



ACTIVE LIVING

Draft Text (April 11, 2023)

Goal

Hanover County will strive to create healthy neighborhoods that provide safe, convenient, and comfortable options for active living for residents of all ages and abilities.

Why It Matters

This section of the Comprehensive Plan provides guidance regarding policies and programs that can create neighborhoods and communities where walking and biking is a safe, convenient, and comfortable transportation option and recreational activity. When this guidance is incorporated into new development and transportation projects, it can improve the connectivity and safety of the pedestrian and bicycle network.

The built environment is an important determinant of the community's health and economic vitality. Research suggests that building an environment where people have the ability to live active lifestyles is more effective than encouraging healthy living through educational efforts. Health impacts should be taken into consideration when evaluating new development as local decisions on land use and transportation have an impact on physical activity, air and water quality, and safety.

The way a community is planned and designed can:

- Improve safety for motorists, cyclists, and pedestrians;
- Promote active living that enables physical activity and exercise;
- Strengthen social cohesion;
- Enhance the local economy; and
- Increase property values and enhance local revenues.

The design of the suburbs of Hanover County, like many in the United States, has been heavily influenced by the automobile. For the most part, people are dependent on their vehicle to get from place to place for shopping, work, and recreation. Community amenities such as neighborhood parks, sidewalks, and bike lanes provide alternative means to connect residential neighborhoods to public facilities and activity centers, such as libraries, schools, parks, churches, and businesses. Treating walking and cycling as viable modes of transportation will greatly influence the manner in which people move about their neighborhoods and communities.

According to the National Association of Realtors publication *On Common Ground* (Winter 2017), neighborhoods that are walkable have higher property values, and market studies have shown a strong demand for walkable real estate product. This study found that pedestrian/bicycle amenities attract new residents and retain current residents, and that if

a place is walkable, people will spend more money locally. In addition, it also noted that a walkable neighborhood creates more of a feeling of being part of a community.

One of the guiding principles identified during the public engagement process is to provide safe opportunities for walking and biking. Stakeholders also identified a desire for more parks and recreation opportunities within the Suburban Service Area (SSA).

Measuring Our Progress

- Mileage of Pedestrian and Bicycle Infrastructure

Quick Facts

- As of Spring 2023, there are an estimated 64.2 miles of sidewalk and 2.96 lane miles of bike lanes countywide.
- The RS (Single-Family Residential) Zoning District applicable to the Suburban Service Area requires that pedestrian paths be provided to open space, common areas, and adjoining developments (both residential and commercial). Pedestrian paths are also required within the required buffer along public roads.
- For non-residential developments, the Zoning Ordinance does require the parking area to be accessible by a public sidewalk or other improved pedestrian walkway.

Providing Safe, Comfortable, and Convenient Opportunities for Walking and Biking

Road networks should be planned and designed to ensure the safety, mobility, accessibility, and convenience for all users (including pedestrians, bicyclists, drivers, commercial and emergency vehicles), while also accommodating people of all ages and abilities. Applying these concepts within neighborhoods also helps residents to age in place by providing additional transportation options for older residents. Given the diversity of the natural and built environment in Hanover County, flexibility in accommodating different modes of travel is essential to balance the needs of motorists, pedestrians, and cyclists.

Application of these policies should be implemented in a balanced approach that considers the character of the project area, community desires, and the needs of all users. These design concepts will not look the same in all settings and will primarily be applicable within the Suburban Service Area (SSA).

As the public sector and development community invest in pedestrian and bicycle infrastructure, these groups should work collaboratively to create a network that is **safe, comfortable, and convenient**. VDOT and Hanover County should consider pedestrian/bicycle mobility when designing roadway improvements. As private property develops, developers should look for ways to incorporate pedestrian/bicycle infrastructure into their design plans, providing thoughtful connections that make walking and biking a convenient and safe option. The following should be evaluated or applied to help pedestrian network that appeals to the greatest number of users.

