

FUNDING OPPORTUNITIES AND PROGRAMMATIC INSIGHTS FOR ADVANCING SHARED USE PATHS, TRAILS, AND GREENWAYS IN NEW JERSEY



RUTGERS-NEW BRUNSWICK

**Edward J. Bloustein School
of Planning and Public Policy**

Alan M. Voorhees Transportation Center

ACKNOWLEDGEMENTS

This report was commissioned by New Jersey Future, and supported by funding from the William Penn Foundation, as well as in-kind support from the Alan M. Voorhees Transportation Center at Rutgers University.

The authors would like to express their appreciation to all who have contributed to this research.

We would like to thank representatives of the New Jersey County Planner's Association, the New York Office of Parks, Recreation, and Historical Preservation, the Pennsylvania Department of Transportation, the Delaware Department of Transportation; and staff representing various NJ counties and municipalities who were generous with their time and insights during interviews, focus groups, and at other meetings and events.

We would also like to thank everyone who dedicates their time and effort to improving trails in New Jersey, whether from within a government agency, a research, policy or advocacy organization, or at the community level. We appreciate those who participated in discussions of preliminary findings and those who will be considering the report's recommendations.

Report Authors

Rebecca Levitsky

Leigh Ann Von Hagen, AICP, PP

Alan M. Voorhees Transportation Center, Edward J. Bloustein School of Planning and Public Health
Rutgers, The State University of New Jersey

Report Advisors

Zeke Weston, Policy Coordinator

Chris Sturm, Policy Director for Land Use

New Jersey Future

Report Contributors

Stephanie Brody

Jon Dugan

Alan M. Voorhees Transportation Center, Edward J. Bloustein School of Planning and Public Health
Rutgers, The State University of New Jersey

TABLE OF CONTENTS

Executive Summary	4
Opportunities for Improving and Accelerating Trail Development in New Jersey	6
Part 1: Study Background	9
Trails, Greenways, and Shared Use Paths	9
Benefits of Shared Use Paths	12
Shared Use Paths, Complete Streets, and the Safe Systems Approach	13
Background on Federal Transportation Funding	14
Navigating the Federal Grant Process	15
Overview of Trail Development in New Jersey	16
Milestones Impacting Trail Planning & Funding in New Jersey	18
Part 2: Available Funding Sources for Trails in New Jersey	20
Federal Funding Programs through USDOT	21
Federal Pass-Through Funding	21
Federal Discretionary Funding	24
Additional Federal Funding Sources:	25
Trail Development and Technical Support from New Jersey’s Metropolitan Planning Organizations	26
State-Level Funding Opportunities	27
Summary of Funding Opportunities for Shared Use Path Development in New Jersey	29
County Open Space Trust Funds and Trail Development	30
County Planner Feedback on Trail Development Processes	33
Part 3: Best Practices from Neighboring States	34
Lessons Learned from Subject Matter Expert Interviews.....	35
Trail Planning and Development	35
Funding Sources (State and Federal)	37
Coordination, Grant Administration, and Technical Assistance	38
Equity Considerations	39
Part 4: Lessons for New Jersey	40
Key Takeaways for New Jersey from Neighboring States:.....	40
Significant Active Transportation Initiatives in New Jersey	42
Opportunities for Improving Trail Development in New Jersey	43
Glossary of Terms	45
Appendices	46
Appendix A. New Jersey County Planner’s Association Discussion Guides	47
Appendix B. List of New Jersey Municipal Open Space Trust Funds	50
Appendix C. Interview Questions for Neighboring States	53
Appendix D. PennDOT Table of State and Federal Funding Sources for Bicycle and Pedestrian Projects	55
Appendix E. New Jersey Level of Traffic Stress Mapping Resources	56
Appendix F. Additional Resources for Shared Use Path Planning & Implementation	57
References	59
End Notes.....	62

EXECUTIVE SUMMARY

Research Purpose and Scope

Trail networks are valuable assets that strengthen communities and support regional vitality. They provide options for walking, biking, and rolling, connecting people to key destinations and fostering a sense of place. Beyond transportation, trails promote health, sustainability, and economic development, offering benefits that extend across urban, suburban, and rural landscapes. In New Jersey, investing in these essential networks not only addresses mobility and safety challenges but also creates healthier, greener, and more connected communities.

In an effort to more fully understand the trail funding, development, and the implementation process in New Jersey, the Alan M. Voorhees Transportation Center at Rutgers University (Rutgers-VTC) worked with New Jersey Future to investigate trail and active transportation funding programs in the state. This research project aims to describe and evaluate federal and state funding programs for trails, investigate local funding opportunities, and compare the trail development process in New Jersey to those of neighboring states. As a part of this research effort, Rutgers-VTC investigated milestones in trail development in New Jersey, documented funding programs at the federal and state levels, researched county funding opportunities and statewide trail development processes, and conducted interviews with subject matter experts in New York, Pennsylvania, and Delaware.

The focus of this report is on **shared use paths and trails which serve a transportation purpose**, distinct from trails primarily used for hiking or other types of recreation. This definition is detailed in later sections.

It is important to note that many aspects of trail development in New Jersey are outside of the scope of this report. Interviews with representatives from New Jersey state agencies, Metropolitan Planning Organizations (MPOs), local governments, and advocacy organizations were not conducted. As such, detailed explanations of both the roles played by these stakeholders in the trail development process as well as New Jersey's funding levels for shared use paths, active transportation infrastructure, and technical assistance is not included. This information would provide a detailed, comprehensive overview of the trail development process in New Jersey, and would be best obtained through interviews with representatives from state agencies, MPOs, local governments, and advocacy organizations. This would be a productive topic for future research.

Furthermore, interviews conducted with neighboring state representatives were focused on trail development processes, not on the nature or extent of trail systems in those states. As such, a comparison of the characteristics and quality of the trail networks in New Jersey and in neighboring states is not included. Rather, the interviews were designed to gain insight into best practices for trail development in neighboring states.

This report should serve as a springboard for discussion on opportunities to accelerate trail implementation in New Jersey. It provides a comprehensive overview of funding opportunities for shared use paths in New Jersey, details best practices from neighboring states, and offers actionable recommendations to enhance the planning and development of shared use path infrastructure in New Jersey.

Report Findings

New Jersey is uniquely positioned to benefit from comprehensive trail planning and effective implementation because of its history of dense development and the growing demand for safer, healthier, and low-carbon active and non-motorized transportation options. The state has a long history of trail and shared use path development with leadership provided by many state and regional agencies, as well as advocacy organizations: the New Jersey Department of Transportation (NJDOT), the New Jersey Department of Environmental Protection (NJDEP), all three New Jersey Metropolitan Planning Organizations (MPOs), all 21 Counties, the New Jersey Trails Action Network

(NJ TAN), and the New Jersey Bike & Walk Coalition (NJBWC), to name a few. The state has over 4,500 miles of mapped public trails, and NJDEP is currently in the process of developing the Essex-Hudson Greenway, a 9-mile former rail line that will be converted into a state park providing approximately 1.5 million residents in the surrounding area with improved recreation and active transportation options. Camden County is also in the process of developing the LINK trail, a proposed 34-mile regional trail that is projected to connect to 22 parks and 17 communities in Camden County. These types of projects, among many others, highlight the important work New Jersey is already conducting on trail network development.

Still, there are opportunities to accelerate trail and shared use path development in New Jersey. The process of identifying funding opportunities, conducting planning and design work, and implementing trail infrastructure is often disconnected and difficult to complete, particularly for less-resourced counties and municipalities. Trails and shared use paths in New Jersey are currently funded with federal, state, and local sources, but leveraging these funds effectively for both large- and small-scale projects remains a challenge for many trail planners.

Many trail projects in New Jersey are eligible for funding through federal programs, but most smaller units of government need significant implementation assistance to comply with the thorough reporting requirements that accompany federal funding. New Jersey also has state-funded programs that are used to build trails and active transportation infrastructure, but most do not provide funding for the planning and design phases of implementation, which can impede local government participation.

Counties and municipalities in New Jersey also develop trails at the local level, and most counties in the state permit the use of funds from Open Space Trust Funds (OSTFs) for trail development. Though a deeper dive into county-level processes for trail development was not conducted as a part of this research, findings indicate a significant opportunity to leverage OSTF revenues for local trail development. Many municipalities also maintain their own OSTFs, which can be used for trail development or as a funding match for grant programs.

The statewide processes for planning and implementing trails in New York, Pennsylvania, and Delaware offer valuable lessons for improving New Jersey's trail development systems. These states highlight the importance of interagency collaboration, dedicated funding, and local government support. Findings from neighboring state interviews are detailed in later sections, but some best practices are summarized below:

- > **Trail Development is a State-led, Interagency Effort that Works Toward Many Goals:**
Trails and shared use paths, particularly where they form usable networks at both large and small scales, are seen as a means to advance community and economic development, mobility, safety, recreation, transportation, and sustainability goals. In practice, this means that **trail networks are the result of collaboration among many state agencies** beyond Departments of Transportation and Departments of Environmental Conservation/Parks and Recreation.
- > **State Funding is Leveraged to Build Trail Networks:**
Many neighboring states dedicate significant state funding to trail and shared use path development. This allows for greater collaboration between state agencies and local governments, and provides simpler access to trail development funds for project sponsors.
- > **Coordination with Local Governments and Technical Assistance is Key:**
Providing timely technical assistance for planning, design, and grant implementation to local governments, including those with fewer resources, expands the number of grant applications and reduces the time between grant award and project implementation. Often, this type of coordination is offered through consolidated grant applications and technical assistance.

OPPORTUNITIES FOR IMPROVING AND ACCELERATING TRAIL DEVELOPMENT IN NEW JERSEY

Based on these takeaways, along with feedback from the NJ County Planner's Association, NJF and Rutgers-VTC have identified the following opportunities for accelerating trail development in New Jersey:

Coordinate Efforts between Multiple State Agencies on Strategic Plans

Many state agencies in New Jersey are already collaborating on expanding the state's network of trails and shared use paths, and upcoming initiatives represent significant opportunities for further coordination. The New Jersey Department of Transportation (NJDOT) and the New Jersey Department of Environmental Protection (NJDEP) co-hosted a **Trails & Greenways Summit** in 2021 and are currently in the processing of updating statewide trail planning documents. NJDEP also recently updated the **Statewide Comprehensive Outdoor Recreation Plan (SCORP)**, which identified increasing opportunities for recreation and active transportation as a primary goal for the state. NJDOT is updating both its **Bicycle and Pedestrian Master Plan** as well as its **2050 Long Range Transportation Plan**, both of which will identify opportunities for expanding active transportation. These plans could be strengthened by prioritizing the development of a **comprehensive shared use path network** throughout New Jersey as a means to achieve many statewide goals.

In neighboring states, strategic plans for shared use path networks involve the collaboration of other state agencies as well, notably **Departments of Community and/or Economic Development** as well as **Departments of Health**. The coordination of many state agencies is often a result of strong state leadership in prioritizing trails and shared use paths as means to advance health, sustainability, and economic development goals. By coordinating efforts, neighboring states are able to leverage trail development to meet statewide goals in these areas. Often, advocacy groups are key in the development of trail network plans as well, and serve as a vital resource for engaging the public throughout the process.

Important elements of strategic, statewide shared use path plans include:

- > **Goals** of the network and **principles** guiding the plan,
- > **Public input** on priority projects and needs,
- > An **inventory** of existing trails and shared use paths, which includes planned segments and potential future connections and displays a vision for a comprehensive statewide network,
- > Benchmarks for success, tracked through **progress reports** and periodic **meetings with stakeholders and advocates**,
- > Regular **updates** to the plan which keep guidance current,
- > **Resources** for trail planners, including **potential funding sources** and **technical assistance**, and
- > **Implementation plans**, identifying project partners and timelines for improvements.

Consider Expanding State Funding for Trails

In neighboring states, a significant amount of state funds are dedicated to shared use paths through active transportation-specific programs. In New York, a \$200 million allocation from the executive budget was instrumental in building out the Empire State Trail, which has significantly expanded the state's trail system. This type of high-level commitment also encourages collaboration between state agencies. Though New Jersey dedicates state funding to trails, as seen with the Essex-Hudson Greenway, there is opportunity to **increase this commitment** and **improve upon existing programs**. In neighboring states, state funding can often be used for planning and scoping trail projects, typically conducted with the assistance of a consolidated trails and/or active transportation resource center.

Explore Options for Increasing Technical and Planning Assistance for Local Governments

Pennsylvania and Delaware exemplify the importance of close collaboration between state agencies and local governments. Regional approaches to trail development work well in these states – the Pennsylvania Department of Transportation (PennDOT) has regional offices with bicycle and pedestrian coordinators who work with municipalities to identify priority projects, and the Delaware Department of Transportation (DelDOT) utilizes the state's Metropolitan Planning Organizations (MPOs) to ensure that local projects fit into a larger trail network.

Based on best practices from neighboring states, **useful features** of such a resource center could include:

A consolidated **trails office** or **active transportation resource center** in New Jersey could help project sponsors leverage *all* available funding sources to conduct trail development. Many local and state funding programs can be leveraged as matching funds for higher dollar federal programs, or be used to effectively scope and plan trail projects before seeking funding for construction. A state office or resource center that helps project sponsors **identify funding sources** and **offers technical assistance** with design, implementation, and maintenance could accelerate trail development in the state. Hands-on support throughout the trail project lifecycle is crucial for ensuring successful and timely project implementation.

- > **Identification of funding sources** for trails and shared use paths (including bicycle and pedestrian project funding) from multiple state agencies, federal programs, and local sources.
- > Planning, design, construction, implementation, maintenance, and grant management **technical assistance and training**.
- > **Opportunities to contact and work** with state agency staff and policymakers via a help desk.
- > Resources for grant applicants such as **trainings and templates** for grants and project budgets.
- > A comprehensive list of trails in New Jersey, including **potential, proposed, and ongoing projects**.
- > **Research efforts** to identify best practices, case studies, and improve grant management.

To accomplish this, New Jersey should **explore increasing funds for technical assistance throughout all phases of trail implementation**: planning, grant application, award and administration, design, construction, and maintenance. Many federal programs offer significant funding for active transportation infrastructure – as such, increasing administrative capacity, **supported by state and federal funding**, could improve coordination with other state agencies, New Jersey’s Metropolitan Planning Organizations (MPOs), and local governments looking to access pre-application and/or technical assistance. Doing so could help leverage *all* available funding sources for trails, including county and municipal Open Space Trust Funds (OSTFs), which can often be used as a matching share to access larger grants.

Technical Assistance Funding Sources

Federal:

The federal Transportation Alternatives Set-Aside program (**TASA**) allows states to use up to 5% of TASA funds for technical and assistance as well as hiring full-time staff to administer the program.

The federal Recreational Trails Program (**RTP**) includes a similar provision, allowing up to 7% of a state’s RTP apportionment to go towards administrative costs and staff time.

State:

Additionally, neighboring states dedicate **state funding** for trail planning and technical assistance.

Expanding the number of state-funded programs for local government coordination and assistance in New Jersey could significantly improve local trail planning efforts.

New Jersey can benefit from adopting these practices to expand and enhance trail development processes, ensuring that trails serve not just recreational purposes, but also safety, economic, environmental, and transportation goals. By improving the effectiveness of funding mechanisms and technical assistance programs, the state can foster a more accessible, safe, and connected trail network that benefits all residents of New Jersey.

PART 1: STUDY BACKGROUND

Research Effort

To outline New Jersey’s current trail funding and development processes, Rutgers-VTC conducted research into funding opportunities and trail development processes at the federal, state, and county levels. Information on federal grant programs was obtained from the U.S. Department of Transportation’s (USDOT) [Pedestrian and Bicycle Funding Opportunities](#) page, while the NJ Department of Transportation’s (NJDOT) [Local Aid Resource Center](#) provided information on state grant programs as well as specific federal grants administered by NJDOT and USDOT. Details on the state implementation of the federal [Recreational Trails Program](#) were obtained from the New Jersey Department of Environmental Protection’s website, and additional funding and planning resources for trails were identified on the websites of each of New Jersey’s three Metropolitan Planning Organizations: the [North Jersey Transportation Planning Authority](#) (NJTPA), the [Delaware Valley Regional Planning Commission](#) (DVRPC), and the [South Jersey Transportation Planning Organization](#) (SJTPO).

To gather information on local trail implementation processes, Rutgers-VTC and New Jersey Future participated in several meetings with county planners in New Jersey in May and September of 2024 to discuss current practices and the availability of county Open Space Trust Funds (OSTFs) for trail funding. Chart and graphics which detail funding opportunities in New Jersey and provide additional context for different phases of trail implementation are included in this report.

Rutgers-VTC also conducted three interviews with subject matter experts on trail development and implementation in New York, Pennsylvania, and Delaware. These states were selected both for their effectiveness in trail and active transportation infrastructure development, and because they offer insights into regional best practices as New Jersey’s neighboring states. Findings from these interviews are summarized in this report, and a full list of interview questions can be found in the appendix.

Part 1 of this report details the definition and benefits of trails and shared use paths as a key part of comprehensive transportation systems, outlines federal transportation funding and grant processes, and provides an overview of trail development in New Jersey. Part 2 details funding opportunities for trails and shared use paths at the federal, state, and county levels, and provides context on funding programs. Part 3 summarizes interviews conducted with subject matter experts in neighboring states and offers takeaways for best practices. Takeaways for New Jersey are included in Part 4 of the report.

Trails, Greenways, and Shared Use Paths

The terms trails, greenway trails, and shared or multi-use paths are broadly used to refer to both on- and off-road facilities that are used for transportation, recreation, and/or conservation. All types of trails serve an important function in communities – natural surface trails can be used for hiking, mountain biking, and other types of recreation, whereas trails with a firm surface connect users to community destinations and provide expanded access to natural resources.

Though all types of trails are important for recreation and conservation, this report focuses on **shared use paths that can be used for active transportation**. To serve this function, shared use paths need to be separated from motor vehicle traffic and include a firm surface. Shared use paths may be used by pedestrians, bicyclists, skaters, wheelchair users, joggers, and other non-motorized users for transportation to key destinations or for recreation

(and often, both). They exist in urban, suburban, and rural areas, and may be a part of a larger network or simply connect a neighborhood to a downtown area. The definition of shared use paths used in this report is below:

Shared use paths often accompany greenways – preserved linear corridors for conservation, ecological, and/or recreational purposes – and rails-to-trails conversions. NJDOT’s [Planning for Greenways: A Guidebook for New Jersey Communities](#) defines transportation greenways as linear corridors with environmental, recreational, and transportation utility that include a shared use path for walking, bicycling, and other non-motorized uses.¹ Greenways with shared use paths can be used for transportation purposes to connect people within and across communities and parks to outdoor recreation and key destinations.

SHARED USE PATH:
trails which are physically separated from motor vehicle traffic by an open space or barrier, have a firm surface, and accommodate the needs of most users for active transportation and recreation

Adapted from FHWA’s Shared Use Path Definition (USDOT, 2006)

Shared use paths may be paved or unpaved, but always include a firm surface that can be traversed by those walking or bicycling. Many shared use paths start as firm gravel or packed dirt and are later upgraded to include pavement – this allows for effective initial expansion of trail networks with firm, unpaved paths, followed by the mobility improvements and reliability that paved paths offer.

This report focuses on both paved and unpaved shared use paths. The terms trails, greenway trails, and shared use paths are used interchangeably going forward, but always default to the above definition. A brief overview of key differences among types of shared use paths and active transportation infrastructure is included below.

Unpaved Shared Use Paths and Greenway Trails

Unpaved shared use paths are composed of gravel or packed earth and are primarily used by hikers, walkers, and bicyclists. Other types of uses such as horseback riding and motor vehicle use are sometimes permitted. They are generally less expensive to construct, but their usability may be impacted by seasonal changes in precipitation and temperature. These types of trails are popular for recreational use, offer important access to nature for communities and visitors, and may serve a transportation function. Rail trails, greenway trails, and waterfront or canal trails fall into this category, though many are paved in some segments to improve accessibility. While these types of trails are valuable for recreation, they can pose challenges for individuals with mobility impairments or micromobility users. In New Jersey, these types of trails can be seen in [Delaware & Raritan Canal State Park](#), the [Columbia Trail](#) in Morris County, and the [Sussex Branch Trail](#) in Sussex County (among many others).



