Chapter 3A

TRAILWAYS MASTER PLAN

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Introduction

The purpose of the Trailways Master Plan (Plan) is to provide a framework around which a comprehensive system of bicycle, pedestrian, and equestrian friendly improvements can be implemented throughout the County for user safety, provision of non-motorized transportation alternatives, and recreational value. This Plan is expected to positively contribute to transportation systems (as transportation alternatives) and provision of parks and recreation amenities considerate of levels of service as established in the Public Facilities Chapter of the Comprehensive Plan. The Plan also is intended to complement existing and future land uses, economic development and tourism related goals. For the purpose of this Plan, such improvements will be collectively referred to as "trailways".

The Plan includes transportation systems improvements paired with planned road improvement projects as outlined in the Thoroughfare Plan including provision of sidewalks, shared use or multi-use paths, paved shoulders. The Plan also includes interconnected off road corridor greenway trails (varying surface types) considerate of intended user groups, location, connectivity, existing and future land uses, and potential vehicular traffic conflicts and volumes. In a number of instances, planned greenway trails and road corridor based improvements such as planned shared use paths, complement one another and have a shared alignment.

This Plan addresses trailways on public land, public rights-of-way, and private land where the trails are open to the public. This Plan identifies a number of goals, objectives, and implementation strategies that Spotsylvania County can use in the development of an integrated system of trailways. An integrated system would link the existing trailway segments within the County into a larger common network of trailways that access residential areas, state, county, and national parks, forests and wildlife management areas, significant viewsheds, entertainment, water related resources, cultural and historic resources, schools, retail outlets, commercial services, mixed-use areas, employment centers, and transportation nodes. On a larger scale they can be incorporated into a regional system of trailways, effectively allowing for inter- and intra-jurisdictional infrastructure, regional tourism, and promoting regional alternative transportation possibilities.

The Plan has been developed acknowledging that full build-out of the trailways system with all amenities will not take place immediately. This will be a flexible, living plan and will be subject to future developments and economic conditions, as the community evolves. Levels of interest, available funding, and community support factors may fluctuate over time; so may the rate at which implementation of the plan is feasible.

Plan History

As noted in Chapter 3, the Spotsylvania County Trailways Master Plan was initially adopted by the Spotsylvania County Board of Supervisors on February 22, 2011 as a standalone document. The Plan was developed initially with direction from the 2008 Comprehensive Plan, 2009 Parks and Open Space Master Plan, numerous community meetings, community survey, collaboration with

the Spotsylvania Greenways Initiative (SGI), work sessions and public hearing process. In 2011 the Virginia Chapter of the American Planning Association bestowed the 2011 Outstanding Plan Award- Plan Element upon the Plan.

In the interest of assuring the Plan does not become outdated or inconsiderate of opportunities that may arise from changes elsewhere within other elements of the Comprehensive Plan, the critical elements of the Plan were reviewed, updated, and incorporated into the Comprehensive Plan in Chapter 3A, here. Abandonment of the standalone Plan in favor of inclusion as a Comprehensive Plan element better positions it for continued monitor, pursuit, and review and update consistent with the 5-year review and update cycle. Otherwise staff has found there tends to be little impetus to update standalone plans that may become outdated or proactively amended to reflect new opportunities or routing alternatives.
Amendments between the 2011 Plan and this iteration result in an update that more harmoniously links planned greenway trails to road based improvements, reduces potential plan recommendations; potential routes that conflict with existing developments or past community input. Road based implementation has been found to be more favorable and feasible in many instances. Bicycle and pedestrian improvements also lend added support in the awarding of transportation dollars for road improvement projects. Bike/Ped improvements add strength to transportation project applications for funding such as Virginia's Smart Scale applications. Plans also lend support and basis for VDOT Project Scoping, Highway Safety Improvement Program (HSIP) Projects, County guidance on transportation projects managed by others, etc.

This update respects and upholds the many months of work and input that went into the development of the 2011 Trailways Master Plan and allows the planning process and implementation efforts to continue on without a radical shift or abandonment on prior plans and progress. This update is not intended to "reinvent the wheel". This update will play an integral role in administration of the County Design Standards Manual, specifically Article 5 where issues have been identified in the past related to required frontage improvements. This update will also better inform and influence bike/ped related recommendations for rezoning and special use permit applications.

The Code of Virginia requires the study of transportation needs and their incorporation in comprehensive plans. Section 15.2.2223 requires coordination of plan amendments that will substantially affect transportation on state controlled highways with the Virginia Department of Transportation. Following staff review and update and work sessions held with the County Transportation Committee and Planning Commission, the draft Transportation Plan was routed to the VDOT Fredericksburg District Office for review in September, 2019. Following the initial VDOT review and County submittal of revisions on December 20, 2019, the VDOT-Fredericksburg District finalized their review with no additional comments, on March 25, 2020.

Existing Plans

The Trailways Master Plan is Spotsylvania County specific however has been developed to "fit" within the scope of larger regional, state or national scale trail routes that involve Spotsylvania County. This Plan was created in consideration of other existing plans to ensure that it is

consistent and harmonious with those other important planning efforts. The result is a Plan that is intended to complement larger regional, state, and nationally significant trail systems. Specifically, as follows:

Nationally Significant

U.S. Bicycle Route 1

U.S. Bicycle Route 1 was designated by the American Association of State Highway and Transportation Officials (AASHTO) in 1982. The route runs the length of the United States eastern seaboard from Maine to Florida. It is one of the two original U.S. Bicycle Routes. The Bicycle Route also coincides with the Atlantic Coast Trail, an Adventure Cycling Association trail. In Spotsylvania County, the Bicycle Route is designated along Lee Drive, Benchmark Rd, Mills Dr, Massaponax Church Rd, Church pond Rd, Guinea Station Rd. VDOT road signage identifying the Bicycle Route designation was added along the corridor within the past five years.

The American Association of State Highway and Transportation Officials (AASHTO) recognize the segments in North Carolina and Virginia as being the only "official" segments of U.S. Bicycle Route 1.

U.S. Bicycle Route 76

It is important to recognize that the second of the original U.S. Bicycle Routes, U.S. Bicycle Route 76, passes just to the south of Spotsylvania County in Louisa County. The Bicycle Route is an east-west corridor accessing Virginia, Kentucky, and Illinois. With proper mapping and advertisement, proximity of the Bicycle Route to Spotsylvania County potentially could bring additional users into the County, resulting in an additional tourism benefit.

The U.S. Bicycle Route 76 coincides with the TransAmerica Trail, an Adventure Cycling Association trail.

East Coast Greenway (ECG)

Primary users: A multi-use path serving bicycle (road or mountain), pedestrian.

Approximate Distance: 13 Miles

Intended final surface: Asphalt shared use path

The East Coast Greenway (ECG) is a developing trail system, spanning nearly 3,000 miles as it winds its way between the State of Maine's northern boundary with Canada and Key West, Florida, linking all the major cities of the eastern seaboard. The ECG long term vision and plans include a 100% firm-surface road separated trail extending all 3,000 miles. At present, thirty-two (32) percent of the planned greenway is now located on safe, vehicle

traffic-free paths. This figure is up from 25% as reported in the 2011 Trailways Master Plan. A portion of the ECG alignment is planned to pass through Spotsylvania County. The East Coast Greenway Alliance (ECGA) is the non-profit organization spearheading the development of the ECG. Implementation of the greenway is largely accomplished at the local and regional level resulting from recognized community benefits expected to come with inclusion along the planned route. As per the ECG, "The ECG is being built by linking together locally owned and managed trails into a continuous route." Concerning why communities "buy-in" to implementation efforts, "Multi-use trails like the East Coast Greenway are an integral part of local transportation systems. They provide free recreational opportunities for all ages, encourage healthier lifestyles, and bolster local economic development."

The Virginia Department of Conservation and Recreation recognizes the importance of the ECG within the Commonwealth of Virginia and has specifically targeted development of the East Coast Greenway as part of the 2018 Virginia Outdoors Plan.

Within Spotsylvania County, implementation of the ECG has been limited. A commercial pad site located at the corner of Tidewater Trail and Bowman Drive was approved for development via site plan review in December, 2018. The project includes development of a standalone restaurant with a trail frontage improvement along Tidewater Trail. In August, 2018, 0.25 miles of right-of-way intended for future trail construction was secured along Thornton Rolling Road as part of project conditions associated with Board of Supervisors approval of a special use permit application there. This will complement efforts to establish an East Coast Greenway Auxilliary Trail. Otherwise, large scale enhancements associated with ECG conversion from road based to roadside trail are most likely to occur via additional new development and/or road widening projects as targeted by the Thoroughfare Plan including along Tidewater Trail, Mills Dr (Rt 17).

On March 5, 2020 the East Coast Greenway Alliance approved a planned route shift in the region impacting the City of Fredericksburg, Spotsylvania County, and Caroline County. This revision resulted from concerns raised amongst regional partners about the viability of the prior route specifically as it related to Lee Drive (NPS)- Connection pointe between the City of Fredericksburg and Spotsylvania County and Thornton Rolling Road, as connection to Caroline County. In Spotsylvania County, the route shift included realignment of the planned route away from Lee Drive (NPS) and to Tidewater Trail (a previously identified alignment alternative) and complement to the County's Planned Deep Run Trail. This approval followed a Statewide meeting of the East Coast Greenway Alliance held in the City of Fredericksburg on February 5, 2020. At the February 5, 2020 meeting of the Virginia East Coast Greenway (ECG) Committee in Fredericksburg, a group of local planners presented a set of proposed changes for the ECG route through the City of Fredericksburg, Spotsylvania County, and Caroline County. The proposed changes were discussed by the committee members present. Committee members who were not present at the meeting were given until February 21, 2020 to make comments on the proposed route changes.