Residential Development

- Safety
 - Provide buffer strips between roadways and adjacent pedestrian/bicycle facilities to provide separation between different users, improving safety and comfort for all users.
 - Use traffic-calming techniques where appropriate (narrow traffic lanes, road diets, traffic-calming circles, etc.) to slow vehicular traffic on spine roads within residential developments, thorough streets, and other higher-volume streets within residential neighborhoods.
 - Provide highly-visible and safe crossings for pedestrians, including accessible curb ramps, crosswalks, pedestrian refuge islands, pedestrian signals, and/or other design features at intersections and mid-block crossings.
 - Provide pedestrian-scale lighting along pedestrian/bicycle facilities (where appropriate).
- Comfort
 - Plant street trees and other landscaping to provide shade and visual interest.
 - Install benches and street furniture, providing a resting place for users.
- Convenient
 - Provide pedestrian/bicycle facilities throughout new development and to adjacent uses. Sidewalks should generally be at least five feet in width. Within residential development, provide access to central mailboxes, open space, and other community amenities, and provide sidewalks around the entire cul-de-sac.
 - Provide pedestrian/bicycle accommodations along the frontage of the road providing access to residential subdivision. Within *Pedestrian/Bicycle Capital Investment Focus Areas* listed on p. , a sidewalk within the public right-of-way is preferred.
 - Create an interconnected street network that provides direct connections for pedestrians and cyclists. In areas with cul-de-sacs, provide pedestrian/bicycle cut-throughs.
 - Provide direct pedestrian and bicycle connections to regional trail networks, public facilities (schools, libraries, parks, etc.), and existing pedestrian/bicycle infrastructure.

Non-Residential Development

- Safety
 - Provide buffer strips between roadways and adjacent pedestrian/bicycle facilities to provide separation between different users, improving safety and comfort for all users.
 - Provide highly-visible and safe crossings for pedestrians, including accessible curb ramps, crosswalks, pedestrian refuge islands, pedestrian signals, and/or other design features at intersections and mid-block crossings.

- Provide pedestrian-scale lighting along pedestrian/bicycle facilities (where appropriate).
- **Comfort**
 - Plant street trees and other landscaping to provide shade and visual interest.
 - Install benches and street furniture, providing a resting place for users.
- **Convenient**
 - Provide pedestrian/bicycle facilities throughout new development and to adjacent uses. Sidewalks should generally be at least five feet in width. In business areas, provide pedestrians safe, convenient, and direct access to building entrances, parking areas, and open space, as well as pedestrian networks within neighboring development. Pedestrians should be able to walk to the building entrance on a paved surface that provides as direct a connection as possible. The following items should be considered when designing pedestrian mobility on site:
 - Pedestrian pathways should be provided through parking areas to connect the main entrance of major destinations to sidewalks and shared-use paths along adjacent major thoroughfares. Trees and landscaping along these paths provide shade and create a more attractive environment for walking, with clearly-marked crosswalks creating safer crossings.
 - For development with multiple buildings and/or outparcels, all building entrances should be connected by walkways. Sidewalks between the building edge and the parking lots should allow safe and convenient access to entrances without having to walk within parking lot drive aisles.
 - Barriers such as fences and landscaping should not be placed to hinder access.
 - Landscaping can be used to channel and organize traffic flow in parking lots, as well as to provide pedestrian refuge.
 - Clearly delineate pedestrian paths with striping, different paving materials, or by situating the path through the center of strategically-placed parking islands.
 - Provide pedestrian/bicycle accommodations along the frontage of the road providing access. Within *Pedestrian/Bicycle Capital Investment Focus Areas* listed on p. [REDACTED], a sidewalk within the public right-of-way is preferred.
 - Provide direct pedestrian and bicycle connections to regional trail networks, public facilities (schools, libraries, parks, etc.), and existing pedestrian/bicycle infrastructure.
 - Provide bicycle parking and/or other end-of-trip facilities (showers, lockers, fix-it stations, etc.) at major destinations (community facilities, employment centers, etc.).