*Pine Creek Rail Trail in Pennsylvania
(Photo: VTC)*



*Lehigh Gorge Trail in Jim Thorpe, PA
(Photo: VTC)*



*Cyclists on the Sussex Branch Trail in New Jersey
(Photo: VTC)*

Paved Shared Use Paths

Paved shared use paths are fully accessible routes designed for a wide range of non-motorized users. Though more expensive to construct, they serve an important function in expanding transportation options for users of all ages and abilities, particularly those with mobility impairments. Paved shared use paths are more reliable for all users from an active transportation perspective and tend to be more common in urban and suburban areas. They often connect to community destinations and provide expanded mobility options for walking, biking, and rolling. Examples of shared use paths in New Jersey include the [Rancocas Creek Greenway](#) in Burlington, the [Middlesex Greenway](#) in Middlesex County, and the [Sandy Hook Trail](#) in the Highlands.



Accessibility on the Henry Hudson Trail in Monmouth County, NJ (Photo: VTC)



Sandy Hook Trail in the Gateway National Recreation Area (Photo: VTC)



Georgetown – Lewes Trail in Cape Henlopen State Park, DE (Photo: VTC)

On-Road Connections for Shared Use Paths

To effectively provide access to trails across communities and networks, almost all shared use paths will include on-road connections. These are locations where a trail segment crosses or runs parallel to existing roadways, and trail users must be safely accommodated with bicycle and pedestrian infrastructure. Perceived safety risks and lack of network connectivity are primary reasons that many people choose not to walk or bike,² highlighting the need for safe connections between trail segments. Infrastructure that provides greater protection from motor vehicles – such as protected bike lanes or high-visibility crosswalks – reduces stress and encourages users of all ages and abilities to choose non-motorized transportation options.³ Additionally, there are several federal and state funding programs for bicycle and pedestrian infrastructure – as such, intersections or overlaps of shared use paths and existing roadways may provide additional funding opportunities for trail development. Safe on-road connections serve as essential links between trail networks and destinations, ensuring a cohesive transportation system for all users. This type of infrastructure is a growing feature on New Jersey’s roadways.



Separated two-way bike lane in Camden (Photo: VTC)



A lane shared by vehicles and bikes, indicated by a sharrow (Photo: VTC)



Crosswalk leading to the Middlesex Greenway (Photo: VTC)

Benefits of Shared Use Paths

Shared use paths offer a wide range of benefits and have the potential to address issues ranging from mobility, safety, economic development, health, and sustainability. By accommodating diverse users and purposes, shared use paths can provide benefits at scale, improving both the quality of life of individual users and the regions where they exist. They are a key part of balanced transportation systems that offer mobility options for users of all ages and abilities. More options to safely connect to destinations by walking, biking, or rolling means more opportunities to spend time outdoors, be physically active, and engage with the local community. Simply put, the presence of well-maintained and accessible shared use paths makes communities a healthier, greener, and more connected place to live.

The many advantages of public shared use paths as well as the value they provide to individuals, communities, the local economy, and the environment is well-documented and is the subject of a growing body of research. The list below is a brief overview of the primary benefits of shared use paths; it is not exhaustive, and there are additional benefits not discussed in detail here. Many organizations, agencies, and researchers have conducted excellent work in this area – a select few include the Rails-to-Trails Conservancy’s [Active Transportation Transforms America](#) report, the Trust for Public Land’s report on [Park Investment and Economic Vitality](#), and a study on the [Impacts of Shared Use Paths](#) conducted by [MassTrails](#), an inter-agency trail development office in Massachusetts.



Safety: Shared use paths provide more opportunities for active transportation. Communities with higher rates of active transportation generally experience lower rates of pedestrian and bicyclist fatalities, a correlation sometimes referred to as *safety in numbers*.⁴ Separated or well-protected shared use paths encourage active transportation by alleviating the primary barrier to bicycling for many Americans – safety risks.⁵



Economic Activity: Improving non-automotive access to local businesses has been shown to drive retail sales in many major cities such as Portland, New York, and Toronto.⁶ Beyond retail access, trails can also attract visitors to towns connected to larger networks – the Trust for Public Land found that cities that invested more in parks and open spaces tended to have a higher job growth rate, attracted more investment and start-ups, and had lower unemployment rates between 2011-2021 than cities that invested less in open space.⁷



Health: By incorporating physical activity into daily routines, active transportation reduces the risk for chronic diseases and other negative side effects that accompany a sedentary lifestyle.⁸ Shorter walking and bicycling trips – just 15-minutes in each direction – would be enough to meet the Center for Disease Control’s recommended physical activity guidelines.⁹ Shared use paths provide more opportunities for this type of transportation, along with the many well-documented mental health benefits of spending time outdoors in nature.



Environment: Shared use paths can positively impact the local environment both promoting a modal shift away from automobiles and their associated emissions. People are more likely to engage in active transportation if there are safe and connected trails and bicycle/pedestrian facilities nearby.¹⁰ Trails also provide opportunity to improve air and water quality by incorporating green infrastructure elements such as permeable pavement and native plants.¹¹



Equity: Importantly, investment in active transportation represents a more equitable distribution of public resources by providing safe transportation options to those who do not or cannot drive. Much of the U.S. population either cannot or chooses not to drive – younger and older populations, people with disabilities, lower-income households, and those who choose a car-free lifestyle as a personal preference. In most U.S. communities, these groups make up 20-40% of the population,¹² and need expanded mobility options. For many people in these populations, improved options for walking, bicycling, or rolling means increased access to opportunities and key community destinations.



Connection: The Circuit Trails Coalition commissioned a 2020 study supported by the William Penn Foundation on the [Equity of Access to Trails](#), which sought to identify motivators and barriers to trail use in diverse and underserved neighborhoods through surveys and community focus groups. The results highlighted the importance of opportunities to connect with nature and access outdoor space for events, which shared use paths offer residents in urban communities.

Shared Use Paths, Complete Streets, and the Safe Systems Approach

Shared use paths, particularly where they connect with existing roadways, offer significant opportunities to advance safety goals. NJDOT’s 2020 [Strategic Highway Safety Plan \(SHSP\)](#) identified a goal of reducing fatalities and serious injuries on all public roads by 14% over a 5-year period,¹³ with an emphasis on improving safety for pedestrians, cyclists, and other vulnerable road users. The safety goals in the SHSP align with zero fatality initiatives such as [Vision Zero](#) and [Toward Zero Deaths](#), which operate on the principles that traffic deaths are unacceptable and preventable.



Figure 2: Safe System Approach and methods to achieve zero deaths
Source: VTC

The Federal Highway Administration (FHWA) has adopted the [Safe System Approach](#) as the guiding paradigm to address roadway safety and achieve zero deaths. The Safe System Approach focuses on designing transportation systems that account for human error, protect vulnerable users, and approach safety proactively through roadway design. [Complete Streets](#) – those that are designed for all road users, not just motor vehicles – are an important method for implementing the Safe System Approach. They make walking, biking, and rolling safer by incorporating these modes safely into the design of roadways.

Shared use paths can serve to advance the Safe System Approach and make New Jersey’s roadways safer for all users by accommodating non-motorized travelers with safe, accessible infrastructure. On-road connections for trails can support and advance Complete Streets initiatives by expanding opportunities for active transportation.

Background on Federal Transportation Funding

All states in the U.S. receive funding for transportation infrastructure from the national Highway Trust Fund (HTF), which derives revenue primarily from excise taxes on fuel (18.3 cents per gallon on gasoline and 24.3 cents per gallon on diesel)¹⁴ and is administered by the Federal Highway Administration (FHWA). Funds from the HTF are distributed to each state by a formula based on previous apportionments and are further divided into core program areas by statute.

The implementation of state and federally funded transportation projects is overseen by state DOTs, with metropolitan planning organizations (MPOs) becoming increasingly involved in decision-making processes in large urban areas.¹⁵ To prioritize the use of federal transportation funds, states are required to develop a Long-Range Statewide Transportation Plan (LRTP), a comprehensive policy document that is developed with MPOs and outlines the state's goals and strategies for developing and maintaining its transportation system over a long-term horizon, typically 20-30 years. For the short-term, states are also required to maintain a Statewide Transportation Improvement Plan (STIP), which lists all transportation projects to be funded over a 4-year period. MPOs also develop their own regional versions of STIPs through Transportation Improvement Programs (TIPs), which identify regional projects to be prioritized under state LRTPs and STIPs. These planning programs include transportation projects for highways, freight, transit, and active transportation infrastructure.

Key Terminology on Federal Transportation Funding

Authorization or Distribution: the availability of federal funds for FHWA programs

Apportionment: the distribution of funds among the states as prescribed by statutory formula

Allocation: the distribution of funds under programs that *do not* have statutory distribution formulas

Obligation: the legal commitment of the federal government to reimburse states or other grantees for the federal share of a project

Set-Aside: a subset of funds apportioned which are dedicated by law for specific programs or purposes

Core formula programs and set-asides under the IIJA

NHPP: National Highway Performance Program

STBG: Surface Transportation Block Grant Program

TASA: Transportation Alternatives (set-aside)

HSIP: Highway Safety Improvement Program

Safety-Related Activities (set-aside)

Rail-Highway Grade Crossings (set-aside)

NHFP: National Highway Freight Program

CMAQ: Congestion Mitigation & Air Quality Improvement Program

Metropolitan Transportation Planning

CRP: Carbon Reduction Program (**CRP**)

PROTECT: Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation

The IIJA significantly increased the funding available for federal highway programs, authorizing \$356.5 billion compared to the \$225.2 billion (unadjusted for inflation) authorized under the FAST Act.¹⁶ In addition to increased funds for formula programs, the number of discretionary grant programs available for transportation funding also increased under the IIJA. Discretionary grant programs entail a competitive application process that allows local governments, MPOs, and some nongovernmental entities to apply directly to the USDOT for funding. Discretionary programs are distinct from formula funding

programs, which apportion funds for specific uses to states and MPOs based on factors such as population, road miles, and previous apportionments. Still, both formula funding and discretionary programs often require a 20% local match for project costs.

While the vast majority of these programs are directed at motorized, rail, and freight transportation, the IJA significantly expanded programs specifically for [bicycle and pedestrian project funding](#). Much of this funding can be leveraged for trail development in New Jersey – as a densely developed state, many trails require on-road connections between off-road segments. As such, federal funding available for bicycle and pedestrian infrastructure can potentially be used to start, connect, or complete trails and shared use paths.

Navigating the Federal Grant Process

The process of identifying, applying for, managing, implementing, and reporting on federal grants requires a high level of administrative capacity on behalf of the applicant. Grant recipients and grant administering agencies have distinct requirements with varying levels of complexity at each stage of the funding process. Figure 2 shows a modification of the U.S. Government Accountability Office (GAO) flow chart of the federal grant process that outlines the general responsibilities of the recipient and agency at each step. Rutgers-VTC adapted the flow chart, adding the authorization stage to clarify the need for written approval from FHWA to proceed and spend funds.

In New Jersey, the complexity of this process means that municipalities and counties with the administrative resources to secure federal grants will generally only do so for large-scale active transportation projects. For example, NJDOT recommends those looking to apply for federal grants should aim for projects costing at least \$350,000 - \$500,000 and above. Feedback from NJ county planners supports this finding, with several planners indicating a minimum project cost of \$1 million to justify seeking federal funding. Additional feedback from NJ county planners is detailed in Part II of this report.

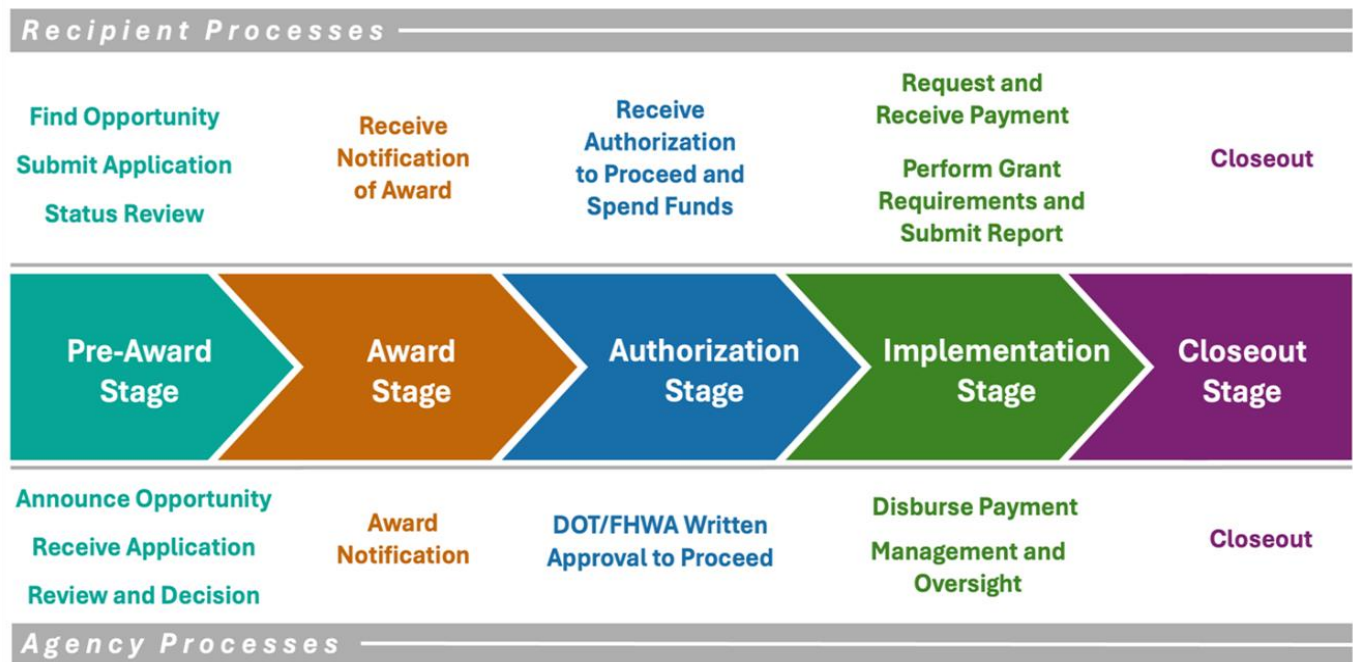


Figure 2. Grant Life Cycle of Federal Grant-making Agency and Grant Recipient

Source: Grants to State and Local Governments: an Overview of Federal Funding Levels and Selected Challenges, GAO 2012 (Modified)

Note: Graphic does not represent length of time at each stage

OVERVIEW OF TRAIL DEVELOPMENT IN NEW JERSEY

As the densest state in the U.S., New Jersey is uniquely positioned to benefit from increased access to green space, connectivity, alleviated automobile congestion, and improved bicycle and pedestrian safety. Governments and agencies in New Jersey are already taking important steps toward a Safe System Approach – NJDOT approved a statewide [Complete Streets Policy](#) in 2009, and published an [update](#) in 2024. Additionally, NJDOT’s [Model Complete Streets Policy and Guide](#) serves as a comprehensive resource for local governments for Complete Streets planning. At the time of this writing, 8 counties and 181 municipalities in New Jersey have also adopted Complete Streets policies and/or ordinances.¹⁷ Shared use path development is a part of this effort for providing safe active transportation facilities for walkers and bikers across the state.



Shared use paths are becoming an increasingly important presence in New Jersey’s transportation system. The state has over 4,500 miles of mapped public trails¹⁸ (including recreational-only trails), and regional networks are expanding through existing, proposed, and developing projects such as the [Morris Canal Greenway](#), the [Essex-Hudson Greenway](#), the [LINK Trail](#), the [Circuit Trails](#), the [Henry Hudson Trail](#), the [Cape May Trail Network](#), and the [Middlesex Greenway](#), to name a few. The Circuit Trails network, which covers the Greater Philadelphia region, is the most extensive regional network in the New Jersey area with 390 miles of the envisioned 800-mile network completed. Furthermore, the DVRPC’s [interactive web map](#) is an excellent model for showing existing, in progress, and planned trail segments. These regionally significant segments and existing networks are an excellent starting point for building out a comprehensive, connected trail network in New Jersey.

In New Jersey, shared use paths, trails, and active transportation infrastructure projects are developed through the leadership of several state agencies, Metropolitan Planning Organizations (MPOs), and local governments, all of which are supported by the work of advocacy organizations. Though trail development work in New Jersey is detailed throughout this report, below is a brief overview of major state agencies, organizations, and their trail development initiatives in the state:

- > **NJDOT** provides leadership on bicycle and pedestrian infrastructure and administers many of the federal funding programs detailed in later sections that can be used to finance trail projects.
 - > NJDOT uses state toll dollars to cover the 20% local matching share of federal funding programs, as outlined in the current [Statewide Transportation Improvement Program](#).
 - > For many pass-through federal programs (such as [TASA](#)) and state-funded programs (such as [Bikeways](#)), NJDOT prioritizes projects where local governments have passed a Complete Streets policy along with projects that serve federally-designated [Environmental Justice](#) communities.
 - > NJDOT’s [Local Aid Resource Center](#) website provides information on both federal and state grant opportunities and is a remarkably user-friendly online resource.

- > **NJDEP** administers the Green Acres Program, which offers support and funding for the conservation of open space and the advancement of projects for recreation and conservation, as well as the federal Recreational Trails Program in collaboration with the [New Jersey Trails Program Council](#), comprised of citizens, and state agency representatives serving as the program’s advisory body.
 - > NJDEP’s recently updated [Statewide Comprehensive Outdoor Recreation Plan](#) (SCORP), which provides a framework for developing outdoor recreation in the state for 2023-2027 and qualifies New Jersey for federal funding from RTP as well as the Land and Water Conservation Fund (LCWF).
 - > In 2021, **NJDEP** and **NJDOT** sponsored the state’s first [Trails & Greenways Summit](#), highlighting exemplary trail projects and identifying opportunities for expanding NJ’s trail and greenway networks.
- > The state’s three MPOs – the North Jersey Transportation Authority (**NJTPA**), the Delaware Valley Regional Planning Commission (**DVRPC**), and the South Jersey Transportation Planning Organization (**SJTPO**) – work closely with NJDOT in administering federal funding programs, as well as providing support and funding for trail projects within their respective regions. Further information on their efforts is provided in later sections.
 - > **NJTPA** recently began the [North Jersey Trail Network Initiative](#), a partnership between the [New Jersey Bike & Walk Coalition](#) and the [Rails to Trails Conservancy](#) to identify, prioritize, and connect shared use paths into a comprehensive trail network in North Jersey.
 - > **DVRPC** administers its own [Regional Trails Program](#), providing planning assistance and funding to local governments and nonprofits for projects, as well as the [Transportation and Community Development Initiative](#), a grant opportunity that funds local planning initiatives linking land use, transportation, and economic development.
 - > **SJTPO** offers a [Trails Design Guide](#) tailored to South Jersey, and is in the process of developing an Active Transportation Master Plan.
- > On the advocacy side, the New Jersey Trails Action Network (**NJTAN**), and the New Jersey Bike & Walk Coalition (**NJBWC**) do significant work in organizing support for trails across the state.
 - > **NJTAN** substantially supported the creation of the 2021 Trails & Greenways Summit.
 - > **NJBWC** was instrumental in securing the right of way and advocating for the planned Essex Hudson Greenway.

Additionally, New Jersey has a long history of trail development and active transportation infrastructure which greatly informs the current outlook for implementation. Below is a timeline of federal laws, state laws and initiatives, and significant developments in the planning, funding, and implementation of trail and active transportation projects in New Jersey. An overview of funding and technical assistance programs follows.

Milestones Impacting Trail Planning & Funding in New Jersey

STATE INITIATIVES

1961

Green Acres Program

The Green Acres Program is established through a bond referendum with the goal of preserving space for conservation and recreation in New Jersey. The program is now administered by NJDEP and works to acquire land for state parks, provides low-interest loans and grants to municipalities to acquire open space and develop recreational facilities, and administers the federal Recreational Trails Program.

1974

New Jersey Trails System Act

The Trails System Act of 1974 laid the groundwork for a network of trails in New Jersey which provide connections within and between communities. The Act charged the New Jersey Department of Environmental Protection (NJDEP) with the task of establishing a trails plan and created the New Jersey Trails Council as an advisory board to NJDEP and NJDOT.

1982

First New Jersey Trails Plan

The first statewide Trails Plan is created and updated in 1996.

1995

First Bicycle & Pedestrian Master Plan

NJDOT publishes the first state-wide bicycle and pedestrian master plan, presenting a vision for active transportation across the state. The plan is next updated in 2004.

1995

Garden State Preservation Trust Act

New Jersey creates a dedicated, statewide funding source for the preservation of open space, historic properties, and farmland, as well as the development of parks and open space for recreation and conservation. The Garden State Preservation Trust is established as the financing authority to secure funds for the statewide Green Acres Program, the Farmland Preservation Program, and the New Jersey Historic Trust.

