VIRGINIA MULTI-USE TRAILS INITIATIVE



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Multi-Use Trails Initiative

A Report on Multi-Use Trail Master Planning, Prioritization and Funding

Chapter 552 – Department of Transportation <u>Item 447.10.G</u>

Office of Intermodal Planning and Investment

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Table of Contents

| 1 | Executive Summary | 1 |
|-----|--|----|
| 1.: | 1 Context | 1 |
| 1.7 | Purpose, Requirements and Coordination | 1 |
| 1.3 | 3 Definition and Oversight | 2 |
| 1.4 | 4 Multi-Use Trails – Recommendations and Actions Across Focus Areas | 2 |
| 2 | Multi-Use Trails Assessment | 5 |
| 2.: | 1 What is a Multi-Use Trail? | 5 |
| 2.2 | 2 Agency Organization and Partnerships | 5 |
| 2.3 | 3 Multi-Use Trails Network – State of the System | 6 |
| 2.4 | 4 Multi-Use Trails Network – Gap Assessment | 8 |
| 2. | 5 Stakeholder Perspectives | 8 |
| 2.0 | 6 Conclusions - Current to Future State of Practice | 9 |
| 3 | State Multi-Use Trails Office | 10 |
| 3.: | 1 Peer State and Virginia Case Studies | 11 |
| 3.2 | 2 Activities and Coordination | 11 |
| 3.3 | 3 Multi-Use Trails Responsibility | 12 |
| 3.4 | Developing the State Multi-Use Trails Plan and Implementing the State Multi-Use Trails Program | 12 |
| 3.5 | 5 Conclusion | 12 |
| 4 | State Multi-Use Trails Plan | 14 |
| 4. | 1 State Multi-Use Trails Plan Outcomes | 15 |
| 4.2 | 2 Prioritizing Statewide Trails | 16 |
| 4.3 | 3 Conclusion | 19 |
| 5 | State Multi-Use Trails Program | 21 |
| 5.3 | 1 Peer State Approaches and Virginia Models | 22 |
| 5.2 | 2 Current State Funding Priorities | 22 |
| 5.3 | 3 Future Funding Structure Recommendation | 25 |
| 5.4 | 4 Conclusion | 27 |
| 6 | Implementation | 29 |
| 6.3 | 1 Implementation Actions | 30 |
| 7 | Emerging Opportunities | 34 |
| 7.: | 1 Overview | 34 |
| 7.2 | 2 Details | 34 |
| 7.3 | 3 Implications | 35 |
| 8 | References | 36 |
| 9 | Appendix | 39 |
| М | ulti-Use Trails Assessment Details | 39 |



List of Tables

| Table 1: Findings by Focus Area | 3 |
|---|----|
| Table 2: Recommendation Details | |
| Table 3: Implementation Details and Costs | |
| Table 4: VTrans Connections to Multi-Use Trails – Vision & Goals | |
| Table 5: Plans Related to Multi-Use Trails | |
| Table 6: Summary of State of Practice and Future Opportunities | |
| Table 7: Summary of State Multi-Use Trails Office Recommendations | |
| Table 8: Summary of State Multi-Use Trails Plan and Master Planning Process Recommendations | |
| Table 9: Category of Funding Framework Options | |
| Table 10: State Multi-Use Trails Program Recommendations Summary | |
| Table 11: 2022-2023 Implementation Details and Costs | |
| Table 12: Beyond 2023 Implementation Details and Costs | |
| Table 13: STAC Member Organizations | |
| Table 14: Interviewee Organizations | |
| | |
| List of Figures | |
| Figure 1: Multi-Use Trails in Virginia | |
| Figure 2: Virginia Outdoor Recreation Economic Activity | 6 |
| Figure 3: State Multi-Use Trails Office Roles and Responsibilities | 10 |
| Figure 4: Universe of Trails and the State Multi-Use Trails Office | |
| Figure 5: State Multi-Use Trails Plan Objectives and Connections | |
| Figure 6: Current Virginia Statewide Trails | |
| Figure 7: Levels of Trail Prioritization | 18 |
| Figure 8: State Multi-Use Trails Plan Relationship to Ongoing Trail Planning | 19 |
| Figure 9: State Multi-Use Trails Program Objectives and Connections | 21 |
| Figure 10: Current State Trails Funding for Capital Investments | 22 |
| Figure 11: SMART SCALE Trail Funding History | 23 |
| Figure 12: Future Funding Structure | 26 |
| Figure 13: State Multi-Use Trails Program – Funding Framework Options | |
| Figure 14: Platform for Virginia's World Class Trail System | 29 |
| Figure 15: Multi-Use Trail Stakeholders and Roles | |
| Figure 16: Virginia's Bicycle-Friendly State Rankings 2008-2019 | 40 |
| Figure 17: Florida Greenways and Trails System Plan | 41 |
| Figure 18: Florida SUN Trail Project Prioritization Criteria | 41 |
| Figure 19: Pennsylvania's State Trail Program and Gaps | 42 |



1 EXECUTIVE SUMMARY

1.1 Context

Virginians enjoy access to a variety of trails and trail experiences, from the tranquility and solitude of the Appalachian Trail to busy commuter trails like the Mount Vernon Trail in Alexandria and Fairfax County. Users can traverse a range of trail conditions from narrow one-way paths to modern, wide paved shared-use paths. Expanding trail systems can be complex to plan and expensive to build and maintain. However, continued trail investment – driven by a resurgence in outdoor recreation – creates direct, sustainable public health, economic, environmental and quality of life benefits for Virginia residents, communities and visitors.

Trail activity rose sharply in 2020 (relative to pre-COVID-19 pandemic levels) fueled by interest in safer socialization, fitness and access to recreational destinations. For example, visitation to Virginia State Parks <u>increased 13 percent</u> in 2020, with nearly eight million visits. The spike in outdoor activity boosted Virginia's outdoor economy consistent with national trends. In November 2021, the <u>Bureau of Economic Analysis (BEA)</u> released economic data for 2020 on outdoor recreation's positive economic impact on the U.S. economy. The BEA concluded that:

- Even as travel and tourism declined due to travel restrictions, industry segments like boating and fishing, biking, camping and RVing, hunting and shooting sports, and powersports experienced record sales and unprecedented growth.
- Outdoor participation soared, especially close-to-home recreation, highlighting the importance of better access to the outdoors.

Expanding Virginia's trail system to keep pace with demand and attract new users requires a coordinated, strategic approach currently spread across multiple state agencies, local partners and foundations. This arrangement leads to different interpretations of "trail" based on stakeholder roles and user expectations. Transportation and public works agencies often use the term "shared use path" or "side path". Conservation, parks, and natural resources agencies may refer to trails as "greenways", "single-track trails", and "multi-use paths" depending on location.

This report examines how Virginia can transition from this arrangement toward a single, unified vision to steward trail planning, programs, partnerships and funding of a world class trail system. Report recommendations are also informed by the recent federal bipartisan <u>Infrastructure Investment and Jobs Act</u> (IIJA) (H.R.3684) and biennium Commonwealth budget proposals and initiatives announced as the report was finalized in December 2021.³

1.2 Purpose, Requirements and Coordination

Chapter 552, Item 447.10.G of the FY 2022 budget directs the Office of Intermodal Planning and Investment (OIPI) to convene a policy working group (working group) to develop recommendations for trails master planning, a prioritization process and a funding needs assessment to advance new "multi-use trail" opportunities. The working group included representatives from the Virginia Department of Transportation (VDOT), the Department of Rail and Public Transportation (DRPT), the Department of Conservation and Recreation (DCR), the State Trails Advisory Committee (STAC), and staff from the House Appropriations Committee and Senate Finance and Appropriations Committee. The working group met four times during the report development process.

In addition, the Virginia General Assembly set aside \$10,000,000 as part of the FY 2022 budget within Chapter 552, Item 447.10.B.5 to support the planning, development and construction of multi-use trails. This set aside enables the Commonwealth Transportation Board (CTB) to assign priority investments to new regional trail projects, improve connectivity of existing trail networks, and consider geographic diversity in the use of these funds. OIPI engaged Virginia agency experts and trail advocates and conducted peer state DOT best practice reviews to inform, guide and strengthen working group recommendations. Draft recommendations were also presented to the STAC. The final report presents recommendations enabling master planning, prioritization and funding opportunities for consideration by the Chairs of the House Appropriations and Senate Finance and Appropriations Committees.

OIPI is located within the Office of the Secretary of Transportation. OIPI's goals and responsibilities are specified in § 2.2-229 of the Code of Virginia. The goals are to promote transparency and accountability of the programming of transportation funds; to ensure that the Commonwealth has a multimodal transportation system; to encourage the use of innovation and best practices to improve the efficiency of the Commonwealth's surface transportation network; and to promote the coordination between transportation investments and land use planning.

1.3 Definition and Oversight

The Code of Virginia defines trails as follows:

- Scenic trails located to provide maximum potential for the appreciation of natural areas and for the conservation and
 enjoyment of the significant scenic, historic, natural, ecological, geological, or cultural qualities of the areas through which such
 trails may pass.
- Recreation trails to provide a variety of outdoor recreation uses in or reasonably accessible to urban areas.
- Connecting trails or side trails to provide additional points of public access to recreation trails or scenic trails, or to provide connections between such trails, or to provide access from urban areas to major outdoor recreation sites.

Additionally, §10.1-204 asserts that state trails should be limited to foot, horse, or nonmotorized bicycle use. If the corridor provides transportation for private motorized vehicles (besides those used for the mobility-impaired), it is not considered a state trail. To narrow the facility types under review, this report establishes a unique "multi-use trail" definition.

- Serve non-motorized users primarily people on foot, bicycle, wheelchair, or horseback in a shared environment.
- Fall predominantly in their own rights-of-way such as along a utility corridor or former rail line. Multi-use trails can also be located within the road right-of-way, either alongside the road or on-road. Multi-use trails in road right-of-way change depending on development context and available right-of-way. Regardless of the context, users should be provided a safe experience through separation from motor vehicle traffic (consistent with safety principles and design best practices).
- Meet design standards for accessibility and "shared use paths" defined by VDOT includes a hard surface such as crushed stone, asphalt, or concrete and a minimum width for safe two-way operation.

No single agency oversees or manages the Commonwealth's entire trail system however, VDOT and DCR share the largest role bifurcated by the responsibilities of each agency, including:

- VDOT manages over 450 miles of shared use paths, mostly along VDOT roads, while DCR manages trails in state parks.
- VDOT typically funds paved, Americans with Disabilities Act (ADA)-accessible shared use paths, while DCR typically funds multiuse trails with various surface treatment and single-track trails that often conform to Architectural Barriers Act (ABA) Outdoor Developed Area Guidelines.
- VDOT administers construction of paved paths meeting American Association of State Highway and Transportation Officials
 (AASHTO) and ADA standards (unless the project is being locally administered), while DCR administers trails, typically crushed
 stone or natural-surface paths, in state parks and natural area preserves.
- VDOT focuses on pedestrian and bicycle transportation infrastructure supporting transportation goals, while DCR focuses on recreational trails incorporating wellness, ecological, scenic, and/or historic values.

The <u>VDOT Bicycle and Pedestrian Program</u> has led planning studies and provided planning assistance to localities since it was established in the late 1970s.⁴ It has helped create Virginia's current network of trails. VDOT's <u>Statewide Bicycle Facility Inventory map</u> shows an existing 1,322 miles of shared-use paths in addition to other facilities open to bikes across Virginia.⁵ Shared-use paths are defined as paths designated for use by both pedestrians and bicycles.

DCR manages Virginia's existing State Trails Program, which includes facilitating the STAC, providing technical assistance, educating the trail community, and maintaining a statewide trail inventory. Every five years DCR updates the Virginia Outdoors Plan (VOP), where regional trail priorities and networks of statewide trails are identified. The 2018 VOP identified six statewide trails and recognized VDOT's designated U.S. Bike Routes that form the backbone of a statewide trails system. A significant percentage of these trail miles would meet the multi-use trail definition.

1.4 Multi-Use Trails – Recommendations and Actions Across Focus Areas

The CTB, at its January 10, 2022 workshop meeting, provided consensus direction to align planning and funding for multi-use trails within the Transportation Secretariat. Report findings and recommendations are built on an assessment that creates an understanding of the current programs, needs, practices, and opportunities around the legislative request focus areas of multi-use trail master planning, prioritization, and funding. The recommendations span all three of these focus areas and help to enhance the process for multi-use trail projects to advance from needs identification, to planning, to project development, to competing for funding, to implementation and maintenance.

Table 1 summarizes the top-line findings from the assessment within each focus area and shows how they translate to the top-line recommendations.

Table 1: Findings by Focus Area

| Master Planning | Prioritization | Funding | | |
|---|--|--|--|--|
| Ad-hoc state trail development; no interagency unifying standards, practice, guidance No single vision and structure for comprehensive planning, interagency coordination Need comprehensive multi-use trail and statewide significant network definitions Lack of platform to track needs, report performance | Compartmentalized, subject to narrow agency requirements Limited resources for feasibility, capacity building, project scoping Assess project benefits to optimize response to grant opportunities (state, federal) Unclear process for appropriate funding path to develop network, address gaps | Full potential constrained by resource limitations, agency roles and responsibilities Missed opportunities – untapped sources, partnerships, leveraging mechanisms No link to trail demand or impact, and limited mechanisms for joint funding Lack of strategy and resources to maintain trails infrastructure and manage a consistent user experience | | |
| Establish a State Multi-Use Trails Office | | | | |
| Develop a State Multi-Use Trails Plan | | | | |
| Implement a State Multi-Use Trails Program | | | | |

Table 2 details how those top-line recommendations will drive implementation actions within each focus area. Implementation of some funding options – to resource and advance master planning and prioritization recommendations, will require further examination of policy, agency, and legislative actions outside the scope of the report.

Table 2: Recommendation Details

| Action | Implementation |
|-------------------------|--|
| | Establishes strategic direction for multi-use trails in Virginia |
| | Identifies an implements multi-use trail implementation policy |
| Establish a State | Leverages VDOT and DCR resources to maintain a statewide multi-use trails database |
| Multi-Use Trails Office | Operationalizes the framework for interagency coordination and engagement (through the STAC) to drive technical assistance, prioritization, grant support |
| Trails Office | ■ Promotes marketing activities, surveys and research and communicates State Multi-Use Trails Plan outcomes |
| | Reports on progress and demonstrates trail investment value to advance state and local goals |
| | ■ Creates a unified vision and goals |
| Develop a | Defines a state priority network of interconnected multi-use trails serving recreational and transportation needs, including creating a State Multi-Use Trails Database |
| State | Documents roles, responsibilities and local participation opportunities to implement the plan |
| Multi-Use | Initiates a master planning process and prioritizes needs and future investments |
| Trails Plan | ■ Engages stakeholders to participate in plan development through a strategic, collaborative process |
| | Coordinates with other statewide and regional plans and creates a platform for enhanced inclusion of multi- use trails within recurring updates to other statewide plans, including VTrans and the VOP |
| Implement a State | Organizes funding strategies to advance projects at different stages of development and delivery, including implementing three grant programs: Planning Grants, Construction Grants, Maintenance Grants |
| Multi-Use Trails | Maximizes potential of new funding sources and leverages existing funding sources |
| Program | ■ Determines maintenance priorities to ensure a safe, modern trails network and consistent user experience |

Table 3 presents implementation details, logistics, and cost estimates. Cost estimates are based on information from peer states, including programs in Florida and Pennsylvania, augmented to reflect the goals and reality of the potential future program in Virginia. The costs are an order of magnitude estimate for policy makers and responsible agencies to further examine and revise as formula funds and grants programs within the IIJA and future Commonwealth budget initiatives are enacted.

Implementation will require additional resources as soon as possible (in state fiscal year 2022 if resources are available, or certainly within state fiscal year 2023), including long-term commitments to funding the State Multi-Use Trails Office and State Multi-Use Trails Plan and build the State Trails Database.