These changes were proposed for a number of reasons:

• To better align with bike/pedestrian infrastructure plans in localities' Comprehensive Plans and prospects for road improvements (Caroline County connection)
• To route along roads with planned road widening projects and/or planned multi-use trails
• To increase the likelihood of funding and project prioritization for local multi-use trail construction projects
• To route the ECG outside of the Fredericksburg & Spotsylvania National Military Park, where user conflict between motor vehicles and bicyclists has been identified by the National Park Service as an issue along Lee Dr.

No opposition to the proposed route changes were voiced by committee members since the distribution of the presentation. A memorandum issued to Spotsylvania County on March 5, 2020 provided an official notice of changes to the ECG Route in the region. The East Coast Greenway Alliance's online mapping platform (map.greenway.org) will reflect the new route by March 31, 2020, and all future hardcopy maps produced by the Alliance will show the new route.

Virginia Significant

2018 Virginia Outdoors Plan (Va. Dept. of Conservation and Recreation)

The Virginia Outdoors Plan is the State's official document regarding land conservation, outdoor recreation and open space planning. It assists all levels of the public and private sectors to meet needs pertaining to those issues. The plan provides guidance for the protection of lands through actions of the Virginia Land Conservation Foundation (VLCF), and the plan is required in order for Virginia to take part in the federal Land and Water Conservation Fund (LWCF) program. Within Spotsylvania County, a VLCF award was granted to the County in 2011 that resulted in securing a recreational trail easement along a roughly 2-mile segment of the Virginia Central Railway Trail between Brock Road and Jackson Trail East. This easement greatly enhances the opportunity to eventually construct a significant historic portion of the planned VCR Trail. Within Spotsylvania County, both the East Coast Greenway (ECG) and Virginia Central Railway Trail have been identified as featured projects for continued implementation. The 2018 Virginia Outdoors Plan can be found **HERE**.

Virginia Birding and Wildlife Trail (Va. Dept. of Game and Inland Fisheries)

Within Virginia's 43,000 square miles of diverse natural habitat, there are 400 species of birds, 250 species of fish, 150 species of terrestrial and marine animals, 150 species of amphibians and reptiles, and a wide variety of aquatic and terrestrial invertebrates. The *Virginia Birding and Wildlife Trail* program is the first statewide program of its kind in the United States. In Virginia, three phases of the trail link wildlife viewing sites throughout the state. An estimated 1,041 visitors are using each VBWT site annually according to the *2008 Assessment of the Virginia Birding and Wildlife Trail* prepared for the Virginia Department of Game and Inland Fisheries. The study looked at the economic contribution

of the VBWT to a local economy, resulting in a statewide economic impact of $8,638,895 annually.

Spotsylvania County is part of the Piedmont Trail system of the Virginia Birding and Wildlife Trail. In all, the Piedmont area offers 13 loops including expansive grasslands, forested tracts, pineland savannahs, several large reservoirs, and an abundance of rich history and culture. Of the 13 loops within the Piedmont system, four (4) are located within Spotsylvania County; they include: Loriella Park, Ni Reservoir Recreation Area, Spotsylvania Courthouse Battlefield, and Chancellorsville Battlefield. Motts Reservoir Recreation Area, located within Spotsylvania County, but owned by the City of Fredericksburg, is also within the loop system.

Regionally Significant

2045 George Washington Region Bicycle and Pedestrian Plan

Through the Fredericksburg Area Metropolitan Planning Organization (FAMPO), the GWRC has completed and adopted a regional bicycle and pedestrian plan. The most recent iteration of the Plan recommends bicycle and pedestrian improvements within the region through 2045. This plan is part of the Constrained Long Range Plan (CLRP) and serves as a tool to direct resources toward defined, prioritized, cost-effective bicycle and pedestrian improvements. The project area encompasses the entire GWRC region including the City of Fredericksburg, Stafford County, Spotsylvania County, Caroline County, and King George County. Within a regional context, Spotsylvania County specific bicycle and pedestrian needs recommendations are primarily targeted to existing public roadways with recommendations for sidewalks and shared use paths in developed or developing areas, and shoulder improvements in more rural areas primarily located outside of the Primary Development Area of the County. The regional plan also includes the Virginia Central Railway Trail and recommends improvements to accommodate the East Coast Greenway. Recommendations from the regional bicycle and pedestrian plan have been synthesized with identified road improvement projects from the County Thoroughfare Plan, and planned greenway system resulting from the County's 2011 Trailways Master Plan. The result is an updated and refined Trailways Master Plan map for the County (located in Chapter 3A of the Comprehensive Plan). The 2045 George Washington Region Bicycle and Pedestrian Plan can be found **HERE**.

An update to the regional plan is expected to kick-off in 2021 with the Regional Bicycle and Pedestrian Advisory Committee.

County Significant

Spotsylvania County Comprehensive Plan

The Spotsylvania County Comprehensive Plan is a guide designed to encourage the most appropriate use of land, water and resources within the County consistent with the interests of the citizens. The Comprehensive Plan sets forth goals, objectives, policies and

implementation techniques that will guide the development activity within the County and promote, preserve and protect the health, safety, and general welfare of its citizens. Specifically, the Plan provides data and analysis on land use, transportation systems, housing, resource protection, public facilities and utilities. As of 2020, the Comprehensive Plan is the host location for the County Trailways Plan.

Recommendations and levels of service standards established within the Comprehensive Plan; those in the land use, transportation, and parks and recreation public facilities section, establish the warrant for a Trailways Master Plan.

Thoroughfare Plan

An element of the Comprehensive Plan, the Thoroughfare Plan identifies improvements to the road network in Spotsylvania County. Though the Thoroughfare Plan includes plans for new roadways, physical improvements to existing roadway facilities is the primary focus of the plan by volume. Improvements within the plan advocate for expanded lane widths or the addition of new lanes. Planned road improvement projects include include a bicycle and pedestrian-friendly element, whether it is the installation of shoulders, shared use paths, and/or construction of roadside sidewalks. Provision for bicycle and pedestrian accommodations are critical to ensuring improvements meet VDOT acceptance standards. Achievement of trailway implementation goals paired with Thoroughfare Plan road improvement projects results in dual benefits. Integration of roadway based projects with planned greenway trails greatly assist implementation efforts.

Enabling Legislation

To successfully implement this plan, the Spotsylvania County Planning Department requested that the County Attorney's Office identify statutes and ordinances that enable the County to plan for and pursue land acquisition or easements in order to construct and maintain trailway facilities for public use. Their research identified a number of sources of law which can provide guidance planning and implementing trailways within the County. The principal legislation granting authority for this plan is indicated below:

Virginia Open Space Land Act; Va. Code Ann. §§ 10.1-1700 – 10.1-1705:

The Virginia Open Space Land Act enables public landholding bodies to acquire land or easements for the preservation of open space and to obtain and utilize funds to develop and maintain facilities on land acquired. This land shall conform to the official comprehensive plan for the area in which the property is located. No land designated as open-space under the authority of this Act can be converted from that status unless the conversion or diversion is determined by the public body to be essential to development and growth of the region and in accordance with the region's official comprehensive plan and there is other substituted real property of equal or greater value.

Planning, Subdivision of Land and Zoning; Va. Code Ann. § 15.2-2200:

This section of the Virginia Code "encourages" local governments to improve the public health, safety, convenience and welfare of its citizens and to plan for the future development of communities to the end that transportation systems be carefully planned; that new community centers be developed with adequate highway utility, health, educational, and recreational facilities; that the needs of agriculture, industry and business be recognized in future growth; that residential areas be provided with healthy surrounding for family life; that agricultural and forestal land be preserved; and that the growth of the community be consonant with the efficient and economical use of public funds.

Comprehensive Plan to be Prepared and Adopted; Scope and Purpose: Va. Code Ann. § 15.2-2223:

This statute outlines the proper method by which a comprehensive plan is to be prepared and adopted. Every local Planning Commission is to prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction and every governing body shall adopt a Comprehensive Plan. In preparation for the comprehensive plan, the commission shall make careful and comprehensive studies of the existing conditions and trends of growth within the locality. In conjunction with the comprehensive plan, "each locality shall develop a transportation plan that designates a system of transportation infrastructure needs and recommendations that may include the designation of new and expanded transportation facilities and that support the planned development of the territory covered by the plan and shall include, as appropriate, but not be limited to, roadways, *bicycle accommodations*, *pedestrian accommodations*, railways, bridges, waterways, airports, ports, and public transportation facilities" (emphasis added).

Legal Status of Plan; Va. Code Ann. § 15.2-2232

This section is critical to the development of a Capital Improvements Plan (CIP) and the identification of specific projects therein. This section establishes that capital projects such as a new park, public building, "feature" must be shown within the adopted comprehensive plan to exhibit substantial accordance with the local comprehensive plan. There are transportation goals, road improvement standards necessary to result in VDOT street acceptance, and parks and recreation related levels of service standards that may necessitate § 15.2-2232 considerations as the County seeks to implement plans or meet levels of service standards concerning trailways projects.