2001

Garden State Greenways

The New Jersey Conservation Foundation (NJCF), in partnership with the Green Acres Program and Rutgers University, launches *Garden State Greenways*, an online mapping tool that shows potential conservation greenway connections throughout NJ.

FEDERAL TRANSPORTATION BILLS



Green Acres Program Sign

1991

Intermodal Surface Transportation Efficiency Act (ISTEA)

ISTEA provides the first significant federal transportation funding source for walking and bicycling facilities and trails, establishing the Recreational Trails Program (RTP), the Transportation Enhancements Program (TE, which later became TASA), the Highway Safety Improvement Program (HSIP), and the Congestion Mitigation and Air Quality Program (CMAQ). ISTEA also mandates that each state appoint a Bicycle and Pedestrian Coordinator within the state DOT.

1998

Transportation Equity Act for the 21st Century (TEA-21)

Building upon ISTEA, TEA-21 continues the integration of active transportation projects into federal funding programs. TEA-21 mandated that state and metropolitan planning organization (MPO) long-range plans consider projects and strategies to increase the safety of transportation system for nonmotorized users.

2005

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

SAFETEA-LU builds upon previous federal transportation bills in improving bicycle and pedestrian programs and establishes the national Safe Routes to School (SRTS) Program with the goal of improving active transportation infrastructure near schools.

STATE INITIATIVES

2009

New Jersey Trails Plan Update

The NJDEP published the most recent update to the New Jersey Trails Plan, presenting renewed visions, goals, and strategic actions to regional and local agencies for planning, coordinating, and building a comprehensive trail network in New Jersey.

2015

New Jersey Conservation Blueprint

The NJDEP, NJCF, the Nature Conservancy, and other interest groups publish the New Jersey Conservation Blueprint, an online mapping tool that builds upon Garden State Greenways by identifying priority lands to be protected at the state and local level.

2016

New Jersey Bicycle & Pedestrian Master Plan

The NJDOT updates the 2004 the Bicycle & Pedestrian Master Plan for New Jersey, presenting a vision for a transportation system in which walking and bicycling are a routine, convenient, and safe method of transportation statewide.

2021

NJ TRANSIT Transit to Trails

NJ Transit launches the “Transit to Trails” initiative, a website which allows users to see public parks and trails that are accessible from NJT.

2021

Trails & Greenways Summit

NJDEP and NJDOT co-host the state’s first Trails & Greenways Summit with support from NJTAN.

2023

Statewide Comprehensive Outdoor Recreation Plan (SCORP)

The NJDEP publishes the 5-year update to the SCORP, qualifying NJ for federal funding from the RTP and the LCWF.

FEDERAL TRANSPORTATION BILLS

2012

Moving Ahead for Progress in the 21st Century Act (MAP-21)

MAP-21 strengthened existing bicycle and pedestrian funding and included new opportunities for active transportation projects, such as the Transportation Alternatives Program (TAP).

2015

Fixing America's Surface Transportation Act (FAST-Act)

The FAST-Act creates a priority safety fund to reduce bicycle and pedestrian fatalities and allows nonprofit organizations to apply for funds under TAP.



Progression of New Jersey's Bicycle and Pedestrian Master Plans
Source: NJDOT

2021

Infrastructure Investment and Jobs Act (IIJA/BIL)

The IIJA provides significant additional funding for bicycle and pedestrian improvement projects, both through formula funding to states and competitive grant opportunities. The Active Transportation Infrastructure Investment Program (ATIIP), the Safe Streets and Roads for All Program (SS4A), and the Reconnecting Communities and Neighborhoods Program (RCN) are re-authorized or newly established under the IIJA.

UPCOMING STATE OPPORTUNITIES TO PRIORITIZE SHARED USE PATH NETWORKS

NJDEP & NJDOT

Statewide Trail Planning Documents

Focuses on providing guidebooks to assist trail planners in New Jersey, addressing priority topics such as funding, connecting trail projects, and action items for developing the state’s trail

NJDOT

Bicycle & Pedestrian Master Plan

Provides new guidance on funding programs, trends in active transportation, and connection to other planning initiatives in New Jersey, drawing on best practices seen in other states.

NJDOT

2050 Long Range Transportation Plan

Identifies priority transportation projects for improving safety, reducing congestion, and supporting economic growth. Shared use path networks can play a key role in advancing these goals.

NJ State Planning Commission

State Development and Redevelopment Plan

Focuses on improving consistency across municipal, county, regional, and state plans, and identifies active transportation networks as key connections to community centers.

PART 2: AVAILABLE FUNDING SOURCES FOR TRAILS IN NEW JERSEY

Trail development requires a high level of coordination between multiple levels of government, community stakeholders, advocates, planners, environmental and health experts, and engineers. Identifying appropriate funding sources is often one of the most difficult parts of the trail development process, as funds are available at federal, state, county, and local levels.

Overview of Funding Tables

The following tables detail primary funding opportunities for on- and off-road paths and trails in New Jersey, broken down by funding source. While some funding programs are specifically designated for trail infrastructure, many federal and state programs designed to expand active transportation infrastructure can also be used to develop shared use paths – these programs are included as well. Tables are broken down by:

Federal Pass-Through Funding	refers to federal formula-funded programs administered by NJDOT, NJDEP, and/or New Jersey’s Metropolitan Planning Organizations
Federal Discretionary Funding	refers to programs through which municipalities, counties, or regional entities can apply for funding directly from USDOT
State-Level Funding	refers to grants offered and administered by NJDOT through the New Jersey Transportation Trust Fund Authority (TTFA)

Grants vary widely in their eligibility requirements, award size, and suitability for trail projects. As such, funding opportunities in the following tables are further broken down by their use in the distinct phases of trail development as well as their typical award size.

Transportation infrastructure development of any type involves several phases: planning, design, engineering, implementation and construction, and operations and maintenance. Funds and capacity are needed throughout all phases of this process, but grants often have limitations placed on the use of funds for specific phases.

The award range for each grant opportunity is also included where information was available on the USDOT, NJDOT Local Aid Resource Center, or MPO website. For state funding opportunities, recommend project size was based on previous award sizes for FY2023. These ranges are estimates based on available information, and may not reflect the size of actual awards under a specific program.

Although the specific level of effort needed to apply to each program is not included, as grant funds increase in award size, there is a related increase in the level of effort needed to pursue and implement them. The administrative capacity needed, reporting requirements, and application/paperwork requirements tend to increase with larger grants at higher levels of government.

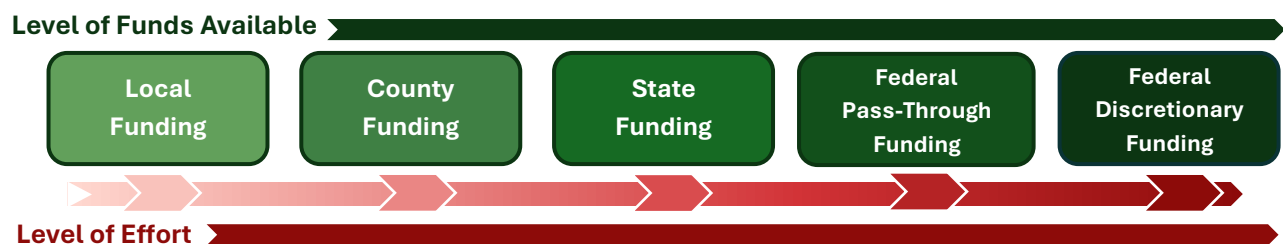


Figure 3: Level of funding correlated with level of effort needed to apply for, use, and report grant funds among different funding sources and types.

FEDERAL FUNDING PROGRAMS THROUGH USDOT

Federal Pass-Through Funding

Table 1: Federal Pass-Through Funding Opportunities for Shared Use Paths

Program Name	Acronym & Link	Planning	Design & Engineering	Implementation & Construction	Operations or Maintenance	Award Range
Transportation Alternatives Set-Aside Program	TASA	no*	yes	yes	no	\$500k – \$1.5m
Recreational Trails Program	RTP	no	no	yes	yes	\$20k – \$200k
Congestion Mitigation and Air Quality Improvement Program	CMAQ	yes	no	yes	no	\$250k+
Bicycle and Pedestrian Planning Assistance**	–	yes	no	yes	no	–
Carbon Reduction Program	CRP	yes	no	yes	no	–
Safe Routes to School	SRTS	no	no	yes	no	\$300k – \$1.5m
Highway Safety Improvement Program	HSIP	yes	yes	yes	no	–

*Under the IIJA, up to 5% of TASA funds may be used by states and MPOs to provide technical and application assistance, including planning, design, and project management¹⁹

**The Bicycle and Pedestrian Planning Assistance Program is administered by NJDOT using CMAQ funding.

The **Transportation Alternatives Set-Aside Program (TASA)**, a set-aside of the Surface Transportation Block Grant (STBG), is the **largest source of federal funding for active transportation projects**,²⁰ and received a 60% increase in funding under the IIJA.²¹ TASA directs funding toward transportation alternatives projects including on- and off-road pedestrian and bicycle facilities, improving non-driver access to public transportation, enhanced mobility, community improvements activities, and environmental mitigation related to stormwater and habitat connectivity. The Recreational Trails Program and the Safe Routes to School Program are set-asides of TASA.

In New Jersey, solicitation of TASA grant applications, project selection, and funding for transportation alternatives projects are administered jointly by NJDOT and New Jersey’s three Metropolitan Planning Organizations (MPOs). Currently, **59% of TASA funds in New Jersey are sub-allocated through the MPOs** based on the size of the population they serve. MPOs in New Jersey also administer technical assistance programs related to active transportation infrastructure – these are detailed in the following section.

The federal TASA program requires a 20% funding match from applicants – in New Jersey, **NJDOT covers this on behalf of the applicant** using state toll funds. Funds are provided on a reimbursement basis. NJDOT offers a [TASA Design Assistance Program](#) to grant award recipients. The program makes consultant engineering services available to Local Public Agencies (LPAs) to assist with the development of plans, specifications, and estimates for their TASA projects.

The **Recreational Trails Program (RTP)**, a set-aside of TASA, authorizes funds to be used for the maintenance and restoration of existing trails, including rehabilitation, relocation, and the purchase or lease of maintenance equipment. RTP requires states to allocate funds for recreational trails based on minimum shares for motorized use (30%), non-motorized use (40%), and diverse use (40%). Additionally, **up to 7% of a state's apportionment of RTP funds may be used for administrative costs** incurred through the program, including staff time, websites, and other communications, and up to 5% of the apportionment may be used for educational programs. RTP also requires that states establish Recreational Trail Advisory Committees to assist with the program and meet at least one time per fiscal year.²²

In New Jersey, the RTP is administered by New Jersey Department of Environmental Protection (NJDEP) [Green Acres Program](#). Under the IIJA, the amount of each state's set-aside is equal to the state's FY2009 RTP apportionment – for FY24, New Jersey's apportionment was \$1,214,489.²³ Many trail projects in the state have been funded through this federal program - however, RTP funds have not been open to municipal projects for at least five years. This is set to change in the coming years as the NJDEP has published a new [Statewide Comprehensive Outdoor Recreation Plan \(SCORP\)](#).

The **Congestion Mitigation and Air Quality Program (CMAQ)** funds transportation projects which help to improve air quality and reduce congestion. Bicycle and pedestrian facilities, including trails that serve a transportation purpose, are eligible under this program. CMAQ is a reimbursement program: applicants are responsible for project costs, and can be reimbursed afterward for those costs that are CMAQ eligible.²⁴ In New Jersey, the CMAQ program is administered by the MPOs: [NJTPA](#), [DVRPC](#), and [SJTPO](#). The MPOs differ slightly in guidance for CMAQ projects, but projects typically identified on a 3-year cycle.

In New Jersey, NJDOT offers the **Bicycle and Pedestrian Planning Assistance Program** using CMAQ funding. The program provides **no-cost technical assistance to counties and municipalities** for bicycle and pedestrian planning activities through the services of on-call consultants retained by NJDOT, and prioritizes applications from underserved communities. This small-scale program is a positive step towards bridging the planning gap for smaller municipalities in securing funds, but could benefit from increased funding and more promotion. For more information on the [Bicycle and Pedestrian Planning Assistance Program](#), please visit the NJ Bicycle & Pedestrian Resource Center's [page on the program](#).

The **Carbon Reduction Program (CRP)** is a newly authorized program under the IIJA aimed at reducing transportation emissions through the development of statewide Carbon Reduction Strategies and by funding projects that are designed to reduce transportation emissions. Similar to CMAQ, the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized transportation are eligible under CRP as transportation alternatives projects.²⁵ In New Jersey, the CRP is administered by the MPOs. Because this is a new federal aid program under the IIJA, specific details on award sizes and project implementation are not yet available.

The **Safe Routes to School Program (SRTS)**, a set-aside of TASA, funds infrastructure improvement projects that aim to make walking and biking to schools a safe and routine choice. Bicycle and pedestrian infrastructure, including shared use paths, and traffic-calming measures are eligible. SRTS has funding available both for infrastructure projects and non-infrastructure activities such as education, encouragement, and program evaluation. The IIJA expanded the SRTS program to include high schools – previously, the program targeted only schools serving grades K-8.

In New Jersey, **TASA funds are separated into TA Set-Aside grants and Safe Routes to School grants** with separate application rounds. SRTS grants for infrastructure projects are administered jointly by NJDOT and the state's MPOs. Funds are provided on a reimbursement basis. The federal SRTS program requires a 20% funding match from applicants – in New Jersey, **NJDOT covers this on behalf of the applicant using state toll funds**. NJDOT also offers an [SRTS Design Assistance Program](#), similar to the agency's TASA Design Assistance Program. The SRTS Design Assistance Program connects recipients of NJDOT SRTS grants with pre-approved consultants to assist with the development of plans, specifications, and estimates. In New Jersey, non-infrastructure programs for SRTS, which include technical assistance, planning, and education, are available through NJDOT, all 8 New Jersey Transportation Management Associations (TMAs) and the state [Safe Routes to School Resource Center](#).

The **Highway Safety Improvement Plan** (HSIP) is aimed at reducing traffic injuries and serious fatalities on all public roads. The program requires a strategic, data-driven approach to improving highway safety, and mandates that projects funded under the program be consistent with a state's Strategic Highway Safety Plan.²⁶ In New Jersey, the program is administered by both NJDOT and the MPOs. NJDOT oversees the production screening lists based on road/intersection type (High Risk Rural Roads list, Pedestrian/Bicycle Corridor lists, Pedestrian/Bicycle Intersection list, among others), which serve to help MPOs prioritize certain projects. New Jersey's [Statewide Transportation Improvement Program](#) includes funding for local safety plans and planning assistance administered through the MPOs.

Federal Discretionary Funding

Table 2: IIJA Federal Discretionary Funding Opportunities for Shared Use Paths

Program Name	Acronym & Link	Planning	Design & Engineering	Implementation & Construction	Operations or Maintenance	Award Range
Active Transportation Infrastructure Investment Program	ATIIP	yes	no	yes	no	\$100k – \$15m
Safe Streets and Roads for All Program	SS4A	yes	yes	yes	no	\$100k – \$25m
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation	PROTECT Discretionary Grant	yes	yes	yes	no	\$3m – \$39m
Rebuilding American Infrastructure with Sustainability and Equity	RAISE	yes	yes	yes	no	\$1m – \$3m
Neighborhood Access and Equity Grant Program	NAE	yes	yes	yes	no	\$100k – \$60m
Reconnecting Communities Pilot	RCP	yes	yes	yes	no	\$60k – \$30m
Thriving Communities Program	TCP	yes	yes	no	no	–

IIJA federal discretionary programs are competitive discretionary grants that allow states, local governments, MPOs, and some nongovernmental entities to apply for funding directly through the FHWA. These programs differ from federal formula funding opportunities in **offering significant funding for planning activities**, although it is important to note that government entities in NJ have had limited success in accessing these funds due to the complexity of securing federal funding. The [New Jersey Infrastructure Investment Tracker](#) tracks investments on programs and projects that have been funded by the IIJA, with project information provided by NJDOT, NJTRANSIT, the NJ Board of Public Utilities, and NJDEP. Agencies, governments, and organizations in New Jersey have had success with SS4A and RAISE grants, limited success with other programs.

Eligible projects and activities differ for each program, but guidance from the FHWA for each program summarized in brief below:

The **Active Transportation Infrastructure Investment Program (ATIIP)** awards two types of grants: Planning and Design grants, and Construction grants. Planning and Design grants support the development of plans for active transportation networks and spines, and must have planning and design costs of at least \$100,000.

The **Safe Streets and Roads for All Program (SS4A)** awards two types of grants: Planning and Demonstration grants, and Implementation grants. Planning and Demonstration grants support the development of Comprehensive Safety Action Plans, while Implementation grants can be used to fund strategies or projects identified in an existing Safety Action Plan.

The **PROTECT Discretionary Grant Program** offers four types of grants: Planning, Resilience Improvement, Community Resilience and Evacuation Route, and At-Risk Coastal Infrastructure. Planning grants do not require a local match and may be used to develop a Resilience Improvement Plan, the presence of which at the state or MPO level qualifies applicants for a lower local match.²⁷

The **RAISE Program** offers two types of grants: Planning grants and Capital grants. Planning grants may be used to develop master plans, comprehensive plans, and transportation corridor plans, among others. RAISE has broad eligibility requirements, funding projects with a significant local or regional impact and which are consistent with the USDOT's strategic goals of safety improvement, economic strength, equity, and climate and sustainability.

The **Neighborhood Access and Equity Grant Program** funds projects that improve walkability, safety, and affordable transportation access through context-sensitive strategies. For projects in disadvantaged or underserved communities (as defined by the USDOT), no local match is required.

The **Reconnecting Communities Pilot Program** (RCP) focuses on community-centered transportation projects which improve access to daily needs such as jobs, education, healthcare, food, nature, and recreation, and which foster equitable development. Two types of grants are offered: Community Planning grants, and Capital Construction grants. Community Planning grants can be used to fund the study of removing, retrofitting, or mitigating an existing facility to restore community connectivity, as well as public engagement and other transportation planning activities. The maximum Community Planning grant award under the RCP is \$2 million.

The **Thriving Communities Program** (TCP) funds organizations to provide technical assistance, planning, and capacity building support to disadvantaged and under-resourced communities in order to advance transportation projects that support community-driven goals. There are three types of applicants to the program: organizations that want to provide technical assistance nationally, organizations that want to provide technical assistance regionally, and community applicants that would like to receive technical assistance. Selected community applicants receive two years of individualized technical assistance under the TCP.

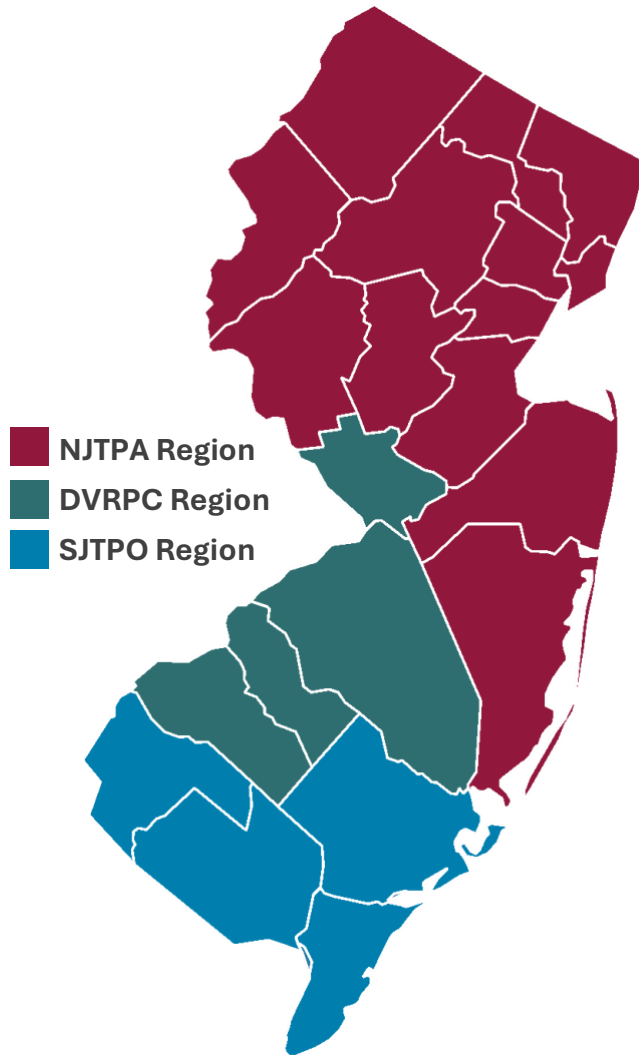
Additional Federal Funding Sources:

Additional federal funding sources for trails and shared use paths in New Jersey include:

- Community Development Block Grants (CDBGs), administered by New Jersey's Department of Community Affairs with funding from the U. S. Department of Housing and Urban Development.
- Wayfinding grants from Preserve America, the National Park Service (specifically around the Delaware Water Gap area), and the Outdoor Recreation Legacy Partnership – a competitive matching grant program funded by the Land and Water Conservation Fund (LWCF) which focuses primarily on urban areas. The LWCF receives its funding from offshore oil and gas leasing revenue, it is then redistributed to recreation and natural projects across the country.

