

# TRANSPORTATION TRAILS — STRATEGIC PLAN



## Introduction

Securing the funding needed to build a transportation trail can seem like a major challenge when considering a trail project. More than 80 percent of implementers, advocates, and users surveyed as part of this Plan, believe that a lack of funding is main barrier to building more trails. However, there are many resources and strategies that can make funding a transportation trail a possibility. Transportation trails not only serve a dual purpose, as both transportation and recreational facilities, but also often have a lower implementation cost compared to other transportation projects. This means implementers can pursue funding from a variety of sources, and can often make a competitive case for resources.

This toolkit is designed to guide trail implementers, such as town planners or advocates working in close collaboration with their local governments. It provides guidance for navigating multiple funding opportunities, including:

- · an overview of funding strategies and resources that support different phases of the trail development project,
- excerpts of funding resources and links to versions that will be updated on a frequent basis, and
- successful case studies from Maryland, offering realworld examples of how trails have been developed and funded.

## **BUILDING SUPPORT**

#### **FUNDING**

## LAND ACQUISITION





FIGURE 1 Trail Lifecycle Phases. Additional toolkits are available for Building Support and Operations & Maintenance phases.

## Funding a Trail Project from Planning to Maintenance

Funding a trail project is not a one-time effort—it is an evolving process throughout the life of a trail. While the implementation phase often garners the most attention due to high upfront costs for construction, consistent funding across all phases—from planning to operations and maintenance—is essential to ensuring a trail's long-term success and usability. Different phases of trail development and their corresponding funding needs are noted in Table 1.

## **Funding Strategies**

Funding for trails generally falls into two categories: grants-based funding and non-grant funding opportunities.

Grants, usually from the federal or state government, are among the most common and competitive sources of trail funding. They are particularly attractive because they do not require repayment and offset capital costs significantly. However, securing grant funding often involves submitting detailed technical applications or proposals and aligning the project with specific goals and priorities of the funding agencies. Federal grants in particular can have more complex documentation requirements, such as compliance with the National Environmental Policy Act (NEPA). Grants are typically awarded as one-time reimbursable

disbursements and can only be used for certain phases of the project, such as planning, design, or construction. Many grants also have a local match requirement, meaning that the project sponsor is required to fund a percentage of the total cost of the project.

Non-grant funding mechanisms offer greater flexibility and continuity, particularly for long-term operations and maintenance. These include borrowing funds through municipal bonds or loans for capital programming, seeking private donations of land and money, and raising money through value capture mechanisms such as increased real estate values along the trail corridor. Non-grant financing mechanisms, particularly those that involve new user fees or taxes, can sometimes be less popular with the public and may require political clout or a vote to implement. Using non-grant funding sources to leverage larger grants can help make these decisions more palatable to stakeholders.

By diversifying funding streams, trail sponsors can create a more long-term and resilient financial model that ensures consistent support across the trail's lifecycle.

Table 1 provides an overview of the phases of a trail project lifecycle and relevant funding and other support strategies.



FIGURE 2 Launch event for the recently expanded Easton Rail-Trail East-West Extension.

TABLE 1 Trail Project Phases and Relevant Funding Strateg	ES
Project Phase	
Key Elements	Funding Strategies
Building Support	
<ul> <li>Includes meeting with key stakeholders and partners to find ways to advance the project.</li> <li>Meetings and events to convene project supporters require time and resources.</li> </ul>	Stakeholder and community organizing is the primary need at this stage. The following strategies may help galvanize support:     » Donations, sponsorships, and private/public grants     » Non-monetary governmental technical assistance (e.g., NPS RTCA)
Planning Local Plans & Priority Letters	
<ul> <li>Ensure inclusion of the trail project with a rough description of alignment into local transportation plans, bicycle and pedestrian plans, land preservation and recreation plans, and MDOT priority letters.</li> <li>Encourage inclusion of the trail project in other relevant plans and projects, if relevant (e.g., public health, economic development, tourism, climate). Also be aware of State, MPO, and neighboring jurisdiction plans that may identify regionally significant corridors that pass through or connect to your jurisdiction.</li> </ul>	<ul> <li>Transportation plans and land preservation are required on a semi-regular basis and are usually self-funded by localities.</li> <li>Funding may be needed to produce materials that builds the case to include a trail project in the next plan update cycle. Consider:         <ul> <li>State discretionary grants (e.g., Bikeways Program, DHCD, Sustainable Communities Program, CDBG, Rural Maryland Council)</li> <li>Non-monetary governmental technical assistance</li> </ul> </li> </ul>
Planning Feasibility Study	
<ul> <li>Defines the project vision, maps key data, opportunities, and barriers, and often seeks and summarizes community input.</li> <li>Includes concept-level trail designs, alternate routes, and identifies technical constraints like environmental factors, ownership, traffic, and utilities.</li> <li>Crucial for securing funding and advancing the project.</li> </ul>	Target funding sources where your community is more competitive (e.g., grants open only to communities like yours) and/or grants where local match and administration burden is lower, such as:  State discretionary grants (e.g., Bikeways Network, DHCD, Sustainable Communities Program, CDBG, Rural Maryland Council)  Planning-focused federal discretionary grants (e.g., Appalachian Regional Commission, Chesapeake Gateways)  Local MPO grants (e.g., transportation land use

connections from TPB or BRTB)