Parks, Recreation Facilities, Playgrounds, etc.; Va. Code Ann. § 15.2-1806(B):

This section of the Virginia Code established that a locality may establish, conduct, and regulate a system of hiking, biking, and horseback riding trails. Towards that end, a locality may set apart any land or buildings owned or leased by it for that purpose and can obtain licenses or permits for such use on land or buildings the locality does not own.

Streets, Sidewalks, and Public Rights-of-way Generally; Va. Code Ann. § 15.2-2001:

This statute sets out the authority of localities to maintain and update streets, sidewalks and public rights-of-way. This includes the authorization that "localities may make, improve and repair sidewalks upon all public rights-of-way and may convert sidewalks to bicycle paths."

Planned Facilities

Planned facilities include upgrades to existing and/or planned roadway right-of-ways and off-road greenway corridors. As noted above, the Plan reflects a synthesis of a number of national, state, and local plans concerning trailway improvements. The following outlines the planned improvements that when complete will result in a comprehensive network of non-motorized transportation system improvements throughout the County.

The trailways map included here in Chapter 3A may not represent all roads where bike/ped improvements may ultimately result. There may be instances throughout the County where existing roads not targeted for thoroughfare plan or regional bicycle and pedestrian plan road improvement or a greenway corridor will still warrant bicycle or pedestrian accommodation as part of required frontage improvements associated with development of land. Article 5 of the Spotsylvania County Design Standards Manual establishes bicycle and pedestrian requirements to be considered as part of site design and development. Additionally, there may be instances where sidewalk gaps, etc. exist along existing roads without larger scale improvements planned. The plan does not intend to dismiss the importance of these improvements to enhance connectivity, bicycle or pedestrian safety, and enhanced accessibility and walkability within the community. The attached map is intended to serve as a guide for implementation of bicycle and pedestrian infrastructure tied to major roadway right-of-way improvement projects and establishment of major greenway corridors that traverse the County.

Roadway Right-of-Way Improvements

Roadway right-of-way bicycle and pedestrian-friendly improvements that have been identified in this plan include the installation of new sidewalks, parallel to road multi-use (or shared use) paths, shoulder improvements, shared road signage improvements, or a combination. Such improvements are intended to promote bicycle and pedestrian activity and connectivity throughout the County and to make existing bicycle and pedestrian activity safer than current conditions for all users. The roadway based improvements identified in this plan include all voting districts of the County and offer residents and outside tourists the ability to travel more safely, resulting in better roadway conditions for bicycles and pedestrians and motor vehicles alike. Recommended improvements tied to roadways are primarily based in Thoroughfare Plan improvement projects as well as the George Washington Region Bicycle and Pedestrian Plan. Improvements also consider the East Coast Greenway and US 1 Bike Route. Opportunities for planned road improvement based bicycle and pedestrian improvements to help implement continuation of greenway corridors have been identified within the plan.

Greenway Improvements

Greenways serve a variety of functions including recreation, transportation, wildlife habitat, water quality protection, flood hazard mitigation, aquifer recharge, erosion prevention, property value enhancement and scenic beauty. Greenway Trails are located in areas of open space, usually linear, that connect and protect various natural, recreational, and historic or cultural resources via features such as streams, ridges, utility easements, or abandoned roads or railroads. Greenways can also serve to connect residential areas with employment, entertainment, commercial retail and services and also act as potential evacuation routes if need be. In the environment, greenways connect natural habitat areas, allowing for the movement of species and promoting healthy ecosystems. Greenway Trails can be publicly or privately owned but for the purposes of this plan would be open for public use and enjoyment. Depending on the identified classification of the trail, greenway trails may accommodate such things as hiking, biking, jogging, roller blade, or equestrian uses or a combination of them. Winter uses for the corridors might also include snowshoeing or cross-country skiing.

Depending on the intended user, environmental conditions and funding, greenway trails may be surfaced with soil, sand, clay, stone dust, woodchip or asphalt materials.

Due to existing land use and development constraints in a number of areas, planned greenway trails such as the Virginia Central Railway Trail include a combination of greenway trail sections (away from road) and sections along the road in the form of a multi-use path. Considerate of past development encroachments upon sections of the corridor and expressed citizen input and concerns, the plan recognizes instances where bypass routes are more favorable paired with planned road widening projects nearby. For the Virginia Central Trail, bypass alternatives were identified as part of the Virginia Central Railway Trail Design Guidelines (October, 2012) prepared for the Fredericksburg Area Metropolitan Organization (FAMPO) and Spotsylvania County by Kimley-Horn and Associates, Inc.

Trailways Master Plan Map (See Map(s))

Based on Geographical Information Systems calculations, in all approximately 100 miles of greenway trails have been identified. This calculated number represents the sum of approximate concept level corridor lengths only and does not consider ancillary spurs from trail heads, from subdivisions, from park facilities, cost based deviations, land acquisition or easement availability and variability, design and construction deviations as may be necessary. The calculated value also avoids assuming the inventory of trail spurs that may be developed to access overlooks and other points of access or interest. Ancillary spurs meant to access the main trail corridors or provide access to points of interest are expected to be identified and planned for during the implementation phase of this plan as particular trailway corridors are studied and engineered for construction. In total therefore it is expected that the greenway plan presented here represents over 100 miles of new trail facilities, significantly decreasing the current and future trailway level of service deficit as outlined in the Parks and Recreation Public Facilities Element found in Chapter 4.

The inventory of planned greenways was developed with extensive community input and consideration of trails deficit as outlined in the adopted Parks and Recreation Public Facilities Section of the Comprehensive Plan. See the Spotsylvania County Trailways master plan map for a complete view of the planned greenway system. Please note that this map plans for the general location of planned greenway corridors only and does not specify any one particular alignment or exact location, except where greenways run contiguous to road corridor based improvements (resulting from road widening projects, etc.). Descriptions of the county-wide greenway bicycle, pedestrian, and equestrian friendly improvements identified within this plan can be found below.

The Spotsylvania Battlefields Loop

The Virginia Central Rail Trail, along with the Ni River Corridor Trail, has been envisioned to be part of a Spotsylvania Battlefields Loop trail system accessed by the East Coast Greenway. The northern portion of the "loop" would feed off of the Virginia Central Railway Trail whose connection to the East Coast Greenway occurs within the City of Fredericksburg. The northern connection will ultimately provide access to both the Fredericksburg Battlefield and Chancellorsville Battlefield to the west prior to connecting with the proposed Ni River Corridor Trail that will run back to the southeast. The Ni River Trail would then provide opportunity for access to the Spotsylvania Courthouse Battlefield before exiting the County into Caroline County en route to the Stonewall Jackson Shrine there. This would be the south end connection to the East Coast Greenway, finishing the "Battlefield Loop". For users who choose to continue west on the Virginia Central Trail they will be able to access the Wilderness Battlefield and Orange County.

A spur off of the East Coast Greenway, the trail loop is envisioned to promote eco and historic tourism throughout the County, taking advantage of the many historic, recreational, and natural resources that it would access.

Potomac, Fredericksburg & Piedmont Railroad (Virginia Central Railway (VCR)) Trail, VCR Auxiliary Trail

Primary users: A multi-use path serving bicycle (road or mountain), pedestrian, and inline skating, with equestrian friendly facilities sharing a western portion the corridor running parallel to the bicycle/ pedestrian friendly trail.

Approximate Distance: Virginia Central Railway Trail: 17.1 Miles (w/ 2.1 miles existing and approximately 2 additional miles in recreational trail easement); VCR Auxiliary Trail: 2 miles

Intended final surface: Mix of asphalt sections and stone dust sections. As part of the Spotsylvania Battlefield Loop system, eventually upgrade to all asphalt or solid pervious from City of Fredericksburg line to intersection with the Ni River Trail. For multi-use pathway with equestrian users to the west as noted in the Trailways Master Plan Map. West of the Ni River Trail intersection, packed soil alongside a stone dust, asphalt, or solid pervious trail may be used. The VCR Auxiliary Trail is intended as an asphalt shared use path and considered the most viable short term option to cross Interstate 95 paired with the planned widening of Harrison Road.

Historical Importance

The Potomac, Fredericksburg, & Piedmont Railroad (PF&P RR) operated 38 miles of three (3) foot gauge railroad between Fredericksburg (with a connection to the Richmond, Fredericksburg, & Potomac Railroad) and Orange County (with a connection to the Orange & Alexandria Railroad). Its predecessor was the standard gauge Fredericksburg and Gordonsville Railroad that was started shortly after the Civil War and built 17 miles of line from Fredericksburg to Parker. The line failed and was sold under foreclosure to become the Fredericksburg, Orange, & Charlottesville Railroad which also failed in 1874. The line was converted to narrow gauge and completed from Parker to Orange in 1878 as the PF&P RR.

Image 1: Developed portion of the VCR Trail between Salem Church Road and Gordon Road in use.

The PF&P RR operated as narrow gauge until after World War I, was sold under foreclosure in 1925 and reorganized as the Orange & Fredericksburg Railroad. In 1926 the line was standard-gauged and the name changed to the Virginia Central Railway (VCR), the second railroad to use that name. In 1930 the Virginia Central Railway projected eastward from Fredericksburg and along the south bank of the Rappahannock River to its mouth near the Chesapeake Bay where a port was to be developed. Construction of the line was never started. In 1938 the entire line was abandoned except for a two-mile segment in Fredericksburg that lasted as late as 1983.