TRAIL DEVELOPMENT AND TECHNICAL SUPPORT FROM NEW JERSEY'S METROPOLITAN PLANNING ORGANIZATIONS

As noted in previous section, New Jersey's three Metropolitan Planning Organizations (MPOs) administer many federal programs for active transportation in the state. The North Jersey Transportation Authority (NJTPA), the Delaware Valley Regional Planning Commission (DVRPC), and the South Jersey Transportation Planning Organization (SJTPO) offer many planning resources to local governments, including **additional funding opportunities and technical assistance**. The MPOs are key in advancing shared use path development in New Jersey, as they conduct and implement plans and policies of regional and statewide significance.



NJTPA developed a [Regional Active Transportation Plan](#) in 2023 which identified regionally significant trails with the goal of identifying a potential comprehensive low-stress network for walking and biking. Furthermore, NJTPA recently began the [North Jersey Trail Network Initiative](#), a partnership between the [New Jersey Bike & Walk Coalition](#) and the [Rails to Trails Conservancy](#) to identify, prioritize, and connect shared use paths into a network. NJTPA also offers a [Complete Streets Technical Assistance Program](#) with support from Rutgers-VTC and [Sustainable Jersey](#).

DVRPC maintains its own [Regional Trails Program](#), providing planning assistance and funding to local governments and nonprofits for projects that would complete [The Circuit Trails](#), a regional trail network in the Greater Philadelphia area that includes Mercer, Burlington, Camden, and Gloucester Counties. DVRPC also offers the [Transportation and Community Development Initiative](#), a grant opportunity that funds local planning initiatives linking land use, transportation, and economic development. DVRPC receives additional funding from the William Penn Foundation, which has greatly increased their ability to offer pre-construction funding and support for trail projects. This, combined with the emphasis on pre-construction investment and support throughout DVRPC's programs, has resulted in many successful projects in their 5-county New Jersey region.

NJTPA and DVRPC have both developed Bicycle Level of Traffic Stress (LTS) map for active transportation planning – these can be found in Appendix E.

SJTPO offers a [Trails Design Guide](#) tailored to South Jersey. SJTPO also has several upcoming initiatives detailed on their [Trail Planning](#) website, including the development of an Active Transportation Master Plan. SJTPO is also in the process of offering [Complete Streets Technical Assistance](#) with support from Rutgers-VTC, [Sustainable Jersey](#), and [Cross County Connection](#).

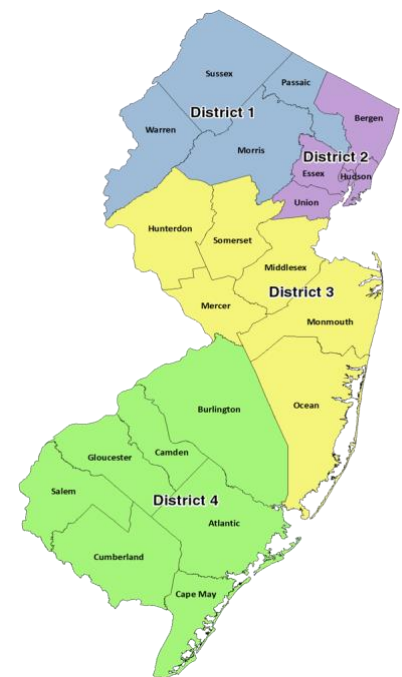
STATE-LEVEL FUNDING OPPORTUNITIES

Table 3: NJ State-Level Funding Opportunities for Shared Use Paths

Program Name	Planning	Design & Engineering	Implementation & Construction	Operations or Maintenance	Award Range
Municipal Aid	no	no	yes	no	\$50k – \$500k
County Aid	no	no	yes	no	\$4m – \$14m+
Bikeways	no	no	yes	no	\$200k – \$1m+
Safe Streets to Transit	no	no	yes	no	\$100k – \$1m
Transit Village Program	no	no	yes	no	\$300k – \$700k
Local Bridges Fund	no	no	yes	no	\$500k – \$3m
Local Transportation Projects Fund	no	no	yes	no	\$50k – \$500k
Green Acres Program	no	yes	yes	no	–
NJ Transportation Infrastructure Bank	yes	yes	yes	no	\$500k – \$20m

Most of New Jersey’s state funding opportunities are administered by NJDOT’s [Local Aid Resource Center](#) and are funded by the NJ [Transportation Trust Fund Authority](#), which receives revenues from fuel taxes, highway toll road authorities, and certain registration fees in the state. The Local Aid Resource Center has 4 [District Offices](#) that provide local governments with application assistance, with each office serving different regions:

- **District 1:** Morris, Passaic, Sussex, Warren
- **District 2:** Bergen, Essex, Hudson, Union
- **District 3:** Hunterdon, Mercer, Middlesex, Monmouth, Ocean, Somerset
- **District 4:** Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Salem



*NJDOT Local Aid District Offices
Source: NJDOT Local Aid Resource*

State-funded grant programs are significant for local governments, as they may be more accessible than federal grants with more complex application and reporting requirements. Support from the District Coordinators is helpful with application requirements and engineering, although they do not offer expertise in planning for active transportation or other non-NJDOT grants. Furthermore, most state-funded programs in New Jersey apply exclusively to the implementation and construction phases of transportation projects, and **cannot be used for planning or design phases**. As a result, they are primarily used for repaving projects that don’t require a significant planning or design effort.

Brief Overview of Programs

The **Municipal Aid Program** provides funds to municipalities for a wide range of projects that enhance safety, renew aging infrastructure, and expand mobility options. Eligible projects related to shared use paths include bikeways, pedestrian safety, and quality of life improvements.

The **County Aid Program** offers support to counties that have developed an Annual Transportation Program (approved by NJDOT). Funds can be used for projects to repair or improve county roads and bridges, which may entail bicycle and pedestrian improvements.

The **Bikeways Program** provides funds to counties and municipalities to develop bike paths and lanes that create new bike path mileage and are physically separated from motor vehicle traffic by an open space or barrier.

The **Safe Streets to Transit Program** provides funds to counties and municipalities for projects that improve safety and accessibility around public transit facilities for those walking or biking. Projects must be within a ½ mile radius of a transit facility.

The **Transit Village Program** provides funds to municipalities designated as [Transit Villages](#) seeking to redevelop or revitalize areas around transit stations through transit-oriented development. Eligible projects include bicycle and pedestrian infrastructure, wayfinding signage, and traffic calming measures. Similar to the Safe Streets to Transit program, projects must be located within a ½ mile radius of a transit facility.

The **Local Bridges Fund** provides funds to counties for preventative maintenance, rehabilitation, and replacement of structurally deficient bridges. Bridges may be widened in the process to accommodate sidewalks and shared use paths.

The **Local Transportation Projects Fund** provides funds to municipalities and counties to address specific focused local transportation issues.

The **Green Acres Program** administered by NJDEP provides low-interest loans and grants to local governments to assist in the acquisition and development of open space for recreation and conservation purposes. Grants and loans within the program have different matching requirements for projects based on their location, with projects in Overburdened Communities and Urban Aid Municipalities receiving a lower match requirement²⁸ NJDEP also hosts virtual application information sessions before funding rounds to provide applicants with information on project eligibility, program priorities, and application procedures.

The **New Jersey Transportation Infrastructure Bank** (NJTIB) finances local surface transportation infrastructure projects with state funds through low-interest loans to counties, municipalities, and regional transportation authorities. Eligible projects for financing under the program include pedestrian and bicycle infrastructure, and eligible costs include construction expenses, right-of-way acquisitions, project management costs, as well as soft costs related to planning, permitting, and engineering. Additionally, the NJTIB offers a match funding program which extends 0% interest loans to disadvantaged communities to meet federal match requirements for discretionary funding programs under the BIL.²⁹

SUMMARY OF FUNDING OPPORTUNITIES FOR SHARED USE PATH DEVELOPMENT IN NEW JERSEY

Funding opportunities offered at different levels of government come with key advantages and disadvantages for applicants. The largest sources for trail funding in New Jersey come from federal pass-through programs, federal discretionary programs, and state programs. A brief overview of advantages and disadvantages for each is below:

	Advantages	Disadvantages and Funding Gaps
Federal Pass-Through Funding	<ul style="list-style-type: none"> > Federal formula programs – TASA in particular – are the largest source of funding for bicycle and pedestrian projects nationwide.³⁰ > These funds are jointly administered by state agencies and MPOs in New Jersey, increasing opportunities for collaboration on statewide and regional priorities. > The significant amount of funds available through these programs means that they are suitable for large-scale projects. 	<ul style="list-style-type: none"> > Many of these programs <i>cannot</i> be used for the planning or design phases of trail development, leaving the financial burden of this type of work on the applicant. Initial planning work is essential – when capacity and resources for this phase are limited, applications may not be successful, or funds may need to be returned if a project is found to be infeasible after a grant is awarded. > Support for planning and technical assistance is dependent on state agency initiative. > These funds are not as suitable for small-scale projects.
IIJA Federal Discretionary Funding	<ul style="list-style-type: none"> > Many of these funds are eligible for all phases of trail development, including planning. > Local governments and regional planning bodies can apply for funding directly from the USDOT. > Currently, these programs expand funding opportunities for active transportation infrastructure. 	<ul style="list-style-type: none"> > Many smaller units of government, particularly those with fewer resources, may not be able to access these funds due to the higher level of difficulty in successfully implementing federal grants. > As many of these programs were established under the IIJA, it is unclear if they will become permanent programs within the USDOT – formula funding programs, on the other hand, are unlikely to change significantly.
State Funding	<ul style="list-style-type: none"> > These funds are more accessible to local governments, as grant requirements are not as labor intensive as federal programs. > NJDOT and NJDEP prioritize underserved communities through many of these programs, ensuring that funds are distributed more equitably. 	<ul style="list-style-type: none"> > Many of these programs cannot be used for planning phases, leaving the financial burden of this type of work on the applicant. > Support for application and technical assistance is dependent on agency initiative. > Applicants need to navigate funding through different agency processes

COUNTY OPEN SPACE TRUST FUNDS AND TRAIL DEVELOPMENT

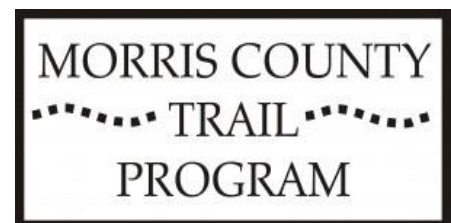
On a smaller scale, many counties in New Jersey conduct their own trail development planning and funding programs. Rutgers-VTC developed a discussion guide for the New Jersey County Planners Association to gain more information on the county-level processes for trail development. Discussions were held at two meetings in May and September of 2024, and the discussion guide can be found in Appendix A of this report. Findings from the County Planners Association meetings were summarized by New Jersey Future and informed the research and writing of this report.

New Jersey's 21 counties are remarkably diverse in their populations, settlement patterns, and needs – as such, there is a wide range of funding, programs, and planning for trails among them, and a comprehensive review of their individual trail development efforts is beyond the scope of this report, although it would be a productive topic for future research. As such, the following discussion of county-level Open Space Trust Funds (OSTFs) and trail development programs is generalized, and may not reflect conditions in a specific geography.

Open Space Trust Funds raise revenues from property taxes (typically 1-5 cents per \$100 of assessed value) to be used for the preservation of open space.³¹ While governing bodies determine the specific uses of the OSTF in their jurisdictions, permissible uses typically include: the acquisition of lands for recreation and conservation purposes, the development and maintenance of those lands, the acquisition of farmland for preservation purposes, and historic preservation activities. Often, these funds can also be used as a 20% match for federal grant programs. Open Space Advisory Committees, which make recommendations on proposed projects or identify other opportunities for preservation, are common features of open space preservation programs.

Many counties in New Jersey utilize funds from their OSTFs for trail development work, classifying it as a recreational purpose. Counties differ in their allocation of OSTF funds for trail development – most allow municipalities and other public entities to apply for funds through a competitive application process, while others identify trail development opportunities individually. Application requirements tend to be less complex, and it is generally easier to contact the program administrator for guidance. This allows municipalities to access funding for smaller trail projects without dedicating significant resources to fulfill the preliminary planning requirements by grants at higher levels of government. Matching funds are still required from the municipality, but eligible project costs tend to be more flexible. Importantly, some – but not all – counties allow local governments to **conduct planning activities using funds from the OSTF**. Further expanding the use of OSTFs for trail development work and improving the programs through which they are administered has the potential to bridge the planning gap in funding for trail infrastructure and could significantly enhance local and regional networks.

Morris County's [Trail Construction Grant Program](#) demonstrates the potential of OSTFs for trail development. The program was started in 2016 after a ballot measure permitting trail construction as an allowable use of the trust fund was approved by voters in 2014.³² The program offers two types of grants – Design & Permitting and Construction – and projects are reviewed and recommended by Morris County's [Trail Program Advisory Committee](#). To date, the Morris County Board of County Commissioners have approved 54 grants with over \$5 million in funding from Morris County's Open Space Trust Fund, resulting in the authorization of over 26 miles of new trails.³³



Source: Morris County

258 municipalities in New Jersey follow a similar model of allocating municipal-level OSTF funds for trails, with many maintaining excellent active transportation programs. Though a review of these programs is not covered in this report, it would be an excellent avenue for future research. A full list of municipalities that maintain local OSTFs is included in Appendix B.

Table 4 details the use of Open Space Trust Funds for trail development for each of New Jersey’s 21 counties. County-level funding was identified initially using the Trust for Public Land’s [LandVote](#) database, which details ballot measures across the county that raise public funds in support of land conservation. After identifying county-level OSTFs, additional research was conducted on respective county websites to assess the accuracy of the database and if funds could be applied to trails. To assess whether a county applied its OSTF to trails, its Open Space Preservation website had to explicitly indicate that the funds could be applied to trail or greenway development. Where county plans or websites reference only recreation or parks, it was assumed that the funds could not be used specifically for trail development. If application information for the OSTF could be found on the county website, it was assumed that they issued grants. Some counties do not use OSTF funds for trail development, but solicit applications for other uses.

Table 4: County Level Open Space Trust Funds and their use in Trail Development

County	OSTF Program Website	Can the OSTF be used for Trails?	Does the county solicit applications?	Department Administering the OSTF
Atlantic	Atlantic Website	no	yes	Regional Planning & Development
Bergen	Bergen Website	yes	yes	Parks, Division of Land Management
Burlington	Burlington Website	yes	no	Resource Conservation
Camden	Camden Website	yes	yes	Recycling & Environmental Affairs
Cape May	Cape May Website	yes	yes	Planning Department
Cumberland	Cumberland Website	no	no	Department of Planning, Tourism, & Comm. Affairs
Essex	-	no	no	Parks, Recreation, & Cultural Affairs
Gloucester	Gloucester Website	yes	no	Land Preservation
Hudson	Hudson Website	yes	yes	Division of Planning
Hunterdon	Hunterdon Website	yes	yes	Planning & Land Use
Mercer	Mercer Website	yes	yes	Planning
Middlesex	Middlesex Website	yes	yes	Parks & Recreation
Monmouth	Monmouth Website	yes	yes	Park System
Morris	Morris Website	yes	yes	Planning & Preservation
Ocean	Ocean Website	no	no	Planning, Natural Lands Trust Fund
Passaic	Passaic Website	yes	yes	Planning & Economic Development
Salem	Salem Website	yes	no	Planning
Somerset	Somerset Website	yes	yes	Planning Division
Sussex	Sussex Website	yes	yes	Planning & Economic Development
Union	Union Website	no	yes	Board of County Commissioners
Warren	Warren Website	yes	yes	Land Preservation

16 counties fund trail development using OSTFs

Figure 5 displays total OSTF Revenues by county for FY2023 and provides information on their use in trail development. Total FY23 OSTF revenues were obtained from approved budgets on county websites. A few notes:

- These numbers include interest income on the OSTFs as well as reserve funds, which a county may not have obligated in previous years – in some counties, this is a significant portion of total revenue.
- Portions of OSTFs are set aside for salaries and other expenses associated with OSTF administration – however, not all counties report this information.
- OSTFs provide funding for several other uses, including farmland and historic preservation, among others. Similar to administrative costs, some counties do not separate the funds obligated for these uses.

Due to the many uses of OSTFs and differences in reporting, the figures below do not represent the total amount of funds available for trail development in each county. Rather, they provide a snapshot of the level of funds within county OSTFs, in order to highlight opportunities to allocate more local funding for trail planning and development work. Because counties vary widely in their use, administration, and reporting of OSTF funds, a detailed review of county processes that investigates these nuances further would be a productive topic for future research.

In order to verify the accuracy of the OSTF program information and solicit feedback from county planners, Figure 5 and Table 4 were presented to the New Jersey County Planner’s Association (NJCPA) during its September 2024 meeting, and all county planners were contacted by email. This information has been reviewed by all counties in New Jersey except Camden, Essex, and Middlesex. Feedback from NJCPA members indicated that some counties consider funding for municipal and nonprofit projects on an informal case-by-case basis, even if there is no formal application process. In FY 23, OSTF revenues in counties that permitted trail development totaled \$343,964,838 – this is a significant pool of money that could accelerate the development of small-scale trails and shared-use paths which benefit local communities.

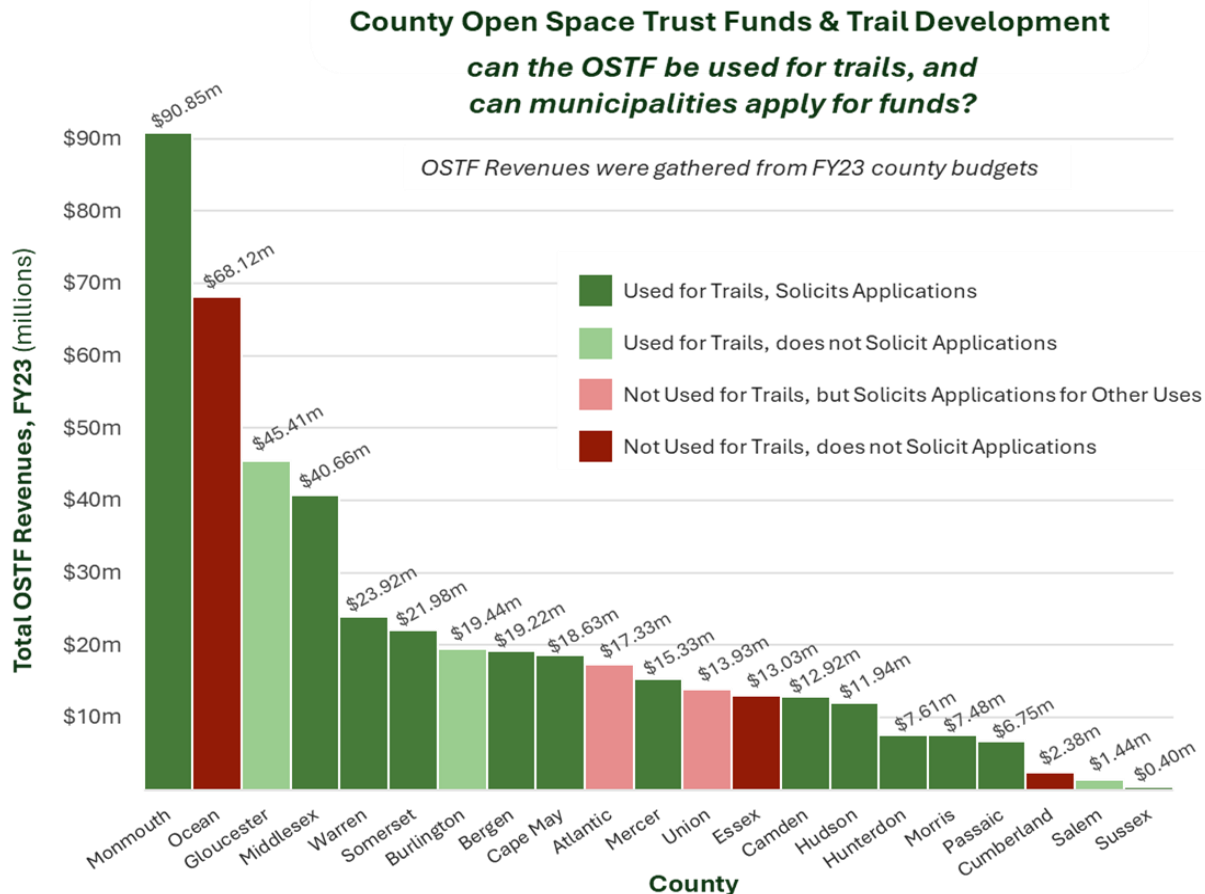


Figure 5: Total FY23 OSTF Revenues by County

County Planner Feedback on Trail Development Processes

For the May 2024 NJ County Planners Association meeting, New Jersey Future (NJF) and Rutgers-VTC developed a discussion guide for funding on- and off-road shared use paths in New Jersey. NJF facilitated a discussion with the county planners present at the May meeting. During the September 2024 meeting, Rutgers-VTC presented progress on this report and provided handouts to county planners with information on the above figures. A brief Q&A and discussion session followed. Themes from both are summarized briefly below.