Table 3: Implementation Details and Costs

| Action | Details | Logistics | Estimated Costs |
|---|---|--|--|
| Establish a Multi-Use State Trails Office | Set aside funding starting as soon as possible to staff and provide resources to the State Multi-Use Trails Office. | The State Multi-Use Trails Office should ramp-up to five FTEs (beyond existing VDOT and DCR staff) to initiate and lead the State Multi-Use Trails Plan as soon as possible, initiate coordination with stakeholders and partners, develop a staffing and organizational plan, construct the framework for the State Multi-Use Trails Program, manage the State Trails Database, lead research and promotion, and initiate a technical assistance program. | Ramp-up to 5 FTEs in FY 2023 (expanding in future years as the program matures), plus an annual budget to support research and promotion |
| Develop a Multi-Use State Trails Plan | Set aside funding to develop the inaugural State Multi-Use Trails Plan in CY 2022 and 2023, in addition to the State Multi-Use Trails Database. | The funding for the State Multi-Use Trails Plan and initial development of the State Multi-Use Trails Database can flow directly into the State Multi-Use Trails Office for implementation, or alternatively be provided to another existing agency to manage until the State Multi-Use Trails Office is established. | \$2.0 million initially, with funding in future years to support regular updates |
| Implement a Multi-Use State Trails Program | Assign new funding for FY 2023 to provide an additional boost to multi-use trails funding and kick-off the State Multi-Use Trails Program in parallel to the State Multi-Use Trails Plan. | There are three recommended aspects to the State Multi-Use Trails Program: Planning Grants, Construction Grants, and Maintenance Grants. As part of the roll-out of the State Multi-Use Trails Office and development of the State Multi-Use Trails Plan, a structure for these grant programs, agency roles and responsibility, and grant eligibility should be developed. | \$20 million initially, increased annually consistent with inflation |



Virginia Capital Trail near Dorey Park, in Henrico County Source: Toole Design Group

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Planning and Investment

2 MULTI-USE TRAILS ASSESSMENT

2.1 What is a Multi-Use Trail?

For the purposes of this report, to meet legislative intent and narrow facility types under review, a "multi-use trail":

- Serves non-motorized users primarily people on foot, bicycle, wheelchair, or horseback in a shared environment.
- Fall predominantly in their own rights-of-way such as along a utility corridor or former rail line. Multi-use trails can also be located within road right-of-way, either alongside the road or on-road. Multi-use trails in road right-of-way change depending on development context and available right-of-way. Regardless of the context, users should be provided a safe experience through separation from motor vehicle traffic (consistent with safety principles and design best practices).
- Meets design standards for accessibility and "shared use paths" defined by VDOT includes a hard surface such as crushed stone, asphalt, or concrete and minimum width for safe two-way operation.

In addition, land trails identified by DCR and VDOT as part of the statewide trail system or bicycle network (see **Figure 6**) are presumed to meet this definition for this initiative.

The following pictures provide example multi-use trails in Virginia meeting the above definition.



Franklin Street, Richmond Source: East Coast Greenway Alliance

W&OD Trail, Falls Church Source: Toole Design Group

Virginia Creeper Trail, Washington County Source: Toole Design Group

2.2 Agency Organization and Partnerships

Numerous public agencies and organizations are involved in multi-use trails planning, development, funding, and maintenance in the Commonwealth. **Figure 15** in the Appendix outlines the public and private entities that are often involved with multi-use trails in Virginia, ranging from the federal to the local level, and their roles in the process. No single agency oversees or manages the Commonwealth's entire trail system. The two agencies with the largest roles are VDOT and DCR. There is a bifurcation of responsibilities under each agency's purview, including:

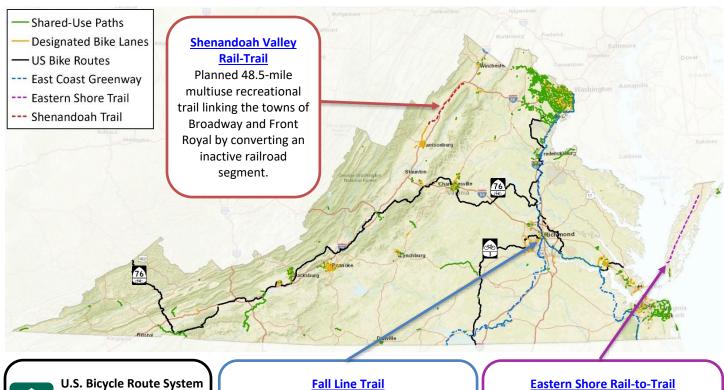
- VDOT manages over 450 miles of shared-use paths, mostly along VDOT roads, while DCR manages trails in state parks.
- VDOT typically funds paved, Americans with Disabilities Act (ADA)-accessible shared use paths, while DCR typically funds multiuse trails with various surface treatment and single-track trails that often conform to Architectural Barriers Act (ABA) Outdoor Developed Area Guidelines.
- VDOT administers construction of paved paths meeting American Association of State Highway and Transportation Officials
 (AASHTO) and ADA standards (unless the project is being locally administered), while DCR administers trails, typically crushed
 stone or natural-surface paths, in state parks and natural area preserves.
- VDOT focuses on pedestrian and bicycle transportation infrastructure supporting transportation goals, while DCR focuses on recreational trails that incorporate wellness, ecological, scenic, and/or historic values.

2.3 Multi-Use Trails Network – State of the System

2.3.1 Geography

Figure 1 shows VDOT's Statewide Bicycle Facility Inventory map, including US Bike Routes and three planned regional trails. This map shows shared-use paths, defined as paths designated for use by both pedestrians and bicycles, in green. Based on this inventory, there are 1,322 miles of shared-use paths in the Commonwealth. DCR also manages a <u>Trails Collaboration Page</u> enabling stakeholders to submit trails for consideration and the public to view trails. More details on the characteristics of trails in different regions in the Commonwealth are in the Appendix (pg. 39).

Figure 1: Multi-Use Trails in Virginia



USBRS USBRS

Three designated and signed routes in <u>Virginia</u>, including Route 1,

Route 76, and Route 176.⁷

43-mile, multi-jurisdictional trail from Ashland to Petersburg, partially funded for construction through SMART SCALE and the Central Virginia Transportation Authority.

Proposed 50-mile rail-to-trail running parallel to U.S. 13. The private company that manages the railroad supports the railbanking process and the trail plans.

2.3.2 Trends

The COVID-19 pandemic, work from home lifestyles, and public health policies are contributing to greater use of Virginia's trail network. Trail activity also correlates to total consumer spending on recreational activities (see **Figure 2**) and connecting communities through a longer trail corridor to facilitate transportation options and stimulate economic impact. More information on park visitation and economic impacts are available through the <u>National Park Service</u>⁹ and the Virginia Office of Outdoor Recreation¹⁰.

Figure 2: Virginia Outdoor Recreation Economic Activity

| 197,000 direct jobs | \$22B in consumer spending | \$6.5B in wages, and salaries | |
|---|----------------------------------|-------------------------------------|--|
| \$1.2B in state and local tax revenue | 200+ outdoor companies | 22 national parks 41 state parks | |

Source: Virginia Office of Outdoor Recreation, DCR, Outdoor Industry Association

Bicycle Friendly State

In 2019, <u>The League of American Bicyclists</u> ranked Virginia ninth in their Bicycle Friendly State Ranking.¹¹ Virginia was ranked 23rd in 2008 and 2009 and steadily rose in the past 12 years (see **Figure 16** in Appendix). This is a testament to the public's increased interest in active transportation and Virginia's recognition and investment in this area.

This ranking is supported by Virginia earning an A for the number of miles of bicycle and pedestrian facilities planned to be built, a B+ in Evaluation and Planning, and a B in Infrastructure & Planning, all on an A – F scale. Bicycle and Pedestrian Safety earned a C+, Virginia's lowest-scoring category. Based on the National Highway Traffic Safety Administration's Fatality Analysis Reporting System, there are approximately 6.6 fatalities per 10,000 bike commuters.¹²

Interest & Utilization

Virginia's General Assembly has seen an increased interest in funding for public health, for which access to quality outdoor recreational facilities is vital. In the summer of 2021, Virginia allotted \$3.1 billion of the \$4.3 billion from the America Rescue Plan Act to public health initiatives. Additionally, the connection between public health and multi-use trails was highlighted during the COVID-19 pandemic when there was a sharp increase in trail usage in Virginia. For example, according to the Virginia Capital Trail Foundation, as documented in its 2020 Impact Report, total usage counts on the Virginia Capital Trail surpassed 1.2 million in 2020, a 47 percent increase in trail usage from 2019.

2.3.3 Rails to Trails Program

Many of Virginia's most popular multi-use trails run along former rail corridors. Rail-trails typically meet the definition of multi-use trails—they are flat, have a hard surface, are in their own right-of-way, and are accessible to users of all ages and abilities. Virginia has 51 rail-trails totaling 429 miles. There are 11 trail projects underway that will bring the total mileage to 569 when completed. DRPT does not fund trails, but does coordinate with railroads and DCR to facilitate communications for trail projects that cross railroad right of way, per the HB 2088 process. 16

There are multiple processes to acquire rail corridors for trail development which are coordinated in part by DRPT discussions with railroads. Railbanking is an important process that is used to preserve rail corridors for the future, while allowing interim use as a trail. Without railbanking, corridors that were acquired by the railroads using eminent domain would potentially revert to the original landowners – making it all but impossible to recreate the corridor should future needs arise. The Eastern Shore Rail Trail is a good example of a planned railbanking process.

2.3.4 *VTrans*

VTrans is the statewide plan that lays out an overarching vision and goals for multimodal transportation in the Commonwealth. It identifies transportation investment priorities and provides direction to transportation agencies on strategies and programs to be incorporated into their plans and programs. VTrans is updated every four years and adopted by the Commonwealth Transportation Board (CTB). For a project to be screened through Virginia's SMART SCALE program, the project must meet three criteria, one being a need identified in VTrans. The Vision, Goals & Objectives, and Guiding Principles within VTrans have clear connections with the purpose and outcomes of multi-use trails. These connections are summarized in **Table 4**.

Table 4: VTrans Connections to Multi-Use Trails – Vision & Goals

| | VTrans | Connection to Multi-use Trails |
|--------|--|--|
| Vision | "Virginia's multimodal system will be good for business and good for communities and that a sustainable transportation system that attracts a 21st century workforce and promotes healthy communities where Virginians of all ages and abilities can thrive." | Multi-use trails play a vital role in healthy communities as places to get physical exercise either for recreation or commuting. These trails have also shown great economic benefits to surrounding communities and are highly attractive to both tourists and a 21 st -century workforce. Multi-use trails with relatively flat grades and hard surfaces are also accessible to people of all ages and abilities. |
| Goals | Goal: Healthy Communities and Sustainable Transportation Communities – support a variety of community types promoting local economies and healthy lifestyles that provide travel options, while preserving agricultural, natural, historic and cultural resources. | This goal is precisely what multi-use trails do – support local economies, provide transportation and recreational opportunities, support healthy, active lifestyles, all while preserving natural land. |

2.4 Multi-Use Trails Network – Gap Assessment

Several plans at the state level touch on multi-use trail planning (see **Table 5**), including DCR's 2018 Virginia Outdoors Plan (VOP) and VTrans. Plans are available for some individual trails, such as Tobacco Heritage Trail's Master Plan, or as part of a larger statewide trail system, such as the Beaches to Bluegrass Trail Master Plan. The lack of a single, unifying State Multi-Use Trails Plan, a designation system, and dedicated funding, including for maintenance, are barriers in the effort to create regional and statewide networks of trails in urban and rural regions throughout the Commonwealth.

Table 5: Plans Related to Multi-Use Trails

| | Plan | Updated | Purpose |
|---------------------------|---|------------------|---|
| ans | VTrans (ongoing) | 4 years | Virginia's statewide multimodal plan presenting the overarching vision and goals for transportation in the Commonwealth and identifies investment priorities. Multi-use trails are not explicitly discussed but clearly fall within the vision and goals and are referenced within the mid-term needs assessment. |
| Recurring Statewide Plans | Virginia Outdoors Plan (VOP) (2018) | 5 years | State's comprehensive plan for land conservation, outdoor recreation and open-space planning. DCR provides a focused chapter on trails that recognizes national and state trails. The VOP is developed to fulfill requirements for Virginia to participate in the federal Land and Water Conservation Fund (LWCF) program. The plan is focused on motorized and non-motorized outdoor recreation, including parks, land trails, water trails, water access, scenic programs, the Natural Heritage Program, and land conservation. |
| ~ | Virginia Strategic Highway Safety Plan (2016) | 5 years | State's traffic safety plan focused on reducing fatalities and serious injuries on public roads to zero and tracking this data. The plan includes pedestrians and bicyclists. The Strategic Highway Safety Plan is being updated in 2022. |
| Policy Plans | VDOT State Bicycle Policy Plan (2011) | Not recurring | Developed to ensure bicyclists are an integral component of Virginia's multimodal transportation system and to provide bicycle policy recommendations that will guide the planning, design, construction, operation and maintenance of bicycle facilities. |
| | VDOT State Pedestrian Policy Plan (2014) | Not recurring | Establish a vision for the future of walking in the Commonwealth and to advance the walking element of the Commonwealth Transportation Board's (CTB) Policy for Integrating Bicycle and Pedestrian Accommodations. 17 |

2.5 Stakeholder Perspectives

Nine interviews (see **Table 14** in Appendix) were conducted with stakeholders to augment national research and understand key needs, priorities and perspectives across the working group focus areas. The following points were consistently heard across the interviews by focus areas.

2.5.1 Master Planning

- Development of a statewide master plan, active transportation plan, or "Walk/Bike" (such as the recent Walk.Bike.Ohio Plan) as a foundation for interagency coordination, partnerships and planning policy cascading from state to regional and local levels. A statewide office to oversee trails potentially jointly staffed by various agencies could serve as a vehicle to implement the statewide plan and support a master planning process.
- Establish scoping and eligibility requirements for funding multi-use trail improvements—the Florida Shared-Use Nonmotorized (SUN) Trail Program policy was cited, which requires a trail to be in the "Florida Greenways and Trails System Plan" to apply to the program.
- Address resource imbalances between urban and rural jurisdictions vying for SMART SCALE funds. Rural jurisdictions may not
 have the staff, time, or data necessary to prepare a full submittal putting them at a competitive disadvantage.

2.5.2 Prioritization

- Develop a stand-alone prioritization process or trail screening process to comprehensively assess the benefits of multi-use trail
 projects (or explore options to augment SMART SCALE criteria to better reflect trail benefits).
- Closing small regional trail gaps is equally as important as completing long-distance trails identify ways to score project impact beyond just project length.

2.5.3 Funding

- The identification of funding for maintenance was seen as a barrier to the development of new trail projects. Existing funding seems to favor the construction of new trails, but without a dedicated source of maintenance funds and a proactive approach (rather than reactive) to trail maintenance, continued safe access to trail systems may be limited.
- Seek innovative public-private partnerships and other untapped sources (such as Community Health Needs grants) to support more statewide and regional trail development, particularly in rural and disadvantaged communities.

2.6 Conclusions - Current to Future State of Practice

Multi-use trails are a unique transportation asset whose investment is linked to recreation, tourism, and broader state goals. The following review in **Table 6** of current state processes and responsive steps can move Virginia towards enhanced trail planning. This enhancement will help optimize scarce resources, engage and involve stakeholders and champions, and establish consistent technical standards, funding requirements, and expectations.