Today the rail lines have been removed but much of the existing rail bed exists throughout Spotsylvania County. In the years following the VCR's abandonment, pieces of the corridor were gradually "carved up" and ended up in public and private ownership. A number of linear sections of the corridor still exist, owned by local Home Owners Associations, private property owners, and some still under public control. The County recognized the benefit of utilizing the VCR corridor for the development of a linear greenway trail in the 2002 Comprehensive Plan. The County has been able to successfully develop a portion of the corridor as a greenway trail connecting Salem Church Road to Gordon Road that is in use today. A Virginia Land Conservation Fund application was made and award was granted to the County in 2011 that resulted in securing a recreational trail easement along a roughly 2-mile segment of the Virginia Central Railway Trail between Brock Road and Jackson Trail East. This easement greatly enhances the opportunity to eventually construct a significant historic portion of the planned VCR Trail. The Fredericksburg Area Metropolitan Planning Organization (FAMPO), in collaboration with Spotsylvania County secured Congestion Mitigation and Air Quality funds to study the design and alignment of the VCR Trail in 2012. Roadway crossing and frontage improvements associated with VDOT and private development projects are expected to enhance the VCR Trail within the planning period, extending it eastward from its current termination point at Salem Church Road.

Though the ultimate goal would be to continue development of the trail along the historic alignment of the VCR, in instances where existing development and/or the grant of easement for use as a trailway along segments of the historic alignment of the VCR Corridor becomes

problematic, alternate alignments, or bypasses are recognized in order to ensure continued progress in the development of this important regional trailway. For instance, at present, eastward extension of the VCR Trail paired with planned Harrison Road widening and Interstate 95 bridge replacement projects appears to be the most viable and cost effective means to cross Interstate 95 with fewest property impacts in the short term, resulting in identification of the VCR Auxiliary Trail as a viable means to bridge Interstate 95 and close the gap between the Spotsylvania County and City of Fredericksburg portions of the greenway trail. The Trailways Master Plan Map has not removed the opportunity to pursue development of the historic rail bed alignment leading up to the base of the Interstate north of Harrison Road. There remains potential to pursue easements and construction along the historic railbed in the area of Interstate 95 but this appears to be a long term option requiring prioritization and a commitment of funds specifically oriented at recreational trail development and a new bicycle/ pedestrian bridge or tunnel through the Interstate 95 right-of-way. The Spotsylvania County Board of Supervisors supported maintaining the historic rail alignment within plans on July 9, 2019 as part of a policy discussion associated with the Hazel Run Bridge Crossing and Virginia Central Trail segment east of Interstate 95.

Plans for the VCR Trail are recognized in the 2045 George Washington Region Bicycle and Pedestrian Plan and the 2018 Virginia Outdoors Plan by the Virginia Department of Conservation and Recreation.

Ni River Trail

Primary users: Bicycle (road or mountain), pedestrian, eventually inline skating. Equestrian use running parallel to the bicycle/ pedestrian friendly trail between the PONI Connector and Todd's Tavern Connector.

Approximate Distance: 11 Miles

Intended final surface: Mix of asphalt sections and stone dust sections. Eventually upgrade to all asphalt or solid pervious. Adjacent to the trail for bicycle and pedestrian users, a parallel packed soil alignment is appropriate for equestrian use between the PONI Connector and Todd's Tavern Connector.

Development of the Ni River Trail acts as the second leg; the southern leg, of the Spotsylvania Battlefields Loop extending to the southeast along the river from the Virginia Central Rail Trail to the Caroline County line where it passes the Stonewall Jackson Shrine. The Ni River Trail is the southern connector to the East Coast Greenway. The connection occurs in Caroline County.

Along the Ni River between the Virginia Central Railroad Trail and Caroline County line exist a number of attractions for users, they include but are not limited to: Chancellorsville Battlefield, Ni Reservoir Recreation Area, Spotsylvania Courthouse Battlefield, Patriot Park. The corridor is also within relatively close proximity to the Historic Courthouse District and Thornburg area.

Image 2: A "blank slate"- natural beauty along the Ni River.

Unlike the Virginia Central Railway Trail that benefits from a relatively intact railbed corridor, the Ni River corridor offers more of a “blank slate” and will require the development of a greenway trail through terrain that, in many cases has been untouched by development. The corridor offers much in terms of natural beauty. Mostly forested or agricultural with larger lot parcels along it, the development intensity along the Ni River corridor is generally less than along the VCR.

The establishment of this greenway corridor trail will be based on the successful attainment of trailway easements along the corridor and implementation of road corridor based improvements in a number of areas. The actual alignment of the trailway along the corridor is expected to occur naturally as easements are negotiated and granted. Here too, the County Utilities Department is considering the acquisition of easements for extension of public utilities along portions of the Ni River. This presents an opportunity to combine the utility and trail projects, with a cost savings, to extend the County’s Ni River Trail Project.

Since the trail initially appeared in the 2011 Trailways Master Plan, the Spotsylvania Greenways Initiative (SGI) has secured an easement and constructed a natural surface Phase 1 segment of the Ni River Trail extending from Route 1 and towards Massaponax Church Road and Patriot Park. Remaining easements and additional funds will be required to secure the complete connection to Patriot Park and upgrade the trail infrastructure.

A portion of the Ni River Trail was also secured with the approval of Fortune’s Landing residential community at the corner of Piney Branch and Catharpin Rd. Fortune’s Landing was approved through rezoning in 2013. As part of that project the applicant has constructed a multi-use path along the Piney Branch Rd frontage and granted right-of-way for future trail extension along the Catharpin Rd frontage. Development of a trail connection between the Fortune’s Landing special use park and trail, and a future park site known as the “Hilldrup Tract” is supported by the Parks and Recreation section of the Comprehensive Plan public facilities element.

Deep Run Spur

> ***"The attack on Hill's left was repulsed by the artillery on that part of the line, against which the enemy directed a hot fire from twenty-four guns. One brigade advanced up Deep Run, sheltered by its banks from our batteries, but was charged and put to flight by the Sixteenth North Carolina, of Pender's brigade, assisted by the Fifty-fourth and Fifty-seventh North Carolina, of Law's brigade, Hood's division"***
>
> -- Robert E. Lee, General
> December 1862

Primary Users: bicycle (road or mountain), pedestrian, inline skating

Approximate Distance: 0.5 to 1 Mile

Intended final surface: Asphalt or solid pervious.

Image 3: Deep Run Trailhead area viewing the Rappahannock River

The convergence of Deep Run and the Rappahannock River in Spotsylvania County just behind the Bowman Center off Route 17, Tidewater Trail played an important part in the December, 1862 Battle of Fredericksburg. Deep Run was the site of the southernmost point of the crossing of the Rappahannock River by Union Troops during the battle who constructed two pontoon bridges there. As a significant part of the battle, to local history and one also containing both State and National Significance, the historic importance of the Deep Run area has been left relatively untapped and appears forgotten. Deep Run was the Union path into the Battle at Slaughter Pen Farm.

The Deep Run Spur offers the ability to expand upon the region's civil war heritage and tourism and to expand interpretive displays associated with the local civil war battles. Development of a greenway trail within close proximity to Deep Run offers a number of exciting opportunities including the establishment of a trailhead or special use park on existing County property fronting the river. The trail would increase access opportunities to waterfront areas as advocated by the Comprehensive Plan.

Image 4: Existing unused crushed stone access road between the Bowman Center and Rappahannock River at Deep Run.

Intended to start at a trailhead at the Rappahannock River, the Deep Run Spur, when ultimately completed, would generally follow Deep Run before climbing terrain and coming to the recently designated National Register of Historic Places Sylvania Plant and navigating the Mixed Use area there. The trail would then run along Tidewater Trail in conjunction with the planned East Coast Greenway Route.

Massaponax Creek Trail

Primary Users: Bicycle (Mountain, Road appropriate in sections), pedestrian, inline skating (appropriate in sections).

Approximate Distance: 13.5 Miles

Intended final surface: Variable natural and stone dust trailway with asphalt segments

Image 5: Existing trailway network along Massaponax Creek off Courthouse Road.

Image 6: Installation of new sewer line along the Massaponax Corridor establishing a linear route and opportunities to pursue trailway development.

The Massaponax Creek Trail is meant to connect the East Coast Greenway and Spotsylvania Avenue Connector Trail in the Lee Hill area to the Virginia Central Rail Trail, extending existing trailway infrastructure in place alongside the Creek associated with the Estates at Breckenridge where an asphalt trailway and public parking area exist off Courthouse Road, and Loriella Park. The trail corridor has a number of points of interest, they include: Virginia Central Rail Trail and the larger Spotsylvania Battlefields Loop system; Loriella Park; Germanna Community College via Spotsylvania Avenue Connector, the East Coast Greenway.

The Spotsylvania County Utilities Department has already secured a trailway easement along with the installation of a new sewer line between Route 673, Piedmont Drive and Route 208, Courthouse Road (see Figure 13). Prior sewer line installation projects along Massaponax Creek, southeast of Route 208, Courthouse Road only have underground utility easements in place and trailway easements would need to be pursued in order to establish the trail linkage to the Spotsylvania Avenue Connector Trail in the Lee Hill area.

A number of roadway crossings will have to be considered while developing this trailway corridor to ensure safety of users. The trailway itself is expected to be of varying surface considering location and existing environmental features. Development of much of the trail is expected to occur within the RPA along Massaponax Creek though a section extending from the East Coast Greenway to the Spotsylvania Avenue Connector would be paved. Future users will find the corridor to be generally natural and forested with commercial and residential development interspersed along the route. Located within the heart of the Primary Settlement District, the corridor will have the ability to serve many nearby housing developments within a five-minute walk or approximately ¼ mile pedestrian shed or walkable catchment area.