Page [REDACTED] provides examples of these design elements and other features that can improve pedestrian and bicycle mobility.

These design elements may be incorporated into public- and private-sector projects. Elements that may be incorporated into street design to encourage the development of safe streets for all users will largely be based on the contextual design of the neighborhood or project. The need, desirability, and specific location of pedestrian and bicycle facilities would primarily be evaluated during the zoning process; not only will recommendations within this chapter be considered, but also recommendations in **Chapter XX (Land Use and Growth Management)** and **Chapter XX (Transportation)**. For public investments, the design, scope, and construction of facilities will largely be dependent on need, location, safety, and intended function of the facility. To that end, a planning and review process that closely follows VDOT's *Policy for Integrating Pedestrian and Bicycle Accommodations* should be implemented.

Not only should pedestrian/bicycle infrastructure be incorporated into new development, but open space should be provided that provides opportunities for passive and active recreation. Open spaces should be located in highly-visible locations accessible to the broader community, and their placement and design in isolated areas that provide limited access should be discouraged.

Partnerships and coordination are necessary to improve pedestrian and bicycle mobility and provide opportunities for active living:

- *County/Neighborhood Partnerships*

Some established neighborhoods and commercial areas do not have adequate pedestrian/bicycle infrastructure to meet residents' needs and expectations. This project type focuses on opportunities for existing neighborhoods and/or business centers to partner with Hanover County when there is community support for enhanced pedestrian or bicycle infrastructure. Projects within this general classification are often initiated by the community.

The types of infrastructure improvements may consist of pedestrian paths, sidewalks, and/or bicycle facilities. Examples of the type of community-supported projects include linking existing sidewalk or pedestrian infrastructure to nearby schools; extending pedestrian paths to link neighborhoods; and creating pedestrian or bicycle linkages to businesses and other community facilities (such as parks and libraries). In commercial areas, the business community may be interested in streetscape improvements, such as sidewalks, street trees, pedestrian-scale lighting, bicycle parking, and/or undergrounding overhead utilities.

Many projects within this classification may qualify for funding through VDOT's Transportation Alternative Program (TAP). These funds are allocated on a competitive basis. Utilization of TAP funds generally requires a local match; therefore, the community or entities seeking support from Hanover County to access these funds would be obligated to contribute the matching funds.

- *Virginia Department of Transportation (VDOT)*

When planning and designing public road improvements, VDOT's ***Bicycle and Pedestrian Accommodation Decision Process*** must be considered. This policy assumes all VDOT projects will include some form of pedestrian and/or bicycle accommodation and is intended to determine the most appropriate type of accommodation based on location, need, design, and safety considerations. Implementation of this policy does not represent a change in road planning and design operational strategy, but rather recognizes VDOT's scoping and funding requirements.

- *Public Facilities*

Pedestrian and bicycle facilities are not the only means by which Hanover can facilitate active living. Public parks play a vital role in the well-being of citizens as well. With nearly 1,300 acres of existing and planned parks, these facilities and other programs sponsored by Parks and Recreation provide extensive opportunities for physical activity and social interaction for all age groups. Schools and other public facilities (as permitted by law) provide additional areas for recreation.

As public parks and other public facilities are planned and improved, the County should consider providing and/or enhancing pedestrian and bicycle facilities to connect to the surrounding community. The County can also consider connections to the already funded Fall Line Trail and developing other linear trail opportunities, such as linear park/trail along the Chickahominy River. While some of these opportunities may require public land acquisition, the County can partner with landowners and developers to reserve right-of-way for linear parks and trails during the zoning process.

- *Private Development*

Privately-owned recreational amenities can be incorporated into new development. These facilities may be owned and maintained by a homeowners association, property owners association, or similar entity that makes these facilities accessible to residents (or, within multi-use and business-oriented developments, employees and customers). **Chapter X (Land Use and Growth Management)** includes recommendations regarding the amount of open space that should be provided within different development types and how it should be designed. The zoning ordinance also includes requirements regarding the provision of open space within new development. Most development should incorporate easily-accessible open space within the development that offers opportunities for active and passive recreation.