Table 6: Summary of State of Practice and Future Opportunities

| State of Practice Review | Responsive Steps, Priorities and Opportunities |
|---|--|
| Lack of unified agency oversight for trails planning – ad hoc process shared across multiple agencies with narrowly focused staff roles and responsibilities | Develop a jointly staffed central office or formalize interagency coordination to serve as a statewide resource to develop a statewide trails plan or active transportation plan Develop and oversee a master planning process with scoping and funding eligibility requirements, engagement/outreach, and technical standards transferable from state experts to stakeholders |
| Limited reference to multi-use trails in VTrans needs assessments and overall statewide transportation planning – although connected to VTrans vision, goals and objectives, multi-use trail needs and investment opportunities can "fly under the radar", creating less awareness of these needs and potential projects in SMART SCALE | Review specific goals (such as Healthy and Sustainable Transportation Communities) and update the VTrans needs assessment process to better reflect the evaluation of multi-use trail improvements Focus particularly on regional and long-distance trail needs, as the current VTrans needs assessment methodology does identify needs related to short trail segments and network gaps |
| Limited investment in data collection, condition and performance reporting – inertia to invest in data systems which provide a basis to inform short/long term needs, adequate funding | Enhance existing trail inventories across agencies to baseline and inventory trail systems, conditions and identify key gaps, missing network connections and track preservation activities (Rails-to-Trails or other stakeholders, non-profit efforts) which protect corridors |
| Lack of strategic, multi-faceted approach and options to fund multi-use trails at different stages of development – limitations with existing programs can only touch a portion of potential future demand for recreational activity and to complete unfinished sections of regional and multi-state plans. | Develop innovative public-private arrangements to leverage investment in multi-use trails at different stages – from project readiness (planning, design) to construction and maintenance Public-private arrangements could include relationships with existing or new local foundations focused on topics like public health, economic opportunity, and environmental preservation or with local businesses or national corporations who are stakeholders within a successful outdoor recreation economy Develop estimates of short- and long-term maintenance needs supportive of a master planning process and investment in high priority and utilized trail improvements. |

3 STATE MULTI-USE TRAILS OFFICE

The State Multi-Use Trails Office will serve as the organizing agency to resource and advance the State Multi-Use Trails Plan and State Multi-Use Trails Program while will help enhance the process for multi-use trail projects to advance from needs identification, to planning, to project development, to competing for funding, to implementation and maintenance.

An interagency State Multi-Use Trails Office is needed to support new multi-use trails in Virginia. Staff would provide leadership and coordination, establish and promote the State Multi-Use Trails Plan, and provide technical assistance and grant funding to support implementation of the plan through the State Multi-Use Trails Program. The State Multi-Use Trails Plan would build from existing local and regional trail efforts to identify and develop connected, multi-use trails of statewide significance or a statewide priority network. The State Multi-Use Trails Program helps position Virginia to optimize the approach to leveraging state, federal, regional, local, and private or non-profit resources to plan, construct, and maintain a statewide trails system.

The best state multi-use trail programs have similar characteristics, led through unique offices that:

- Provide leadership and coordination across multiple agencies and organizations.
- Facilitate a strategic planning process focused on a statewide system of trails.
- Lead studies to identify trail gaps and a plan to close them.
- Collaborate with stakeholders to prioritize trails of statewide significance.
- Manage unique and sustained sources of funding for trail planning, design, and construction.
- Partner with the private sector and foundations.

Figure 3 shows how the primary roles of the State Multi-Use Trails Office and its oversight of State Multi-Use Trails Plan development and State Multi-Use Trails Program implementation. The existing State Trails Advisory Committee (STAC) continues to serve an important interagency and stakeholder advisory role. STAC membership is provided in **Table 13** in the Appendix (pg. 39.

Figure 3: State Multi-Use Trails Office Roles and Responsibilities

State Multi-Use Trails Office • Establishes strategic direction • Institutes implementation policy • Leverages VDOT and DCR resources • Coordinate investment and project priorities • Markets multi-use trails and works with partners • Reports on progress State Trails Advisory Committee State Multi-Use Trails Program

3.1 Peer State and Virginia Case Studies

Peer states demonstrate various approaches to developing a multi-use trail network within a statewide initiative. Florida and Pennsylvania provide examples of similar office and program structure but slightly different processes to building out their multi-use trail networks. Regional trail programs in Virginia have also demonstrated successful strategies for trail network development. More information on these office and programs are available in the Appendix (pg. 39).

3.2 Activities and Coordination

A State Multi-Use Trails Office is needed to coordinate a State Multi-Use Trails Program and encourage trail partners and stakeholders to work together to reach multi-use trail goals and strategically support the development of trails that deliver the greatest benefit to Virginians. With support from the STAC, and state agency partner staff at VDOT, DCR, and DRPT, the State Multi-Use Trails Office would:

- Facilitate and oversee development, updates to and implementation of the State Multi-Use Trails Plan.
- Provide a mechanism for shared resources among state, regional and local trail partners, including a central, statewide database for tracking and reporting on regional and statewide priority network trail development.
- Provide technical assistance to regional and local partners on all aspects of trail development, including design guidance, signage, cost estimating, and other critical trail scoping and design issues such as railbanking and rail-to-trail projects. Technical assistance for localities is intended to provide materials and expertise to support any multi-use trail project, whether it is on the statewide priority network or not.
- Establish consistent and best practice standards for trail planning, design, safety, operations, and maintenance.
- Facilitate targeted funding for high-priority projects and planning studies to develop a statewide priority network, facilitating
 movement across regional, inter-regional and national trails throughout Virginia; explore innovative, non-traditional
 partnerships with foundations and the business community to leverage current state funding programs.
- Coordinate with the State Trails Advisory Committee (STAC) to cross-promote interagency cooperation and private or non-profit
 partnerships, recommend priorities (new or planned trails, gaps, links, etc.), and discuss funding recommendations for
 developing and managing the system.
- Engage stakeholders, advocates and users to improve, evolve best practice specific to Virginia and promote/demonstrate how
 operationalizing a State Multi-Use Trails Program advances related transportation goals and benefits (access, equity, economic,
 environmental, or other).
- Communicate and regularly report progress towards statewide trail plan goals, objectives, and implementation actions including specific accomplishments.
- Manage influx of current and future federal grant opportunities and support applications, pre-positioning Virginia to be competitive.

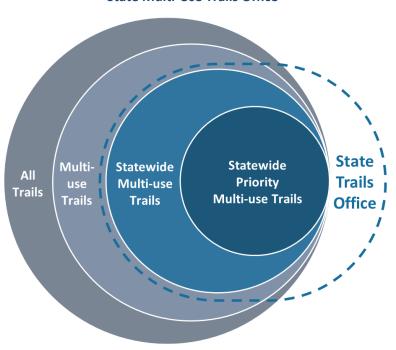
The State Trails Advisory Committee (STAC) was established in 2015 (§ 10.1-204.1) to assist the Commonwealth in developing and implementing a statewide system of trails (§ 10.1-204); a natural evolution of the STAC might be a transition to serve as the Advisory Committee to the new State Multi-Use Trails Office and the State Multi-Use Trails Program. The current STAC is administered by DCR, and membership includes VDOT and other state agencies. One of the notable achievements of the STAC is its contribution to the trails chapter of the Virginia Outdoors Plan (VOP), which is Virginia's plan for outdoor recreation and land conservation.¹⁸

3.3 Multi-Use Trails Responsibility

Multi-use trails support multiple uses, offer numerous cobenefits, and are extremely flexible. As shown in **Figure 4**, while there is great diversity in all types of trails and responsibility for managing those trails, the focus of the State Multi-Use Trails Office will be on building a statewide system of connected multi-use trails (based on the multi-use trails definition), targeting attention on priority segments. Not all multi-use trails will be under the purview of the State Multi-Use Trails Office. The specific system of statewide multi-use trails will be developed as part of the Statewide Multi-Use Trails Plan.

The State Multi-Use Trails Office will turn the jurisdiction overlap of VDOT and DCR on multi-use trails into an opportunity for leveraging resources. The master planning process enabled by the State Multi-Use Trails Plan (see **Section 4**) and the associated prioritization process enable, through a new State Multi-Use Trails Office, for VDOT and DCR to collaborate and prioritize multi-use trails improvements on a statewide priority network.

Figure 4: Universe of Trails and the State Multi-Use Trails Office



3.4 Developing the State Multi-Use Trails Plan and Implementing the State Multi-Use Trails Program

Two overarching responsibilities of the State Multi-Use Trails Office will be to conduct multi-use trails master planning (convened initially through the State Multi-Use Trails Plan) and manage new multi-use trails funding through the State Multi-Use Trails Program. To translate the results of master planning into multi-use trails construction requires a decision-making process that enables the State Multi-Use Trails Office, state agency partners, regional and local partners, and the State Trails Advisory Committee (STAC) to assign levels of importance to multi-use trail needs and projects. There are three objectives for this decision-making process (also known as a prioritization process) managed by the State Multi-Use Trails Office:

- Prioritization should help identify the most critical and beneficial multi-use trails and trail segments to address statewide needs and priorities from the State Multi-Use Trails Plan.
- Prioritization should identify candidate trail projects best positioned to meet the vision and goals of the State Multi-Use Trails Plan and other important statewide plans, like VTrans and the Virginia Outdoors Plan.
- Once projects are identified, prioritization helps advance projects into priority lists and position them to compete for competitive multimodal federal and state grants, and funding for construction through the State Multi-Use Trails Program.

The prioritization process will be developed as part of the State Multi-Use Trails Plan and implemented as part of the State Multi-Use Trails Office management of the State Multi-Use Trails Program. More information on the specific approach to multi-use trails prioritization is included in **Section 4** of this report.

3.5 Conclusion

There is a strong case for prioritizing the development of multi-use trails that deliver multiple benefits (health, transportation, recreation, sustainability, economic development), meet the goals of multiple agencies simultaneously, complete a statewide system or network, and serve as an example and inspiration to regional and local trail projects around the Commonwealth.

The State Multi-Use Trails Office will aim to optimize how the Commonwealth leverages resources, partnerships, funding opportunities, and public input in order to develop a statewide multi-use trails network. Centralizing this approach enables the State Multi-Use Trails Office to remain focused on its unique mission, while also leveraging the existing trail planning, implementation, and maintenance resources of VDOT and DCR. A summary of the roles and responsibilities of the State Multi-Use Trails Office is presented in **Table 7**.

Table 7: Summary of State Multi-Use Trails Office Recommendations

Recommend the Commonwealth formalize and fund an interagency State Multi-Use Trails Office to develop a State Multi-Use Trails Plan, coordinate a State Multi-Use Trails Program, and encourage trail partners and stakeholders to work together to strategically support development of trails throughout the Commonwealth.

Establish a State Multi-Use Trails Office

- Oversee development and implementation of the State Multi-Use Trails Plan to establish a vision, goals, and objectives and identify and prioritize a network of statewide trails, including those elements of the network that are multi-use trails.
- Coordinate the work of state agencies involved in trail development to maximize the efficient use of resources.
- Create a shared, open-source State Multi-Use Trails Database to help track existing system assets and project implementation.

Develop an interagency State Multi-Use Trails Plan (see more details in Section 4, pg. 14)

Start-up a technical assistance program to support trail development at the local and regional level

- Develop and disseminate technical resources such as design guidance and application development.
- Support local governments and community organizations develop trail projects that contribute to the statewide system.
- Assist all levels of government undertaking equity analyses of trail projects and programs.
- Document best practices related to trail development, operations, maintenance, and management.

Undertake critical research and marketing

- Enable local agencies and organizations to measure the economic, social, and recreational benefits of potential trail projects.
- Explore the potential of innovative, non-traditional partnerships to leverage current state funding programs.
- Conduct surveys, promotion and marketing activities, including planning and logistics for future State Trail Conferences.

Administer three unique grant programs supporting high priority statewide trails (see more details in Section 5, pg. 21)

Coordinate and facilitate public involvement

- Ensure public participation and engagement during the development of the State Multi-Use Trails Plan and other related activities
- Establish a feedback mechanism for the public to share comments, suggestions, feedback on current and future trail projects.

Evaluate implementation of the State Multi-Use Trails Program (see more details in Section 5, pg. 21)

4 STATE MULTI-USE TRAILS PLAN

The first and most critical step in identifying and prioritizing a multi-use trail network in Virginia is to establish a comprehensive, interagency, State Multi-Use Trails Plan and State Multi-Use Trails Program through a master planning process.

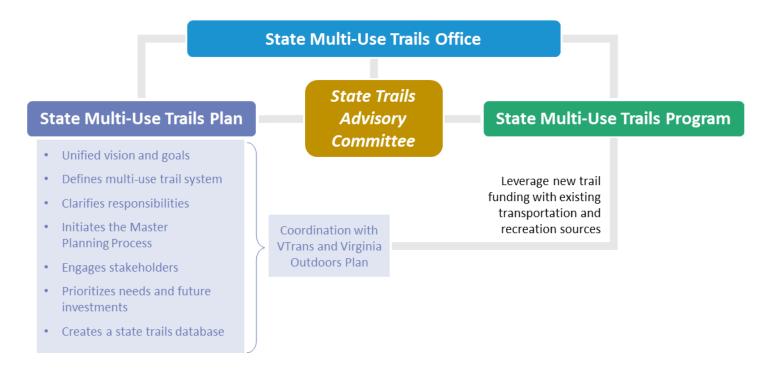
The best and most successful statewide multi-use trail networks in the United States are developed as an element of a comprehensive statewide trails plan. Although Virginia has multiple state agencies, advocacy organizations, and foundations to plan, fund, and develop multi-use trails, the Commonwealth lacks a single, unifying, and strategic State Multi-Use Trails Plan and State Multi-Use Trails Office to oversee development of regional and statewide trail networks.

The development of a State Multi-Use Trails Plan provides a mechanism to facilitate greater state, regional, local stakeholder, and partner coordination. The result will be more effective and strategic prioritization of routes and gaps, more competitive and feasible projects, and a collaborative interagency implementation strategy that leverages existing resources and identifies new ones to support trail development.

Best practice state trails programs develop a statewide trails plan separate from the required outdoor recreation plan. Both plans involve all relevant trail-related agencies in their development to ensure connectivity between the two, but the statewide trails plan provides a comprehensive vision of what trails can achieve for the state while undertaking the investigation, analysis, public outreach, prioritization, and implementation actions necessary to build a connected network. The planning process will identify goals, objectives, actions needed to build the system statewide.

Figure 5 shows how the primary roles of the State Multi-Use Trails Office and its oversight of State Multi-Use Trails Plan development and State Multi-Use Trails Program implementation. The existing State Trails Advisory Committee (STAC) continues to serve an important interagency and stakeholder advisory role.

Figure 5: State Multi-Use Trails Plan Objectives and Connections



4.1 State Multi-Use Trails Plan Outcomes

The State Multi-Use Trails Plan should be developed by an interagency group focusing on key elements of a master planning process:

Strategic and Collaborative Vision, Goals and Objectives – A robust visioning and goals development process can build consensus among stakeholders and the public and establish an overarching framework for the plan. The statewide plan should establish a vision and identify multi-use trail goals and objectives that reflect all trail partners, including state agency and partner organizations. The plan should identify those places where multi-use trails contribute to common goals across existing plans and mission statements, such as shared commitments to equity, sustainability, safety healthy environment and communities, economic prosperity, and accessible and connected places.

Shared Ownership of Virginia Trail Program – The State Multi-Use Trails Plan should engage and describe a clear path of involvement for all Virginia trail agencies and partners at state, regional, and local levels, clearly defining key agency roles and collaboration opportunities and address private partnerships. Regional and local trail plans should inform the multi-use trail plan and vice versa.

State Multi-Use Trails Database — A key first step in implementing a coordinated State Multi-Use Trails Program is establishing a central, statewide, baseline inventory of all trail systems and their conditions as part of the State Multi-Use Trails Plan. This comprehensive database would include gaps and missing connections and track preservation activities (Rails-to-Trails or other stakeholder, non-profit efforts) which protect corridors for future development. This database should reflect all existing agency and partner organization data, remain up-to-date, and be accessible to all agencies and the public. This effort would require committed staff resources and assistance to localities to help maintain data. This would build from existing VDOT and DCR data in addition to national data such as the National Digital Trails Network project.¹⁹

Enhanced Public Engagement/Outreach — In addition to enabling coordination among trail-related agencies and organizations, development of the State Multi-Use Trails Plan should provide multiple opportunities for stakeholder and public involvement, including interested community members and trail users and advocates. Public input should be sought during identification of existing, planned and conceptual trails as well as during the identification of a statewide priority network. The public input process should bring new people to the table and show participants how their input was incorporated.