» Non-monetary governmental technical assistance

#### Project Phase **Key Elements Funding Strategies Land Acquisition** • Process often involves several preparatory steps, • Before trail project enters the Implementation stage: such as researching the corridor to identify right-» Donations of land or easements of-way ownership, conducting environmental » Federal and state grants focused on land conservation assessments, estimating the corridor's value, and preservation (e.g., Program Open Space) and securing financing or funding. • When trail project is in the Implementation stage: · Land may be acquired prior to trail development through » Consider using above strategies as local match conservation-focused grants and private donations, » Use funding sources that allow for which may not require a transportation trail to be built at right-of-way acquisition the same time. **Implementation** Concept Design • Identifies trail corridor, site-specific trail specifications Consider pairing with a Feasibility Study on smaller (e.g., surfacing), and matches the project need and trail projects. purpose to resources. • For larger projects, consider sources similar to the • Field flagging and GPS data that delineates the trail 30/60/90/100% Design Phases. location, alignment, width, height, grade, and structures Apply for a philanthropic or other small grant for a appropriate to intended trail use. demonstration project to test a design and demonstrate use. Pair with community events and promotion. **Implementation** 30/60/90/100% Design Phases • 30% design phase: Major design decisions finalized with Review previously awarded projects from potential grants public input, including alignment, typical sections, general and consider applying to those that match the cost range access changes, and preliminary plans. of your trail project. If possible, pair these stages with • 60% design phase: More detailed design elements construction to maximize results from similar grant finalized, including refinements to typical sections (e.g., administration burden: trail widths, lane widths, buffers), intersection designs, » Federal formula grants (e.g., Recreational Trails, site plans for trailheads, traffic plans, and environmental Transportation Alternatives) » MDOT Consolidated Transportation Program (CTP) project mitigation measures. • 90-100% design phase: Design is further refined, such prioritization process as lighting and landscaping plans, signage, architectural » Federal discretionary grants (e.g., BUILD) treatment of retaining walls and noise walls, and • Multiple grants may need to be combined to meet local construction planning. match requirements. Consider using these sources for local match:

Program, Program Open Space) » Local funds (e.g., taxes and fees)

» Federal funding braiding

» State discretionary grants (e.g., Bikeways Network

Project Phase			
Key Elements	Funding Strategies		
Implementation			
Construction			

- · Includes sequencing construction phases and special conditions, such as permit compliance, trail tread construction, corridor clearing, grade reversal, and more.
- Explore similar sources as the 30/60/90/100% Design Phases.
- Combine with design stages if possible to reduce grant administrative burden.
- Donations of money, land, materials, and/or labor can help with local cost share.

#### **Operations & Maintenance**

- Typically managed by a municipal, county, or state agency, though some private organizations also oversee trails. Maintenance is often carried out by staff, volunteers, contractors, or a combination of all three.
- · Robust maintenance plans understand current and anticipated needs and assess the local capacity to meet them.
- Plan for State of Good Repair (SGR) projects, which may be needed at infrequent but regular intervals (e.g., resurfacing due to rooting).
- Most grants are not allowed to be used for operational funding. Consider these non-grant funding sources:
- » Park and roadway maintenance allocations in local government budgets
- » Fundraising events and Friends-of-the-Trail membership dues
- » Special district taxes (e.g., Business Improvement Districts (BIDs))
- » Ancillary user fees (e.g., paid parking)
- » Volunteer labor and support
- For State of Good Repair projects, consider:
- » Saving money for these eventual expenses
- » Federal or state grants marked for "Maintenance" in Table 3

#### Cost Estimates

Stakeholders and the public will want to know how much a trail project might cost, so it is crucial that trail implementers understand how cost estimates are made at each phase of trail building and how they will evolve over time to be more accurate. This way, implementers can be clear and transparent with the public as a project evolves.

In the early stages, estimates are broad and based on limited information. Factors such as project scale, terrain complexity, and material choices can significantly affect cost accuracy. When estimating costs, consider including a contingency to account for uncertainty and risk, particularly during early phases when detailed data is unavailable. MDOT's Bikeways Project Cost Estimator tool can generate a rough order of magnitude cost estimate, which includes these contingency allowances.

As a project advances into design, reliable sources for unit costs, such as the MDOT SHA's Price Index, can help standardize assumptions and improve overall consistency. As the project moves from planning to construction, cost estimates become more reliable, and the need for added large contingency goes down.

Table 2 outlines the primary cost categories and detailed components typically involved in transportation trail projects across the trail project lifecycle.

It is important to be as transparent as possible when communicating trail project costs, even though it can be difficult as there are risks and uncertainties such as inflation, supply chain disruptions, and permitting delays. Trail implementers can hedge for risks and uncertainties by identifying what they can cost estimate earlier, such as environmental, regulatory, and site-specific constraints. While historical data and experience of other similar trail projects are useful, they should not be the sole basis for estimates due to variations in project location, scope, market conditions, and implementation context.

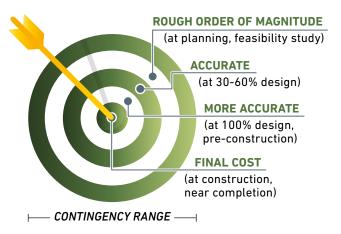


FIGURE 3 Cost Estimate Levels by Project Phase.

TABLE 2 Trail Project Phases and Core Cost Elements for Budgeting

Project Phase	Core Cost Elements	
All Phases	Legal reviews     Interagency agreements	<ul><li>Funding management</li><li>Contract administration</li></ul>
Planning	Architectural and engineering fees     Community outreach staffing and supplies	Printing and collateral
Implementation	<ul> <li>Architectural and engineering fees</li> <li>Project inspection fees</li> <li>Site work, including site clearing, grading and preparation</li> <li>Demolition and removal costs of existing structures/pavements</li> <li>Construction costs, including material costs, contractor mobilization, utility relocation, erosion and sediment control, inspections during construction</li> </ul>	<ul> <li>Environmental and regulatory compliance</li> <li>Labor costs, including wages for construction crews, supervisors, and support staff</li> <li>Equipment costs, including rental, use, and transportation of construction equipment/tools</li> <li>Miscellaneous costs such as insurance, bonding, financial administration</li> <li>Contingencies, including budget buffer for inflation, market volatility, design changes, or unexpected site conditions (typically 10–30 percent)</li> </ul>
Land Acquisition	Land, structures, and right-of-way (ROW)     Property appraisals	Relocation expenses and payments
Operations & Maintenance	<ul> <li>Yearly facility evaluation to determine the need for minor repairs</li> <li>Vegetation management: planting, pruning, and general landscaping</li> <li>Storm-related maintenance</li> <li>Trash collection, litter removal, and regular site cleaning</li> </ul>	<ul> <li>Surface maintenance (e.g., patching, regrading, sealing, and replacement of concrete panels)</li> <li>Signage, wayfinding, and informational kiosk maintenance or updates</li> <li>Routine checks and repairs of lighting, other amenities, and ADA-accessible elements</li> </ul>

## Grants and Technical Assistance

## **Federal Discretionary Grants**

Federal discretionary grants have been increasingly used by communities to help advance active transportation and trail projects, especially with the passage of the 2021 Infrastructure Investment and Jobs Act (IIJA). Also known as the Bipartisan Infrastructure Law (BIL), this most recent federal transportation bill created several avenues for the federal government to directly fund local projects. These programs are authorized and appropriated by Congress and are awarded on a competitive basis by federal agencies. While much of the focus has been on the Department of Transportation, other agencies such as the National Park Service also offer their own awards. These grants are discretionary in the sense that they are awarded by the federal agencies to specific projects as opposed to formula grants, which are distributed to states and regional agencies who then award the funds to local projects.