East Coast Greenway Auxiliary Trail

Primary Users: Bicycle and Pedestrian

Approximate Distance: 0.5 to 1 Mile

Intended final surface: Asphalt or solid pervious

The East Coast Greenway Auxiliary Trail is meant to provide a direct connection between the East Coast Greenway and the Spotsylvania County VRE station and mixed-use area utilizing Crossroads Parkway and a new overland connector to Thornton Rolling Rd within the Primary Development Boundary.

Spotsylvania Avenue Connector

Primary Users: Bicycle (Road or Mountain), pedestrian, inline skating

Approximate Distance: 1 Mile

Intended final surface: Asphalt or solid pervious

Born from the Massaponax Corridor Study that is referenced in the Transportation Element; Chapter 3, and identified within the County Thoroughfare Plan, the Spotsylvania Avenue Connector Trail is will connect the commercial, lodging, employment center uses centered on Spotsylvania Avenue, and Germanna Community College and surrounding residential developments in the Lee Hill area off Germanna Drive. This connector trail would intersect one proposed to follow Massaponax Creek from the Lee Hill area, extending northward to connect with the Virginia Central Rail Trail. It is expected to be developed as part of the Spotsylvania Avenue/ Germanna Pt Drive Connector Road.

Image 7: Existing asphalt surface Lee Hill Office Complex Trail system

The area between the termination point of the existing Spotsylvania Avenue and Germanna College is undeveloped and forested with wetlands present, offering qualities consistent with a natural greenway trail. Existing trail infrastructure behind the Lee Hill Office Buildings along the edge of stormwater management ponds there should be explored to be tied into the Spotsylvania Avenue Connector Trail. The ponds are active with wildlife for nature interest with geese and a number turtle's witnessed upon visiting the site.

The trailway is in close proximity to a number of Fredericksburg Regional Transit stops and transfer points including routes F2, F3, S1, S4 and S5.

Po River Trail (incl. Norton Prong)

Primary Users: Bicycle (mountain), pedestrian. Equestrian uses running parallel to the bicycle/ pedestrian friendly trail between PONI Connector and Todd's Tavern Spur.

Approximate Distance: 20 Miles

Intended final surface: Clear cut packed/ stabilized soil pathway

The 2008 Spotsylvania Comprehensive Plan initially advocated for the development of walking/ biking trails along the Po River in the Jackson Gateway, Rural, and Agricultural/ Forestal development districts.

The Po River trail is planned to be bookended by two trail head facilities. The easternmost trail head of the Po River Trail for the purpose of this plan is identified as Jackson Gateway South, located in a mixed-use or employment center area as defined by the future land use map. To the west, the Todd's Tavern Spur trail head has been identified. The Po River Trail is intended to be developed as a multi-use greenway trail, serving bicycle, pedestrian, and equestrian users.

Image 8: Example of a side by side bike and pedestrian-friendly and equestrian greenway trail at Lake Anna State Park. This is similar to that proposed along the Po River.

The Po River Trail is planned to connect with the Lake Anna State Park Connector Trail via the Todd's Tavern Spur. The equestrian character of this and other greenways within rural portions of the County are intended to complement and enhance the rural agricultural and forestal land uses outside of the Primary Development Boundary, consistent with land use descriptions.

The Po River and Lake Anna Connector system of trails are integrated into other planned greenways within Spotsylvania County with access to the PONI Connector, the Virginia Central Rail Trail and Ni River Trail. Additional access can be gained through bicycle and pedestrian-friendly roadway improvements as outlined in this plan. In addition to potential horse friendly trail facilities along the western reaches of the Virginia Central Corridor, the PONI Connector, Lake Anna State Park Connector, and portion of the Ni River Trail, the Po River Trail is planned to greatly increase the equestrian trail miles within Spotsylvania County and make Spotsylvania County a horse enthusiast destination for trail riding, and spin-off economic benefits associated with tourism.

Currently there exists no preferred alignment along the Po River though frequent bridge crossings are discouraged due to additional costs. The actual alignment of the greenway trail along the corridor is expected to occur naturally as development occurs, public land acquisition, road improvement projects are implemented, easements are negotiated and granted.

PONI Connector Trail

Primary Users: Bicycle (mountain), pedestrian, equestrian running parallel to the bicycle/ pedestrian friendly trail

Approximate Distance: 3 Miles

Intended final surface: Stone dust with parallel packed/ stabilized soils for equestrian users

The PONI Connector Trail is envisioned to connect the Po River Trail and Ni River Trail by use of an existing overhead utility easement corridor.

The planned connector also will result in the creation of a secondary trail loop, one that is unique to and totally contained within Spotsylvania County. The secondary loop would result in a trail network that utilizes sections of the Ni River Trail, Virginia Central Rail Trail, Lake Anna State Park Connector Trail, Todd's Tavern Spur and the Po River Trail.

The PONI Connector might be thought of as the "Pony" Connector Trail as it connects identified equestrian sections along the multi-use Ni River Trail to the multi-use, equestrian-oriented Po River Trail.

Lake Anna State Park Connector Trail (LASP), Todd's Tavern Spur and Connector

Intended Users: Equestrian running parallel to the bicycle (mountain)/ pedestrian friendly trail

Approximate Distance: LASP: 9 Miles; Todd's Tavern Spur: 6.3 Miles; Todd's Tavern Connector: 1.5 Miles

Intended final surface: Natural Surface packed/ stabilized soils or stone dust.

Image 9: Example from Lake Anna State Park of an equestrian trail.

The Lake Anna State Park Connector Trail has been envisioned to create a link between existing equestrian trails already in place at Lake Anna State Park and an equestrian oriented loop through western and central Spotsylvania County outside of the Primary Development Boundary. The equestrian network would effectively make Lake Anna State Park the southern-most trail head location for equestrian users. When approached during development of the Plan, the State Park expressed interest in the development of such a trail system.

Though subject to deviation, the Connector Trail is envisioned to utilize an existing transmission line easement corridor stretching northward from a trail head, existing trailways and equestrian facilities located at Lake Anna State Park, to intersect with the Po River Trail and the Virginia Central Rail Trail further to the north. A multi-use spur trail and connector, also utilizing existing utility

easements, would access the Todd's Tavern Area, creating a second trail head location for equestrian, bicycle, and pedestrians to access the Po River Trailway and Lake Anna State Park Equestrian Connector Trail.

Significant recreational trail easements are expected to be granted resulting from conditions associated with the April, 2019 approval of a large solar energy facility in western Spotsylvania County. Once secured, the site will include easements for the convergence points of the Todd's Tavern Spur, Po River Trail, Lake Anna State Park Connector, and a small portion of the Virginia Central Railway Trail along the old rail bed. Lengthy easements for segments of the Lake Anna State Park Connector and Todd's Tavern Spur are also expected.

Trail Heads

For the purpose of this plan a trail head can be considered a centralized location along the trail network where users can meet up embarking on a trail ride, or after the ride is complete. Though access, amenities and parking areas are intended to be scattered throughout the greater system of trailways throughout the County, at trail heads you may find enhanced trail amenities above and beyond those you may find along points in between. Trail heads should include and are not limited to public access points to the trail system, parking areas, enhanced signage and availability for bicycle parking, or equestrian hitching posts where appropriate, public restroom facilities. The general location for a number of trail heads have been recommended throughout the trailway system and appear in the Trailways Master Plan map.

If future, more detailed studies recognize the need for additional or modified locations for trail heads, this plan should be considered advisory. As land is acquired and specific trailway implementation issues are addressed, this portion of the plan will need to be flexible in order to execute the goals and objectives listed previously in the document.

Major Trail Heads

A major trail head location can be thought of as a site where parking, access, and basic conveniences are provided and complemented by higher population densities and commercial/ retail activities. These are also excellent locations to establish links between bicycle and pedestrian facilities and mass transit options including FRED Bus and potential VRE services. Most major trail heads are planned to be located within designated mixed-use areas or employment center locations as identified in the Comprehensive Plan Future Land Use Element. These are areas in the County intended for higher density development with a mix of uses where people can "live, work, shop, and play". Alternative modes of transportation are also desired within the mixed-use areas to encourage pedestrian access and discourage automobile reliance. Accommodating higher density housing, mixed-use areas serving also as trailhead locations can provide the trail system large supply of trailway facility users. As a local point of activity, trail heads provide nodes of interest for residents and tourists who may also use the trailhead areas to frequent nearby entertainment, recreation, commercial retail or services, restaurants, hotels, places of employment resulting in a mutual benefit between the trailway user and private industry. They are also intended to be great locations from which to organize and implement

special trailway system based events such as organized bike rides, volunteer day events, educational events or promotions.

Minor Trail Heads

Minor trail head locations are planned to provide the same level of basic services to trailway users but due to geographic location, future land use potential and existing development patterns and population densities, access to a variety of nearby commercial/ retail establishments will be far less likely. These locations will be much more rural in character.

In all, thirteen (13) locations have been identified throughout the County. A fourteenth (14th) location, already existing at Lake Anna State Park, has also been identified as a complement for bicycle, pedestrian, and equestrian users. Under control by the Virginia Department of Conservation and Recreation (DCR), the trail head at Lake Anna State Park has been recognized as a contributing piece of the overall planned network and is referenced only.