County planners identified **staffing capacity** as a significant barrier to identifying funding opportunities. Many counties do not have adequate staff to identify or administer grants, particularly federal ones, or to do the necessary project management they require.

Resource availability was another barrier - because many grants require “shovel-ready” projects, local governments must complete initial planning and feasibility work with their own resources. This is particularly significant for municipalities with fewer planning resources and less capacity, and emphasizes the funding gap for planning work across federal and state programs.

Many planners identified expanded **technical assistance programs** as a potential solution for these issues, both to help municipalities identify potential grant opportunities and assist with preliminary planning activities and grant administration.

Additionally, several planners noted that **permitting requirements and regulations differ** between NJDOT and NJDEP. This forces county planners to navigate two complex permitting processes in order to implement trail projects and serves as an additional barrier. Many planners expressed the potential of having a centralized office or contact to support active transportation infrastructure projects that is created jointly by NJDOT and NJDEP.

Per Capita OSTF Revenues for Counties that use OSTF Funds for Trail Development

County	2023 Population	FY23 Total OSTF Revenue	Per Capita Revenue
Warren	111,252	\$23,917,231	\$215
Cape May	94,610	\$18,630,022	\$197
Gloucester	308,423	\$45,408,714	\$147
Monmouth	642,799	\$90,848,917	\$141
Somerset	348,842	\$21,976,322	\$63
Hunterdon	130,183	\$7,612,200	\$58
Middlesex	863,623	\$40,657,459	\$47
Burlington	469,167	\$19,438,139	\$41
Mercer	381,671	\$15,333,000	\$40
Camden	527,196	\$12,917,130	\$25
Salem	65,338	\$1,441,342	\$22
Bergen	957,736	\$19,219,286	\$20
Hudson	705,472	\$11,942,405	\$17
Morris	514,423	\$7,481,194	\$15
Passaic	513,395	\$6,746,477	\$13
Sussex	146,132	\$395,000	\$3

Total: \$343,964,838

PART 3: BEST PRACTICES FROM NEIGHBORING STATES

In order to identify best practices for trail development in neighboring states, online interviews were conducted with subject matter experts in Pennsylvania, Delaware, and New York. These states were chosen both because they are neighboring states to New Jersey and because of their effectiveness in trail funding and implementation. Following an approved Rutgers Institutional Review Board protocol, Rutgers-VTC designed interview questions in partnership with New Jersey Future to analyze what processes work well in each state and assess where obstacles, bottlenecks, and missed opportunities occur regarding identifying and implementing funding for trail development projects. The goal of the interviews was to identify strategies to improve the trail development process in New Jersey. A full list of interview questions can be found in Appendix C, and responses are summarized below.

It is important to note that representatives from each state differed in their position and the agency they represented. While additional research was conducted to verify and expand on the information provided, the interviews themselves presented a specific perspective on trail development in each state. As such, there may be aspects of funding mechanisms, planning work, grant administration, and collaboration present in these states that were not brought up in interviews. They are not meant as a comprehensive review of each state's trail development work nor as a comparison of quality for any aspect of trail development. Rather, they serve as an overview of processes and effective practices from each state, with the goal of identifying opportunities to accelerate trail development in New Jersey. The interviewees represented:

- **New York's** Office of Parks, Recreation, and Historic Preservation (OPRHP), Planning Bureau
- **Pennsylvania's** Department of Transportation (PennDOT), Multimodal Transportation Program
- **Delaware's** Department of Transportation (DelDOT), Division of Planning

As in New Jersey, neighboring states conduct planning and development efforts for all types of trails: paved, unpaved, shared use, recreational only, or specialized use. The focus of these interviews is on **trails and shared use paths which serve a transportation purpose**. Neighboring state agencies use different terms for shared use paths. New York's OPRHP, for example, uses the term "greenway trails" to refer to shared use paths with a transportation utility that accompany greenway corridors – the planned shared use path along the Essex Hudson Greenway in New Jersey would fall under this definition. All terms used below – trails, greenway trails, and multi-use paths – refer back to the definition of shared use paths outlined in this report: those that accommodate the needs of most users for walking and biking and provide transportation options.

LESSONS LEARNED FROM SUBJECT MATTER EXPERT INTERVIEWS

Trail Planning and Development

In **New York**, greenway trail development occurs collaboratively through many state agencies. The Office of Parks, Recreation, and Historic Preservation (OPRHP) serves as the statewide trail coordinating agency and plays a key role in trail planning across New York. In 2021, OPRHP published the [Statewide Greenway Trails Plan](#) with contributions from the NY State Departments of Transportation, Environmental Conservation, and Health, as well as the Empire State Development Corporation. The Statewide Greenway Trails Plan includes a public survey developed alongside [Parks & Trails New York](#) (a statewide advocacy group), seven key goals for the future of greenway trail networks in New York, an inventory of the existing network, an overview of trail benefits and current trends and issues in greenway trail development, an overview of funding opportunities, and a plan for implementation.

The New York State Assembly [enacted legislation](#) in 2019, signed by the Governor in the same year, authorizing OPRHP to complete the Greenway Trails Plan in consultation with the Departments of Environmental Conservation, Health, and Transportation. with a specific focus on non-motorized, multi-use trails and to update the plan every 5 years.³⁴ As a part of this effort, OPRHP issues annual [progress reports](#) on the implementation of the plan and holds quarterly meetings with [stakeholders](#) to monitor progress. The OPRHP also published a statewide [Grassroots Guide to Developing Greenway Trails](#) in 2021 to help local advocates navigate development opportunities outlined in the Statewide Greenway Trails Plan. In addition to statewide planning, OPRHP provides consultation and feedback to regions working on individual trail plans.

Importantly, New York established the [Hudson River Valley Greenway](#) as a state agency in 1991 dedicated to the goal of establishing a network of multi-use trails along the Hudson River, encouraging economic development in communities along the greenway, and preserving natural, cultural, and historic resources. The Hudson Greenway connects to the [Empire](#)

Virginia's State Trails Office

In 2022, the Virginia General Assembly allocated \$89 million to establish a [State Trails Office](#) under the Virginia Department of Transportation. The State Trails Office is responsible for developing a Statewide Trails Plan and a Multi-Use Trail Design Guide, as well as coordinating efforts to prioritize the completion and connection of five key trails in the state. The State Trails Office focuses on multi-use trails, which are defined as **Multimodal, Safe, Accessible, and Regionally Connected**. The statewide plan will:

- Inventory existing & planned multi-use trails
- Identify key gaps in VA's trail network
- Outline next steps and best practices in trail development
- Provide opportunities for community visioning and engagement
- Include public engagement (surveys, town halls, and focus groups)

Funding: The 2022 state budget directed the VA Office of Intermodal Planning and Investment to develop recommendations for trails master planning. After a [2022 Report](#), the VA State Trails Office was established using \$41.5 million from the state's [general fund](#) for the first year, with specific amounts allocated to five key trails. The state also allocated an additional \$14 million over two years to the Trails Office as a set-aside from funds received through the federal Transportation Alternatives Program.

[State Trail](#), a 750-mile trail network that connects bikers, walkers, and hikers from NYC, Buffalo, and the Adirondacks. The OPRHP works to facilitate connections between existing and proposed active transportation projects and maintains a [GIS Map](#) of existing and planned greenway trails and their connection to the Empire State Trail, NY State Bike Routes, and potential trail corridors. The [New York State Trails Council](#) is the Advisory Committee fulfilling the federal Recreational Trails Program (RTP) requirement for an advisory committee, but performs work beyond this requirement such as trail advocacy, coordination, and public education.

In **Pennsylvania**, shared use path planning and implementation is the result of active coordination between state agencies, regional districts, and local municipalities. The Pennsylvania Department of Conservation and Natural Resources (DCNR) published a [Land and Water Trail Network Strategic Plan](#) in 2020 as a companion document to their [Statewide Comprehensive Outdoor Recreation Plan](#). The Trail Network Strategic Plan involved contributions from many state agencies, including PennDOT, the Department of Community and Economic Development, the Department of Health, and the [Keystone Trails Association](#), an advocacy organization. Similar to New York's, PA's Trail Network Strategic Plan identifies seven goals and includes an implementation matrix identifying strategies and partners for actions steps in pursuit of each goal. The DCNR also appoints members to the [Pennsylvania Trails Advisory Committee](#), which fulfills the RTP Advisory Committee requirements and advises the commonwealth on the use of state and federal trail funding.

Other state agencies in PA are also developing active transportation infrastructure projects. PennDOT's 11 districts have regional bicycle and pedestrian coordinators with specific focus areas, some of whom work with municipalities to update bicycle & pedestrian plans and scope projects. The state's [WalkWorks](#) program, which is run by the Department of Health with support from the DCNR, is a critical resource for municipalities in crafting active transportation plans and prioritizing related projects.

Delaware's development of shared use paths is highly focused on the expansion of their active transportation network. DelDOT's [Active Transportation and Community Connections](#) program (ATCC), situated within the Planning Division, administers both state and federal programs focused on active transportation: Transportation Alternatives (federal), Pedestrian Access Routes (state), and Safe Routes to School (federal), among others. Additionally, ATCC facilitates about 95% of the bicycle and pedestrian projects introduced by DelDOT, and coordinates regularly with the [Delaware Bike Council](#) and the [Delaware Pedestrian Council](#), two advisory committees made up of representatives from state agencies as well as citizens.

Distinct from other neighboring states, Delaware does not have a Statewide Trails Plan. Still, active transportation projects and networks are a priority for the state: DelDOT is in the process of developing a [Pedestrian Action Plan](#) aligned with the Safe System Approach towards zero deaths, and their 2018 [Bike Plan](#) identifies routes of statewide importance for active transportation by focusing on routes that reduce the Level of Traffic Stress (LTS) for cyclists. LTS analysis uses roadway factors such as traffic speed and volume, number of lanes, and presence and quality of bicycle infrastructure to rate roadway segments on a scale of 1-4 with 1 representing low-stress roadways suitable for bicyclists of most ages and abilities and 4 representing high-stress areas where most bicyclists would choose not to ride.* Active transportation projects in Delaware are prioritized based on their ability to provide low-stress access for the greatest number of people to essential destinations, which are scored equally and broken down into 5 categories: schools, community centers, jobs, transit, and existing parks and trails.³⁵ Projects will score well under this framework if they connect people to these destinations, provide separation from vehicular traffic, and convert high-stress routes into low-stress routes. To this end, DelDOT

* NJTPA and DVRPC have conducted LTS analyses and created LTS maps for New Jersey – these can be found in Appendix E.

developed a [map](#) displaying the Bicycle Level of Traffic Stress (LTS) on Delaware’s roadways and shared use paths. Intergovernmental collaboration is key in this process: Delaware’s three MPOs work with local governments to identify potential projects, and submit 3-5 priority projects to ATCC.

Funding Sources (State and Federal)

New York has a substantial amount of state funding available for trails, the most impactful of which was the state’s leadership allocating \$200 million from the executive budget to build out the Empire State Trail in 2017. The dedication of state funds to such a significant trail enabled multiple state agencies to support the work connecting already-constructed segments of the trail before ultimately passing on management to the NY Office of Parks, Recreation, & Historic Preservation (OPRHP).

Additionally, New York maintains an [Environmental Protection Fund](#) (EPF), which is financed primarily through a dedicated portion of real estate transfer taxes, and the legislature and governor negotiate the allocation of the EPF across categories such as open space, parks and recreations, and solid waste. Many state agencies administer the funds, though the bulk of the EPF is administered by Department of Environmental Conservation and by OPRHP. The EPF can be used both as programmatic funding by state agencies for state-led projects or as grant funding to local governments.

Federal funds for shared use paths in New York are administered by both OPRHP and NYSDOT. OPRHP administers the Recreational Trails Program (RTP) in New York and funded 15 projects with just under \$2.5 million in federal funds in [2023](#). NYSDOT awards federal funds for shared use paths from the Transportation Alternatives Program (TASA), the Safe Routes to School Program (SRTS), the Highway Safety Improvement Program (HSIP), and the Congestion Mitigation and Air Quality Improvement Program (CMAQ). Still, the bulk of trail planning, funding, and implementation work in New York State is performed by the OPRHP.

Pennsylvania leverages a mix of state and federal funding for shared use path development. Similar to New York, PA has several state funding sources for trail development, also overseen by different agencies: both PennDOT and the Department of Community and Economic Development (DCED) administer funding from the state’s [Multimodal Transportation Fund](#) (MTF). Pennsylvania [Act 89](#) of 2013 significantly restructured the formula for generating PennDOT’s revenue by raising taxes on gasoline distributors and increasing vehicle registration fees, established a multimodal transportation program at PennDOT, established annual funding for the MTF as a portion of new revenue. The MTF includes dedicated funding for bicycle and pedestrian improvements – in FY2023, PennDOT funded 58 projects across the state with over \$49 million in funding from the MTF.³⁶

The Department of Community and Economic Development (DCED) administers a [separate grant program](#) with funding from the MTF, which allows both public and private entities to develop, enhance, or repair transportation assets, including bicycle and pedestrian projects. Additionally, DCED administers the [Greenways, Trails, and Recreation Grant Program](#) (GTRP). The GTRP is funded through the [Marcellus Legacy Fund](#), which was established in 2012 in order to distribute gas well impact fees to counties, municipalities, and commonwealth agencies. The GTRP program funds projects of up to \$250,000 with a 15% match required.³⁷

Pennsylvania’s Department of Conservation and Natural Resources (DCNR) administers the bulk of the state’s [Keystone Fund](#), which allocates 15% of the state’s realty transfer tax as a dedicated funding source for recreation, conservation, libraries, and historical initiatives. DCNR receives 65% of Keystone Funds, and is permitted to direct 10% of their apportionment to rails-to-trails projects – Pennsylvania’s [Pine Creek Rail Trail](#) was developed using Keystone Funds.

Federal funds for shared use paths in Pennsylvania are administered by both the DCNR and PennDOT. DCNR administers Recreational Trails Program (RTP) and PennDOT relies heavily on Transportation Alternatives (TASA) funding for bicycle and pedestrian projects, though it also distributes funds from Safe Routes to School (SRTS) and the Highway Safety Improvement Program (HSIP). A comprehensive list of funding sources for bicycle and pedestrian projects in Pennsylvania can be found in Appendix D of this report.

Delaware furthers active transportation projects primarily through federal funds. DelDOT administers many federal grant programs, including CMAQ, HSIP, and RAISE, as well as TASA and SRTS through their Active Transportation and Community Connections (ATCC) office. DelDOT receives around \$7-10 million annually from CMAQ, which is programmed into the bike-pedestrian project pool fund. Federal funds also support larger projects through programs like Rebuilding American Infrastructure with Sustainability and Equity (RAISE), which has helped expedite major trail projects in Delaware, such as the \$21 million project connecting [Lewes to Georgetown](#).

The Department of Natural Resources and Environmental Control (DNREC) is the principal state agency responsible for administering the federal Recreational Trails Program (RTP) as well as Delaware's [Outdoor Recreation, Parks, and Trails Program](#) (ORPT), which is funded through the [Delaware Land and Water Conservation Trust Fund](#). Delaware's Trust Fund functions similarly to other states and raises funds from real estate transfer taxes. OPRT offers a dedicated grant to municipalities for trail projects, and permits pre-construction activities such as planning, design, and engineering. OPRT requires a 50% match from municipalities, but reduces the match requirement to 25% for projects located in census tracts which score high on the Center for Disease [Control's Social Vulnerability Index](#) – this enables underserved communities to secure a higher level of funding for trail projects.

Coordination, Grant Administration, and Technical Assistance

New York manages grant applications for state funding primarily through its [Consolidated Funding Application](#) (CFA), which is managed by the state's [Regional Economic Development Councils](#). The CFA allows applicants to apply for different pools of funding through one application and permits a broader scope of projects – for example, a complete streets initiative that also addresses downtown revitalization. Around 70% of the funds available through the CFA come from the state, with the Recreational Trails Program being one of the exceptions. The state summarizes all of the awards granted through the CFA in an annual report – in a typical year, 1 in 20 of these projects are trail-related.³⁸

Though New York's approach to supporting local governments after grants are awarded is more decentralized, The Regional Economic Development Councils provide manuals, guidebooks, and information sessions to local governments for navigating the CFA. Furthermore, the NY Office of Parks, Recreation, and Historic Preservation (OPRHP) holds an annual information session on RTP funding and offers assistance through regional grant administrators, who assist applicants in identifying funding sources and meeting grant requirements. Though these administrators are not involved in implementation, they are an important guiding resource for municipalities.

In **Pennsylvania**, PennDOT uses a structured, many-layered approach in supporting municipalities in implementing active transportation projects. District-level bicycle & pedestrian coordinators work with municipalities to identify available grants and develop active transportation plans.

Additionally, PennDOT offers workshops to guide municipalities through grant opportunities and compliance requirements, and published a [Municipal Grant Guide](#) for local government applicants looking to access IJA

funds. Preapplication conferences between the applicant, the district coordinators, and the MPO/RPO are required for some federal grants, and PennDOT supports pre-construction technical assistance for local governments through the [PennDOT Connects](#) program. Through the program, PennDOT connects DOT staff, planning partners, and local governments for collaboration before project scopes are developed to ensure that local needs are identified early in the process and that projects are considered holistically. PennDOT Connects provides no-cost assistance to municipalities through virtual or on-site workshops, outreach sessions, summaries of best practices, and online trainings.

Delaware's relatively small size enables a high level of collaboration between DelDOT and local governments. DelDOT plays a more centralized role in planning, overseeing the design and construction of projects in partnership with MPOs and local municipalities. DelDOT assigns consulting and engineering teams to municipalities and counties to alleviate the burden of federal grant administration. When a municipality or county is selected for a state or federal grant, they are assigned an on-call DelDOT consultant who will oversee grant administration and assist with implementation.³⁹ This process allows smaller and lower-income municipalities that would otherwise be unable to access federal dollars without this direct assistance to leverage higher-dollar federal grants to implement meaningful active transportation projects in their communities. The process has also sped up grant delivery: federal grants are typically fully implemented, from award to construction to closeout, within 3-5 years.

Equity Considerations

New York's Consolidated Funding Application process has introduced challenges in ensuring equity in greenway trail funding distribution. While the Regional Economic Development Councils (REDCs) help guide municipalities through the application process, projects tend to be concentrated in areas with more capacity to apply for grants, potentially leaving underserved regions at a disadvantage. To combat this, the REDCs work to identify trail projects based on their location as a method to ensure they are not overly concentrated in highly resourced areas.

Pennsylvania faces challenges in addressing the disparity in grant application quality between more- and less-resourced municipalities, especially considering the limited availability of funding relative to the number of requests. While PennDOT's role in managing TASA and other funds is significant, municipalities with fewer resources often struggle to submit high-quality applications. To address this, the state has increased scoring incentives for Environmental Justice (EJ) communities, especially within the WalkWorks program, which prioritizes active transportation plans in underserved regions. However, while these communities benefit from higher scores in grant applications, they do not receive additional financial support, highlighting an ongoing challenge in achieving equitable distribution of resources.