Each grant program has distinct eligibility requirements and scoring rubrics. Successful applications must often demonstrate innovation, multimodal integration, clear public benefit, and alignment with the program's stated objectives. Because they are determined exclusively by federal agencies, a new federal administration can have a more direct impact on the criteria and awarding of discretionary grants. The application process is often complex and time-intensive, requiring detailed project plans, environmental documentation, cost estimates, and community engagement records. Early and strategic planning, coalition building, and identifying complementary funding sources for the local match can significantly improve the likelihood of success in securing these funds. Most federal discretionary grants require applicants—typically local governments or agencies—to provide 20 percent of the total project cost. Securing this local match is often a prerequisite for eligibility, but funds from state grants and certain other federal grants can serve as the local match.

Some discretionary grants have lower barriers to entry, particularly to help communities that may be under-resourced to begin the planning process. The National Park Service has programs to help conserve land and plan and build recreational facilities including trails, some of which are delivered as technical assistance rather than grants. Technical assistance programs can be particularly useful for trail sponsors who lack in-house experience to plan a trail find the procurement process for contracted planning support onerous. Specific programs from other federal agencies, such as the Appalachian Regional Commission and the Department of Defense, have also supported trails and active transportation improvements in Appalachian counties and military base-adjacent communities in Maryland respectively.



FIGURE 4 St. Mary's County funded sidewalk improvements along a future phase of the Three Notch Trail by Patuxent River Naval Air Station using a discretionary Department of Defense grant. (Source: Airbus)

#### **Federal Funding Braiding**

Securing the local match for federal funds can be a barrier for communities with limited resources. Some federal funding programs allow the use of other federal funds as a local match, as long as the project sponsor can meet the conditions for both grant programs. This strategy, called federal fund braiding, has been explored by USDOT's Coordinating Council on Access and Mobility, which has published the Coordinating Council on Access and Mobility (CCAM) Federal Fund Braiding Guide to support similar efforts in local human services transportation coordination.

### Federal Formula Grants

While federal discretionary grants are large and prestigious, among the most significant and consistent grant sources for transportation trails are formula grants provided by federal agencies, in particular Transportation Alternatives and Recreational Trails programs from the Federal Highway Administration (FHWA). The main difference between formula and discretionary grants is that these funds are distributed to state and regional levels of government via a prescribed formula, and projects are considered, ranked, and awarded by the equivalent state or regional agency. For example, National Park Service Land & Water Conservation Funds are administered by the Maryland Department of Natural Resources, while Federal Highway Administration and Federal Transit Administration formula grants are administered by the State Highway Administration (SHA) and the Maryland Transit Administration (MTA), respectively. As with federal discretionary grants, applicants must apply and compete for federal formula grants in Maryland, but the pool of competition is limited to other in-state applicants.

A notable exception to SHA administration of federal formula grants is if the project is in an urbanized area, where responsibility is further delegated to a Metropolitan Planning Organization (MPO), a federally mandated regional entity. Trail sponsors should work with their MPO if they are located within their jurisdiction. Most of Maryland's counties and cities are under the jurisdiction of one of six MPOs that cover parts of the state. Some MPOs cross state lines, and some are housed within larger regional organizations often referred to by their parent organization's name:

- Baltimore Regional Transportation Board (BRTB), part of the Baltimore Metropolitan Council (BMC)
- Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO)
- National Capital Region Transportation Planning Board (TPB), part of the Metropolitan Washington Council of Governments (MWCOG)
- Salisbury/Wicomico Metropolitan Planning Organization (SWMPO)
- Wilmington Area Planning Council (WILMAPCO)

#### State Grants

In addition to federal formula grants, state agencies also administer grants that can be used for transportation trails using state funding. Popular programs include MDOT's Kim Lamphier Bikeways Network Program and DNR's Program Open Space. While awards are often smaller compared to federal funding, these can serve as key pieces of the puzzle when building trails. Program Open Space has been used by localities to acquire land for conservation and build smaller sections of trails, while the Bikeways Program has been used for feasibility studies and preliminary design for shared-use paths. Both grants can also serve as the local match for a federal grant. Almost all state grants are discretionary.



FIGURE 5 The first phase of the Terrapin Run Trail in Somerset County was funded with a federal formula grant matched with an MDOT state grant. (Source: Somerset County)

#### Trail Grants Table

**Table 3** is a selection of the 30+ available federal programs and Maryland-specific funding sources that could fund transportation trail projects. For a full, searchable, updated list of available funding sources, see the MDOT Transportation Trails website.

#### **Eligible Activities**

These are linked to the Trail Lifecycle Phases:

- · LA: Land Acquisition
- · PL: Planning
- IM: Implementation
- · OM: Operations & Maintenance