General trail head locations are symbolized in the Trailways Master Plan Map. Descriptions are in Table 1 below:

Table 1: Trail Heads

Name	General Location	Voting District	Interest
Elys Ford Rd	Elys Ford Rd/ Rappahannock River/ Hunting Run Reservoir	Chancellor	public boat ramps, fishing, Rappahannock river access, Hunting Run Reservoir access, scenic/ natural/ historic
Courthouse District	Spotsylvania Courthouse Mixed Use Area, Spotsylvania Courthouse Historic District	Berkeley/ Livingston District	Spotsylvania Historic District, County government center, Spotsylvania Courthouse Battlefield, Spotsylvania Courthouse Village and mixed-use area
Lane Anna Area	Route 208, Courthouse Road at Lake Anna	Livingston District	Lake Anna, Lake Anna marina's, Lake Anna State Park and Connector Trail, mixed-use area
Jackson Gateway North	Massaponax Church Rd., Jefferson Davis Hwy., Ni River	Berkeley District	Ni River, Patriot Park, mixed-use area, employment center, Ni River Trail
Jackson Gateway South	Po River, Morris Rd., Thornburg	Berkeley District	Thornburg, mixed-use Area, employment center, Po River, Po River Trail
Bowman Center	Rappahannock River, Deep Run, Bowman Center, Tidewater Trail	Lee Hill District	Potential site for public boat ramp/ water-side park, fishing, Rappahannock River access, scenic/ natural, Civil War historic interpretation, East Coast Greenway, Deep Run Spur, industrial heritage, mixed-use area, employment center
New Post	Mills Dr., Tidewater Trail, Benchmark Rd., Jim Morris Rd., Massaponax Church Rd.	Lee Hill District	VRE station, mixed-use area, employment center, East Coast Greenway, Massaponax Creek Trail
Virginia Central East	Harrison Rd., Salem Church Rd., Virginia Central Railway Trail	Salem/ Battlefield District	Virginia Central Railway Trail, VCR Auxiliary Trail, mixed-use area, Harrison Rd Park
Virginia Central West	Orange Plank Rd.	Livingston/ Chancellor District	Virginia Central Railway Trail, Wilderness Battlefield, LASP Connector
Spotsylvania Medical Center	Jefferson Davis Hwy., Spotsylvania Pkwy., Mills Drive	Lee Hill/ Berkeley District	Spotsylvania Regional Medical Center, employment center, mixed-use area, Massaponax Creek Trail, Spotsylvania Avenue Connector
Lake Anna State Park	Lake Anna State Park	Livingston District	Lake Anna State Park, Lake Anna, LASP Connector
Ni Reservoir North End	Ni Reservoir & Park, Catharpin Rd.	Livingston/ Chancellor District	Virginia Central Railway Trail, Ni River Trail, Jackson Trail East, Chancellorsville Battlefield, Ni Reservoir & Park
Todd's Tavern	Todd's Tavern, Brock Rd., Catharpin Rd., Po River	Livingston District	Todd's Tavern Spur, Todd's Tavern Connector, Po River Trail (incl. Norton Prong), Po River, LASP Connector

Greenway System Design Guidelines

The following greenway system design standards have been provided with the assistance of a Million Mile Greenway (MMG) Community Technical Grant. The grant award provided technical services and design assistance by Photoscience Geospatial Solutions to the Spotsylvania Greenway Initiative (SGI) and Spotsylvania County, resulting in recommended system-wide trailway design standards specific to intended users. These standards should be considered when looking to construct portions of planned trailways or trail head facilities.

With consideration of the intended user(s) and type of trailway to be constructed, trail bases and surfaces should be constructed consistent with the *Design Standards Manual (Article 5- Streets, Parking, and Driveways)*.

Trail Design Guidelines & Sections

Trailhead Design

Restrooms:
Located at each trailhead, these ADA accessible restrooms will provide necessary amenities for trail users. The use of sustainable building practices will ensure a low cost of maintenance and operation.

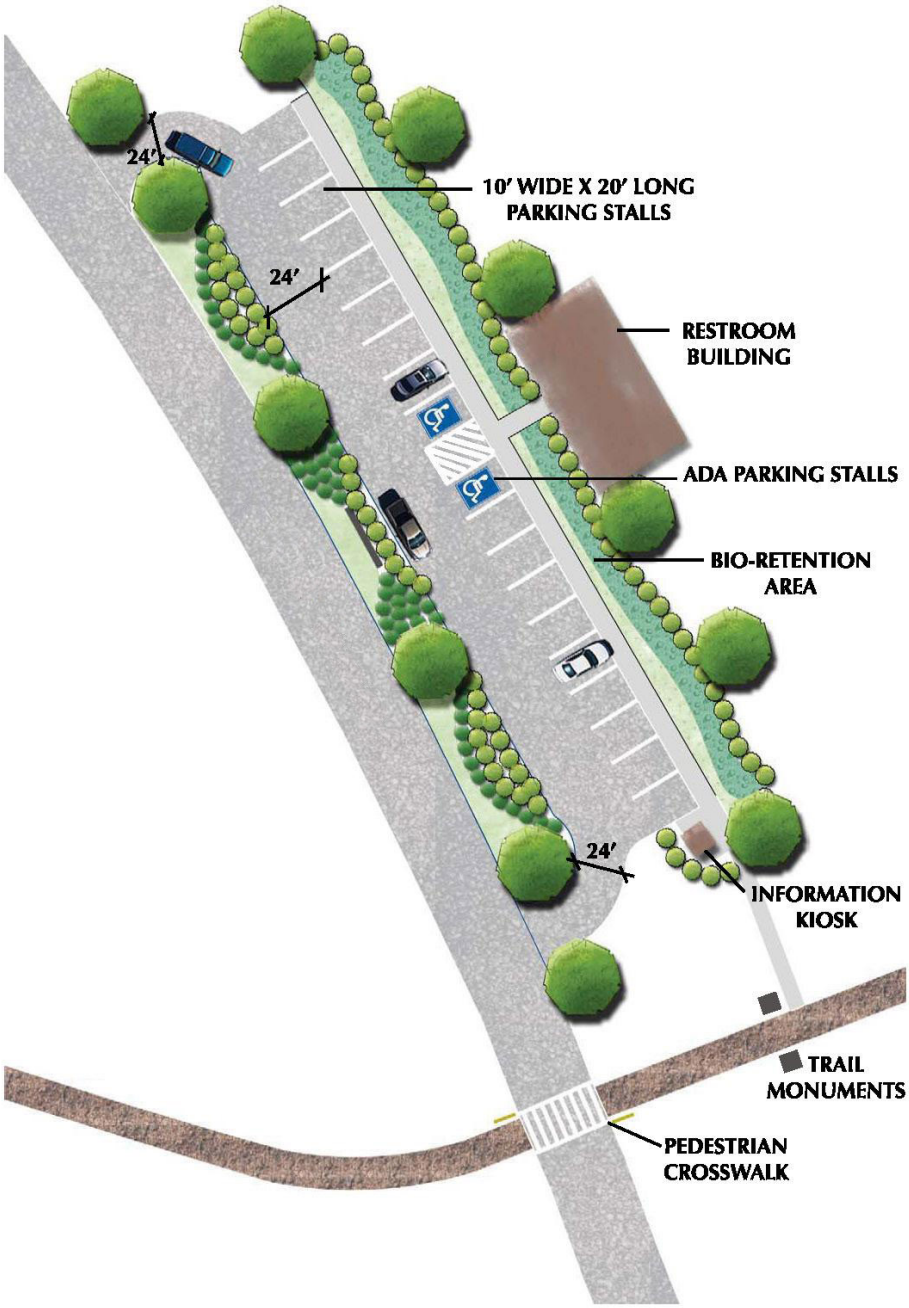
Porous Paving Parking Lot:
Proposed parking lots will be constructed using porous pavement surfaces to help preserve the water quality.

Pedestrian Crosswalks:
High visibility pedestrian crosswalks will be used at all street crossings. Flashing warning signals are proposed to maximize safety for trail users.

Bioretention Areas:
Adjacent to each parking lot and restroom building, bioretention areas will provide a first filter flush of stormwater runoff from paved impervious surfaces.In addition to the use of pervious surface parking lots, the bioretention areas will preserve the water quality of stream corridors.

Trail-Head Signage and Information Kiosks:
Appropriate user-friendly signage should be used throughout the length of the trail and especially near each trailhead. Covered wooden kiosks displaying trail information and recent news, as well as granite or wooden signs showing trail direction will help maximize the trail experience.

Trailhead Layout



Equestrian trails will complement the rural character of Spotsylvania County and add yet another layer of recreational enjoyment.

Equestrian Trails

Typical Features and Materials

Typical Features

Trail Width:	Single track, equestrian only = 4' to 5'
	Double track, equestrian only = 6' to 8'
	Shared use path, single tread = 10' to 12'
Trail Clearance:	10' minimum overhead ceiling, 12' preferred
Trail Surface:	Crushed Stone, Wood Mulch, Compacted Earth
Trail Grades:	Varies Depending on Level (see hiking trails)
Trail Signage:	Follow United States Forest Service Standards

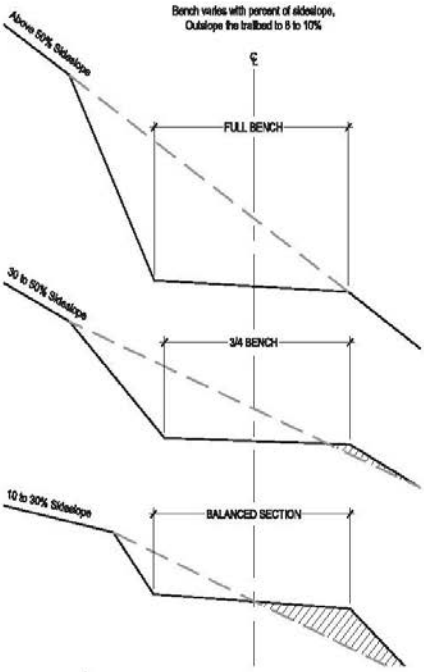
Design Principle

Construction of equestrian trails with hiking and multiuse is encouraged wherever there is adequate width for coexistence of these facilities. Hiking trails are particularly compatible with such use and are capable of sharing the same tread with equestrian traffic, granting they have proper sight distance and ample passing room for all users. Multiuse trails, however, as designed primarily for pedestrians and bicyclists, are generally preferred to have more considerable width and a lower traffic volume to be compatible as a horseback route. Wherever width allows in the greenway corridor, it is highly recommended that these uses be separated into multiple treads, thereby keeping conflicts minimal. Trail signage should be provided to make all users aware of proper yielding to other traffic.