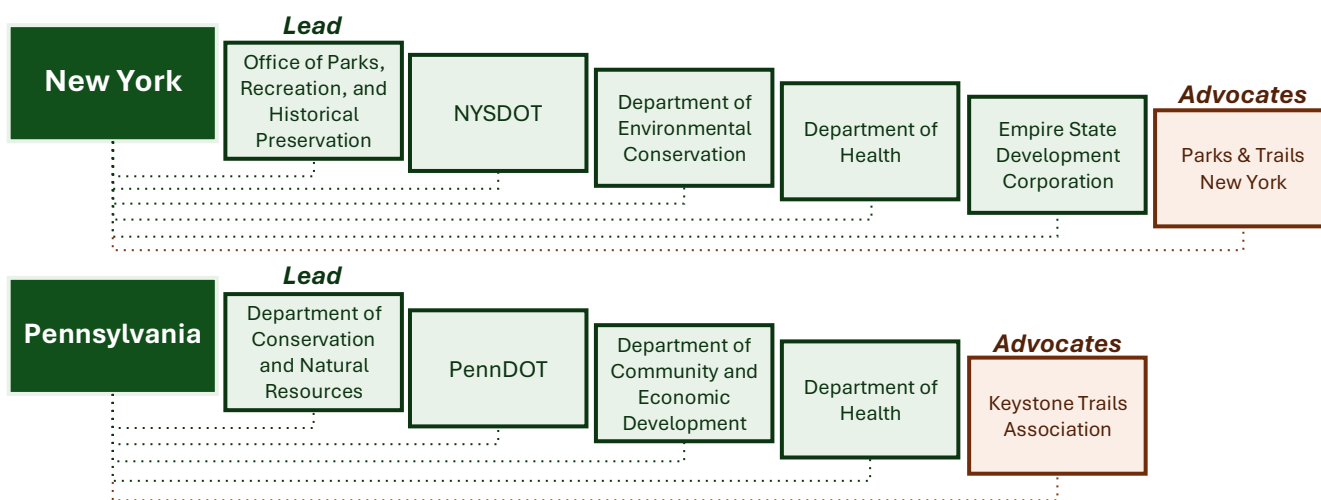
Delaware has faced similar challenges in ensuring that trail projects are distributed equitably across the state, particularly given that most funding for active transportation in Delaware comes from federal sources. State programs such as the Outdoor Recreation Parks and Trails Grants Program target under resourced communities by adjusting the match rate for projects within these communities.

PART 4: LESSONS FOR NEW JERSEY

Key Takeaways for New Jersey from Neighboring States:

> Trail Development is a State-Led, Interagency Effort that Works Toward Many Goals

Neighboring states highlight the importance of aligning trail projects with broader state goals and accelerating trail development with inter-agency collaboration. Shared use paths, particularly where they form usable networks at both large and small scales, are seen as a means to advance community and economic development, mobility, safety, recreation, transportation, and sustainability goals. In practice, this means that **trail networks are the result of collaboration among many state agencies** beyond Departments of Transportation and Departments of Environmental Conservation/Parks and Recreation. In New York and Pennsylvania, strategic statewide trails plans were developed by the following state agencies and advocacy organizations:*



Strategic trail planning documents are the product of leadership from several agencies, but there is clear authority for trail planning and implementation. New York's **state leadership was essential** in establishing the Empire State Trail, and this has allowed OPRHP and other state agencies to build on this progress with trail connections. In Pennsylvania, trail planning is primarily conducted by the DCNR, but **PennDOT is active in supporting these efforts** with substantial multimodal transportation planning. By coordinating efforts, neighboring states are able to leverage trail development to meet statewide goals across many state agencies.

All three states emphasize the role of trails in boosting local economies by improving access to jobs, schools, and businesses. **Delaware focuses on creating low-stress bike networks** that connect communities, thus enhancing livability and attracting residents and tourists alike. Pennsylvania's WalkWorks program leverages shared use paths and active transportation projects as **improvements to the local health, economy, and environment**. By leveraging trail networks as a strategy to support many state goals, neighboring states increase opportunities for interagency collaboration and support.

* Additional agencies and organizations not included here also contributed to these plans; refer to plans for a full list.

> **State Funding is Leveraged to Build Trail Networks**

Many neighboring states dedicate significant state funding to shared use path development. New York allocated **\$200 million from the executive budget** to build out the Empire State Trail, and conducts significant trail development work using the State's Environmental Protection Fund. Pennsylvania dedicates state funding for trail development and active transportation infrastructure through **many programs**: the Keystone Fund, the Multimodal Transportation Fund, and the Greenways, Trails, and Recreation Grant Program, all of which are administered by Departments of Transportation, Conservation, and Economic Development. Expanded state funding for trail networks in these states allows for greater collaboration between state agencies and local governments, and provides simpler access to trail development funds for applicants. In Pennsylvania, this is accomplished by dedicating 5% of state TASA funds to technical assistance.

State funding could also be used to develop a **comprehensive trails and/or active transportation office**, as seen in Virginia which allocated \$89 million out of the state budget for this purpose. The office identifies priority projects for expanding the state's trail network and coordinates with both state agencies and local governments.

> **Coordination with Local Governments and Technical Assistance is Key**

Pennsylvania and Delaware exemplify the importance of close collaboration between state agencies and local governments. **Regional bicycle and pedestrian coordinators** in PA work with municipalities to identify priority projects, and PennDOT's pre-application support helps local governments navigate complex processes. DelDOT's **close coordination with MPOs and local governments** ensure that each trail project works toward a larger network, and the consolidation of many programs through their Active Transportation and Community Connections Team provides applicants with a **consolidated office** for information and support on active transportation projects.

These states also offer significant support for the planning, design, and engineering phases of trail projects through technical assistance programs. DelDOT addresses this by **providing consultant support** to municipalities who receive federal funds, and PennDOT offers comprehensive guides and trainings to municipalities through their PennDOT Connects program. In these states, hands-on support throughout the project lifecycle from identifying trail projects to administering grants is crucial for **ensuring successful and timely project implementation**.

All three states work to make both state and federal funding sources easily accessible for applicants. New York provides **streamlined access to many funding sources** with their Consolidated Funding Application, which allows applicants to apply for different pools of funding with one application. PennDOT's Municipal Grant Guide provides information on IJA funding programs, and their PennDOT Connects program is active in **providing pre-application assistance** to project sponsors. These efforts have the combined effect of expanding access to funding for less-resources municipalities, and help to ensure that statewide networks are **equitably built**.

Significant Active Transportation Initiatives in New Jersey

As noted, many state agencies in New Jersey already utilize many of the approaches seen in other states, and are actively working toward improving their trail development processes:

State Agency Coordination:

- > NJDOT and NJDEP **coordinated on the statewide Trails & Greenways Summit** in 2021, and both agencies are currently in the process of updating statewide trail planning documents. As a part of this effort, NJDEP & NJDOT administered a joint survey designed for trail planners and managers with the goal of providing guidebooks to assist trail development in the state. This collaboration is a significant step in building connected trail networks in New Jersey.
- > Many projects of regional and statewide significance already exist or are being planned in New Jersey: the Middlesex Greenway, the Essex Hudson Greenway, and the Circuit Trails, among many others. These large-scale networks have the potential to provide many communities across the state with improved access to greenspace and expanded mobility options. They are also a useful planning tool in prioritizing proposed shared use path segments that would connect to the larger statewide network.

State Funding:

- > Many state-funded programs in New Jersey such as the Green Acres Program and Bikeways, among others, prioritize projects located in historically underserved communities by reducing the required matching share for local governments.
- > NJDOT uses toll dollars to cover the local matching share of federal funding programs.

Planning Support and Technical Assistance:

- > NJDOT provides regional coordinators through its [Safe Routes to School](#) program, which offers an excellent model for how regional bicycle and pedestrian coordinators many function in the state.
- > Municipalities and counties can access no-cost technical and design assistance for active transportation projects through NJDOT's [Bicycle and Pedestrian Planning Assistance Program](#) and [TASA Design Assistance Program](#), which retain the services of pre-qualified, on-call consultants with expertise in bicycle and pedestrian planning. Though these services are limited in scale, they provide a starting point from which state agencies can build out these programs.
- > New Jersey's MPOs – the NJTPA, DVRPC, and SJTPO – conduct many regional trail planning efforts, and offer substantial support and funding for active transportation and trail projects.
- > New Jersey prioritizes underserved communities in their selection criteria for many state and federal programs, improving the ability of less-resourced municipalities to access funds.

OPPORTUNITIES FOR IMPROVING TRAIL DEVELOPMENT IN NEW JERSEY

New Jersey is making progress on trail and shared use path development. At the same time, opportunities exist to accelerate and improve its shared use path networks to better serve residents of the state. Incorporating best practices seen in other states and applying them in the context of New Jersey's current processes could go a long way in ensuring that shared use paths and trails in New Jersey are funded adequately, implemented equitably, and further statewide recreational, economic, safety, environmental, health, and transportation goals. Specific recommendations for New Jersey's trail development processes are below:

Coordinate Efforts between Multiple State Agencies on Strategic Plans

Networks of shared use paths are strengthened when they are developed through the **collaboration of many state agencies**, beyond NJDOT and NJDEP. New Jersey could strengthen upcoming strategic plans with enhanced coordination with the Department of Community Affairs, the Department of Health, the Economic Development Authority, and the Division of Travel and Tourism. Doing so would position trail networks not just as means to improve recreation and transportation, but also **to meet statewide community and economic development, safety, and health goals**.

To further coordinate efforts, NJDOT could **prioritize shared use path development** in its upcoming [2050 Long Range Transportation Plan](#) to allocate formula funding for trails projects. There is also an opportunity to prioritize shared use path development within the NJDOT's Bicycle & Pedestrian Master Plan, which is in the early stages of being updated from the [2016 plan](#). While representatives from NJDOT currently serve on the [New Jersey Trails Program Council](#), there is an opportunity to include representatives from other state agencies as well as advocates.

Upcoming plans including on active transportation should be strategic in their approach, including key elements:

- > **Goals** of the network and **principles** guiding the plan,
- > **Public input** on priority projects and needs,
- > An **inventory** of existing trails and shared use paths, along with planned segments and potential future connections, which displays a vision for a comprehensive network by identifying statewide trails, regional networks (such as the Circuit Trails), and county and municipal shared use paths and connectors.
- > Benchmarks for success, tracked through **progress reports** and periodic **meetings with stakeholders and advocates**,
- > Regular **updates** to the plan which keep guidance current,
- > **Resources** for trail planners, including **potential funding sources** and **technical assistance**, and
- > **Implementation plans**, identifying project partners and timelines for improvements.

Consider Expanding State Funding for Trails

Though New Jersey dedicates state funding to trails, there is opportunity to **increase this commitment** and **improve upon existing programs**. Allocation of funds from the state budget specifically for trail network development could both improve interagency coordination and improve local government access to federal active transportation funding. In neighboring states, a significant amount of state funds are dedicated to shared use paths through active transportation programs. The impact of state funding could be strengthened by allowing agencies and local governments to use it to plan and scope trail projects, as this phase of trail development is often left up to local governments who may not have the resources to conduct planning efforts effectively.

Explore Options for Increasing Technical and Planning Assistance for Local Governments

Dedicating state funding toward the development of a comprehensive **trails office** or **active transportation resource center** as an independent office or housed within NJDOT or NJDEP could significantly improve coordination and the alignment of state plans, a priority identified by the New Jersey State Development and Redevelopment Plan. A state office or resource center that helps project sponsors **identify funding sources** and **offers technical assistance** with design, implementation, and maintenance could accelerate trail development in the state.

Based on best practices from neighboring states, **useful features** of such a resource center could include:

- > **Identification of funding sources** for trails and shared use paths (including bicycle and pedestrian project funding) from multiple state agencies, federal programs, and local sources.
- > Planning, design, construction, implementation, maintenance, and grant management **technical assistance and training**.
- > **Opportunities to contact and work** with state agency staff and policymakers via a help desk.
- > Resources for grant applicants such as **trainings and templates** for grants and project budgets.
- > A comprehensive list of trails in New Jersey, including **potential, proposed, and ongoing projects**.
- > **Research efforts** to identify best practices, case studies, and improve grant management.

A specific action that could be taken to support this effort is **hosting another Trails & Greenways Summit** with an emphasis on identifying needs from local governments to more effectively implement trail projects. The 2021 Trails & Greenways Summit focused on providing information to advocates and local governments on current funding sources, and included opportunities for participants to submit questions on trail development. The most submitted questions at the Summit concerned knowledge on funding sources for trails, accessing design, construction, and/or repair expertise, working with policymakers, and accessing a comprehensive list of ongoing trail projects.⁴⁰ The frequency of these questions from those looking to develop trails indicate that while these resources may be available, they are not easily accessible in a consolidated location, highlighting the need for a comprehensive resource center for local governments.

Regional approaches to coordination and support for local governments is a key best practice seen in other states. New Jersey's MPOs already play a significant role in trail planning and development, but state support in coordinating their efforts and increasing funds for technical assistance throughout all phases of trail implementation could greatly expand the trail network in the state. **Hands-on support throughout the trail project lifecycle is crucial for ensuring successful and timely project implementation.** Improving access to funding for local governments and continuing to prioritize underserved communities through these programs can also help ensure that statewide networks are **equitably built**.

New Jersey can benefit from adopting these practices to expand and enhance trail development processes, ensuring that trails serve not just recreational purposes, but also safety, economic, environmental, and transportation goals. By improving the effectiveness of funding mechanisms and technical assistance programs, the state can foster a more accessible, safe, and connected trail network that benefits all residents of New Jersey.

GLOSSARY OF TERMS

Acronym	Meaning
ATCC	DelDOT's Active Transportation and Community Connections
ATIIP	Active Transportation Infrastructure Investment Program
CFA	New York's Consolidated Funding Application
CMAQ	Congestion Mitigation and Air Quality Program
CRP	Carbon Reduction Program
DCNR	Pennsylvania Department of Conservation and Natural Resources
DelDOT	Delaware Department of Transportation
DVRPC	Delaware Valley Regional Planning Commission
EJ	Environmental Justice, often Environmental Justice Communities
FHWA	Federal Highway Administration
HSIP	Highway Safety Improvement Program
LPA	Local Public Agency or Authority
LTAP	Local Technical Assistance Program
LTS	Level of Traffic Stress
MPO	Metropolitan Planning Organization
MTF	Pennsylvania's Multimodal Transportation Fund
NAE	Neighborhood Access and Equity Grant Program
NJCF	New Jersey Conservation Foundation
NJDEP	New Jersey Department of Environmental Protection
NJDOT	New Jersey Department of Transportation
NJTPA	North Jersey Transportation Planning Authority
NYS DOT	New York State Department of Transportation
OPRHP	New York Office of Parks, Recreation, and Historical Preservation
OSTF	Open Space Trust Fund
PennDOT	Pennsylvania Department of Transportation
PROTECT	Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation
RAISE	Rebuilding American Infrastructure with Sustainability and Equity
RCP	Reconnecting Communities Pilot Program
REDC	New York's Regional Economic Development Councils
RTP	Regional Trails Program
SCORP	Statewide Comprehensive Outdoor Recreation Program
SJTPO	South Jersey Transportation Planning Organization
SRTS	Safe Routes to School
SS4A	Safe Streets and Roads for All
TASA	Transportation Alternatives Set-Aside Program
TCP	Thriving Communities Program
USDOT	United States Department of Transportation

APPENDICES

The following items are referenced in the report and can be found in the attached Appendices:

- A. New Jersey County Planner Association Documents: Discussion Guide (May 2024 Meeting) and Meeting Handout (September 2024 Meeting)
- B. List of Municipal Open Space Trust Funds
- C. Neighboring State Interviews: Full List of Questions
- D. PennDOT Table of State and Federal Funding for Active Transportation (edited by Stephanie Brody)
- E. New Jersey Level of Traffic Stress Mapping Resources
- F. Additional Resources for Shared Use Path Planning & Implementation

APPENDIX A.

NEW JERSEY COUNTY PLANNER'S ASSOCIATION DISCUSSION GUIDES

County Trail Development and Funding

May 17th, 2024

Meeting Goals: To discuss county support for trail and greenway funding and county-level Open Space Trust Funds used for trail development.

Trails are often separated, mostly off-road facilities that are used for transportation, recreation, and/or conservation. In NJ, on-road connections between off-road segments are often necessary because of gaps in the alignment.

Shared use paths used for transportation have firm surfaces to accommodate users of all ages and abilities. Firm surfaces are good for wheeled transport, such as bicycles, skateboards, wheelchairs, and strollers, and are accessible to people with disabilities. Natural surface trails are more often used for recreation.

Trail users include people on foot, bicycle, wheelchair, other wheeled devices, off-road vehicles, and equestrian use. Many trails limit travel modes or are built for one specific user (e.g., hiking, or off-road vehicle only trails).

Building Trails, Including On- and Off-road Facilities

1. In your county, do you have staff or consultants that support development of trails?
 - a. If yes, which department(s)
 - b. Are they experts specifically in planning, designing, and building trails?
 - i. If consultant, can you provide contacts?
2. Does your county provide any support or resources to municipalities pursuing trail development? (e.g. coordinating with neighboring governments on regional networks, developing county trails master plan, complying with regulations and permitting, ROW and property acquisition, negotiating with utilities and railroads, GIS/CAD mapping, etc.)
3. Does your county provide any support for trails along or crossing county facilities?
4. All counties have some level of Open Space Trust Funds, which counties include trail development as an allowable expense?

Questions for Counties that Do Not Use Open Space Trust Funds for Trails

5. For counties that do not use Open Space Trust Funds for trail development,
 - a. Does your county use other funds to develop trails?
 - i. If so, which types of funds (state, federal)
 - b. Is funding for trails an issue that has come up in the past? By whom? (voters, municipal officials, advocates, County Commissioners, etc.)
 - c. Is trails development something your county might be interested in funding in the future? Why or why not?

Questions for Counties where Trail Development can be funded through Open Space Trust Funds

6. For counties that include trail development as an allowable expense:
 - a. Was that always the case from the start of the first voter-approved Open Space Trust Fund? Did voters approve funding trail development later?
 - b. Does the county implement funds or does your county run a competitive grant program?
 - c. Does your county use other funds to develop trails?
 - i. If so, which types of funds (state, federal)

7. If your county solicits requests for proposals (competitive program):
 - a. Who is eligible to apply?
 - b. What can municipalities (or other eligible applicants) apply for?
 1. Infrastructure?
 2. Design?
 3. Planning?
 - c. How often do you have RFPs?
 - d. How much funding is typically available?
 - e. Do most or all municipalities (or other eligible applicants) within your county apply?
8. Do you require any public engagement?
9. What are some common challenges grant applicants or recipients face? Does your county provide support and/or training throughout the grant process?
10. Are there concerns about spending funds?
 - a. If so, what?

General Trail Funding Questions

11. Are there any obstacles, bottlenecks, or missed opportunities that commonly occur when developing trails?
 - a. If so, what?
12. Are you aware of examples that successfully combines, extends, or phases county funds with state or federal funds for trail projects?
 - a. If so, can you share projects and which funds paid for which pieces of the trail project?
13. What does your county need to support more trail projects?
14. Is there anything related to the grant process for trail projects we didn't discuss today that you feel is important to mention?
15. For counties that support trail development, who would be the best person to contact with follow up questions?

New Jersey County Planner's Association Meeting Handout County Open Space Trust Funds (OSTF) and Their Application in Trail Development September 20th, 2024

The following information was presented to NJ County Planners at the NJCPA's September 2024 meeting. A presentation on this report was given and handouts were circulated to ensure accuracy of the information regarding county OSTFs.

County-Level Open Space Trust Funds and their use in Local Trail Development

The Voorhees Transportation Center (Rutgers-VTC) is working with New Jersey Future to research local, county, state, and federal trail and active transportation funding in New Jersey. As a part of this effort, research was conducted into county-level Open Space Trust Funds (OSTFs) and their use in trail development. Table 1 was created to gain a more complete picture of OSTF programs across NJ's 21 counties. The focus is to assess whether a county uses OSTF funds to develop trails or shared use paths and whether they solicit applications from municipalities or nonprofits for trail projects that use these funds. Information was gathered from public county websites. The table has been edited based on feedback from the NJ County Planners Association's May 2024 meeting. This chart will appear in the final report, please review the information to ensure it is accurate. A digital version will also be sent out by NJF.

