looking to live and work in areas that support their hunger for outdoor recreation opportunities and desire to commute by bike or foot. This creates economic development opportunities for communities.



Pulaski County • Sam Dean