Typical Section

Scenic Hiking Trails

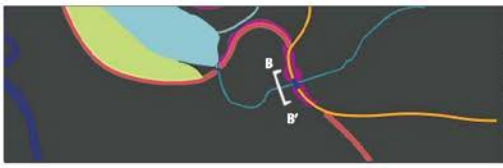
Typical Features and Materials



Typical Features

Trail Width:	Strenuous = 18" to 30"
	Moderate = 24" to 36"
	Accessible = 36" to 60"
Trail Surface:	Materials - Crushed Stone, Wood Mulch
Trail Edges:	Stacked Stone or Heavy Wood Timber
Trail Grades:	Varies Depending on Level (see hiking trails)
Trail Signage:	Follow National Park Service Standards

Typical Section



Stream corridors are desirable locations for trails and greenways; however, ecologically compatible trail standards should be utilized to ensure minimal impacts to the natural hydrologic process.

Stream Corridor Trails

Typical Features and Materials

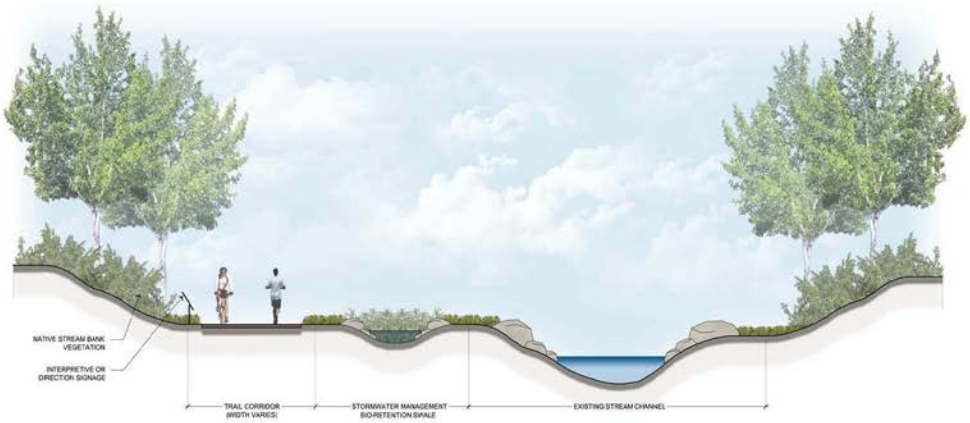
Typical Features

Trail Width:	Varies Depending on Level (see hiking trails)
Trail Surface:	Materials - Crushed Stone, Wood Mulch
Trail Edges:	Stacked Stone or Heavy Wood Timber
Trail Grades:	Varies Depending on Level (see hiking trails)
Trail Signage:	Follow National Park Service Standards

Design Principle

Trails following stream corridors shall be designed in a way that both complements and are compatible with the natural ecological environment and system. Trail and trail components including steps, bridges, rails, signs, furnishings, etc. shall be constructed of natural materials such as wood, stone, and mulch. Concrete, steel, and other more industrial materials shall be used in very limited capacity, and only when natural materials are not suitable. Special design features such as bio-retention swales and other BMP's shall be used to mitigate negative impacts to stream hydrology and water quality when appropriate. Plant materials shall also be native and appropriate for the given micro-climate and pre-existing plant communities. Trails should be respectful of stream buffers / setbacks and local variance requirements.

Typical Section



Overlook areas can be used to emphasize natural vistas, and improve the trail experience.

Overlook Areas

Typical Features and Materials

Design Principle

Overlook areas should be sited to capitalize on specific natural vistas. When no special vista is present, the design should be scaled back to a simple seating or rest area along the trail. In general, overlook areas should be constructed of local materials that blend with or complement the natural environment.

Overlook areas can be elevated observation decks above grade, or flat areas retained by stone or wood walls. Interpretive signs may also be incorporated into the vista, but should be sited away from the natural view.

All applicable building codes should be followed to determine appropriate rail design and height. An appropriate deck or landing area should be provided to match the expected level of use. Overlook areas directly adjacent to multiuse trails or within close proximity to the trailhead will have relatively more users at any given point, and should be designed accordingly with larger observation areas. In contrast, overlook areas accessible only by hiking trails and in remote areas can be designed with a smaller footprint.

Typical Section / Elev.

Multiuse trail systems can improve bicycle and pedestrian mobility throughout Spotsylvania County.

Multiuse Trails

Typical Features and Materials

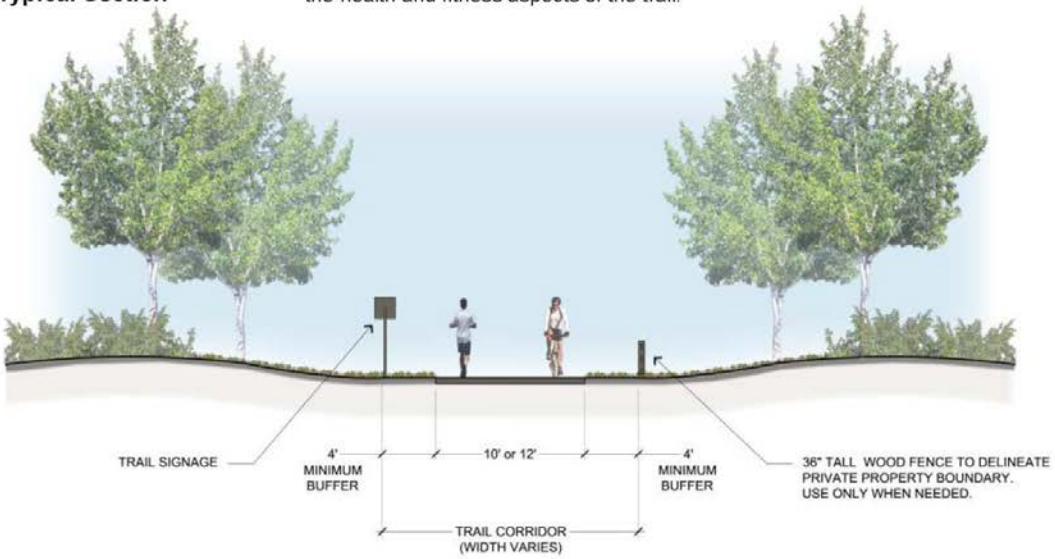
Typical Features

Trail Width:	10' to 12'
Trail Surface:	Crushed Stone, Concrete, or Asphalt
Trail Location:	Easements Along Private Property Lines, Transmission Line Corridors, Through Existing Parks, Through Conservation Areas.
Trail Grades:	5% Overall Maximum
Trail Signage:	Follow Local or VDOT Standards

Design Principle

The simultaneous creation of trails and greenways allows pedestrian and bicycle corridors to be located in park like settings. Because of their popularity, multiuse greenway trails should be designed to accommodate many different user groups. Large trail widths allow for pedestrians and bicycles to interact safely while hard surface and gentle slopes provide a greater range of accessibility. In many cases, multiuse trails are striped to delineate travel lanes and/or user lanes that separate pedestrians from bicycles. Traffic control and directional signs can also increase the safety and functional aspects. Crossing signs, signals, and pavement markings shall be used when trails interact with roadways and other vehicular facilities such as parking lots. Map kiosks combined with exercise stations can also complement the health and fitness aspects of the trail.

Typical Section



Bicycle and Pedestrian System Goals and Objectives

The following goals and associated objectives are intended to build on the strengths of Spotsylvania County and to ensure that the planned system of trailways is developed to the maximum benefit of its users. They are designed to help achieve the County's vision for an integrated network of trailways as identified in the Spotsylvania County Comprehensive Plan.

Goal 1: Improve and expand the existing public-access non-vehicular trails network to create a comprehensive system of interconnected recreational and/ or commuter trails and sidewalks throughout the County.

a. Develop infrastructure in accordance with the Trailways Master Plan.

b. Develop bicycle and pedestrian friendly corridors that offer complementary amenities such as trash receptacles, interpretive or educational signage or displays, bike racks, lighting (where appropriate), benches and seating areas, parking areas, and water fountains.

c. Establish partnerships with State and National partners to promote access to existing state and national parks trailways by incorporating them into the County trailways network.

d. Where appropriate, utilize abandoned roadway beds to establish additional trailway linkages and implement the plan.

e. Ensure that the FRED bus system and VRE station in Spotsylvania County are integrated into the bicycle and pedestrian system, promoting bicycle and pedestrian access to mass transit.