County-Level Open Space Trust Funds and Application to Trail Development (DRAFT 9.16.24)

County	OSTF Website /Info	Parks Dept?	Does the county solicit applications?	Can the OSTF be used for Trails?	Department
Atlantic	Atlantic Website	yes	yes	no	Regional Planning & Development
Bergen	Bergen Website	yes	yes	yes	Parks, Division of Land Management
Burlington	Burlington Website	yes	no	yes	Resource Conservation
Camden	Camden Website	yes	yes	yes	Recycling & Environmental Affairs
Cape May	Cape May Website	yes	yes	yes	Planning Department
Cumberland	Cumberland Website	no	no	no	Department of Planning, Tourism, & Community Affairs
Essex	-	yes	no	no	Parks, Recreation, & Cultural Affairs
Gloucester	Gloucester Website	yes	no	yes	Land Preservation
Hudson	Hudson Website	yes	yes	yes	Division of Planning
Hunterdon	Hunterdon Website	yes	yes	yes	Planning & Land Use
Mercer	Mercer Website	yes	yes	yes	Planning, Open Space
Middlesex	Middlesex Website	yes	yes	yes	Parks & Recreation
Monmouth	Monmouth Website	yes	yes	yes	Park System
Morris	Morris Website	yes	yes	yes	Planning & Preservation, Open Space Preservation
Ocean	Ocean Website	yes	no	no	Planning, Natural Lands Trust Fund
Passaic	Passaic Website	yes	yes	yes	Open Space, Farmland, & Historic Preservation
Salem	Salem Website	no	no	yes	Planning, Open Space Advisory Council
Somerset	Somerset Website	yes	yes	yes	Planning Division
Sussex	Sussex Website	no	yes	yes	Planning & Economic Development
Union	Union Website	yes	yes	no	Board of County Commissioners
Warren	Warren Website	no	yes	yes	Land Preservation

APPENDIX B.

LIST OF NEW JERSEY MUNICIPAL OPEN SPACE TRUST FUNDS

Obtained from the Trust for Public Land's [LandVote Database](#) in April 2024

The following table was edited to include only information on municipalities maintaining Open Space Trust Funds and the county in which they are located. The LandVote database returns additional information, such as the date the measure was passed or amended, the funding mechanism for the OSTF, and its purpose (recreation, farmland preservation, watershed protection, etc). Full information for any municipality in the following table can be obtained from the database or from municipal records. There are **258 municipalities** in New Jersey with OSTFs.

County	Municipality	County	Municipality
Atlantic	Egg Harbor Township	Burlington	Eastampton Township
Atlantic	Port Republic	Burlington	Edgewater Park Township
Atlantic	Weymouth Township	Burlington	Evesham Township
Bergen	Allendale Borough	Burlington	Florence Township
Bergen	Alpine Borough	Burlington	Hainesport Township
Bergen	Carlstadt Borough	Burlington	Lumberton Township
Bergen	Closter Borough	Burlington	Medford Township
Bergen	Cresskill Borough	Burlington	Moorestown Township
Bergen	Demarest Borough	Burlington	Mount Laurel Township
Bergen	Edgewater Borough	Burlington	North Hanover Township
Bergen	Fair Lawn Borough	Burlington	Shamong Township
Bergen	Glen Rock Borough	Burlington	Southampton Township
Bergen	Hackensack	Burlington	Springfield Township
Bergen	Hillsdale Borough	Burlington	Tabernacle Township
Bergen	Mahwah Township	Burlington	Westampton
Bergen	Midland Park Borough	Burlington	Westampton Township
Bergen	Montvale Borough	Camden	Berlin Borough
Bergen	New Milford Borough	Camden	Berlin Township
Bergen	Northvale Borough	Camden	Cherry Hill Township
Bergen	Norwood Borough	Camden	Clementon Borough
Bergen	Oakland Borough	Camden	Gibbsboro Borough
Bergen	Old Tappan Borough	Camden	Gloucester Township
Bergen	Park Ridge Borough	Camden	Haddonfield Borough
Bergen	Ridgewood Village	Camden	Voorhees Township
Bergen	River Edge Borough	Cumberland	Bridgeton
Bergen	River Vale Township	Essex	Bloomfield Township
Bergen	Teaneck Township	Essex	Caldwell Borough
Bergen	Tenafly Borough	Essex	Cedar Grove Township
Bergen	Upper Saddle River Borough	Essex	East Orange
Bergen	Waldwick Borough	Essex	Essex Fells Borough
Bergen	Woodcliff Lake Borough	Essex	Fairfield Township
Bergen	Wyckoff Township	Essex	Livingston Township
Burlington	Bordentown	Essex	Maplewood Township
Burlington	Bordentown Township	Essex	Millburn Township
Burlington	Cinnaminson Township	Essex	Newark
Burlington	Delanco Township	Essex	North Caldwell Borough
Burlington	Delran Township	Essex	Roseland Borough

County	Municipality	County	Municipality
Essex	South Orange Village Township	Middlesex	South Brunswick Township
Essex	Verona Township	Middlesex	South Plainfield Borough
Essex	West Orange Township	Monmouth	Allentown Borough
Gloucester	East Greenwich Township	Monmouth	Atlantic Highlands Borough
Gloucester	Elk Township	Monmouth	Colts Neck Township
Gloucester	Harrison Township	Monmouth	Freehold Township
Gloucester	Logan Township	Monmouth	Hazlet Township
Gloucester	Mantua Township	Monmouth	Highlands Borough
Gloucester	West Deptford Township	Monmouth	Holmdel Township
Gloucester	Woolwich Township	Monmouth	Howell Township
Hudson	Hoboken	Monmouth	Keyport Borough
Hudson	Jersey City	Monmouth	Little Silver Borough
Hudson	Secaucus	Monmouth	Loch Arbor Village
Hunterdon	Alexandria Township	Monmouth	Manalapan Township
Hunterdon	Bethlehem Township	Monmouth	Manasquan Borough
Hunterdon	Califon Borough	Monmouth	Marlboro Township
Hunterdon	Clinton	Monmouth	Middletown Township
Hunterdon	Clinton Township	Monmouth	Millstone Township
Hunterdon	Delaware Township	Monmouth	Ocean Township
Hunterdon	East Amwell Township	Monmouth	Oceanport Borough
Hunterdon	Frenchtown Borough	Monmouth	Shrewsbury Borough
Hunterdon	Glen Gardner Borough	Monmouth	Spring Lake Heights Borough
Hunterdon	Kingwood Township	Monmouth	Tinton Falls Borough
Hunterdon	Lambertville	Monmouth	Upper Freehold Township
Hunterdon	Lebanon Township	Monmouth	Wall Township
Hunterdon	Raritan Township	Morris	Boonton Township
Hunterdon	Readington Township	Morris	Chatham Borough
Hunterdon	Stockton Borough	Morris	Chatham Township
Hunterdon	Tewksbury Township	Morris	Chester Borough
Hunterdon	Union Township	Morris	Chester Township
Hunterdon	West Amwell Township	Morris	Denville Township
Mercer	Hamilton Township	Morris	Hanover Township
Mercer	Hopewell Borough	Morris	Harding Township
Mercer	Hopewell Township	Morris	Jefferson Township
Mercer	Lawrence Township	Morris	Kinnelon Borough
Mercer	Pennington Borough	Morris	Lincoln Park Borough
Mercer	Princeton Borough	Morris	Long Hill Township
Mercer	Princeton Township	Morris	Madison Borough
Mercer	Robbinsville Township	Morris	Mendham Borough
Mercer	Washington Township	Morris	Mendham Township
Mercer	West Windsor Township	Morris	Mine Hill Township
Middlesex	Carteret Borough	Morris	Montville Township
Middlesex	Cranbury Township	Morris	Morris Township
Middlesex	East Brunswick Township	Morris	Mount Olive Township
Middlesex	Edison Township	Morris	Parsippany-Troy Hills Township
Middlesex	Monroe Township	Morris	Pequannock Township
Middlesex	New Brunswick	Morris	Randolph Township
Middlesex	North Brunswick Township	Morris	Riverdale Borough
Middlesex	Old Bridge Township	Morris	Rockaway Township
Middlesex	Plainsboro Township	Morris	Roxbury Township
Middlesex	Sayreville Borough	Morris	Wharton Borough

County	Municipality	County	Municipality
Ocean	Barnegat Light Borough	Somerset	Montgomery Township
Ocean	Barnegat Township	Somerset	Peapack-Gladstone Borough
Ocean	Beach Haven Borough	Somerset	Rocky Hill Borough
Ocean	Berkeley Township	Somerset	Warren Township
Ocean	Brick Township	Somerset	Watchung Borough
Ocean	Harvey Cedars	Sussex	Andover Borough
Ocean	Jackson Township	Sussex	Andover Township
Ocean	Little Egg Harbor Township	Sussex	Byram Township
Ocean	Long Beach Township	Sussex	Frankford Township
Ocean	Manchester Township	Sussex	Fredon Township
Ocean	Plumsted Township	Sussex	Green Township
Ocean	Point Pleasant Beach Borough	Sussex	Hamburg Borough
Ocean	Point Pleasant Borough	Sussex	Hampton Township
Ocean	Ship Bottom Borough	Sussex	Hopatcong Borough
Ocean	Stafford Township	Sussex	Lafayette Township
Ocean	Toms River Township	Sussex	Sparta Township
Passaic	Bloomington Borough	Sussex	Stillwater Township
Passaic	Clifton	Sussex	Vernon Township
Passaic	Little Falls Township	Sussex	Wantage Township
Passaic	Pompton Lakes Borough	Sussex	Wantage Township
Passaic	Ringwood Borough	Union	Fanwood Borough
Passaic	Wanaque Borough	Union	New Providence Borough
Passaic	Wayne Township	Union	Plainfield
Passaic	West Milford Township	Union	Scotch Plains Township
Passaic	West Paterson Borough	Warren	Allamuchy Township
Passaic	Woodland Park Borough	Warren	Alpha Borough
Salem	Alloway Township	Warren	Blairstown Township
Salem	Carney's Point Township	Warren	Franklin Township
Salem	Mannington Township	Warren	Frelinghuysen Township
Salem	Oldmans Township	Warren	Greenwich Township
Salem	Pilesgrove Township	Warren	Hardwick Township
Salem	Pittsgrove Township	Warren	Harmony Township
Salem	Upper Pittsgrove Township	Warren	Hope Township
Salem	Woodstown Borough	Warren	Independence Township
Somerset	Bedminster Township	Warren	Liberty Township
Somerset	Bernards Township	Warren	Lopatcong Township
Somerset	Bernardsville Borough	Warren	Mansfield Township
Somerset	Branchburg Township	Warren	Phillipsburg
Somerset	Bridgewater Township	Warren	Pohatcong Township
Somerset	Green Brook Township	Warren	Washington Borough
Somerset	Hillsborough	Warren	White Township

APPENDIX C.

INTERVIEW QUESTIONS FOR NEIGHBORING STATES

New York, Pennsylvania, and Delaware: State and Regional Support for Funding and Implementing Trail Infrastructure Interview Questions

Interviews with subject matter experts from neighboring states were conducted virtually in Summer 2024.

WELCOME AND INTRODUCTIONS

You are being asked to take part in research conducted by the Alan M. Voorhees Transportation Center in the Edward J. Bloustein School of Planning and Public Policy at Rutgers University. The purpose of this research is to get a better sense of the process for funding and implementing trail infrastructure in your state. By assessing best practices and challenges in facilitating both state and federal grants, our aim is to identify opportunities to improve the funding and implementation process in New Jersey.

Your participation will include one interview that will take approximately 60 minutes to complete. We will video and audio-record your participation in this research with your permission. The video and audio recordings will be used only for notetaking purposes to help document the research. If you are uncomfortable answering any question, you can skip those questions or withdraw from the study altogether. All efforts will be made to keep your responses confidential and anonymized. If a report of this study is published, or the results are presented at a professional conference, only anonymized results will be stated. There are no direct benefits to you for taking part in this research, however, you will be contributing to knowledge that will allow a better understanding of the process for funding and implementing trail infrastructure and developing knowledge regarding best practices that New Jersey should seek to incorporate.

If you have questions about taking part in this study, you can contact the Principal Investigator:

Leigh Ann Von Hagen, PP, AICP

Voorhees Transportation Center, Rutgers University

Phone: 848-932-7901

Email at srts@ejb.rutgers.edu

By beginning the interview, you acknowledge that you are 18 years of age or older and agree to take part in the research, with the knowledge that you are free to withdraw your participation without penalty.

[Interviewer: Note date, time, participant name and affiliation, and verbal consent to participate.]

Introduction

1. Can you tell us about your role within your agency?
2. How does your role relate to the administration of grants, particularly those for trails and bike/pedestrian infrastructure?
3. Where does your division fit within the overall structure of your department?

Trail Planning & Implementation Overview

1. Does your state maintain a database on the number of trail applications received, the amount of funds awarded, and types of projects that get built? (Please share a link to this if applicable.)
2. Can you provide an overview of the **regional** or **statewide** approach to trail implementation in your state?
 - a. Is there a statewide plan for a comprehensive trail network, or is it approached at the regional, county or municipal level?
 - b. Is there a single entity or organization that provides support in trail planning? Or multiple? If so, what are they?
3. What is the level of coordination among agencies existing in different departments for administering trail funding or support?

4. Can you provide an overview of the funding sources, regional, state, and federal, that support trail infrastructure projects in your region?

State Funding Opportunities

1. Are there any **state** funding opportunities for trail development (planning, design, or construction)?
 - a. Which state **department(s)** administers these grants? (DOT, Environmental/Conservation/Natural Resources, Parks & Recreation, Community & Economic Development, Tourism, etc.)
 - b. What is the **funding mechanism** for these grants?
 - c. What kinds of assistance do applicants receive for state grants, such as pre-application meetings, a “concierge approach” to identifying the most appropriate grant program, state-funded on-call consultants, or other approaches? Can state grant funds be used for project planning and feasibility efforts, or just engineering design, construction, and implementation?
 - d. Does your state have a website where potential applicants can view all of the **state-level** funding opportunities available?
 - e. Are applicants tracked on the same system?
 - f. Are applicants able to apply for several grants for the same project? If they are awarded several grants, are they permitted to use them all on the same project?
2. How is project funding managed when trails run through several jurisdictions?

Federal Funding Opportunities

1. What **federal** grants are most often used to support trail development?
 - a. Recreational Trails Program (RTP)
 - b. Transportation Alternatives Set-Aside Program (TA Set-Aside)
 - c. Safe Routes to School (SRTS)
 - d. Congestion Mitigation and Air Quality Improvement Program (CMAQ)
 - e. Highway Safety Improvement Program Funds (HSIP)
 - f. Others?
2. Do you monitor or provide support for applying for direct federal (USDOT) grants awarded in your state, and if so, what type of support? (For example)
 - a. Active Transportation Infrastructure Investment Program (ATIIP)
 - b. Safe Streets and Roads for All Program (SS4A)
 - c. Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)
 - d. Others?
3. Can you describe the process for applying for federal grant funding in general terms?
 - a. Does your agency have a comprehensive website for applicants to view grant opportunities, details, and/or eligibility requirements?
4. What are some obstacles, bottlenecks, or missed opportunities that commonly occur?
5. In administering federal grants, do you have examples of project development and implementation that highlight how federal grant funding was successfully used for infrastructure implementation?

Award & Implementation

1. Does your state have a reporting mechanism for trail/active transportation funds awarded and projects completed?
 - a. If projects that were awarded funds were not implemented or completed, what do you feel is the reason?
2. What are some common challenges grant applicants or recipients face, and does your agency provide support and/or training throughout the grant process?
 - a. Are there any common stages where assistance is requested?
 - b. What do you think your program does well and that you might recommend for New Jersey to consider? If you could implement one or two changes that would improve your program, what would they be?

Is there anything related to the grant process for trail projects we didn't discuss today that you feel is important to mention?

APPENDIX D.

PENNDOT TABLE OF STATE AND FEDERAL FUNDING SOURCES FOR BICYCLE AND PEDESTRIAN PROJECTS

PENNSYLVANIA STATE FUNDING FOR BICYCLE AND PEDESTRIAN PROJECTS		
	State Fiscal Year	State Fiscal Year
Bicycle and Pedestrian Funding	July 1 2021 - June 30	July 1 2022 - June 30 2023
PennDOT MTF Dedicated Bike/Pedestrian Funding	\$2,239,000	\$2,561,000
PennDOT MTF Competitive Statewide Program (awarded to bike/ped projects)*	\$7,000,241	\$5,472,735
PennDOT Share to Road Plate Revenue	\$2,789	\$1,570
PennDOT ARLE Funds - Bike/Pedestrian Projects	\$3,208,933	\$5,647,640
DCNR – C2P2 Trail Grants (STATE)	\$6,410,100	\$5,417,200
DCNR C2P2 funds to DOH ATP Plans	\$19,500	\$20,000
DCED MTF	\$1,219,372	\$1,214,758
DCED Greenways and Trails (GTRP)	\$907,905	\$2,376,666
	\$21,007,840	\$22,711,569
* This table does not account for state matching funds on projects where federal funding is used for active transportation components of a project that is not classified as entirely bicycle or pedestrian.		

ADDITIONAL FEDERAL FUNDING BEYOND TASA		
	State Fiscal Year	State Fiscal Year
Bicycle and Pedestrian Funding	July 1 2021 - June 30	July 1 2022 - June 30 2023
DCNR – ARPA – C2P2 Trail Grants (FEDERAL)*	\$0	\$9,964,300
DCNR – Rec Trails (FEDERAL)	\$1,181,838	\$1,181,837
DOH – (CDC - FEDERAL) Preventive Health and Health Service Block Grant for ATP Plans	\$95,000	\$95,000
DOH (CDC - FEDERAL) State Physical Activity and Nutrition Grant	\$35,000	\$45,000
PennDOT Highway Safety Improvement Program (HSIP) Funds (FEDERAL) - Pedestrian Countdown Signals		\$19,300,000
	\$1,311,838	\$30,586,137
* This table does not account for federal funds dedicated to active transportation components of a project that is not classified as entirely bicycle or pedestrian.		

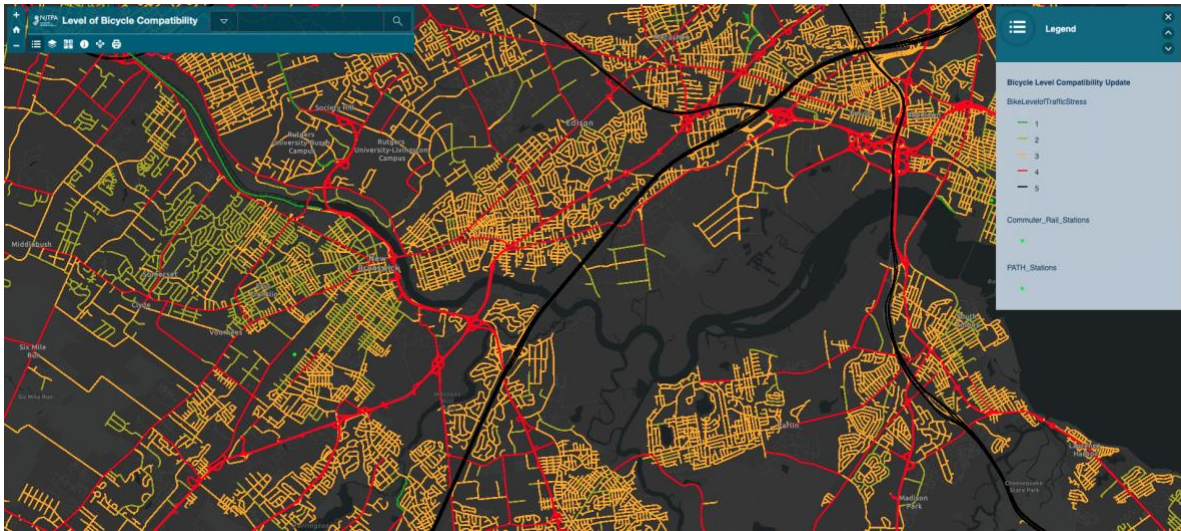


APPENDIX E.

NEW JERSEY LEVEL OF TRAFFIC STRESS MAPPING RESOURCES

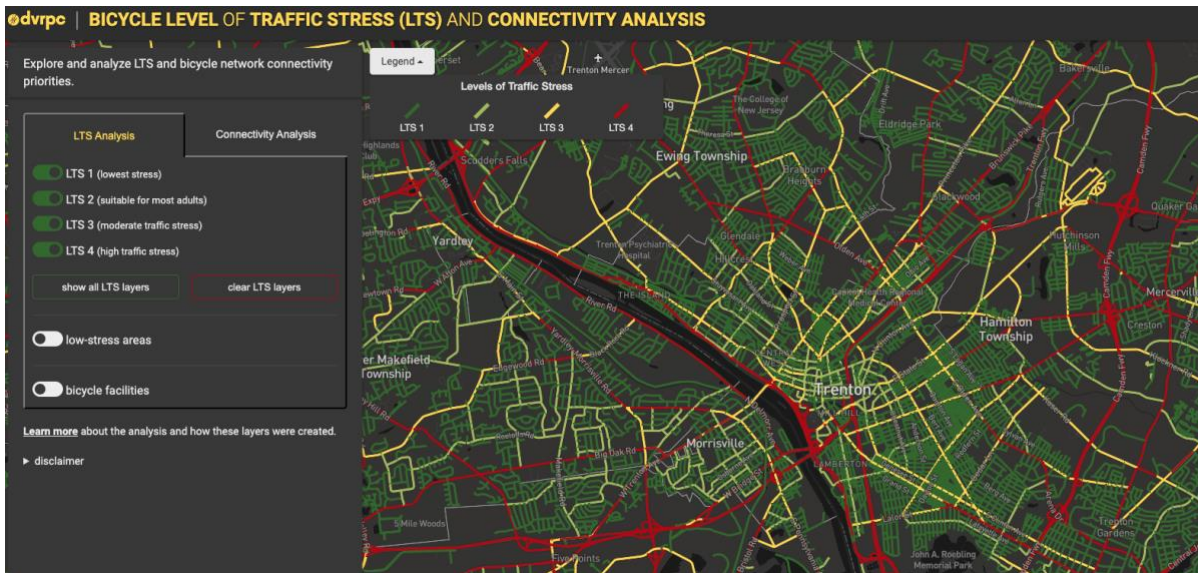
NJTPA maintains a dataset and map on [Level of Bicycle Compatibility](#) across roadways in the state. The criteria used to create the map can be found [here](#). There is also an interactive GIS web map available on the NJTPA website [here](#).