Prioritization of Multi-use Trails for Targeted Implementation — As the State Multi-Use Trails Plan nears completion, a statewide multi-use trails implementation policy should be developed. The policy (with oversight from the State Trails Advisory Committee) would create the structure for a transparent process to prioritize multi-use trails to develop a statewide network. This strategic prioritization lays the foundation for dedicated and focused funding for planning, design and construction of priority trails, which cascades from state to regional and local levels. State, regional and local partners can develop a coordinated funding and implementation strategy, such as feeding the priority trails into the selection process for existing funding programs or pursuing private partnerships.

Technical Assistance to State, Regional and Local Trail Agencies and Partners — The State Multi-Use Trails Plan should develop a platform to develop and provide technical assistance to state, regional, and local implementing agencies. This assistance, delivered as part of the State Multi-Use Trails Office management of the State Multi-Use Trails Program should include trail design standards, research and performance evaluation to support trail development in the Commonwealth, and support in developing equity criteria and outreach strategies to improve equity in trail planning and construction.

Strategic Investment/Funding/Implementation Plan – The State Multi-Use Trails Plan should identify existing trail funding programs and determine the strengths and weaknesses of each program for trail development. The plan should also identify areas where trail development is currently inhibited by a lack of specific funding sources (e.g., for planning and feasibility studies) and recommend ways to overcome those obstacles through new state funding programs, adjustments to existing programs, or promotion of private and philanthropic funding sources (see more detail in Section 5.2 of this report).

Development of the State Multi-Use Trails Plan should coordinate with the recent findings and ongoing planning activities within statewide and regional transportation and recreation planning activities, including:

- VTrans, Virginia's statewide transportation plan, which is updated every four years and adopted by the Commonwealth Transportation Board (CTB),
- Virginia Outdoors Plan, which is updated every five years by DCR, and
- Regional long-range transportation, land use, and economic development plans led by Virginia Metropolitan Planning Organizations (MPOs) and Planning District Commissions (PDCs).

The State Multi-Use Trails Plan provides a platform of goals, policies, and strategies that will support an enhanced inclusion of multi-use trail needs, strategies, and recommendations within future iterations of VTrans and the Virginia Outdoors Plan

4.2 Prioritizing Statewide Trails

Instituting a prioritization process for multi-use trails requires two building blocks that will be developed as part of the State Multi-Use Trails Plan and implemented as part of the State Multi-Use Trails Program:

- A defined statewide system with identified needs including a vision and goals for the State Multi-Use Trails Program, criteria for the types of trails included within the program, and an understanding of critical trail needs and gaps. Needs should reflect the full scope of multi-use trail users, both those using trails for transportation purposes and those using trails for recreation.
- A process for trail planning and project development that creates projects that are ready to compete for a variety of existing
 and new funding sources requires a common set of standards for project definition and scope, to enable an analytical and
 equitable process for prioritization.

The statewide system can build from the system of statewide trails and connecting trails developed by DCR within the Virginia Outdoors Plan (VOP) and tracked by VDOT through the Statewide Bicycle Facility Inventory (see **Figure 1**). **Figure 6** Figure 6 presents two maps from the VOP highlighting six statewide trails, designated U.S. Bike Routes, and a list of some 80+ connecting trails.

Once a statewide system or network is in place as part of the State Multi-Use Trails Plan, the agencies involved should develop the details of the prioritization approach through an implementation policy. The policy should establish the framework for a flexible prioritization process and serve multiple stages of trail project development, from planning and project development to funding decision making and construction. A prioritization process for multi-use trails should be flexible. It should work at multiple stages of project development and funding eligibility, and potentially be organized around three specific objectives to support multi-use trails project implementation.

The approach presented in **Figure 7** does not necessarily require a unique funding source for the State Multi-Use Trails Office to distribute. Options for State Multi-Use Trails Office funding to support the State Multi-Use Trails Program are discussed in Section 5 (pg. 21) of this report.

The steps of screening, scoring, and project assessment can occur in parallel as planning studies and project development activities are completed by multi-use trail implementation partners like VDOT, DCR, and regional and local agencies. This process ensures that the State Multi-Use Trails Office can position projects to compete for existing funding programs, like SMART SCALE, while also meeting the overall goals of the State Multi-Use Trails Plan. This approach also does not require structural changes to existing processes like SMART SCALE, TA, or RTP.

Figure 6: Current Virginia Statewide Trails

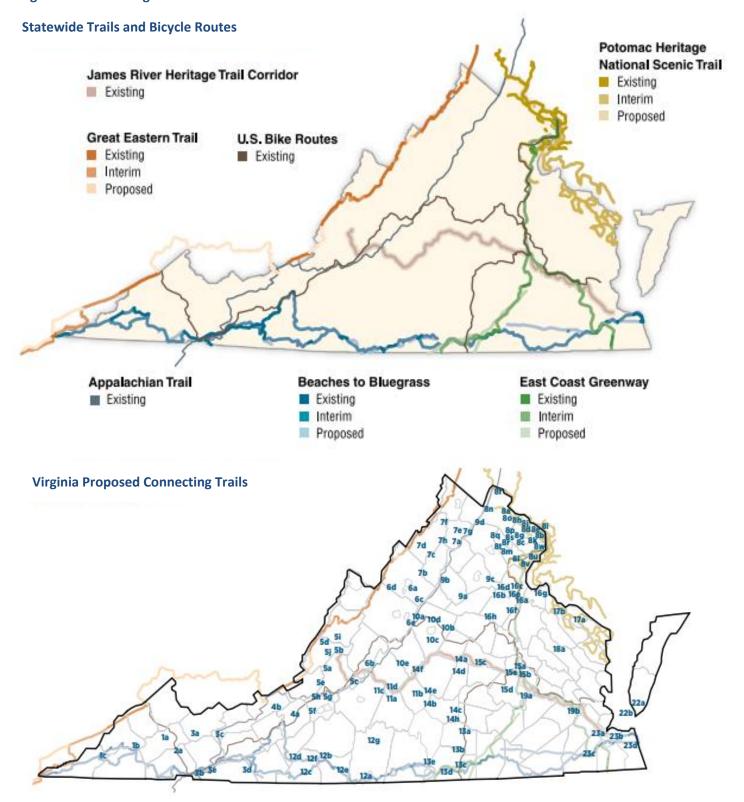
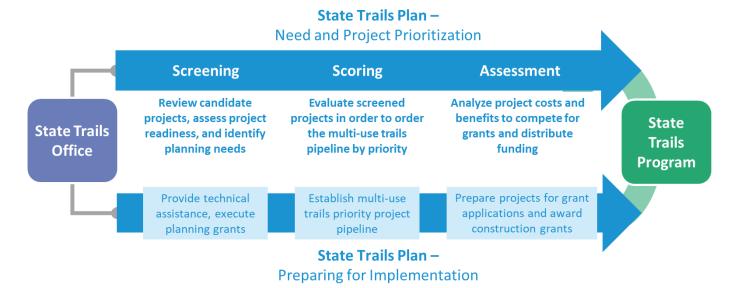


Figure 7: Levels of Trail Prioritization



Screening – The objective of screening is to review candidate projects, confirming that each project meets needs from the State Multi-Use Trails Plan, and assess project readiness. Meeting this prioritization objective enables the most promising projects to proceed into a multi-use trails project pipeline. For projects that do not meet readiness criteria and require additional planning and project development, screening can be used to justify technical assistance from the State Multi-Use Trails Office or inform decisions on providing funding for planning studies.

Screening criteria should also uniquely assign projects that develop a statewide priority network first. The statewide priority network would focus on the most critical trail segments connecting communities and recreational and tourism destinations within regions and between regions. These projects would support addressing critical gaps first,

Virginia's statewide transportation plan, VTrans, includes a multimodal data-driven needs assessment. Projects must meet a VTrans need to be eligible for funding within SMART SCALE.

VTrans includes bicycle and pedestrian needs, however, these needs may not completely represent the multi-use trail needs that will be developed within the State Multi-Use Trails Plan. VTrans is updated by OIPI on a regular cycle, at least every four years, consistent with the Code of Virginia § 33.2-353.

which creates more potential to draw visitors, spur local and regional demand, and further promote the new Funding Approach.

Scoring – The objective of scoring is to evaluate screened projects to create a multi-use trails priority project pipeline. Meeting this objective creates a top tier of best-in-class projects that are ready to compete for existing and emerging grant programs, help facilitate leveraging opportunities with local and regional governments (or private/non-profit sources) and help identify potential project implementation costs and risks. Criteria within the scoring approach should aim to assign more importance to projects supporting the statewide priority network, positioning those projects to advance toward full funding and implementation more quickly. As these segments are implemented, scoring criteria should evolve to reflect changing system development priorities.

The scoring process should be generally consistent with existing prioritization processes like SMART SCALE, Transportation Alternatives, Recreational Trails, and Land and Water Conservation Fund. More information on the methodology and criteria within these programs is provided in the funding assessment section of this report (Section 5).

Project Assessment – The objective of the project assessment is to position the most promising and ready priority projects to compete for Federal and state competitive grants. Meeting this objective would enable an understanding of project costs compared to quantitative and qualitative benefits from scoring, helping position locally supported projects that create the highest value relative to cost, and are ready for implementation. This information would help the State Multi-Use Trails Office, and partner state agencies stay ahead, particularly of Federal competitive grant cycles, and ensure local and regional support. Meeting this objective would also enable the State Multi-Use Trails Office to prioritize annual funding through the State Multi-Use Trails Program to serve the most critical project needs.

These three levels support projects as they are developed and prepared to compete for funding. The screening level ensures that projects address multi-use trails needs and goals; the scoring level helps identify best-in-class projects to proceed for further study or position for grants; the benefit/cost level prepares projects to compete for grants, secure partner leverage, and apply quantitative criteria to inform decision-making on fund distribution. The three levels create a platform for more competitive projects and extends the master planning process so that regions and localities see how the planning process can evolve into implementation.

4.3 Conclusion

The State Multi-Use Trails Plan is an essential first step to unlocking the potential of a statewide system or network of multi-use trails in Virginia. Stakeholder interviews, working group discussions, peer state research, and an assessment of current conditions for trail development in Virginia supports the recommended master planning process (including the State Multi-Use Trails Plan as a new platform for multi-use trails planning) including the elements shown in

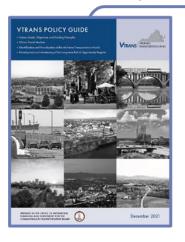
It is important to note that the State Multi-Use Trails Plan does not replace the activities supporting trails in VTrans or the Virginia Outdoors Plan. It also does not replace the need for ongoing plan at the regional level, including, for example ongoing regional efforts in the Metropolitan Washington region led by the Capital Trails Coalition and ongoing trails planning and promotion led by the Roanoke Valley Greenway Commission. The State Multi-Use Trails Plan can represent the overarching vision, goals, and policy guidance (see **Figure 8**) for trail needs assessments and planning within the legislatively required plans like VTrans and the Virginia Outdoors Plan and ongoing regional planning efforts.

Figure 8: State Multi-Use Trails Plan Relationship to Ongoing Trail Planning

State Trails Plan

Statewide Transportation and Recreation Plans

Regional Trail Plans (examples)







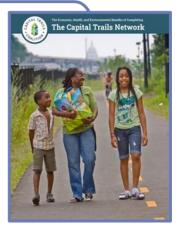


Table 8: Summary of State Multi-Use Trails Plan and Master Planning Process Recommendations

The State Multi-Use Trails Plan will help create a framework for continuous multi-use trails master planning and needs and project prioritization. As the State Multi-Use Trails Plan is completed, the State Multi-Use Trails Office, in coordination with the State Trails Advisory Committee and other stakeholders should develop a prioritization process that creates a framework to implement the State Multi-Use Trails Program.

Develop an interagency State Multi-Use Trails Plan.

- Establish statewide multi-use trails vision, goals, and objectives.
- Identify a system or network of statewide trails, including those elements of the network that are multi-use trails and are multi-use trails of statewide significance.
- Coordinate with recent and ongoing statewide planning processes, including VTrans and the Virginia Outdoors Plan.

As the State Multi-Use Trails Plan nears completion, a statewide multi-use trails implementation policy should be developed.

- This policy would establish the official framework for prioritization (refining the three-level process identified above) and the process for trail projects to advance from needs identification, to planning, to project development, to competing for funding, to implementation and maintenance.
- Part of this implementation policy should specify the operational details of the technical assistance program to help local and regional agencies.
- The program should help refine project scopes, identify and prepare applications for the most appropriate funding sources, and ensure the latest design guidance and policy approaches are being followed in trail development work.

The State Multi-Use Trails Office will own and execute the prioritization process and be responsible for managing a project database of multi-use trails and trail projects (State Trails Database).

- The State Multi-Use Trails Office will collaborate with VDOT and DCR to leverage existing data sources, mapping and analysis tools, and project costing methodologies. This includes leveraging and expanding the existing VDOT bicycle and pedestrian count program and VDOT's robust crash analysis tools and strategies.
- Trail projects may also include expanding existing trails, such as widenings, mode separation, and improved roadway crossings. Count data can help determine key gaps, safety issues, and capacity constraints.

The implementation policy should also establish guidance, eligibility criteria, and project prioritization measures for use within the State Multi-Use Trails Program, including prioritizing new multi-use trail funding programs.

- As recommended in the master planning approach, the first program would support planning and feasibility studies so that trail projects can be quickly moved from concept to design.
- The second program would support construction of targeted (i.e., prioritized) segments of the statewide trail system, or network as defined by the State Multi-Use Trails Plan.
- Both funding programs would require a prioritization system to ensure planning or construction funds go to projects that help develop a statewide priority network, address State Multi-Use Trails Plan needs, are cost effective and have local support.

5 STATE MULTI-USE TRAILS PROGRAM

Multi-use trail funding recommendations operationalize a State Multi-Use Trails Program to enhance planning practice, develop consistent standards and leverage resources to advance projects at different stages of development and delivery.

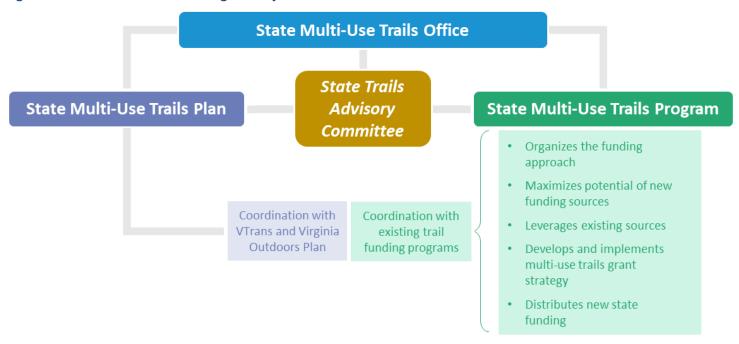
Successful funding models in peer states are built on interagency commitments, public-private initiatives, and non-profit partnerships. These approaches create expertise, resources and incentives to support trail development through right-of-way preservation, local contributions or competitive grants. This multi-faceted, flexible approach is an untapped opportunity for Virginia. The objectives of the funding assessment and recommendations incorporate:

A State Multi-Use Trails Program can help organize, optimize and leverage funding opportunities between current, emerging programs and new models consistent with the goals and needs of a State Multi-Use Trails Plan.

- Peer state best practice transferable to Virginia by integrating within existing Virginia transportation processes and building from recommendations in the prior master planning and prioritization recommendation sections.
- Flexible processes allowing the flow of new, increased funds through existing programs and prioritization without disrupting these processes while simultaneously organizing to support new funding models which resource, operationalize, and effectively implement a State Multi-Use Trails Plan and State Multi-Use Trails Program.
- Scalable approach linking and focusing revenue potential commiserate with system development impact and needs. For example, direct recurring, high revenue potential sources to plan, design, develop, construct, and maintain a statewide priority network. Whereas direct short-term or new trail-specific sources to widen the scale and scope of non-public or shared funding participation to address localized needs.
- Implementation considerations which outline high-level steps, challenges and opportunities to enact report recommendations.