 TABLE 3
 Selected Federal and State Grant Sources and their Eligible Activities

		Elig	jible <i>i</i>	Activ	ities
Funding Source	Description	LA	PL	IM	ОМ
Federal Discretiona	ry Grants				
Better Utilizing Investments to Leverage Development (BUILD) Grants	USDOT's BUILD grants (formerly called TIGER and RAISE) are awarded to government entities to fund surface transportation infrastructure projects with significant local or regional impact. Trail, pedestrian, and bicycle projects are eligible if they support the program's larger goals.	✓		✓	
Chesapeake Gateways	NPS's Chesapeake Gateways provides both technical and financial assistance to support the conservation, restoration, interpretation, and public access to cultural, natural, and recreational resources throughout the Chesapeake Bay watershed. Assistance is available to managers and partners of designated Chesapeake Gateways sites, as well as other eligible partners, with no match required.		✓		
Rivers, Trails, and Conservation Assistance (RTCA)	NPS's RTCA program supports locally led conservation and outdoor recreation projects by providing technical assistance (instead of grants) to help communities and public land managers plan, develop, and restore parks, trails, rivers, wildlife habitats, and outdoor recreation programming. Eligible applicants include community groups, nonprofits, and governmental agencies, with no match required.		✓		
Federal Formula Gr	ants				
Community Development Block Grants (CDBG) DHCD administered	The US Department of Housing and Urban Development's (HUD) CDBG program provides annual grants to states, cities, and counties to support community development activities, with at least 70 percent funds devoted to activities that benefit low- to moderate-income persons. Eligible uses include public facility improvements, such as sidewalks, trails, and parks that enhance access and livability.	✓		√	
Highway Safety Improvement Program (HSIP) MDOT administered	FHWA's HSIP provides funding to government entities to reduce roadway hazards and improve safety on high-risk roads based on a data-driven process. Projects should be consistent with Maryland's Strategic Highway Safety Plan and qualify for a lower 10 percent local match. Maryland must allocate at least 15 percent of HSIP funds to improving safety for vulnerable road users, and maintains a dedicated set-aside for High-Risk Rural Roads.		✓	✓	
Land and Water Conservation Fund (LWCF) State and Local Assistance DNR administered	NPS's LWCF awards grants to states to safeguard natural areas, protect natural resources, expand outdoor recreation opportunities, and preserve cultural heritage. Eligible projects include trail development, parkland acquisition, and recreational facility improvements that ensure public access and environmental stewardship.	✓	<b>√</b>	✓	
Recreational Trails Program (RTP) MDOT administered	USDOT's Rec Trails Program provides funding to government entities to develop and maintain recreational trails and related facilities for nonmotorized use. Eligible projects include trail construction, State of Good Repair maintenance, signage, and trailside amenities.	✓	✓	√	<b>√</b>
Transportation Alternatives Program (TA/TAP) MDOT administered	USDOT's TAP provides funding to government entities for transportation projects that expands safe, accessible transportation options for bicyclists and pedestrians. This is a commonly used source of funding for transportation trails.		<b>√</b>	✓	<b>√</b>

			Eligible Activities			
Funding Source	Description	LA	PL	IM	ОМ	
State Grants						
Bicycle and Pedestrian Accessibility Funds (Funds 79 and 88)	MDOT SHA's Fund 79, New Sidewalk Construction for Pedestrian Access, and Fund 88, Bicycle Retrofit, can be used to fund trails on existing SHA roads. Projects should be listed in local master plans and in county priority letters.			✓		
Consolidated Transportation Program (CTP)	MDOT's six-year fiscally constrained capital improvement program has been used to fund transportation trails in the past. To qualify, trail projects must be prioritized in county transportation priority letters. If the project meets certain cost thresholds, the project must also undergo Chapter 30 prioritization before it can be considered for inclusion in the CTP.			✓		
Community Parks and Playgrounds Program	DNR's Community Parks and Playground Program provides flexible grants to local governments to restore, expand, or improve parks and green spaces, particularly in cities, towns, older neighborhoods, and densely developed areas. Funding may be used to rehabilitate existing parks, create new parks, develop environmentally focused recreation projects, or install playground equipment where recreational needs are underserved throughout the state.	<b>✓</b>		<b>√</b>		
Greenspace Equity	DNR's Greenspace Equity Program is a state discretionary grant administered by the Maryland Department of Natural Resources. It was established in 2023 through legislation (Chapter 487 of 2023) to provide grants to eligible applicants for enhancing the public health and livability of overburdened and underserved communities by implementing projects to preserve, create, and improve public green spaces.	✓		✓		
Kim Lamphier Bikeways Network Program	MDOT's Kim Lamphier Bikeways Network Program funds projects that maximize bike access and close gaps in the state's bike network, particularly those identified in the Statewide Trails Plan. The Program prioritizes projects that enhance safety and access in disadvantaged communities. Eligible activities include design and planning and feasibility studies, minor retrofits and low cost treatments, and construction of bikeways that improve connectivity and mobility for cyclists.		<b>√</b>	<b>√</b>		
MD Agricultural Education and Rural Development Assistance Fund	Rural Maryland Council's MAERDAF provides grants to rural-serving nonprofit organizations that promote statewide and regional planning, economic and community development, and agricultural and forestry education. Trail planning projects could qualify as an eligible regional planning activity, with no match required.		✓			
Program Open Space - Local Grants	DNR's Program Open Space - Local Grants Program provide financial and technical assistance to local governments in Maryland for the planning, acquisition, and development of public recreation and open space areas. Local governments may use up to 75 percent of the appraised land value as local match. Eligible projects include trails, greenways, parks, and recreational facilities that enhance community access to outdoor spaces.	✓		<b>√</b>		

#### Role of MPOs in Advancing Trail Projects

Transportation projects, including trails, frequently span multiple jurisdictions, necessitating regional coordination among cities, counties, and various agencies. Establishing a regional approach from the outset can significantly strengthen the trail's impact and longterm viability. However, doing so requires deliberate collaboration, alignment of priorities, and continuous communication across partners.

In urbanized areas, Metropolitan Planning Organizations (MPOs) exist specifically to support such coordination. These federally designated bodies facilitate regional transportation planning and investment decisions, including for trails and active transportation infrastructure—whether in urban cores or rural corridors within their jurisdictions. Despite their importance, MPOs are often underutilized by trail advocates and project sponsors, yet they can provide critical support across several areas:

- Grant Application Assistance: MPOs can assist with the technical preparation of funding proposals reviewing scopes of work, developing cost estimates, aligning with regional priorities, and navigating federal systems like Grants.gov. This can significantly enhance application competitiveness.
- Feasibility Studies and Preliminary Design: Some MPOs have the capacity to complete feasibility studies and preliminary concept design.

- Public Engagement and Coordination: These organizations are well-positioned to facilitate interjurisdictional collaboration, coordinate stakeholder engagement, and help align trail projects with broader regional goals.
- Incorporation in Long-Range Planning: By ensuring trail projects are included in Long-Range Transportation Plans (LRTPs), Transportation Improvement Programs (TIPs), and other regional plans, MPOs can significantly enhance project visibility and funding competitiveness.
- Access to Additional Funding Streams: MPOs often manage or influence funding allocations from federal formula programs, such as the Transportation Alternatives Program (TAP) and Congestion Mitigation and Air Quality Improvement (CMAQ); both of which are important funding sources for trails and active transportation infrastructure projects. Some MPOs also provide additional grants and technical assistance to communities, which can be used for planning-level studies (e.g., Transportation-Land Use Connections Program from TPB and BRTB).