Pedestrian/bicycle facilities should be provided throughout new development, providing access to open space and other destinations within and adjacent to the development to create an interconnected network. **Chapter X (Land Use and Growth Management)** includes recommendations regarding the provision of pedestrian/bicycle infrastructure within different development types.

Pedestrian/Bicycle Capital Investment Focus Areas

To maximize the impact of public investment, some focus areas have been identified for pedestrian/bicycle improvements. These areas include a mix of uses in close proximity, higher population densities, and/or an existing pedestrian/bicycle “framework” that could be enhanced with strategic investments.

- **Pedestrian and Bicycle Spine Network**

Map **XX** shows a pedestrian and bicycle “spine network” within the Suburban Service Area (SSA) that could provide safe and connected facilities for walking and biking. The “spine network” links communities to necessities (such as schools, libraries, and grocery stores) and can be used as a starting point to guide further improvements to active living facilities. Specific sidewalk and pedestrian crossing improvements are recommended along the “spine network.”

- **Mechanicsville Village**

This area includes a mix of businesses and community destinations (churches, elementary school, etc.) in close proximity to established residential areas, providing an opportunity for residents to walk or bike for everyday needs and services. As much of the area is developed, improvements would likely involve redesigning existing streets and roadways.

- **Lee-Davis Road Corridor**

This area includes a mix of businesses and community destinations (library, schools, churches, etc.) in close proximity to established residential areas, providing an opportunity for residents to walk or bike for everyday needs and services. While some newer residential developments include sidewalks, many of these neighborhoods do not have any pedestrian/bicycle infrastructure. Improvements would likely involve redesigning existing streets and roadways.

- **Atlee Station Road Corridor + Rutland**

There are a mix of businesses and community destinations (library, YCMA, schools, etc.) in close proximity to established residential areas, providing an opportunity for residents to walk or bike for everyday needs and services. Many of the newer residential neighborhoods include sidewalks and other pedestrian/bicycle improvements, so efforts in this area should focus on closing gaps in the network to provide safe and convenient connections between destinations.

In this area, walk/bike audits have been completed and identify potential pedestrian/bicycle improvements that could make it safer and more convenient for students walking or biking to Cool Spring Elementary School, Chickahominy Middle School, and Atlee High School (Cool Spring Elementary School Walkabout Report: May 2021 and Chickahominy Middle School Walkabout Report: December 2021). These reports can provide guidance for potential improvements in that area.

- **Sliding Hill Road Corridor**

This area includes a mix of businesses and community destinations (library, schools, churches, etc.) in close proximity to established residential areas, providing an opportunity for residents to walk or bike for everyday needs and services. While some newer residential developments include sidewalks, many of these neighborhoods do not have any pedestrian/bicycle infrastructure.

- **U.S. Route 1 Corridor (South of Ashland)**

There are existing businesses in this area, along with some existing residential development (including the Colonial Estates and Stoney Run Village mobile home parks). Even though there are a variety of destinations in this area, there is limited pedestrian/bicycle infrastructure. Due to high traffic volumes along U.S. Route 1 itself, it may be appropriate to provide alternative routes for pedestrians and cyclists along parallel routes with lower traffic volumes, such as Telegraph Road and Old Telegraph Road.
- **Woodside Lane Area**

Several existing residential neighborhoods that include pedestrian/bicycle infrastructure could be connected to Washington Lacy Park
- **Brown Grove Rural Historic District**

While more rural in nature, this residential development is near commercial uses that could provide services to residents. The residents of this community has expressed a desire for sidewalks. U.S. Bicycle Route 76 passes through the Brown Grove Rural Historic District along Ashcake Road and Sliding Hill Road.
- **Rural Villages**