Figure 9 shows how the State Multi-Use Trails Program is the primary implementation outcome of the State Multi-Use Trails Plan led by the State Multi-Use Trails Office. Implementation of the State Multi-Use Trails Program coordinates with existing multi-use trail funding programs, helping to maximize the leverage potential of these programs through new funding and partnerships. The State Multi-Use Trails Program also fosters multi-use trail implementation through grant programs to support planning, construction, and maintenance of priority statewide multi-use trails.

Figure 9: State Multi-Use Trails Program Objectives and Connections



5.1 Peer State Approaches and Virginia Models

Peer state approaches vary by ownership, scale, fund sources, duration and purpose. Several states have established Foundations, Funds or Trusts managed by public, public-private, non-profit or exclusively private sources. Almost all issue grants through a competitive process to meet the mission – which can include broader access, equity and public health goals or direct funds to expand or better maintain a particular regional trail. More information on best funding practices, including unique regional practices and organizations in Virginia, are presented in the Appendix (pg. 39).

5.2 Current State Funding Priorities

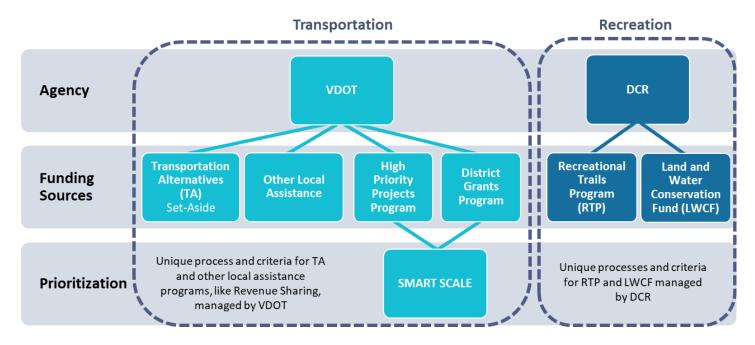
At the state level, multi-use trails are predominantly funded through programs administered by VDOT and DCR. Numerous other state agencies have an interest in trail development because of the benefits of active transportation and recreation to health, sustainability, economic development, and the intersection with housing and various social policy areas; however, these other agencies do not contribute substantially to the development and construction of trails.

The funding programs to support capital transportation and recreation investments have unique prioritization processes that determine eligibility and rank submitted projects based on policy priorities. The resulting patchwork of funding programs, with shifting priorities and inconsistent levels of funding, makes it challenging to fund multi-use trails. This is especially true in jurisdictions represented by under-resourced rural agencies and in traditionally underserved communities.

Existing processes also focus on construction and "project-readiness" resulting in limited funding for feasibility studies, planning, capacity-building, and maintenance. Further, the absence of a State Multi-Use Trails Plan inhibits the cross-agency prioritization of multi-use trails critical to developing a statewide priority network which deliver multiple benefits to all Virginians, particularly those living, working, and recreating in the communities the trails serve.

Figure 10 depicts the existing capital funding programs for multi-use trails managed by VDOT and DCR. Transportation programs are larger and more diverse than the recreation programs, for example, the federal Transportation Alternatives (TA) Set-Aside funds managed by VDOT currently average \$20 million per year and the Recreational Trails Program (RTP), managed by DCR, averages \$1.4 million a year.

Figure 10: Current State Trails Funding for Capital Investments



5.2.1 Transportation

VDOT manages a broad portfolio of programs with a total annual value for FY 2022 of approximately \$7.229 billion, of which \$3 billion is identified for construction projects and programs. Approximately 16 percent (\$1.2 billion) of VDOT's revenues come from Federal transportation funds, which includes limited programs targeting bicycle and pedestrian needs.

VDOT allocates an average of \$20 million of Transportation Alternatives (TA) funding annually to "transportation alternatives" such as sidewalks, bike lanes, and trails. Between 2017 and 2022, an average of \$6.4 million (34 percent) of TA funds were awarded to trail projects. Projects that are eligible for TA funding are ranked using a set of prioritization criteria.

VDOT's Local Assistance Division manages a diversity of programs to directly support localities, including trails. For example, the Revenue Sharing program provides additional funding for use by a county, city, or town to construct or improve the highway systems within such locality, including investments in multi-use trails.

2021 Transportation Alternatives Set-Aside Prioritization Criteria

Project Funding: Is there a realistic cost estimate/budget for the project?

Project Concept: Is the project fully scoped, phased, designed to meet standards, for a transportation purpose?

Improvement to the Transportation Network: What and who does the project benefit?

Readiness to Proceed: What steps have been taken to prepare for implementation?

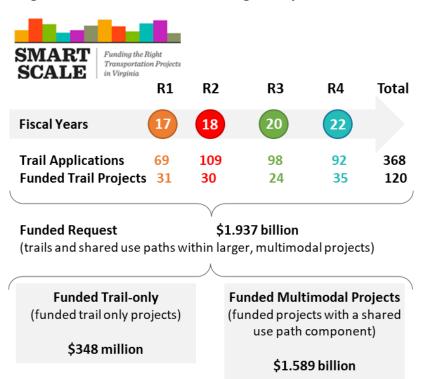
Regional Significance: Does the project reach beyond local boundaries?

OIPI, through coordination with VDOT, DRPT, and regional and local governments, and under guidance from the Commonwealth Transportation Board (CTB), manages SMART SCALE, which is the program to prioritize projects funded through the High Priority Projects Program and the Highway Construction Districts Grant Program. SMART SCALE prioritizes approximately \$600 million annually for multimodal surface transportation mobility enhancing investments on a biennial cycle. SMART SCALE evaluates projects through quantifying project-level benefits across six factor areas: Safety, Congestion Mitigation, Accessibility, Environmental Quality,

Economic Development, and Land Use. The scores of each project are then weighted by regional factors to arrive at a final score. For example, congestion is the highest weighted factor in major urbanized areas of the Commonwealth, while safety and economic development are more heavily weighted factors in the rural parts of the state.

Trail projects in SMART SCALE are characterized two different ways – as "shared-use paths", which are multimodal projects that include a shared-use path (for example a side path along a widened highway), or as standalone trail project. **Figure 11** presents results from the first four rounds of SMART SCALE. Trail-only projects that compete well in SMART SCALE are typically shorter segments, with lower cost (e.g., minimal right-of-way purchase) and a local funding match (averaging around 40 percent of total project cost). The total cost of shared use path components within funded multimodal projects is not available.

Figure 11: SMART SCALE Trail Funding History



5.2.2 Recreation

DCR is the state's lead natural resource conservation agency. DCR protects what Virginians care about – natural habitat, parks, clean water, dams, open space and access to the outdoors. DCR manages both general fund and non-general fund budgets and utilizes revenue generated facilities to reduce state funding sources. The emphasis of DCR funding is on resource protection and preservation, of which trail projects may be a part. DCR manages numerous funding programs related to outdoor recreation, including two important sources of funds for public parks and trail projects.

DCR administers the RTP, which is an 80/20 percent match reimbursement grant program funded by the Federal surface transportation program with a focus on trails that serve primarily recreational purposes. The \$1.4 million annual program apportionment must be split between non-motorized trail projects (30 percent), motorized trail projects (30 percent) with the remainder (40 percent) being for "diverse-use" trails. The Federal Highway Administration is the authority of this program and DCR manages the Commonwealth of Virginia's annual apportionment.

DCR also administers a 50/50 match reimbursement fund program for the acquisition and/or development of public outdoor recreation areas and amenities known as the <u>Land and Water Conservation Fund</u> (LWCF) State and Local Assistance Program.²⁴ These Federal funds are an annual apportionment to the Commonwealth of Virginia and the National Park Service is the authority of the program. Towns, cities, counties, regional park authorities, recognized Tribes, and state agencies may apply for 50 percent matching reimbursement fund assistance from the LWCF. In 2019, the grant round focused on acquisition projects specifically. Future grant rounds are expected to include development projects as well as acquisitions.

5.2.3 Funding Needs Assessment

The current funding structure is compartmentalized by VDOT and DCR agency roles and responsibilities. Funding programs within each agency are subject to unique processes and requirements which limit a comprehensive, coordinated approach to fund and address statewide transportation and recreational needs regardless of utility. A single estimate of statewide trails "need" is also challenged by a lack of historical data of trail utilization, trail conditions, and tools to predict future demand. Therefore, an order-of-magnitude estimate of statewide multi-use trail needs can be categorized and qualified by:

- Local Priorities Represented by a ratio of funded to unfunded requests within SMART SCALE and Transportation Alternatives (TA) Set-Aside. Approximately \$348 million (of \$5.14 billion over six fiscal years of SMART SCALE funding) has been programmed to projects meeting the multi-use trail definition. This represents stand-alone trails, not shared-use paths within multimodal projects. As noted in Section 4.3.1, there is over \$1.5 billion committed to multimodal projects that include shared use paths.
 - Trail projects received approximately \$6.4 million of requested TA Set-Aside funds equating to 34 percent of the overall share of available funds over the past six years. The projected increase in TA Set-Aside funding of 70 percent within the Infrastructure Investment and Jobs Act (IIJA) will increase this trend.
- Incomplete Trail Systems Represented by miles of planned but incomplete sections of multi-use trails documented in locally adopted regional and multi-state plans. These sections of multi-use trails were developed through planning processes led by different organizations to support unique organization, regional, or local goals. Examples include:
 - Completing more of the Capital Trails Network which includes an additional planned 61 miles in Fairfax County, 8 miles in Arlington County, and 6 miles in Alexandria.
 - Completing the East Coast Greenway (ECG) which covers 300 miles in Virginia, of which approximately 100 miles is built, leaving 200 miles for future development.
 - Completing over 140 miles of trail across three significant regional projects including the Eastern Shore Rail Trail, Fall Line
 Trail (already partially funded through SMART SCALE Round 4 funding, Central Virginia Transportation Authority, and
 additional Commonwealth Transportation Board (CTB) commitments), and the Shenandoah Valley Rail Trail.

Average per mile cost of multi-use trails range from \$1.2 million to \$3.4 million. These costs are consistent with 2020 costs based on VDOT planning, recent regional trails, and shared use path elements of highway projects. The range can vary based on geography, number of structures, modernizing current trails versus constructing new ones, bringing current/new trails to latest design standards, amenities, and scale of coordination. If right-of-way needs to be purchased, recent project estimates show that costs can exceed \$6 million per mile.

Estimates to complete all unfinished regional plans and sections of national trail networks are potentially 5 to 10 times the capacity of existing programs. For example, these four examples noted above total over 400 miles of potential multi-use trails. Assuming an average per-mile cost based on recent projects and information from VDOT, the total order-of-magnitude construction cost for these trails could run between \$480 million and \$1.27 billion. This order-of-magnitude estimate is based on existing needs and plans and doesn't consider the continuing growing demand for access to trails throughout Virginia. The following factors will continue to shape and inform the extent of future estimated needs:

- Construction cost increases Trail construction costs have increased over each round of SMART SCALE. Scoping of shared-use
 path elements within highway improvements and right-of-way acquisition in growing urban areas contributed to the increase.
 Cost estimates for sections of the Fall Line Trail have averaged as high as \$6 million per mile. Existing funding sources cannot
 offset increasing costs tracking with property values, economic indicators and construction material inflation.
- Trail maintenance A world-class trails system requires a commitment to maintenance. According to cost information developed to support the Virginia Capital Trail Sponsorship and Maintenance Report, annual operations and maintenance for the 52-mile Virginia Capital Trail totaled \$378,000 in FY 2019. The current maintenance practices undertaken by the Virginia Capital Trail Foundation, VDOT, and localities are undertaken on an as-needed basis and are reactive to customer complaints and concerns. The costs above do not reflect preventative maintenance, which will be a growing need in the coming years.
- Sufficiency of current funding programs Virginia law and existing planning practice require a need to be identified in VTrans to be eligible for SMART SCALE. Each successive evolution of VTrans and SMART SCALE have incrementally improved how multi-use trail needs are identified, assessed, and scored. However, the current process is not exclusive to multi-use trails scoring but rather designed to evaluate a large universe of mode neutral and multimodal projects with benefit to cost ratio as a major scoring factor. The benefits unique to multi-use trail candidate projects are not fully captured and incorporated into current scoring, which limits their ability to compete. Even with these limitations, the share of SMART SCALE funds for standalone trail improvements and shared-use paths has increased through successive rounds relative to the number of projects submitted and funding availability in each round. Therefore, a pre-screening approach for multi-use trail projects identified in the prioritization chapter of this report can help pre-position candidate projects to compete.

5.3 Future Funding Structure Recommendation

The State Multi-Use Trails Program managed by a State Multi-Use Trails Office creates the organization to optimize leveraging opportunities between current programs and new models consistent with the goals and needs of the State Multi-Use Trails Plan. **Figure 12** depicts how this ultimately could work in practice:

- On the left side of Figure 12, the State Multi-Use Trails Program would operate in parallel to an enhanced planning and needs development process where the State Multi-Use Trails Plan is integrated with VTrans and the Virginia Outdoors Plan (VOP). This integration would help feed better multi-use trail projects supporting the statewide system into existing funding programs. This results in no change to those processes, just results in better and more competitive projects. For example, the ongoing update of the VOP is an opportune time to evaluate how its development can identify recreational trail needs, gaps, and funding opportunities to inform an inaugural State Multi-Use Trails Plan.
- On the right side of Figure 12, the critical role of the State Multi-Use Trails Office will be to manage the State Multi-Use Trails Program, helping to prioritize trails funding and strategically identify the best projects to leverage SMART SCALE, TA Set-Aside, RTP, and other funding programs with the new funding models.
- Also, as recommended within master planning and noted as a critical intended outcome of a prioritization process, when or if a sustained state trails funding program comes into existence, the State Multi-Use Trails Office will distribute that funding through the State Multi-Use Trails Program.

Figure 12: Future Funding Structure

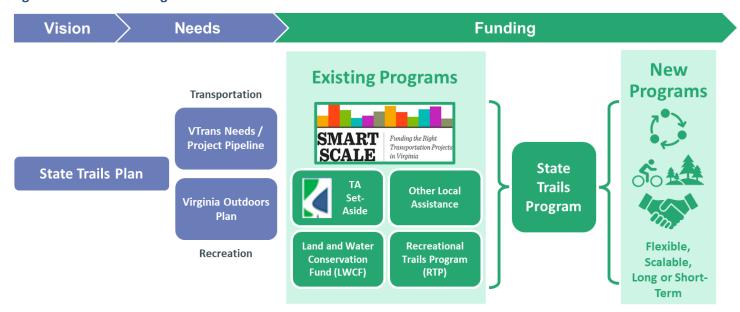


Table 9 defines three broad (but not exhaustive) categories with proposed funding mechanisms. Peer state funding approaches are highlighted to simplify and translate their applicability to the development of multi-use trails in Virginia. It is important to note elements introduced in each category have pros/cons and there is no single funding solution; some combination of all three of these models will be necessary to close the gap between multi-use trail needs and funds.