Rural counties in Maryland have an analogous structure in Tri-County Councils, which can provide some support with grant proposals and regional coordination. These councils currently do not have specific funding allocations for transportation purposes to distribute in their regions.



FIGURE 6 Trail bridge on Sligo Creek Trail, Montgomery County.

## Non-Grant Funding Opportunities

Non-grant financing strategies for trail transportation projects can be organized across five areas. Many of these require action at the local level, and trail implementers and advocates can serve a key role in explaining the benefits that new local funding can bring, especially if it can be used to leverage larger grants.

Table 4 describes the different kinds of non-grant financing strategies that can be used to fund trail development. The table also notes examples of bicycle and pedestrian infrastructure projects funded through these mechanisms.

 TABLE 4
 Non-Grant Funding Opportunities and Relevant Examples

Financing Option	Description	Relevant Example(s)
Bonds & Loans		
Bonds	Bonds are a common financing tool used by municipalities to improve infrastructure, including trails, and can be secured by general taxing power of the issuer. Funds are borrowed through selling bonds to build trails or buy equipment, repaid with interest over time at market interest rates.	Metropolitan Branch Trail (Montgomery County), where 27 percent of the total funds for recent trail expansion came from general obligation bonds.
Loans	Funds are also borrowed, but at lower than market interest rates, which results in paying less in interest. Securing a loan usually requires a long and competitive administrative process in addition to the borrower maintaining strong credit ratings and stable revenue sources to repay the debt.	
Ballot Measures	Specific voter-backed legislation and ballot measures can make additional funding available. Voters have ability to directly support and secure dedicated funding for specific trail projects by approving the issuance of new bonds in excess of a municipality's usual amount.	California, Iowa, Ohio, Washington, and Maine have enabled millions of dollars of funding to go towards trail projects through specific voterbacked ballot measures.
Consumer Activ	ity	
Purchase-Based Tax	Funding comes from a portion(s) of consumer purchases, such as sales taxes, real estate transfer fees, hotel taxes, etc.	DNR's Program Open Space is primarily funded by real estate transfer taxes, with a portion set by the state and another set by the local county.
Purchase-Based Fee	Funds are generated from one-time and/ or recurring fee charged when purchasing a government-regulated service, such as license plates or bikeshare/scootershare rentals.	City of Baltimore collects a 10 cent fee per dockless bikeshare and scootershare rental. Other cities dedicate similar sources of funding to bike infrastructure projects.
Usage-Based Fee	Funds are collected directly from trail users. This method is used infrequently for transportation trails due to feasibility of tolling such a facility, but fees for ancillary services, such as parking or facility reservations, are more common.	The Chesapeake & Ohio Canal Towpath is free to travel on, but the Great Falls Tavern area along the canal has a \$10 entrance fee per vehicle. Drive-in campsites along the trail also have nightly fees.

#### **Capturing Value**

Financing Option	Description	Relevant Example(s)		
Corporate Impact Funds	Enabling legislation for casinos and other gambling establishments direct a portion of proceeds to be offered as grants to improve their surrounding communities.	Baltimore Casino Local Impact Funds (CLIF) have been used as a local match to build a portion of the Gwyns Falls Trail through the Warner- Stockholm Complete Streets project.		
Development Impact Fees	These fees raise funds for off-site transportation improvements and other projects needed due to higher demand generated by new development.	Fourteen counties in Maryland charge impact fees, with seven counties explicitly stating a transportation and/or recreation purpose for their fees.		
Special Taxing Districts	Special taxing districts, such as business improvement districts, empower a municipality to charge an additional property tax within a specific area to improve infrastructure and services within the district itself.	Kent Narrows Commercial Management and Waterfront Improvement District (Queen Anne's County) was specifically created for the development of sidewalks and bikeways in the area.		
Tax Increment Financing (TIF)	TIF revenues fund transportation and other projects by borrowing money against the projected increase in tax revenues resulting from higher property values following infrastructure improvements and new development.	Montgomery County will fund new bike/ped infrastructure and water and sewer lines via a TIF on Viva White Oak, a proposed 280 acre mixed-use development adjacent to the Food and Drug Administration.		
Partnerships				
Corridor Licensing	Owners of a long, graded, uninterrupted corridor such as a rail-trail could allow new and existing utility and telecommunications lines along the corridor for an annual licensing fee.	NOVA Parks, the entity that owns the W&OD Trail in Northern Virginia, receives licensing fees from AT&T for telecommunication lines running along the length of the trail.		
Developer Agreements	Agreements with developers where they build and/or maintain trails in or near the development site, or pay a fee to have it built, if they meet an Adequate Public Facilities Ordinance (APFO) threshold or are seeking a site modification or zoning variance.	Anne Arundel County has successfully worked with developers to build sidepaths in new subdivisions.		
Public-Private Partnerships (P3s)	Typically reserved for large infrastructure projects, P3s involve a government partnering with a private company to finance, build, operate, and/or maintain a new or existing piece of infrastructure or program, such as a new rail line or toll road. Future user fees (e.g., fares or tolls) are used to compensate the private entity for financing project development, which may include parallel trail facilities.	The Georgetown Branch Trail (part of the Capital Crescent Trail) along the new Purple Line in Montgomery County is being built by Purple Line Transit Partners, a joint venture that will operate the light rail service for 30 years.		
Donations and Other Supports				

Financing Option	Description	Relevant Example(s)
Adopt-a-Trail	Similar to Adopt-a-Highway programs, this allows groups to contribute to regular maintenance of a trail (e.g., quarterly trash cleanup), with the group recognized via a sign on the portion of the trail they maintain.	The Friends of the W&OD Trail manages the namesake trail's Adopt-a-Trail program by recruiting volunteer groups and paying for the on-trail signage on behalf of NOVA Parks, with all segments currently adopted and a waitlist started for interested trail adopters.
Community Foundations	Mission-based nonprofit charities operating from an endowment and other private donations often to improve overall life and wellbeing for within a specific place.	The Horizon Foundation, focused on building health equity in Howard County, has supported and advocated for Complete Streets initiatives and updates to design guidelines and ordinances to support multimodal transportation improvements, in support of public health, housing and quality of life outcomes.
Private Donations	Private entities and/or philanthropic organizations can partner with public or nonprofit entities to provide funding or land for trails and trail improvement projects.	Through financial and in-kind donations, the Friends of the Patapsco Valley State Park have created new natural surface trails within the namesake park, such as the Ellicott City Connector Trail.