Three rural villages (Beaverdam, Montpelier, and Hanover Courthouse) have a mix of uses within close proximity, including community destinations (schools, churches, government facilities, etc.). These areas could provide opportunities for walking and biking in more rural parts of the County, where there is limited existing pedestrian/bicycle infrastructure.
- **Cold Harbor Battlefield Sites**

During the Envision Hanover process, there has been a desire to create pedestrian and biking opportunities to connect the various Cold Harbor Battlefield sites for tourism engagement.
- **Near Regional Trail Networks and Public Facilities**

Invest in pedestrian/bicycle infrastructure to provide new connections and close gaps in the existing network within one mile of regional trails networks (such as the Fall Line Trail) and public facilities (schools, libraries, parks, etc.). Consideration should be given to providing a connection between the Fall Line Trail and Atlee Station Road Corridor. Kings Acres Road is a possible route.

Fall Line Trail

Throughout the Richmond region, VDOT and localities have been planning for and investing in regional trail networks that improve pedestrian/bicycle mobility, create recreational opportunities, and can support tourism. One of the major regional trail projects that will benefit Hanover County is the Fall Line Trail. Once complete, the shared-use path will run 43 miles thorough seven localities: Ashland, Hanover, Henrico, Richmond, Chesterfield, Colonial Heights, and Petersburg. In Hanover County, the facility will generally follow the route of the historic Ashland Trolley Line, running approximately

4.8 miles from the end of the existing Trolley Line Trail in Ashland to the Chickahominy River near Holly Hill Road. As of early 2023, design was underway.

As the Fall Line Trail is developed, the County could consider partnering with VDOT and other agencies to provide amenitized access points at key locations. The trail crosses two existing major thoroughfares (Cedar Lane and Cobbs Road), along with some local roads.

Parking areas, benches, shaded rest areas, water fountains, fix-it stations, and other amenities could be provided at these crossings.

As rezoning requests and other development proposals next to the Fall Line Trail are reviewed, consideration should be given to how these projects could connect to the trail. Also consider how they can be designed to create attractive views from the trail and provide amenities to trail users. For example, vegetated buffers could be maintained along the trail and/or buildings within the development could be oriented towards the trail.

The Fall Line Trail will serve as a north/south spine for the regional pedestrian/bicycle network. In Hanover County, a connecting trail along the Chickahominy River was proposed in the 2017 Comprehensive Plan. No specific alignments or designs for the Chickahominy River Trail have been determined.

U.S. Bicycle Routes

Established in 1978 by the American Association of State Highway and Transportation Officials (AASHTO), the United States Bicycle Route System (USBRS) is a network of long-distance cycling routes in the United States that include shared roadways, on-road accommodations, and off-road shared use paths. On-road segments were selected for lower traffic volumes, posted speed limits, and generally safer riding conditions. As traffic volumes and speeds increase, conditions for biking becomes less safe. VDOT works with regional governments, localities, governments, and advocates to identify safer alternates.

Two U.S. Bicycle Routes traverse Hanover County:

- U.S. Bicycle Route 1 generally goes north/south through the County.
- U.S. Bicycle Route 76 generally goes east/west through the County.

The two routes intersect in Ashland and follow the same route northwest from the town.

This long-distance network provides opportunities for tourism and for local cyclists. As roadways projects are planned along these routes and zoning cases are evaluated, the County should consider providing improved accommodations for cyclists (where appropriate). For example, bicycle lanes, wide shoulders, shared-use paths, or other accommodations for cyclists could be provided. Increased signage and improved amenities, such as fix-it stations and bicycle parking at major destinations, could also be considered.

Overall Objectives and Strategies for Active Living

Objective AL.1: Support development of a regional trail network.