Table 9: Category of Funding Framework Options

| Model | Definition |
|--------------|---|
| COMMITMENT | "Commitment" is the highest level of funding support. This could be either a sustained, dedicated, and recurring annual commitment, or a larger up-front commitment with a smaller recurring commitment to jump start regional trails. This would require legislative action by the General Assembly, and potentially a new funding source to maintain that recurring commitment. Non-traditional sources or indirect fees could be considered. This can be spun as an investment not just in trails and recreation, but as an investment in the mobility of Virginians, the environment and sustainable transportation options, the economic viability of towns along trail corridors, and out-of-state tourism in Virginia (of which recreation makes up 13 percent or \$2.3 billion). |
| INITIATIVES | Initiatives are generally administered outside the State Department of Transportation's responsibility, normally connected to some other state department, such as the Outdoor Recreation Department or Natural Resources Department. Initiatives take the form of a dedicated funding source, although not a dedicated source for regional trails. In many states' cases, their initiatives are tied to general outdoor preservation, of which recreational trails are only a part. Examples can be seen in Iowa's Natural Resources and Outdoor Recreation Trust Fund, Pennsylvania's Growing Greener Program, Ohio's Clean Ohio Fund, and many more. Trails can generally apply for grants within these programs and compete against other projects such as brownfield revitalization, green space conservation, and more. |
| PARTNERSHIPS | Partnerships could take many forms to support multi-use trail funding, marketing, or user education and awareness programs. Many of these entities are purpose-driven, with an emphasis on aspects like equity, conservation, or public health. For this reason, these groups often function as advocacy groups, both for better recreational trail infrastructure, but also for funding for their specific trails. Entities don't have to be trail-specific however; other states have had success in partnering with general philanthropic foundations such as the Walton Family Foundation and the Harvest Foundation to secure grants used for regional trails. |

Figure 13 outlines funding framework options and characteristics within the State Multi-Use Trails Program (not an exhaustive list) organized by potential leverage (or revenue) and scale of execution (or extent of legislative involvement). As indicated in **Table 9**, the commitment model for the State Multi-Use Trails Program creates the greatest potential for meaningful statewide investment in multi-use trails, however, would face the most significant legislative and public scrutiny for implementation. Directing the largest share of statewide revenue (from a multitude of potential sources including those related to both transportation and recreation) towards the development of statewide and regional multi-use trails would leverage a direct relationship between user demand and adequate, correlating level of funds to keep pace with priority network expansion, connections and maintenance.

Figure 13: State Multi-Use Trails Program – Funding Framework Options

| | Model | Ownership | Scale | Sources | Duration | Benefits | |
|-----------------------|--------------|---|--|---|--|---|---|
| \$\$\$ | COMMITMENT | Public: single or joint agency oversight | ■ Statewide | Percent revenue share (e.g., percent of recreation spending) User-based (e.g., parks or destination fees, sales tax) | Long-termShort-term if goals achieved | Grows with demand High economic impact Supports long-term maintenance Operationalizes State Trails Program | Policy Scrutiny <u>More</u> Legislative Involvement |
| Leverage Potential | INITIATIVES | Public: single or joint agency oversight | Trail-specificStatewide or regional | Dedicated within a broader programCompetitive grantsNon-Recurring | Short-term if goals achievedAnnual review | Shared resourcesCoordinated planningSupports statewide initiatives | Execution Scale |
| \$ | PARTNERSHIPS | Public, private, and/or non-profit Board oversight | Trail-specificStatewide or regional | Private donors, foundations, trusts Competitive grants Leasing rights, impact fees, proffers | Short-term if goals achieved | Low public burdenVested interest, advocacy vehicleCorridor protection | Low Barrier Less Legislative Involvement |

5.4 Conclusion

Funding the State Multi-Use Trails Program through a multi-faceted, flexible funding framework will launch and sustain the technical resources, best practice planning standards and innovative partnerships to forward implementation of the State Multi-Use Trails Plan and empower the State Multi-Use Trails Office. The framework should leverage existing state programs, spur more public and private party interest, and define goals and objectives to target more funding at different stages of multi-use trail project development and statewide network performance—from feasibility, planning, and design through construction and maintenance. The strategy should also evolve and grow commensurate to user demand, recreational interest, tourism investments, societal trends, emergence of new transportation options, and other trends pushing Virginia to be a national leader and model for active transportation planning, practice, and development resulting in an accessible, safe, and modern multi-use trail system. State Multi-Use Trails Program implementation recommendations are presented in

Table 10. This report does not identify the preferred combination of funding sources to support State Multi-Use Trails Program Implementation. As discussed in Section 5.3

(pg. 25) there a number of diverse options for consideration related to funding. The recommendations focus on the key implementation components of the State Multi-Use Trails Program, including State Multi-Use Trails Office management of a statewide grant program enabling regions and localities to leverage state funds to support regional and local multi-use trail planning, construction, and maintenance.

Table 10: State Multi-Use Trails Program Recommendations Summary

A State Multi-Use Trails Program resourced by a multi-faceted funding framework enables Virginia agencies to set a statewide vision and planning standards tailored to develop a statewide priority network, support regional and local needs, and position to compete for federal funds.

A State Multi-Use Trails Program organization supports and provides:

- Commonwealth multi-use trail planning, construction and maintenance grants Mechanism to allow local partners to
 complete or extend critical sections of existing trail infrastructure which develop the state priority network and local
 comprehensive plans. Access to planning grants for feasibility studies to evaluate economic impact potential of new trail
 construction and allocation of grants to fund maintenance activities such as capital repairs to structures or improved lighting.
- Flexibility to leverage federal, state, regional, and local funding sources Additional and recurring Virginia commitment to capital investments in multi-use trails will enable the State Multi-Use Trails Office to work with VDOT, DCR, and other funding partners to position priority trail needs and projects to compete for existing state funding programs.
- As part of the State Multi-Use Trails Program, establish performance measures and metrics that regularly monitor and report on progress towards the goals of the plan.

The State Multi-Use Trails Program can evolve and adapt the funding framework to meet changing needs:

- Respond to anticipated increases in federal funding, emerging state programs, competitive grant opportunities and changing societal trends, commuting patterns promoting both transportation and recreational trail utility.
- Continue to grow State Multi-Use Trails Office staff capacity, capabilities transferring technical assistance knowledge to local agencies who in turn identify, scope and submit multi-use trail projects under guidelines and eligibility requirements to develop a statewide priority network or work through new partnerships to address previously deferred, localized needs.
- Invest in adequate statewide and local trail network maintenance Maintenance needs will continue to grow in proportion to the development of state and regional priority networks and other needs under a future State Multi-Use Trails Office and State Multi-Use Trails Program. Tying maintenance funding to demand or user-based fees (at destinations or trail-specific) could be an approach to create a defendable, replenishing fund to maintain modern trails infrastructure and provide consistent, high quality user experiences for Virginia residents and visitors.

6 IMPLEMENTATION

This report recommends three primary implementation activities all starting as soon as possible, contingent on availability of funding and agency staff resources to manage the activities.

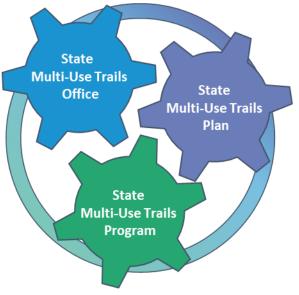
As presented in **Figure 14**, the recommendations in this report – establish a State Multi-Use Trails Office, develop a State Multi-Use Trails Plan, implement a State Multi-Use Trails Program, create the platform for Virginia to plan for, prioritize, fund, deliver, and maintain a world-class trail system.

Figure 14: Platform for Virginia's World Class Trail System

State Multi-Use Trails Office

- Establishes strategic direction
- Institutes implementation policy
- Leverages VDOT and DCR resources
- Coordinate investment and project priorities
- Markets multi-use trails and works with partners
- · Reports on progress

World-Class Trail System



State Multi-Use Trails Plan

- · Unified vision and goals
- Defines multi-use trail system
- Clarifies responsibilities
- Initiates the Master Planning Process
- Establishes standards and data
- Engages stakeholders
- Prioritizes needs and future investments
- Creates a state trails database

State Multi-Use Trails Program

- Organizes the funding approach
- Maximizes potential of new funding sources
- Leverages existing sources
- Develops and implements multi-use trails grant strategy
- · Distributes new state funding

6.1 Implementation Actions

- 1. **Establish a State Multi-Use Trails Office** Commit funding starting as soon as possible (pending available resources) to staff and provide resources to the State Multi-Use Trails Office. The State Multi-Use Trails Office should initially be staffed with three to five FTEs to lead the State Multi-Use Trails Plan, initiate coordination with stakeholders and partners, develop a State Multi-Use Trails Office organizational plan, construct the framework and prioritization process for the State Multi-Use Trails Program, maintain and improve the State Trails Database, lead trails research and promotion, and initiate a technical assistance program. The State Multi-Use Trails Office will lead coordination with VDOT, DCR, and DRPT to ensure a consistent strategy to compete for federal and state grants for multi-use trails.
- 2. **Develop the State Multi-Use Trails Plan** Commit funding to develop the inaugural State Multi-Use Trails Plan and the State Multi-Use Trails Database in 2022 and 2023. The funding for the State Multi-Use Trails Plan and the State Multi-Use Trails Database can flow directly into the State Multi-Use Trails Office for implementation, or alternatively be provided to another agency to manage until the State Multi-Use Trails Office is established. The State Multi-Use Trails Plan should feature robust public outreach and agency/stakeholder engagement, working directly with the State Trails Advisory Committee (STAC).
- 3. Implement the State Multi-Use Trails Program Commit new resources to provide a further boost to multi-use trails funding and kick-off the State Multi-Use Trails Program in parallel to the State Multi-Use Trails Plan. There are three recommended aspects to the State Multi-Use Trails Program: Planning Grants, Construction Grants, and Maintenance Grants. As part of the roll-out of the State Multi-Use Trails Office and development of the State Multi-Use Trails Plan, a structure for these grant programs, agency roles and responsibilities, and grant eligibility should be developed.

These three recommendations represent a reasonable investment and combination of actions beyond the initial \$10 million investment in the 2021 Transportation Initiative to position Virginia to proactively meet critical needs in the short-term, sustain a statewide multi-use trails program over the long-term, and expand and maintain Virginia's future world class trail network.

Table 11 summarizes these recommendations, action steps, and funding estimates. The table also provides a set of assumptions and information from peer state programs to help understand potential ranges of funding required to initiate and sustain the State Multi-Use Trails Office, the State Multi-Use Trails Plan, and the overall State Multi-Use Trails Program.

Table 11: 2022-2023 Implementation Details and Costs

Establish a State Multi-Use Trails Office – Commit funding as soon as possible (no later than FY 2023) to staff and provide resources to the State Multi-Use Trails Office.

Three core staff to administer the State Multi-Use Trails Plan, coordinate with the STAC, aid ongoing and planned trail projects, promote trails and State Multi-Use Trails Program.

One to two additional staff to provide additional technical expertise in trail planning and design, railbanking, rails-with-trails, organizational development, grant-writing, community representation, etc.

One to two additional staff to administer grant programs (planning, maintenance, and/or construction).

Research and promotion – Funding for the State Multi-Use Trails Office should cover the costs of staff focused exclusively on commissioned research, and include an annual budget to conduct surveys, lead promotion and marketing, and plan for and deliver other statewide trail events.

Office organization – This report does not specify the organizational structure of the State Multi-Use Trails Office, other than recommending that it should be a unique office with an annual budget. The CTB, at its January 10, 2022 workshop meeting, provided consensus direction to align planning and funding for multi-use trails within the Transportation Secretariat.²⁶

5 FTEs starting in FY 2023

Assumptions/References: The Florida Office of Greenways and Trails is staffed by eight FTEs who provide statewide leadership and coordination to establish, expand, and promote the Florida Greenways and Trails System.²⁷ In addition, Florida DOT has one FTE to manage the Shared-Use Nonmotorized (SUN) Trail Program.²⁸ The Pennsylvania Department of Conservation and Natural Resources has 3.5 to four FTEs plus part-time support from other staff in the department to develops and administer the Pennsylvania Land and Water Trail Network Strategic Plan and coordinate the Trails Advisory Committee.²⁹

Note, within the IIJA, a state is now able to use not more than five percent of TA Set-Aside funds for providing technical assistance to applicants to improve the ability to access funding and reduce the time between project selection and fund obligation. Total annual technical assistance set-aside, given up to 70 percent increase in TA Set-Aside funding could equal up to \$1.75 million.

Develop a State Multi-Use Trails Plan – Commit funding to develop the State Multi-Use Trails Plan and the State Trails Database.

State Multi-Use Trails Plan – Conduct a statewide plan starting in 2022 with robust public outreach, stakeholder engagement, and technical analyses.

State Multi-Use Trails Database – Create a State Multi-Use Trails Database and information clearinghouse including a platform for education and training.

\$2.0 million initial investment in 2022/2023

Assumptions/References: Recent statewide plans in Ohio (2021)³⁰ and North Carolina (2013)³¹ average \$1 to \$1.25 million and typically take 12 to 18 months to complete. The State Multi-Use Trails Plan should include a technical analysis of current conditions/future needs, robust outreach/engagement, and evaluation of current/future funding opportunities, assess innovative partnerships, and address new federal focus areas (equity, resiliency, restoring communities, technology). Development of the Clearinghouse will require extensive data collection and development and stakeholder coordination at a statewide level.

Implement a State Multi-Use Trails Program – Commit new funding for FY 2023 and beyond to provide boost to multi-use trails funding and kick-off the State Multi-Use Trails Program in parallel to the State Multi-Use Trails Plan.

There are three recommended components to the State Multi-Use Trails Program: Planning Grants, Construction Grants, and Maintenance Grants. As part of the roll-out of the State Multi-Use Trails Office and development of the State Multi-Use Trails Plan, a structure for these grant programs, agency roles and responsibilities, and grant eligibility should be developed. The three grant programs will be focused on multi-use trails on the statewide trail system, as defined by the State Multi-Use Trails Plan.

<u>Planning Grants</u> – Multi-use trail planning and concept development studies to help counties, cities and towns scope solutions and prepare to compete for funding through grant programs.

<u>Construction Grants</u> – Multi-use trail construction grants supporting construction of critical, high priority segments of trail on the statewide system that are of strategic importance (e.g., closing difficult gaps).

<u>Maintenance Grants</u> – Annual allocation to a maintenance fund that supports maintenance activities on existing trails, focusing on capital maintenance activities (replacing a structure, repaving, replacing lights, improving signage/wayfinding).

\$2.5 million annual for Planning Grants

\$15 million
annual for
Construction Grants

\$2.5 million annual for Maintenance Grants

Assumptions/References: Multi-use trail planning and concept development studies can range from \$75,000 to \$250,000 depending on scope and location. OIPI's existing <u>Growth and Accessibility Planning (GAP) Technical Assistance</u> program represents an existing Virginia best practice for comparable size and scope grants. \$2.5 million per year could fund 10 to 20 grants annually. ³² Construction grants could completely fund trail construction or provide leverage to other matching funds. Multi-use trail cost per mile in Virginia ranges from \$1.2 million to \$3.4 million.

Maintenance grants should focus on supporting critical repairs to ensure safe use and access. Routine operations and maintenance costs can vary substantially depending on the facility, climate, and complexity of the system with an annual per-mile cost ranging from \$2,500 to \$10,000 or higher depending on trail surface types. In Section 5, maintenance cost data for the 52-mile Virginia Capital Trail indicated an average annual operations and maintenance cost of \$7,200 per mile.

Planning and construction grants through <u>Florida's SUN Trail Program</u> total \$25 million annually with additional support of \$1.5 million per year from <u>Florida Forever</u>.³³ Planning, construction, and maintenance grants from <u>Pennsylvania's Community Conservation Partnerships Program</u> total approximately \$70 million annually.³⁴

Table 12 summarizes considerations for continuation of the State Multi-Use Trails Office, updates to the State Multi-Use Trails Plan, and increasing funding to the State Multi-Use Trails Program beyond FY 2023.

Table 12: Beyond 2023 Implementation Details and Costs

Maintain and Update the State Multi-Use Trails Plan – Routinely update the State Multi-Use Trails Plan and amend components consistent with

evolving trails policy and implementation of the State Multi-Use Trails Program.

Commit funding in FY 2024 and beyond to support future State Multi-Use Trails Plan updates. These updates should occur in sequence with updates to the Virginia Outdoors Plan and VTrans to inform recreational and transportation trail system priorities in these complementary statewide plans. Commit annual funding to the State Multi-Use Trails Office to maintain and expand the State Trails Database.