## Case Studies

The following three case studies are examples of trail projects across Maryland that showcase best practices and lessons learned in funding trails from planning through operations and maintenance. From three different regions across the state and with varying levels of resources available to each municipality, these case studies are intended to provide guidance that would be applicable to a variety of communities.

- Terrapin Run Trail, Somerset County (Eastern Shore)
- Indian Head Rail Trail, Calvert County (Southern Maryland)
- Frederick & Pennsylvania Line (F&PL) Trail, Frederick County (Capital Region)

#### **Embracing Trails** in Municipal Code

In addition to financing strategies, updating local codes and processes can help a community incorporate trails into other ongoing projects. For example, updating policies or passing a resolution for Complete Streets (similar to MDOT's Complete Streets Policy at the state level) can help integrate shared use paths into other public facilities projects. Howard County has an exemplary Complete Streets policy, which was awarded a perfect score in 2023 by the National Complete Streets Coalition.

#### **Lead Agencies**

Somerset County Recreation, Parks, and Tourism Department; MDOT SHA

#### Location

Crisfield to Westover, Somerset County (Eastern Shore)

#### **Surface**

Paved (asphalt)

#### Trail Length

4.7 miles (existing Crisfield to Marion segment), 13 miles (when complete)

#### **Total Cost**

\$25.6 million (\$4.6 million for Phase I and \$21 million remaining phases)



MAP 1 Existing (blue) and under construction (green) segments of the Terrapin Run Trail.

## Terrapin Run Trail



FIGURE 7 Trailhead of the Terrapin Run Trail in the City of Crisfield. (Source: Somerset County Recreation, Parks, and Tourism Department)

The Terrapin Run Trail repurposes a former railroad corridor in Somerset County, Maryland. Rail service on the corridor ceased in 1978, and the State of Maryland acquired the corridor for \$9 million. After the tracks were removed, the corridor lay dormant for decades, later informally maintained by adjacent residents and businesses.

In 1995, a local citizens group began discussing the idea of creating a trail along this right-of-way. The trail concept gained traction in 2008, when it was included for the first time in the County's Land Preservation, Parks, and Recreation Plan—a plan updated every five years. Supporters gained momentum by leveraging the Somerset County Trail Mix Initiative. This initiative is funded by a Center for Disease Control Healthy Places grant and allows the county's Recreation, Parks and Tourism Department to create resources to promote physical activity and healthy lifestyles through hiker-biker and water trail promotion and development. This grant helped with branding, signage, and website development to spread the word about various existing and proposed trails in the county, including the potential Terrapin Run Trail.

A partnership with Delmarva Power, the local utility provider, proved to be a turning point in implementation of the trail project. Delmarva Power collaborated with the Somerset County to clear the right of way to install a transmission line, restoring visibility to the dormant corridor and catalyzing the county's interest in securing further funding for trail development.

#### **Initial Funding and Construction**

Terrapin Run Trail's Phase 1 involved constructing a 4.7-mile segment of the trail, extending from Crisfield to Marion. This phase was led by Somerset County and was marked by a combination of grassroots efforts, interagency collaboration, and layered funding mechanisms involving a combination of federal and state funds. Approximately 80 percent of the \$4.6 million Phase I cost was financed through the federal Transportation Alternatives Program (TAP), while the remaining 20 percent local cost-share was covered by MDOT's Kim Lamphier Bikeways Network Program. The Bikeways program has its own 20 percent local cost-share, but its more flexible in-kind contribution rules meant that the county only needed to provide about 5 percent (20) percent of 20 percent) of the total project cost in in-kind labor. This funding structure enabled the County to move forward with the project without placing an undue burden on local capital budgets.

Construction for the first phase commenced in the summer of 2019. While physical progress advanced steadily, the onset of the COVID-19 pandemic presented a series of logistical challenges. Public meetings had to be restructured, contractors were required to follow distancing protocols, and coordination became more complex. Despite these obstacles, project leaders maintained strong communication channels with stakeholders, which not only kept the project on schedule but also reinforced relationships with local residents. Engaging adjacent property owners was critical, as many had informally maintained the former rail corridor for years and initially viewed it as part of their private yards. The County staff made a deliberate effort to talk to residents directly, held in-home meetings, responded clearly to questions, and highlighted the broader community value of the trail. By engaging residents early and maintaining open communication, these efforts gradually helped build trust and shift public perception from skepticism to support. Involving children and families also helped build a culture of support—kids are using the trail and it's now seen as a safe community space. Following the completion and ribbon-cutting of Phase 1 in May 2021, planning shifted to the next segment of the trail.

#### **Current and Future Plans**

While the first phase was a county-managed project with support from the state, Phases 2 and 3 are a state-led effort, funded through Governor Larry Hogan's final capital budget, which allocated \$21 million to complete the remaining segments of the trail. MDOT SHA now leads the design and construction of the trail, with the County serving as a key partner in the project and the ultimate owner and maintainer of the trail once it is complete.

Maintenance of the trail is currently managed by the Somerset County Recreation, Parks and Tourism Department's maintenance division, with support from other County departments. Tasks include mowing, tree thinning, and litter removal. As the trail system expands, the County recognizes the need for a dedicated two-person trail crew, and plans are underway to establish a specialized maintenance unit within the division. To ensure long-term sustainability, the department also aims to set up a "Friends of the Trail" group for ongoing support, establish a trail maintenance fund within the County budget that grows over time for larger maintenance projects, and continue encouraging community stewardship of the trail.

#### **Key Takeaways**

- · Leverage smaller but more accessible state grants as the local share for larger federal grants that have cost-share requirements.
- Build public support early, especially in smaller or rural communities: start conversations early, be transparent, and respect the personal and emotional ties residents may have to the corridor. Ensure that the methods used for public engagement are the right ones to reach the communities surrounding the project area.
- · Trails reflect a community's investment in health, pride, and quality of life and these connections should be highlighted even though they are often funded as any other transportation project.
- · Design trails with long-term sustainability in mind; avoid overbuilding infrastructure that local agencies can't afford to maintain and have a plan for continuous maintenance.
- · Include trail projects in plans to make them more competitive for funding opportunities.