- **Strategy AL.1a:** Support development and construction of the Fall Line Trail, including connections to adjacent developments (existing and proposed) and the construction of amenitized access points.
- **Strategy AL.1b:** Evaluate the possibility for a linear park and shared-use path along the Chickahominy River that ultimately connects to the Fall Line Trail.
- **Strategy AL.1c:** Evaluate and plan for a shared-use path that connects battlefield sites in the Cold Harbor/Mechanicsville area.
- **Strategy AL.1d:** Consider improving accommodations for cyclists along roadways that are part of U.S. Bicycle Route 1 and/or U.S. Bicycle Route 76 as zoning cases are evaluated and roadway projects are under design.

Objective AL.2: Encourage the creation of a built environment which provides residents with opportunities for active living.

- **Strategy AL.2c:** Evaluate proposed development during the zoning process to determine how effectively the proposed design promotes active living through the provision of safe, convenient, and comfortable pedestrian/bicycle infrastructure and the design/location of open space.
- **Strategy AL.2d:** Design roadway improvements and other public facilities to incorporate safe, convenient, and comfortable pedestrian/bicycle infrastructure that provides thoughtful and direct connections to residential areas and community destinations.
- **Strategy AL.2e:** Review zoning ordinance and subdivision regulations to create more walkable places.
- **Strategy AL.2f:** Encourage collaboration between County departments (including Health, Parks and Recreation, Public Works, Economic Development, and Planning) to align policies, design standards, and funding resources to promote healthy, active, and vibrant communities.
- **Strategy AL.2g:** Identify the feasibility (including possible funding sources) of retrofitting established neighborhoods to include pedestrian/bicycle infrastructure, traffic calming, pocket parks, street lighting, and/or other amenities that support active living within the Suburban Service Area (SSA).
- **Strategy AL.2h:** Pursue funding opportunities to close gaps in the pedestrian/bicycle network within the identified focus areas, including improved pedestrian/bicycle access to schools and along the recommended pedestrian and bicycle “spine network.”

Active Living Design Concepts

These are examples of features that could be incorporated into new development, existing neighborhoods, and/or planned road projects to improve mobility for pedestrians and cyclists and support active living.



Clearly-marked curb ramps and crosswalks help ensure the safety of pedestrians and bicyclists when crossing roads.



A *pedestrian refuge island* is a refuge area that is intended to help protect pedestrians crossing a road, providing a place to wait as vehicular traffic passes. This pedestrian refuge island in Arlington features *Rectangular Rapid Flashing Beacons (RRFBs)*, which further alert motorists that a pedestrian is crossing the street. When a pedestrian approaches the crosswalk, they press a button that activates a set of flashing lights, improving their visibility as they cross the street.



Pedestrian traffic signalization is an effective means of enhancing pedestrian safety when linking existing or planned neighborhoods with nearby business centers or public facilities.



Shared-use paths can be located along major thoroughfares or be part of a larger linear park, providing pedestrian and bicycle access to amenities and environmental/cultural resources. Shared-use paths also enhance the safety and comfort of users.



Access points can be provided along regional shared-use paths, such as the Fall Line Trail. They can include parking (for cars and bikes), benches and seating areas, maps, shelters, bike fix-it stations, and other amenities for pedestrians and cyclists using these facilities.



A pedestrian cut-through at the end of a cul-de-sac provides a direct connection from neighborhood sidewalks to a shared-use path along a major thoroughfare.

	<p>Pedestrian pathways should be provided to connect the main entrance of major destinations to sidewalks and shared-use paths along adjacent major thoroughfares, providing a clear, unobstructed path that is accessible to all users. Trees and landscaping along these paths provide shade and create a more attractive environment for walking.</p>
	<p>Sidewalks are provided along major thoroughfares, with pedestrian connections to adjacent businesses. Crosswalks are clearly marked and designate routes pedestrians can take between adjacent businesses.</p>
	<p>Strategic and convenient placement of bike racks adjacent to stores, restaurants, and other identified activity centers is a cost-effective strategy to encourage and promote biking within communities.</p>
	<p>Open spaces, including pocket parks, that are connected by sidewalks and pedestrian paths to surrounding development can create opportunities for active living and recreation.</p>