State Multi-Use Trails Office - Commit annual funding to staff and provide resources to the State Multi-Use Trails Office.

Increase annual funding for up to seven FTEs in addition to continued funding for research, marketing, and outreach activities promoting the State Multi-Use Trails Program. Total FTE allowance could increase in year three or beyond, pending maturity and funding to the State Multi-Use Trails Program. Annual funding to the State Multi-Use Trails Office could also include resources to deliver a biennial state trails conference.

Implement the State Multi-Use Trails Program – Commit annual funding to the State Multi-Use Trails Program.

Total funding for FY 2024 and beyond should increase consistent or ahead of inflation (based on the consumer price index or other inflation indicators) to account for continued construction and labor cost increases. The State Multi-Use Trails Plan, once completed, will provide comprehensive evidence on the scope of multi-use trail needs within Virginia. With this more detailed information and designation of a statewide network during the State Multi-Use Trails Plan process, there will be further justification for increased annual funding to the State Multi-Use Trails Program.

In a future General Assembly session (2023 or beyond), legislative action should be taken on establishing a recurring funding source to support the State Multi-Use Trails Office and State Multi-Use Trails Program, once the office and the program reach a level of maturity following completion of the State Multi-Use Trails Plan and ongoing work activities and grant management. The Appendix highlights potential best practices and yield potential from peer states for consideration and additional research.

7 EMERGING OPPORTUNITIES

7.1 Overview

New initiatives – announced as this report was finalized during December 2021 represent a surge in federal, state, and local funding opportunities and partnerships to implement multi-use trails in Virginia. The initiatives can launch immediate priorities to build a statewide trail network and catalyze longer term trail planning, development and maintenance in Virginia.

These initiatives reinforce the importance of the recommendations of this report. Collaboration and coordination between state agencies, within the structure of a State Multi-Use Trails Plan, is essential to strategically manage and deliver multi-use trails. The initiatives also confirm the importance of establishing a robust State Multi-Use Trails Program and State Multi-Use Trails Office to steward resources critical to attract future users and promote outdoor recreation.

7.2 Details

7.2.1 2021 Revenues

- Fiscal year 2021 Commonwealth Transportation Fund (CTF) revenues were \$365.8 million above the official forecast. Item 430 of Chapter 56 of the 2020 Acts of Assembly allows flexibility in distribution of additional revenues and, through the Priority Transportation Fund (Section 33.2-1257) establishes a process to allocate additional revenues.
- The Priority Transportation Fund (PTF) revenues are dedicated to debt service and the Commonwealth Transportation Board (CTB) can also use the Fund to facilitate the financing of priority transportation projects throughout the Commonwealth.
- At its December 9, 2021 meeting, the CTB took <u>action</u>³⁵ to allocate \$42.7 million from the PTF to various Fall Line Trail projects, matching a commitment of \$104.5 million in regional funds from the <u>Central Virginia Transportation Authority</u>³⁶ and \$72.6 million in existing committed funding through a combination of local, regional, and state sources (including three projects funded within SMART SCALE Round 4 in June 2021 totaling over \$30 million).

7.2.2 Enhanced Two-Year Budget for Multi-Use Trails

- Governor Northam announced on December 8, 2021, that his two-year proposed budget will include nearly \$245 million for outdoor recreation and natural lands preservation.³⁷ This new funding is to support the planning, development, and construction of multi-use trails in the Commonwealth.
- If approved, this funding will go towards supporting existing trails and for developing new trails like the Eastern Shore, Shenandoah, and Fall Line trails in addition to supporting the Office of Outdoor Recreation.

7.2.3 Infrastructure Investment and Jobs Act (IIJA)

- The IIJA creates several new and unique opportunities for multi-use trail programs and projects. Virginia is expecting to receive \$7.7 billion in total formula funding through the Federal Highway Administration (around a 25 percent increase) over the next five years including for several programs that can be used to build trails.³⁸
- Within this increase are enhancements to existing programs like the Transportation Alternatives (TA) Set-Aside and new programs and initiatives like Carbon Reduction and Vulnerable Road Users. The Carbon Reduction program focuses on reducing carbon emissions from on-road sources through projects that reduce traffic through facilitating non-single occupancy vehicle trips or facilitate use of vehicles or modes with lower emissions. There is also a new provision in the Highway Safety Improvement Program (HSIP) (termed Vulnerable Road Users) that requires Virginia to set aside 15 percent of HSIP funding to projects that support safe mobility for pedestrians and bicyclists.
- Total funding for the TA Set-Aside is increased by 70 percent, with a greater increase specifically for funding controlled by large MPOs and a 55 percent increase for CTB controlled funding. As a result of this increase, the CTB will consider how to prioritize TAP funds to explicitly support multi-use trails.
- IIJA includes an expanded diversity of multimodal grant programs, many which could support multi-use trails, like the continuation of Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grants (\$15 billion nationwide), the new Reconnecting Communities Pilot Program (\$1 billion nationwide), and the new Rural Surface Transportation Grant Program (\$2 billion).

7.2.4 Transportation and Public Lands Initiative

- On November 17, 2021, the Secretaries of the U.S. Department of Transportation and U.S. Department of the Interior
 announced a <u>new initiative</u> that will help increase access, support jobs, and enhance the transportation experience on public
 lands across the country.³⁹ The initiative, established through a memorandum of understanding, will strengthen coordination
 regarding infrastructure investment and innovative technologies at National Park Service sites, consistent with the IIJA.
- The initiative priorities reinforce the need for interagency coordination to support access to public lands through the State Multi-Use Trails Plan and implementation of the State Multi-Use Trails Program.

7.3 Implications

Together these emerging opportunities will provide an immediate boost and long-term commitment to implementing meaningful statewide multi-use trail investments.

The commitment by the CTB and Central Virginia
Transportation Authority to the Fall Line Trail will help this
corridor of local, regional, and statewide importance become
a reality this decade. A successful outcome for this highprofile project, among others, creates a real-world example
to communicate the value of these projects. The initial next
biennium budget commitment to trail improvements will
provide immediate visibility and resources to strengthen the
link between trail infrastructure investment, economic
impact, public health, access to natural destinations
and community vitality. This is an important, timely response
to keep pace with the demand and renewed
interest for outdoor recreation.

Greater agency collaboration and coordination to oversee increased funds will enhance Virginia's competitive edge to secure IIJA discretionary grants to remove mobility barriers in communities of concern. These communities experience disproportionate chronic health and equity challenges which can be solved through more access and options to active transportation, trails and greenways.



The opportunity to serve recreational and transportation purposes under a coordinated State Multi-Use Trails Plan and closer interagency partnership mirror the U.S. Department of Transportation and Department of Interior efforts. This step, along with engaging trail foundations, trail advocacy groups and the private sector partners pre-positions Virginia to compete for projects which improve access and mobility options for more residents to enjoy Virginia's national parks.

The current and emerging level of support and opportunities for trails is recognition of their popularity and role in addressing health, environmental, recreation, transportation, and economic development goals of the Commonwealth. This current and proposed support adds urgency to the recommendations in this report.

- A State Multi-Use Trails Plan will increase coordination between agencies and provide a clear, shared blueprint for priority trail development across Virginia.
- A State Multi-Use Trails Office will provide critical technical assistance and support to agencies at all levels of government, enabling them to be effective stewards of funds and natural resources.
- A State Multi-Use Trails Program will enable VDOT and DCR to direct critical funding to gaps in the statewide trail network and to traditionally underserved communities of concern who will gain most from the development of new multi-use trails.

8 REFERENCES

- ¹ Office of the Governor. (2021). *Governor Northam Continues 'thank you, Virginia' tour, announces increased funding for outdoor recreation*. The Commonwealth of Virginia. Retrieved December 10, 2021, from https://www.governor.virginia.gov/newsroom/all-releases/2021/december/headline-916154-en.html.
- ² Outdoor Recreation Satellite Account, U.S. and States, 2020. U.S. Bureau of Economic Analysis, November 9, 2021. Retrieved November 9, 2021, from https://www.bea.gov/news/2021/outdoor-recreation-satellite-account-us-and-states-2020.
- ³ Mills, K. (2021). *Analysis: Bipartisan infrastructure bill passes with new opportunities for trails, walking and biking*. Rails-to-Trails Conservancy. Retrieved December 10, 2021, from https://www.railstotrails.org/trailblog/2021/november/06/analysis-bipartisan-infrastructure-bill-passes-with-new-opportunities-for-trails-walking-and-biking/.
- ⁴ Virginia Department of Transportation. (2019). *Bicycling and Walking in Virginia*. Virginia Department of Transportation. Retrieved December 16, 2021, from https://www.vdot.virginia.gov/programs/bikeped/
- ⁵ Virginia Department of Transportation. (2021). *Statewide Bicycle Facility Inventory Map*. Virginia Bicycle Facility Inventory. Retrieved December 16, 2021, from https://vdot.maps.arcgis.com/apps/webappviewer/index.html?id=6b824c469989495e8c62c05c3103ade7
- ⁶ Virginia Department of Conservation and Recreation. (2021). *Greenways and Trails*. Virginia Department of Conservation and Recreation. Retrieved December 16, 2021, from https://www.dcr.virginia.gov/recreational-planning/tr-sbii
- ⁷ Virginia Department of Transportation. (2021). *U.S. Bicycle Routes in Virginia*. Virginia Department of Transportation. Retrieved December 16, 2021, from https://vdot.maps.arcgis.com/apps/webappviewer/index.html?id=d6fe387ccb444235be71e4da92b9966c
- ⁸ Virginia Department of Conservation and Recreation. (2020). *VDCR Trails Collaboration Page*. DCR Trails Concept Page. Retrieved December 16, 2021, from https://trails-vdcr.hub.arcgis.com/
- ⁹ The Commonwealth of Virginia. (2021). *The Office of Outdoor Recreation*. Virginia Governor Ralph S. Northam. Retrieved December 16, 2021, from https://www.governor.virginia.gov/outdoor/
- ¹⁰ U.S. National Park Service. (2021). *Virginia*. U.S. Department of the Interior. Retrieved December 16, 2021, from https://www.nps.gov/state/va/index.htm
- ¹¹The League of American Bicyclists. (2020). *Bicycle Friendly State Report Card: Virginia*. The League of American Bicyclists. Retrieved December 10, 2021, from https://www.bikeleague.org/sites/default/files/BFS2014 WestVirginia.pdf
- ¹² National Highway Traffic Safety Administration. (2019). *Fatality Analysis Reporting System (FARS)*. NHTSA. Retrieved December 10, 2021, from https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars.
- ¹³ Pasia, N. (2021, July 9). *Health policy reform on Virginia special session agenda*. State of Reform. Retrieved December 10, 2021, from https://stateofreform.com/news/virginia/2021/06/health-policy-reform-on-virginia-special-session-agenda/.
- ¹⁴ Virginia Capital Trails Foundation. (2020). *2020 Impact Report*. Richmond, Virginia. Retrieved December 15, 2021 from https://www.virginiacapitaltrail.org/.
- ¹⁵ Rails-to-Trails Conservancy. (2021). *Virginia*. Rails-to-Trails Conservancy. Retrieved December 10, 2021, from https://www.railstotrails.org/our-work/united-states/virginia/.
- Rails with Trails/Pedestrian Crossing Project Initiation, Coordination and Review, Commonwealth of Virginia, 2009. https://www.dcr.virginia.gov/recreational-planning/document/house-bill-2088.pdf.
- ¹⁷ Virginia Department of Transportation. (2004). *Policy for Integrating Bicycle and Pedestrian Accommodations*. Virginia Department of Transportation. Retrieved December 16, 2021, from https://www.virginiadot.org/programs/resources/bike_ped_policy.pdf.

- ¹⁸ Virginia Department of Conservation and Recreation. (2018). *Virginia Outdoors Plan 2018*. Retrieved December 16, 2021, from https://www.dcr.virginia.gov/recreational-planning/document/vopall2018.pdf.
- ¹⁹ United States Geological Survey. (2021). *National Digital Trails*. U.S. Department of Interior. Retrieved December 16, 2021, from https://www.usgs.gov/national-digital-trails
- ²⁰ Florida Office of Greenways and Trails. (2019). *Florida Greenways and Trails System Plan*. Retrieved December 16, 2021, from https://floridadep.gov/sites/default/files/FL-Greenway%2BTrails-System-Plan-2019%2C 2023 0.pdf
- ²¹ Florida Office of Greenways and Trails. (2021). *Florida Greenways and Trails System Plan and Maps*. Florida Department of Environmental Protection. Retrieved December 16, 2021, from https://floridadep.gov/parks/ogt/content/florida-greenways-and-trails-system-plan-and-maps.
- ²² Pennsylvania Department of Conservation and Natural Resources. (2020). *Pennsylvania Land and Water Trail Network Strategic Plan.* Retrieved December 16, 2021, from http://elibrary.dcnr.pa.gov/GetDocument?docId=3176020&DocName=dcnr 20030875.pdf
- ²³ Virginia Department of Conservation and Recreation. (2021). *Virginia Recreational Trails Program*. Retrieved December 16, 2021, from https://www.dcr.virginia.gov/recreational-planning/trailfnd.
- ²⁴ Virginia Department of Conservation and Recreation. (2021). *Land and Water Conservation Fund*. Retrieved December 16, 2021, from https://www.dcr.virginia.gov/recreational-planning/lwcf.
- ²⁵ The Secretariat of Natural Resources, & The Secretariat of Transportation. (2019). *Virginia Capital Trail Sponsorship and Maintenance Report*. Retrieved December 10, 2021, from https://rga.lis.virginia.gov/Published/2020/RD86/PDF.
- ²⁶ Commonwealth Transportation Board January 10, 2022 Workshop. http://www.ctb.virginia.gov/resources/2022/ctb_workshop_meeting_jan2022.pdf.
- ²⁷ Florida Office of Greenways and Trails. (2021). *Florida Office of Greenways and Trails*. Florida Department of Environmental Protection. Retrieved December 16, 2021, from https://floridadep.gov/ogt.
- ²⁸ Florida Department of Transportation. (2021). Shared-Use Nonmotorized (SUN) Trail Program. FDOT Systems Implementation Office. Retrieved December 16, 2021, from http://floridasuntrail.com/.
- ²⁹ Pennsylvania Department of Conservation and Natural Resources. (2021). *Land and Water Trail Development in Pennsylvania*. Retrieved December 16, 2021, from https://www.dcnr.pa.gov/Communities/TrailDevelopment/Pages/default.aspx.
- ³⁰Ohio Department of Transportation. (2021). *Walk.Bike.Ohio Policy Plan*. Retrieved December 16, 2021, from https://www.transportation.ohio.gov/wps/portal/gov/odot/programs/walkbikeohio/welcome#page=1.
- ³¹ North Carolina Department of Transportation. (2013). *WALKBIKENC*. Retrieved December 16, 2021, from https://www.ncdot.gov/bikeped/walkbikenc/default.aspx.
- ³² Office of Intermodal Planning and Investment. (2021). *GAP Technical Assistance*. VTrans: Virginia's Transportation Plan. Retrieved December 16, 2021, from https://vtrans.org/about/gap-ta.
- ³³ Florida Department of Environmental Protection. (2021). *Florida Forever*. Retrieved December 16, 2021, from https://floridadep.gov/lands/environmental-services/content/florida-forever
- ³⁴ Pennsylvania Department of Conservation and Natural Resources. (2021). *Trail Grants*. Retrieved December 16, 2021, from https://www.dcnr.pa.gov/Communities/Grants/TrailGrants/Pages/default.aspx#:~:text=DCNR%27s%20goal%20is%20to%20have%2 0a%20trail%20within,are%20awarded%20through%20the%20Community%20Conservation%20Partnerships%20Program.