**Lead Agencies Charles County Parks** Department

Location

Indian Head to White Plains, Charles County (Southern Maryland)

**Surface** Paved (asphalt)

Trail Length

13.5 miles (when complete); will connect to Three Notch Trail (additional 11 miles currently. 28 miles when complete)

"Using County and State funding, railroad recycling revenue (selling the track) and private contributions, Charles County began trail construction early in 2008. With an aggressive work schedule and the efforts of dedicated park construction crews, the trail was open for public use within 18 months."

The Historical Marker Database

## Indian Head Rail Trail



FIGURE 8 Indian Head Rail Trail Gateway. (Source: Southern Maryland Natural Heritage Area)

The Indian Head Rail Trail, a 13.5-mile multi-use trail in Charles County, Maryland, was developed on a former railroad line built in 1918 to transport supplies to the Indian Head Naval Base located on the Indian Head peninsula overlooking the Potomac River. While the naval base still exists, the railroad was decommissioned. Following the decommissioning, the corridor was transferred through the U.S. Department of the Interior's Federal Lands to Parks Program, with initial funding support from federal sources, including the National Park Service. The corridor was donated to Charles County for the public's perpetual recreational use and enjoyment. After conversion into what today is the Indian Head Rail Trail, the corridor opened to the public in 2009. The first 13.5 miles of the trail were successfully implemented thanks to the strong public agency commitment and role of the Parks Director as a project champion. The success of the rail-to-trail project was also due to effective public outreach to adjacent landowners, which was done early and frequently throughout the project. Over time, the trail gained popularity for its scenic character, recreational value, and regional connectivity. The rail-trail passes through the scenic Mattawoman Creek stream valley and is a regional favorite for runners and cyclists.

The trail's success spurred interest in extending it eastward to connect with the Three Notch Trail in St. Mary's County, thus expanding regional trail connectivity in Southern Maryland. The Charles County Planning team has championed this vision, securing multiple planning and design grants and coordinating with state and local partners to move the project forward. In the future, it will be important to capture public or economic return on investment data to showcase the trail's role as a county asset, galvanize support for future extensions, and build the case for additional funding.

#### **Funding Trail Extension Plans**

The development of the Indian Head Rail Trail has followed a phased, strategic approach, with Charles County staff leveraging state and federal grant programs to move the project forward. Planning for the extension of the trail to The Three Notch Trail began in 2020 when Charles County secured funding from MDOT's Kim Lamphier Bikeways Network Program. The grant was used to initiate a feasibility study, identify potential alignments, and support 30-60 percent design for priority segments of the trail extension. The priority segments were selected based on their feasibility, anticipated impact, and potential to generate community and political support. As of 2025, two early phases have been organized into projects that are ready for funding. The County's goal is to ensure continuous progress by always having a segment ready for advancement, design, or construction. The County has also recently submitted federal TAP funding applications to support trail construction.

To meet local match requirements—typically 20 percent of total project cost—Charles County has relied on general planning funds and occasionally reallocated funding from long-term capital projects. While this ad hoc approach has worked to date, the County staff recognize the need for a dedicated planning and studies fund to ensure consistent local match availability and to avoid tying up millions in inactive capital accounts. In-kind contributions have not yet been pursued but may be explored in the future.

#### **Future Process Improvements**

The County staff highlighted that cross-departmental buy-in—particularly between planning, parks and tourism, and transit—has been instrumental in elevating trail priorities. However, trail implementation still falls primarily on the Planning Department, and there is no ongoing interagency group responsible for executing trail plans. Absence of a dedicated trails department or capital team focused on bike-pedestrian infrastructure has slowed progress in general. County staff are advocating for long-term capacity building, cross-agency implementation teams, and better cost estimation tools to streamline future phases and funding requests.

County staff noted that the grant application processes have varied in complexity. State grants, such as those through the Kim Lamphier Bikeways Program, have proven to be more accessible and well-supported, with centralized portals and direct agency communication. Applying for the state grant involved demonstration of broader community impacts, such as proximity to schools and transit. In contrast, other grant applications have posed challenges due to complex form requirements, unclear guidance, and limited technical support. The County staff emphasized the importance of maintaining internal templates and leveraging staff continuity to ease future applications.

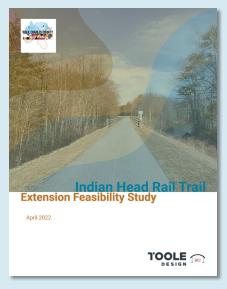
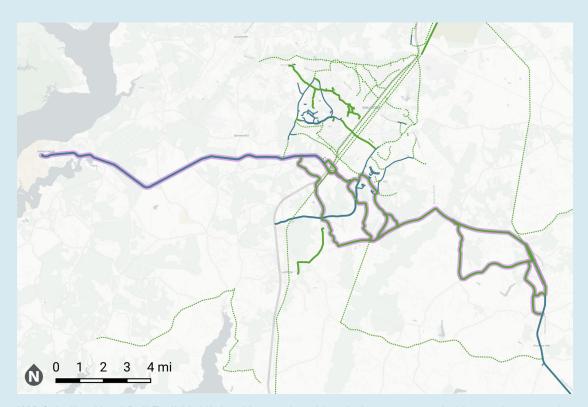


FIGURE 9 The Indian Head Rail Trail Feasibility Study was completed in 2022.

#### **Key Takeaways**

- · Seek out public lands wherever possible and build partnerships with public land agencies. Consider how these partnerships can be leveraged when applying for funding and securing local match.
- Coordinate across planning, parks, and transit to strengthen internal advocacy and elevate trail priorities.
- · Establish a cross-departmental trail implementation committee to maintain momentum after the planning phase.
- · Dedicate flexible local funds to meet small match requirements and fund feasibility studies without delay.
- Develop high-level per-mile cost estimates by trail type and geography to support realistic internal budgeting.
- Build and document the economic case for trails using user counts, school and park access metrics, and local business partnerships.



MAP 2 Indian Head Rail Trail highlighted in purple, with existing segments in blue and proposed alignments in green. The existing Three Notch Trail can be seen in the lower right.