Goal 2: Improve, expand, and construct roadway-based pedestrian and bike facilities.

a. Coordinate with adjoining jurisdictions to ensure the construction of bike and pedestrian improvements along roadways can effectively fit within a regional framework; that improvements will be consistent at the County boundary and can connect into the larger, regional system consistent with the FAMPO Bicycle/ Pedestrian plan as well as other local government plans.

b. Extend bicycle and pedestrian-friendly road improvements and/or trailways to public access points identified along the Rappahannock River and Lake Anna.

c. Develop sidewalk facilities along roadways consistent with Article 5, Streets, parking and Driveways, of the Spotsylvania County Design Standards Manual.

i. Ensure consistency between the Trailways Master Plan and Article 5, Streets, Parking and Driveways, of the Spotsylvania Design Standards Manual.

d. Avoid conflicts between automobiles, pedestrians, and bicycles by identifying and constructing appropriate pedestrian and bicycle facilities.

Goal 3: Develop and promote trail facilities for multiple user-groups, types, and recreational users.

a. For equestrian trails, provide hitching rails and trailer parking accommodations at trail heads.

b. Identify trailway corridors ideal for winter sport uses like snowshoeing or cross-country skiing.

c. Provide handicap-accessible facilities wherever possible, throughout the trails system.

d. For recreational trails, develop a classification system that considers intended users and expected level of difficulty and disclose the information with trail signage throughout the system.

e. Seek technical input and support from local, state, national walking-running, bicycling, equestrian groups during the design and construction phases of trailway implementation and post construction maintenance in order to result in more user friendly trails with feedback from avid user groups.

Goal 4: Review proposed development proposals and land-use projects for compliance with existing and planned trailways and sidewalk improvements.

a. Review all federal, state, regional, and county transportation projects to ensure they include appropriate lateral crossings in the funding, design, and construction of bridges and road projects, as well as bicycle and pedestrian signage, crossing signals and crosswalks that facilitate easy pedestrian and bike access across highways, streams, and railroads.

b. Make land-use decisions that stimulate private sector development and public transportation improvements that are consistent with the County's desired trailways network.

Goal 5: Develop a comprehensive inventory to track the location of trails, sidewalks, bicycle and pedestrian friendly road crossings, bicycle pedestrian right-of-way and easements.

a. Formally name planned public greenway and trail corridors.

b. Trailways and bike & pedestrian improvements and easements should be mapped in an appropriate trailways database or GIS based map.

c. Track plats for easements and infrastructure plans to ensure both easement acquisitions for trails and the construction of trailway segments, and the trail surface has been inventoried.

d. Prepare a current comprehensive inventory of existing trails by type. The inventory will include trails within public parks and open space, paved multi-use trails alongside highways, natural surface trails, and other paths open to the public for non- motorized travel. State and National Park trails will also be inventoried.

e. Report expanded trailway inventory information to the East Coast Greenway, Virginia Department of Conservation and Recreation and George Washington Regional Commission as part of the East Coast Greenway, Virginia Outdoors Plan and George Washington Region Bicycle and Pedestrian Plan update process to ensure consistent and up to date trails information.

Goal 6: Efficiently Implement the Plan.

a. Conduct detailed trailway corridor studies for all proposed off-road trails that address:
   - Recommended crossings of streams or other environmentally sensitive areas.
   - Recommended crossings of public roadways.
   - Recommended public points of access to the trailway, including locating ideal locations for public parking.
   - Identification of possible alternative alignments of the trailway to minimize impacts on existing developed areas.
   - Trailway amenities specific to intended user groups.

b. Seek trailway easements and/or construction along identified bike/pedestrian improvement corridors through rezoning and special use permit commitments.

c. Negotiate trailway easements with private landowners along greenway corridors identified in this plan. In general, the ultimate alignment of the greenway will result from successfully achieved grant of easements over private lands and use of existing public lands.

d. Establish and maintain volunteer Memorandum of Understanding (MOU) agreements between Spotsylvania County and volunteer organizations who seek to help construct, beautify, or maintain the trail system.

e. Ensure adequate right-of-way is dedicated and trailways are developed in conjunction with roadway improvement projects along designated trailway corridors.

f. Pursue easements for all identified bicycle & pedestrian improvements identified in this plan regardless of the implementation schedule.

g. Obtain joint utility and trailway easements when County sewer and waterline installation projects are consistent with identified trailway alignments.

h. Pursue grant opportunities to enhance pedestrian facilities for County-owned properties.

i. Pursue funding, including survey and engineering design, easement acquisition and construction, for projects that provide trail linkages to the battlefield parks and other historic sites.

j. Greenway trails intended for both bicycle and pedestrian users may be developed initially using a natural or stone dust surface to lower the initial cost to construct and complete the establishment of planned trailways. Where appropriate, as outlined in this plan, such surfaces over time can be upgraded to higher quality materials.

Goal 7: Establish safe trailways.

a. Seek to develop a public-private partnership between local law enforcement and citizenry in order to assure that trailway corridors are patrolled for the safety of users.

b. Bike and Pedestrian underpasses should be illuminated for the safety of users.

c. Where appropriate, illuminate public parking access points and trailheads.

d. Establish hours of operation along all public greenway trails for safety of users.

e. Provide trailway signage that advocates for users to walk or ride with a partner and disclose trailway hours of operation and other rules/warnings.

f. Provide trailway mileage markers for users to identify their location in case of emergency.

g. Where appropriate, consider developing a “blue light security telephone” network along isolated segments of greenway trails to notify emergency services of safety and security incidents should they occur.

h. Promote the use of the trailways in the County, therefore providing more “eyes along the trailway”.

i. Regularly inspect and maintain trailway corridors so they do not appear forgotten or abandoned. Ensure that the trails are clean, free of litter and debris.

j. Maintain long sight-lines and avoid routing trails through dense brush to minimize potential low-visibility situations.

k. Prohibit motorized vehicle use of the trailways with the exception of safety patrol, emergency or trailway maintenance vehicles, and personal assistive mobility devices for disabled persons. Disabled vehicles, emergency or maintenance vehicles, personal assistive mobility devices for disabled persons along roadway shoulders are also an exception.

l. Provide proper trail surface maintenance to ensure a safely navigable trailway and ensure no uneven trail surfaces, avoiding falls and/or equipment damage.

m. Install directional signs—spaced uniformly—so that a trailway can be navigated with ease from one end to the other.

n. Provide trailway crossing signage along public roadways where bicycle, pedestrian, or equestrian crossings exist to raise vehicle driver awareness and provide road crossing warnings along trailways at least five hundred feet prior to intersection with roadway for trailway user awareness. Changes in texture of the surface near a roadway crossing should be used where possible.

o. Review (and modify as appropriate) regulations related to trail usage and safety.

Goal 8: Provide regular maintenance of the trailways system.

a. Maintain trails so that they are passable, allowing intended trail user groups to be unimpeded by debris, fallen trees or limbs, or trail surface degradation over time or due to specific weather events.

b. As appropriate, institute limitations on use due to uncontrollable weather events.

c. Maintain the “adopt a trail” program to promote litter free trailways and promote pride in the County trailways system.

d. Reduce the potential maintenance burden by advocating for litter free trailways through outreach and education and trailside regulation signage.

e. Develop and maintain standard operating procedures, outlining the frequency of inspection and maintenance of trails and affiliated facilities throughout the County.

f. Ensure County trailway surfaces, bridge crossings, and public access parking areas are regularly monitored to ensure proper maintenance and safety for users and equipment.

g. Regularly inspect and maintain pedestrian amenities along the trail including but not limited to: trash receptacles, interpretive or educational signage or display, lighting where appropriate, benches/ seating areas, water fountains, exercise stations, trailway identification signage and mile markers.

h. Enact a leave no trace policy for equestrian trails.

Goal 9: Develop and implement an education and outreach program that promotes trail usage and educates users on the benefits of trails and the resources located along them.

a. Inform and educate the public as to the available trailways in Spotsylvania County.

b. Develop interpretive signage along the greenway corridors that portray significant historic events, sites, buildings, monuments, technology, unique natural features or natural processes for educational purposes.

c. Develop historical interpretive signage along the Virginia Central Trail to document the "Screamerville" area, and history of the Civil War in the area and the Virginia Central Railroad.

d. Develop a trail-side signage program for nearby commercial establishments to advertise their location in proximity to the trailway, offering convenience, lodging or dining opportunities to promote access to local businesses by trail users.

e. Explore the feasibility of introducing a Bike Smart Virginia program in local schools to promote bicycle ridership, basic bicycle ridership, basic bicycle safety, road rules, and basic mechanics of the bicycle.

f. Develop a trails inventory mapping feature publicly accessible via Spotsylvania County internet GIS.

g. With partners, develop a County-wide or region-wide trailways map available for public distribution.

h. Promote County trailways through grassroots citizen and organization driven volunteer efforts to maintain and beautify the trail corridors.

i. Utilize volunteer efforts from local gardening organizations and citizens to develop linear flower gardens along segments of greenway corridors.

j. Consider organizing or participating in annual National Trails Day events.

k. Promote organized events centered on use of the County Trailway system.

l. Develop or partner in the development of a local or regional trail system website that can advertise the local trail network, intended user groups, identify points of interest and promote special events.

m. Promote the trail system through Spotsylvania County Tourism and other tourism venues.

Goal #10: Review and update the Trailways Master Plan consistent with the Comprehensive Plan update cycle.

a. Track plan implementation successes since last update and amend plans as necessary to accommodate new or improved implementation opportunities.