- ³⁵ Commonwealth Transportation Board (2021). Action on the Revised Fiscal Year 2022 Annual Budgets for the Commonwealth Transportation Fund and for the Virginia Department of Transportation; Action on the Allocation of Funds made available to the Priority Transportation Fund.
- ³⁶ Central Virginia Transportation Authority. (2021). *Letter to Governor Ralph Northam*. Retrieved December 16, 2021, from https://planrva.org/wp-content/uploads/12032021-CVTA-Regional-Funding-Request.pdf.
- ³⁷ 2022 Session, Budget Bill HB30 (Introduced). Item 452.I. Retrieved December 16, 2021, from https://budget.lis.virginia.gov/item/2022/1/HB30/Introduced/1/452/.
- ³⁸ U.S. Department of Transportation. (2021). *The Bipartisan Infrastructure Law Will Deliver for Virginia*. Retrieved December 16, 2021, from https://www.transportation.gov/sites/dot.gov/files/2021-11/Bipartisan Infrastructure Law Virginia.pdf.
- ³⁹ U.S. Department of the Interior. (2021). *Secretaries Haaland and Buttigieg Announce Partnership to Increase Access, Enhance Visitor Experience at National Parks*. Retrieved December 16, 2021, from https://www.doi.gov/pressreleases/secretaries-haaland-and-buttigieg-announce-partnership-increase-access-enhance-visitor.

9 APPENDIX

Multi-Use Trails Assessment Details

Stakeholders & Roles

Figure 15: Multi-Use Trail Stakeholders and Roles

Oversight / Regulatory

Department of Conservation and Recreation (DCR)
Virginia Department of Transportation (VDOT)
Department of Rail and Public Transportation (DRPT)
U.S. Department of Transportation
U.S. National Parks Service

TRAILS

Advocacy (examples)

National: Rails-to-Trails Conservancy
State: Virginia Trails Alliance, Virginia Conservation Network
Regional: Tidewater Trails Alliance, etc.
Trail specific: Virginia Capital Trail Foundation
Multi-state: East Coast Greenway Alliance

Advisory

State Trails Advisory Committee (STAC) Recreational Trails Program (RTP) Advisory Committee Statewide Bicycle and Pedestrian Advisory Committee

Recipients

Local Governments
Planning District Commissions (PDCs)
Metropolitan Planning Organizations (MPOs)
Regional Recreation Authorities
on-Profits (through agreement with government entity

Geographical Regions

Northern Virginia – As the most developed region of the Commonwealth, shared use paths typically connect to other shared use paths and transit systems. These trails are used for recreation but are also the trails most likely to be used for commuting in the state. The 18-mile Mount Vernon Trail, runs from Mount Vernon to Rosslyn, connecting neighborhoods, major employers, recreational destinations, and transportation hubs. The W&OD Trail runs 45 miles from Shirlington to Purcellville.

Central Virginia – The multi-use trails in central Virginia are mostly clustered in the urban areas of Richmond and Charlottesville. However, the Virginia Capital Trail, which runs from Richmond East to the Hampton Roads region passes through all of these geographies and jurisdictions and is one of the most successful trails in Virginia. The Fall Line Trail is being developed to provide access from Ashland to Petersburg, running through Richmond, which will be a vital regional connection.

Tidewater Region – The Hampton Roads region currently has several trails connecting the employment centers and suburban residential areas in the region, which are used both for recreation and access to work and other necessities. Planning is currently underway for the Eastern Shore Rail-to-Trail, which would provide pedestrians and cyclists access to communities, businesses, and State and Federal parks. There are other regional trails and trail development efforts like the Birthplace of America Trail.

Southwestern Virginia – There are several popular trails in rural, Southwestern Virginia that showcase the Commonwealth's natural beauty and attract eco-tourism. These trails, compared to the more developed regions of the state, are more likely to connect to large public parks, rustic destinations, and small towns. The Virginia Creeper Trail, located just north of the North Carolina and Tennessee state lines, brings in 250,000 trail riders and about \$25 million in trail-related tourism revenue annually.

East Coast Greenway - The East Coast Greenway (ECG) is an in-development walking and cycling route safely connecting communities from Maine to Florida via protected, off-road paths. Within Virginia, the ECG consists of a combination of 15 trails including the Virginia Capital Trail, the Mount Vernon Trail, and the Tobacco Heritage Trail. These trail segments range from 0.25 miles to 52 miles long. All trails are owned and managed by agencies at the state and local levels. However, advocacy for new connective trails is often led by the ECG Alliance.

Trends: Virginia's Bicycle-Friendly State Ranking

Figure 16: Virginia's Bicycle-Friendly State Rankings 2008-2019



Source: League of American Bicyclists

Stakeholder Engagement

Table 13: STAC Member Organizations

| State Trails Advisory Committee (STAC) Organizations | |
|--|---|
| State Agencies – DCR, VDOT, DWR, VDOF | Virginia Creeper Trail |
| Virginia Capital Trail Foundation | The Nature Conservancy |
| U.S. Forest Service | Dominion Legislative Outreach |
| East Coast Greenway Alliance | Virginia Bicycling Federation |
| Virginia Tourism Corporation | James River Park System |
| National Park Service | James River Association |
| Virginia Recreation and Park Society | International Mountain Bike Association |
| Roanoke Greenways Commission | Outdoor Recreation Caucus |
| Virginia Horse Council | Northern Virginia Regional Park Authority |
| Great Eastern Trail Association | Virginia Outdoors Foundation |
| Chesapeake Bay Commission | RTP Advisory Committee |
| Spearhead Trails | Monacan Indian Nation |
| Paralyzed Veterans of America | Potomac Appalachian Trail Club |

Table 14: Interviewee Organizations

| Interviewee Organizations | |
|--|--|
| State Agencies – DCR, VDOT, DRPT | |
| Virginia Capital Trail Foundation | |
| League of American Bicyclists | |
| East Coast Greenway | |
| Capital Trails Coalition | |
| Florida Department of Transportation (FDOT), SUN Trail Program | |
| Virginia Creeper Trail | |

Peer State Best Practices: Florida's State Trail Program

Florida's state trail program is the **Office of Greenways and Trails** (OGT), which is housed in the Department of Environmental Protection (DEP). The **Florida Greenways and Trails Council** advises the DEP on greenway and trail issues, promotes intergovernmental cooperation and private partnerships for developing the greenways and trails system, recommends priorities for critical links, and provides funding recommendations. The Council is supported by staff from the OGT and includes a combination of agency/organization representatives and public stakeholders.

The OGT, with oversight from the Council, leads the development of the Florida Greenways and Trails System Plan (see Figure 17).²⁰ Building on local and regional trail efforts, the plan identifies existing, planned and conceptual trail corridors, establishes opportunities and priorities, and identifies the goals, objectives and actions needed to connect the trail system statewide. The plan is updated every five years, focusing on four goals:

- Delineate regional systems.
- Strategic investment of resources to advance system completion.
- Promote and market the system to residents and visitors.
- Establish partnerships and engage stakeholders.

The Florida Shared-Use Nonmotorized (SUN) Trail Program was created within the Florida Department of Transportation to support the establishment of a statewide system of interconnected multi-use trails for bicyclists and pedestrians—the SUN Trail Network—in coordination with the Florida DEP. The SUN Trail Network is a refined version of the Florida Greenways and Trails System (FGTS) Plan's Land Trails Priority Network; it is the statewide system of high-priority (strategic) paved trail corridors for bicyclists and pedestrians, and it includes a combination of existing, planned, and conceptual multi-use trails. ²¹ The SUN Trail Program receives an annual allocation of \$25 million from the redistribution of new vehicle tag revenues to fund trail. The Florida SUN Trail Program prioritizes projects based on the criteria seen in Figure 18.

Figure 18: Florida SUN Trail Project Prioritization Criteria

Project enhances the safety of bicyclists, pedestrians, and motorists

- Includes a safety component
- Is located within an area identified as a hazardous biking/walking zone or an area with significant numbers of safety concerns
- Implements bicycle and pedestrian safety action plan

Project is recognized as having regional, state, or national importance

- Project is a component of a Regional Trail
 System prioritized by the Florida Greenways and Trails Council
- Project is a component of a National Recreation Trail, East Coast Greenway, or a trail that has other national importance
- Project implements an adopted regional bike, pedestrian, or trail master plan

Figure 17: Florida Greenways and Trails System Plan



Additional financial contribution committed to the project

- Project funds are leveraged by multiple public/private sources of investments dedicated to this specific trail segment
- Project funds are leveraged by at least one additional public/private source of investment dedicated to this specific trail segment

Peer State Best Practices: Pennsylvania's State Trail Program and Priority Trail Gaps

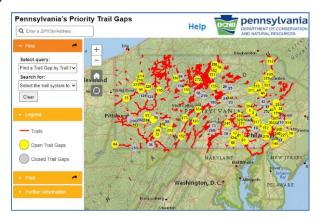
The Pennsylvania Department of Conservation and Natural Resources (DCNR) develops and administers the Pennsylvania Land and Water Trail Network Strategic Plan. The DCNR, along with the Pennsylvania Department of Transportation and the Department of Community and Economic Development, supports non-motorized and motorized trail development by providing financial and technical resources and a strategic vision for a statewide trail network.

The Pennsylvania Land and Water Trail Network Strategic Plan, 2020-2024 provides a blueprint for state and local governments, trail providers, and other stakeholders to guide stewardship and expansion of a statewide trail network.²² It is a companion document to the Pennsylvania Statewide Outdoor Recreation Plan and was developed with input from the Pennsylvania Trails Advisory Committee (PTAC), multiple contributing state agencies and organizations, and a year-long public input process. The 20-member PTAC is charged with helping to guide the implementation of a statewide trail network based on recommendations from both the Statewide Outdoor Recreation Plan and the Land and Water Trail Network Strategic Plan. The PTAC represents motorized and non-motorized trail users across six regions and advises the Commonwealth on the use of state and federal trail funding.

The Strategic Plan includes a list of **Major Greenways/Trail Corridors**. These corridors are defined as land or water-based greenways/trails that are at least 50 miles long, go through more than one county, and are identified in an official planning document. The Strategic Plan also includes a process to identify **Priority Trail Gaps** and the **Top 10 Trail Gaps** that are most critical and require significant time and resources to address (see **Figure 19**).

Figure 19: Pennsylvania's State Trail Program and Gaps





Pennsylvania chooses to focus on closing critical gaps in the system or network. Their strategic trails plan includes a process to identify and prioritize trail gaps. **Priority Trail Gaps** meet the following criteria:

- The gap is along a statewide major greenway or regionally significant trail.
- The gap connects two existing segments of trail or connects an existing trail to a state park, state forest, or key community.
- The gap is five miles or less.
- The trail itself has been formalized in an official planning document.

From the list of Priority Trail Gaps, Department of Conservation and Natural Resources (DCNR), and Pennsylvania Trails Advisory Committee (PTAC) identify the **Top 10 Trail Gaps** that are most critical and require significant time and resources to address. These 10 trail gaps represent projects that:

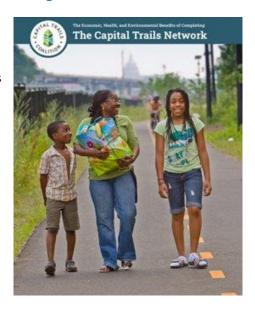
- Will connect contiguous open miles of trails.
- Require construction or rehabilitation of major infrastructure.
- Require a large amount of funding (generally over \$1 million).
- Require interagency coordination.

Virginia Best Practices: Capital Trails Coalition Collaborative Planning

The Capital Trails Coalition (CTC) is a collaboration of public and private organizations, agencies, and citizen volunteers working to advance completion of the Capital Trail Network, an interconnected network of multi-use trails for metropolitan Washington, DC. Coalition members include governmental agencies, non-profit organizations, decision-makers and elected officials, community groups and citizen advocates, business improvement districts, public health representatives, and environmental organizations.

The Capital Trail Network is a compilation of existing, planned and conceptual trails gathered from regional and local jurisdiction plans, including MPO, city, county, and state agencies. In 2017, the CTC convened meetings with the six regional jurisdictions and the National Park Service to build a mapping portal for all trails and to understand each jurisdiction's definition of planned and proposed trails. That same year the CTC refined criteria that sets the framework for which trails are included in the network.

The CTC analyzed the trail network to prioritize trails that intersect the boundary of high-population-density areas with low-income communities of color that are also designated Metropolitan Washington Council of Governments Activity Centers. The CTC asked each member jurisdiction to submit their top trail development priorities, then overlaid the two lists, resulting in 40 priority trail projects. To date, 54 percent or 479 miles of the 881-mile network has been completed.

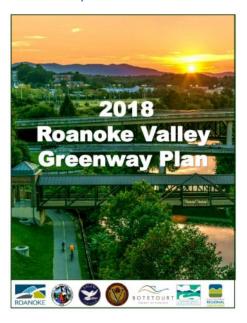


The CTC has equity as its primary focus and priority. The CTC analyzed the proposed trail network to prioritize trails that intersect the boundary of high-population-density areas with low-income communities of color that are also designated Metropolitan Washington Council of Governments Activity Centers. The CTC asked each member jurisdiction to submit their top trail development priorities, then overlaid the two lists, resulting in 40 priority trail projects.

Virginia Best Practices: Roanoke Valley Greenway Commission Partnerships

The Roanoke Valley Greenway Commission is an excellent example of regional partnerships developed for the purpose of planning and implementing trails and greenways. The Commission serves as an advisory board, coordinating among its member jurisdictions (City of Roanoke, Roanoke County, the City of Salem, the Town of Vinton, and Botetourt County), regional planning agencies (Roanoke Valley Transportation Planning Organization), and non-profit partners (Pathfinders for Greenways). The purpose of the Commission is to promote and facilitate coordinated direction and guidance in the planning, development, and maintenance of a system of greenways through the Roanoke Valley. The greenway network includes over 400 miles of paved and natural surface trails for all types of visitors with hundreds of miles in the planning stages as outlined in their 2018 Greenways Plan.

The Commission is supported by Pathfinders for Greenways, Inc., a 501(c)(3) grass roots citizen organization. Pathfinders for Greenways promotes and encourages development of a greenway network, educates citizens and officials on greenway benefits and value, raises and receives gifts, donations and grants, organizes volunteers, and sponsors community events.



Innovative Funding Best Practices

The New Mexico Outdoor Recreation Trails Grant supports trail projects that enhance community access to outdoor recreation destinations, and which contribute to state economic development, prosperity, and public wellness. This grant funds shovel-ready projects that directly add to that access. The Walton Foundation is a privately managed investment which facilitates and supplements trail development. The Foundation awarded over \$500 million in grants to further its mission which includes promoting outdoor recreation and access to destinations in Arkansas and surrounding Mississippi Delta. All activities are accomplished through private donations and sponsorships.

Peer State funding for trail development is most often administered through the state's parks, recreation, conservation, natural resources, or environmental protection department or agency and sometimes departments of transportation. A variety of programs are available, including those that provide grants, matching funds and low-interest or interest-free loans. Relevant examples include:

- **Florida** Founded in 2001, the Florida Forever program devotes 1.5 percent of annual conservation funds to trails and greenways. Since that time, 155 miles of priority recreational trails have been created under the program.
- Pennsylvania Invested \$43 million in trails through Growing Greener—administered by four state agencies—from 1995 to 2006. In recent years, funding for the program has decreased, but the program remains "the largest single investment of state funds in Pennsylvania's history to address Pennsylvania's critical environmental concerns."

Virginia non-profit foundations which encourage private donations or issue grants for trail investment to meet trail specific goals, objectives or enhance community vitality represent a starting point to model and expand into other regions and supplement scarce resources in existing programs. Two models, in an urban and rural region, include:

- Virginia Capital Trail Foundation The Foundation depends on private donations to fulfill its mission. Private donations allow the Foundation to continue to protect and enhance the Capital Trail, support programming and events, and lead advocacy efforts for more miles of trails to connect to the existing trail system.
- Harvest Foundation Established in 2002 from the sale of Memorial Hospital to produce resources for the citizens of Martinsville and Henry Counties. The Harvest Foundation conducts research and responsibly invests in programs and initiatives to address local challenges in health, education, and community vitality.