#### **Lead Agencies** Frederick County

#### Location

Frederick (city) to Walkersville, Frederick County (Capital Region)

#### **Surface**

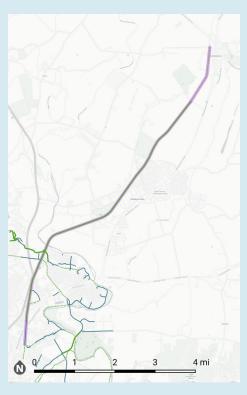
Paved (asphalt)

#### Trail Length

7 miles (when complete in 2029)

#### Total Cost (estimated)

\$6.6 million



MAP 3 FP&L Trail Map, with existing City segment (blue), planned City and County segments (green), and proposed (dotted) segments.

## Frederick and Pennsylvania Line (F&PL) Trail



FIGURE 10 The F&PL Trail will parallel the active Walkersville Southern Railroad and connect people to transportation hubs such as SHA's North Frederick Park & Ride. (Source: Google Street View)

The Frederick & Pennsylvania line (F&PL) Trail is a planned approximately 7-mile multi-use trail in Frederick County, Maryland, extending from Monocacy Boulevard in the City of Frederick through the Town of Walkersville and up to near Woodsboro. The trail largely follows an existing Maryland Transit Administration (MTA)-owned railroad corridor. Once completed, the trail will connect to the City of Frederick's East Street Rails-to-Trails project in Frederick County and provide new access to regional parks and town centers. The F&PL Trail will also be a part of the National Capital Trail Network and connect with a State Highway Administration (SHA) Park & Ride. This asphalt trail will follow the railroad right-of-way owned by MTA, and leased to the Walkersville Southern Railroad. Frederick County has a license agreement with MTA for the entire project, but will need construction agreements for each piece ahead of building the trail, as this path will be adjacent to an active rail line owned by the MTA.

#### Phased Development and Funding

Due to its scale and complexity—including a major pedestrian bridge over the Monocacy River—the F&PL trail is being developed in four phases. Construction is expected to begin on Phase 1 in 2027, with design activities underway across all phases and currently under different stages of development. Funding for each of the phases of the trail involves a combination of federal, state, and local sources:

- Phase 1, Monocacy to Fountain Rock, received a \$4.8 million construction grant from the local Metropolitan Planning Organization (MPO), the Transportation Planning Board (TPB) of the Metropolitan Washington Council of Governments. Funding for the trail comes through the Transportation Alternatives Program grant. The construction cost of the trail was originally projected at \$6.6 million in 2022-23 dollars. The TPB approved a \$5.3 million grant to build the entire F&PL Trail, which included \$4.8 million to build the trail and an MDOT management fee of 10 percent. The remaining unfunded portion of the request will be provided through MDOT's statewide Transportation Alternatives allocation. Frederick County is providing a 20 percent match of \$1.3 million.
- Phases 2 & 3 are at 30 percent design complete. In 2023, the County received a \$360,000 grant from Kim Lamphier Bikeways Network Program through MDOT to fund 100 percent design for the Phases 2 and 3. The County intends to complete construction using local dollars to avoid procedural delays that can come from using outside grant funding.
- Phase 4, which involves the segment from Heritage Park to Glad Road, received funding through a Congressional earmark grant of \$280,000 in fiscal year 2023-24 to complete design. However, incorporating the earmark required a lengthy process of creating a new Transportation Improvement Program (TIP) file, delaying the notice to proceed more than a year. Notice to proceed for this design was issued recently in May 2025.

All phases require a 20 percent local match, which the County meets using its general capital funds. The County does not currently receive funding from private developers or other local jurisdictions but is exploring updates to its Adequate Public Facilities Ordinance (APFO) to support trail development through developer contributions.

#### Back to the Drawing Board

According to the Frederick County staff, a cost of 2-3 million dollars per mile is expected for construction; about 20 percent of which is the design cost. The overall construction cost however is expected to go up significantly due to design revisions resulting from a mismatch between the original design for an 8-foot-wide trail and state and federal standards for 10-12 feet wide shared use paths. As a result, the TAP grant for Phase 1 will not be able to cover all of the final construction cost, and the County will need to look at additional sources of funding. County staff noted that using federal or state funds for design can slow project timelines due to added agency oversight, compliance processes, and regulatory reviews.

#### **Key Takeaways**

- Maximize use of local dollars, if possible. Funding design phases through state and federal grants can lead to project delays. The County staff noted that keeping grants out of design phase could have allowed for faster progress.
- Design to the highest standard of the grants from the start — for example, you can't build an 8-foot-wide wide trail with most grants; it must be 10-12 feet wide. Designing a trail that doesn't meet standards blocks access to grant dollars.
- Acquire necessary property under County ownership as early as possible. Property owner support is not the same as resident support — those living near or adjacent to the trail are likely to object to trail use easements, even when the broader community supports the project.
- · Establish realistic expectations early about timelines, both internally and externally. The number of agency reviews and approvals often increases the anticipated project duration as well as costs.
- More money does not mean faster delivery. Complex funding sources add administrative burden without speeding up progress.

## **Funding Toolkit Resources**

American Trails - Grants for Trails: Finding, Applying, and Managing Webinar

American Trails Webinar Archive and Upcoming Webinars

Coordinating Council on Access and Mobility (CCAM) Federal Fund Braiding Guide

FHWA: Bicycle and Pedestrian Program Funding Information

FHWA: Bicycle and Pedestrian Program Funding Opportunities Spreadsheet

FHWA: Recreational Trails Program Information

Grants.gov: All about Federal Funding

**Howard County Complete Streets Implementation** 

MDOT: Complete Streets Policy

MDOT: Federal Discretionary Grant Information and Mailing List

MDOT: Grants Roadshow

MDOT: Kim Lamphier Bikeways Network Program

MDOT: Kim Lamphier Bikeways Network Program: Project Cost Estimator tool

National Park Service: Rivers, Trails, and Conservation Assistance program (NPS-RTCA)

Rails-to-Trails Conservancy: Federal Funding for Trails

SHA: Bicyclist and Hikers Resources

SHA: Materials and Labor Price Index

SHA: Recreational Trails Program in Maryland

SHA: Transportation Alternative Program in Maryland

US Department of Interior (DOI) Office of Grants Management: Programs, training, and policies.

US Department of Transportation (USDOT) Navigator: Grants, webinars, resources