Example of NJTPA’s Level of Bicycle Compatibility Map:



DVRPC also maintains a dataset and map on [Bicycle Level of Traffic Stress](#). The DVRPC interactive GIS web map can be found [here](#).

Example of DVRPC’s Bicycle LTS map:



APPENDIX F.

ADDITIONAL RESOURCES FOR SHARED USE PATH PLANNING & IMPLEMENTATION

Association of New Jersey Environmental Commissions (ANJEC)

<https://anjec.org/open-space-stewardship-grants/>
<https://anjec.org/wp-content/uploads/2019/07/pathways.pdf>

The ANJEC, a local non-profit organization, helps NJ environmental commissions, individuals, and local and state agencies preserve natural resources and promote sustainable communities. The ANJEC offers grants of up to \$1,500 to municipal environmental commissions for Open Space Stewardship Projects. The ANJEC also maintains a resource center, including publications and handbooks which assist NJ municipalities in the planning, financing, and design of open space.

BIL Launchpad

<https://billlaunchpad.com/statedashboard>

The BIL Launchpad is an online resource provided by the USDOT that provides information on available funding programs, interactive technical support, data on successful awards, and essential resources. It is designed to help localities accelerate their grant application process and access the necessary tools to enhance their transportation infrastructure.

Delaware Valley Regional Planning Commission's Trails Planning Program

<https://www.dvrpc.org/trails/>

DVRPC's Regional Trails Program provides planning assistance and financial support to trail developers, counties, municipalities, and nonprofit organizations to complete the Circuit Trails, Greater Philadelphia's network of more than 800 miles of multi-use trails.

NACTO- Urban Street Design Guides

<https://nacto.org/publication/urban-street-design-guide/intersection-design-elements/crosswalks-and-crossings/>
<https://nacto.org/publication/urban-bikeway-design-guide/>

The National Association of City Transportation Officials is an association of 98 major North American cities and transit agencies formed to exchange best practices to build cities as places for people with safe, accessible, and equitable transportation choices. NACTO provides design guides and resources available to any entity looking to better design and implement transportation improvements in urban areas.

New York Statewide Greenway Trails Plan

<https://www.ptny.org/our-work/support/nys-greenways-plan>

The NY Greenway Trails Plan serves as a handbook to guide grassroots advocates through the steps to take the vision for a new multi-use path from concept to reality. The guide provides a high-level overview of the various aspects of trail development with a focus on how participation from a broad range of stakeholders factors in throughout the process.

New Jersey Conservation Foundation

<https://www.njconservation.org/>
<https://www.njconservation.org/wp-content/uploads/2024/04/Nature-for-All-A-2050-Vision-for-New-Jersey.pdf>

The New Jersey Conservation Foundation, a local non-profit organization dedicated to preserving land and protecting natural resources, manages nature preserves, conducts public outreach and education programs, and advocates for sensible land use and climate policies throughout New Jersey. Through their Land Conservation and Land Stewardship Programs, the NJCF provides support and technical assistance to landowners, municipalities, and conservation groups to acquire and manage open space.



RUTGERS-NEW BRUNSWICK

Edward J. Bloustein School
of Planning and Public Policy

Alan M. Voorhees Transportation Center

NJDOT- Planning for Greenways A Guidebook for New Jersey Communities

https://www.nj.gov/transportation/commuter/bike/pdf/Planning_Greenways_Guidebook.pdf

This guidebook focuses on greenways with paths for walking or wheeled transportation and is tailored to help grassroots groups, nonprofit organizations, and government staff better understand the development steps from concept to ribbon cutting. It is not a technical or design guide, but an overview of the development of transportation greenways that have conservation and recreational value.

NJ TRANSIT- Transit to Trails

<https://www.njtransit.com/trails>

NJ TRANSIT's new Transit to Trails program gives everyone the ability to access over 40 parks in all 21 New Jersey counties via our bus, light rail, rail, or [Access Link](#) services. Interactive map lets you search by park name or view a virtual map of the state with different park locations designated. Each destination has access points comprised of park entranceways, parking lots, or meeting areas. Service options for each of these areas, park info, and directions are all accessible from a pop-up that appears at each access point.

Open Space Institute

<https://www.openspaceinstitute.org/apply-for-a-grant>

The Open Space Institute is a regional non-profit organization dedicated to protecting land for clean drinking water, public recreation, healthy communities, wildlife habitat, and climate protection across the Eastern US and Canada. OSI offers grants and loans which support the strategic use of land protection.

Rails to Trails Conservancy Resource Library

<https://www.railstotrails.org/resource-library/>

The Rails to Trails Conservancy, a non-profit organization dedicated to connecting communities with safe trails and improved bicycle and pedestrian infrastructure, provides an extensive resource guide for any entity looking to plan, design, construct, improve, or maintain trail systems. Their manuals include information on all aspects of trail development, from how to acquire the necessary ROW, to effective community engagement, to budgeting for trail maintenance.

The Watershed Institute

<https://thewatershed.org/professional-resources-2/>

The Watershed Institute is a local non-profit focused on keeping water in New Jersey clean, safe, and healthy through conservation, advocacy, science, and education.

Union County Connects

<https://unioncountyconnects.org/>

Union County Connects is a resident-led local nonprofit advocating for a safer trail network in Union County.

USDOT – Pedestrian and Bicycle Funding Opportunities

<https://www.transportation.gov/grants/dot-navigator/pedestrian-and-bicycle-funding-opportunities-us-department-transportation>

This resource details project eligibility for pedestrian and bicycle improvements under USDOT surface transportation funding programs. With links to grants and federal programs, it allows local governments, MPOs/RPOs, state DOTs, and transit agencies to identify potential funding sources for bicycle and pedestrian projects.



RUTGERS-NEW BRUNSWICK

Edward J. Bloustein School
of Planning and Public Policy

Alan M. Voorhees Transportation Center

REFERENCES

- Association of New Jersey Environmental Commissions (ANJEC) (2001). *A Handbook for Public Financing of Open Space in New Jersey*. Retrieved from: <https://anjec.org/wp-content/uploads/2019/07/PublicFinancingOpenSpace.pdf>
- Bicycle Coalition of Greater Philadelphia (2023). *Moving the Circuit Forward to Reach 500 Miles by 2025: Strategies to accelerate the completion of The Circuit Trails*. Retrieved from: https://circuittrails.org/wp-content/uploads/The_Circuit_Trails-Moving_the_Circuit_Forward_4thEdition-April2023.pdf
- Circuit Trails Coalition, Opinion Works (2020). *Equity of Access to Trails: Market Research Conducted Fall 2020 Short Report*. Retrieved from: https://circuittrails.org/wp-content/uploads/2021/10/Equity_of_Access_to_Trails-Market_Research_Conducted_Fall_2020-Short.pdf
- Congressional Research Service (2022). *Federal Highway Programs: In Brief*. Retrieved from: <https://crsreports.congress.gov/product/pdf/R/R47022>
- Delaware Department of Natural Resources and Environmental Control (2024). *Outdoor Recreation, Parks, and Trails Program*. Retrieved from: <https://dnrec.delaware.gov/parks/planning/recreation-parks-trails/>
- Delaware Department of Transportation (2016). *Professional Services Procurement Manual*. Retrieved from: https://deldot.gov/Publications/manuals/professional_services/pdfs/ProfessionalServicesProcurementManual2016.pdf
- Delaware Department of Transportation (2018). *Blueprint for a Bicycle-Friendly Delaware*. Retrieved from: <https://deldot.gov/Publications/plans/bikeandped/pdfs/DelDOTBikePlan043018FINAL.pdf>
- Delaware Department of Transportation (2022). *Pedestrian Action Plan*. Retrieved from: <https://experience.arcgis.com/experience/a4b4f11b2abc4cbf95a4bcd9c02f5153>
- Delaware Department of Transportation (2024). *Bicycle Level of Traffic Stress in Delaware*. Retrieved from: <https://www.arcgis.com/apps/MapJournal/index.html?appid=0281bffd6e8d46849f95a000c182bff4>
- Delaware Department of Transportation (2024). *Delaware Bike Council*. Retrieved from: https://deldot.gov/Programs/bike/biking_in_delaware/
- Delaware Greenways (2024). *Georgetown-Lewes Trail*. Retrieved from: <https://delawaregreenways.org/trail/georgetown-lewes-trail/>
- Delaware Valley Regional Planning Commission (2020). *Congestion Mitigation and Air Quality (CMAQ) Program for New Jersey Guidance*. Retrieved from: https://www.dvrpc.org/cmaq/pdf/5077_2020_cmaq_guidance.pdf
- Delaware Valley Regional Planning Commission (2021). *Funding Trails in New Jersey – a Guide to Funding Multi-Use Trails*. Retrieved from: <https://www.dvrpc.org/reports/18035.pdf>
- Government Accountability Office (2012). *Grants to State and Local Governments: an Overview of Federal Funding Levels and Selected Challenges*. Retrieved from: <https://www.gao.gov/assets/gao-12-1016.pdf>
- League of American Bicyclists (2018). *Bicycling & Walking in the United States: 2018 Benchmarking Report*. Retrieved from: https://bikeleague.org/sites/default/files/Benchmarking_Report-Sept_03_2019_Web.pdf
- League of American Bicyclists (2024). *State: Funding for Biking & Walking*. Retrieved from <https://data.bikeleague.org/data/states-funding-for-biking-walking/>
- Litman, Todd (2018). *Community Cohesion as a Transport Planning Objective*. Victoria Transport Policy Institute. Retrieved from: <https://www.vtpi.org/cohesion.pdf>
- Litman, Todd (2024). *Evaluating Active Transport Benefits and Costs: Guide to Valuing Walking and Cycling Improvements and Encouragement Programs*. Victoria Transport Policy Institute. Retrieved from: <https://www.vtpi.org/nmt-tdm.pdf>
- MassTrails (2021). *Impacts of Shared Use Paths*. Retrieved from: <https://www.mass.gov/doc/masstrails-shared-use-path-impacts-study/download>
- Morris County (2024). *The Morris County Open Space, Farmland, Floodplain Protection and Historic Preservation Trust Fund*. Retrieved from: <https://www.morriscountynj.gov/Departments/Trail-Construction-Grant-Program/Rules-Regulations>
- Moudon, A. V., et. al (2005). *Cycling and the built environment, a US perspective*. Transportation Research Part D. Retrieved from: <https://doi.org/10.1016/j.trd.2005.04.001>
- National Association of City Transportation Officials (2017) *Urban Bikeway Design Guide: Designing for All Ages & Abilities*. Retrieved from: <https://nacto.org/publication/urban-bikeway-design-guide/designing-ages-abilities-new/>
- New Jersey Bicycle and Pedestrian Resource Center (2023). *PROTECT Discretionary Grant Program: Can We Use Resilience Funding to Also Make New Jersey Streets Safer?* Retrieved from: <https://njbikeped.org/protect-discretionary-grant-program/>
- New Jersey Bicycle and Pedestrian Resource Center (2024). *Crafting an Effecting Complete and Green Streets Policy*. Retrieved from: <https://njbikeped.org/complete-and-green-streets-policy-webinar/>
- New Jersey Bike and Walk Coalition (2024). *New Jersey Trails*. Retrieved from: <https://njbwc.org/new-jersey-trails/>

New Jersey Conservation Foundation (2004). *Garden State Greenways: Online Mapping Tool*. Retrieved from: <https://www.arcgis.com/apps/OnePane/basicviewer/index.html?appid=7e4f35cec87a4b9c940ba5dc713826f0>

New Jersey Conservation Foundation, New Jersey Department of Environmental Protection, The Nature Conservancy, et al (2015). *New Jersey Conservation Blueprint*. Retrieved from: <https://conservationblueprintplus.org/#/>

New Jersey Conservation Foundation, New Jersey Keep it Green Coalition, Elliott Ruga (2009). *The Accomplishments of State Preservation Programs*. Retrieved from: https://www.njconservation.org/wp-content/uploads/2018/12/GSPTAccomplishments04_15_09.pdf

New Jersey Department of Environmental Protection (2009). *New Jersey Trails Plan Update*. Retrieved from: <https://dep.nj.gov/greenacres/trails-program-plan/>

New Jersey Department of Environmental Protection (2024). *Green Acres Program: Local and Nonprofit Assistance Funding*. Retrieved from: <https://dep.nj.gov/wp-content/uploads/greenacres/pdf/2024-local-green-acres-press-package-descriptions.pdf>

New Jersey Department of Environmental Protection (2024). *Outside, Together! New Jersey's Statewide Comprehensive Outdoor Recreation Plan*. Retrieved from: <https://dep.nj.gov/outside-together/>

New Jersey Department of Environmental Protection (2024). *New Jersey's Trails Program*. Retrieved from: <https://dep.nj.gov/greenacres/trails-program-home/>

New Jersey Department of Environmental Protection & New Jersey Department of Transportation (2021). *New Jersey Trails & Greenways Summit: Post-Summit Report*. Retrieved from: https://www.saferoutesnj.org/wp-content/uploads/2021/12/2021-Trails-Greenways-Summit-Summary-Report_2021-1.pdf

New Jersey Department of Transportation (2016). *New Jersey Bicycle & Pedestrian Master Plan*. Retrieved from: <https://www.nj.gov/transportation/commuter/bike/pdf/bikepedmasterplan2016.pdf>

New Jersey Department of Transportation (2016). *New Jersey Highway Safety Improvement Program Manual*. Retrieved from: <https://www.nj.gov/transportation/about/safety/pdf/2016hsipmanual.pdf>

New Jersey Department of Transportation (2020). *Strategic Highway Safety Plan*. Retrieved from: <https://www.nj.gov/transportation/about/safety/pdf/NJ+2020+SHSP+Final+Report+-+09-08-2020.pdf>

New Jersey Department of Transportation (2022). *Highway Safety Improvement Program: 2022 Annual Report*. Retrieved from: <https://highways.dot.gov/sites/fhwa.dot.gov/files/2023-08/NJ-HSIP-2022.pdf>

New Jersey Department of Transportation (2024). *Local Aid Resource Center*. Retrieved from: <https://www.njdotlocalaidrc.com/>

New Jersey Infrastructure Bank (2023). *Annual Report SFY2023*. Retrieved from: <https://cdn.njib.gov/njib/Annual%20Reports/Annual-Report-2023.pdf>

New Jersey Keep it Green Coalition (2011). *A Legacy of Green: Celebrating 50 Years of the Green Acres Program*. Retrieved from: https://www.njkeepitgreen.org/wp-content/uploads/2019/05/50Legacy_greenacres.pdf

New York State (2024). *Hudson River Valley Greenway*. Retrieved from: <https://hudsongreenway.ny.gov/>

New York State (2024). *Empire State Trail*. Retrieved from: <https://empiretrail.ny.gov/>

New York State (2024). *Environmental Protection Fund*. Retrieved from: <https://dec.ny.gov/environmental-protection/fund>

New York State Assembly (2019). *Bill A05035B: an Act to require the office of parks, recreation, and historic preservation to create a plan regarding non-motorized multi-use trails*. Retrieved from: <https://assembly.state.ny.us/leg/?bn=A05035&term=2019>

New York State Office of Parks, Recreation, and Historic Preservation (2010). *New York Statewide Trails Plan*. Retrieved from: <https://parks.ny.gov/documents/recreation/trails/StatewideTrailsPlan.pdf>

New York State Office of Parks, Recreation, and Historic Preservation (2021). *Final Statewide Greenway Trails Plan & Final Generic Environmental Impact Statement*. Retrieved from: <https://parks.ny.gov/documents/inside-our-agency/FinalStatewideGreenwayTrailsPlan2020.pdf>

New York State Office of Parks, Recreation, and Historic Preservation (2021). *Trails Across New York: a Grassroots Guide to Developing Greenway Trails*. Retrieved from: https://www.ptny.org/download_file/view_inline/5793 and <https://greenway-trails-plan-nysparks.hub.arcgis.com/>

New York State Office of Parks, Recreation, and Historic Preservation (2024). *Trails Council*. Retrieved from: <https://parks.ny.gov/recreation/trails/trails-council.aspx>

New York State Office of Parks, Recreation, and Historic Preservation (2024). *Grant Awards*. Retrieved from: <https://parks.ny.gov/grants/awards.aspx>

New York State Regional Economic Development Councils (2024). *Consolidated Funding Application Projects*. Retrieved from: <https://regionalcouncils.ny.gov/cfa/projects>

NJTRANSIT (2021). *Transit to Trails*. Retrieved from: <https://www.njtransit.com/trails>

NV5, New Jersey Department of Transportation, Together North Jersey (2019). *Planning for Greenways: a Guidebook for New Jersey Communities*. Retrieved from: <https://togethernorthjersey.com/wp-content/uploads/2019/12/Planning-for-Greenways-Guidebook-2019.pdf>

Pennsylvania Department of Community & Economic Development (2024). *Act 13 Programs: Marcellus Legacy Fund*. Retrieved from: <https://dced.pa.gov/programs-funding/commonwealth-financing-authority-cfa/act-13-programs/>

Pennsylvania Department of Community & Economic Development (2024). *Greenways, Trails, and Recreation Program*. Retrieved from: <https://dced.pa.gov/programs/greenways-trails-and-recreation-program-gtrp/>

Pennsylvania Department of Conservation and Natural Resources (2020). *Pennsylvania Land and Water Trail Network Strategic Plan*. Retrieved from: https://elibrary.dcnr.pa.gov/GetDocument?docId=3176020&DocName=dcnr_20030875.pdf#

Pennsylvania Department of Conservation and Natural Resources (2024). *Keystone Fund*. Retrieved from: <https://keystonefund.org/>

Pennsylvania Department of Health (2024). *WalkWorks Program*. Retrieved from: <https://www.pa.gov/en/agencies/health/programs/healthy-living/walkworks.html>

Pennsylvania Department of Transportation (2024). *Multimodal Transportation Fund*. Retrieved from: <https://www.penndot.pa.gov/ProjectAndPrograms/MultimodalProgram/Pages/default.aspx>

Pennsylvania Department of Transportation (2024). *Local Technical Assistance Program*. Retrieved from: <https://gis.penndot.gov/ltap/>

Pennsylvania Department of Transportation (2024). *Developing IIIA/BIL Grant Proposals: A Guide for Municipalities*. Retrieved from: <https://www.penndot.pa.gov/ProjectAndPrograms/Planning/Documents/Municipal%20Grant%20Guide%208-24.pdf>

Pennsylvania Department of Transportation (2024). *PennDOT Connects*. Retrieved from: <https://www.penndot.pa.gov/ProjectAndPrograms/Planning/Pages/PennDOT-Connects.aspx>

Rails to Trails Conservancy (2019). *Active Transportation Transforms America Report*. Retrieved from: <https://www.railstotrails.org/resource-library/resources/active-transportation-transforms-america-report>

Rails to Trails Conservancy (2024). *Transportation Alternatives Spending Report*. Retrieved from: <https://www.railstotrails.org/wp-content/uploads/2024/09/TradeFY23.pdf>

Siehl, H. G. (2008). *The Policy Path to the Great Outdoors: A History of the Outdoor Recreation Review Commissions*. Retrieved from: <https://media.rff.org/documents/RFF-DP-08-44.pdf>

Smart Growth America (2024). *Dangerous by Design 2024: State of the States*. Retrieved from https://smartgrowthamerica.org/wp-content/uploads/2024/06/Dangerous-By-Design-2024-States_Final.pdf

State of New Jersey (2005). *NJ Transportation Trust Fund Authority*. Retrieved from: <https://www.nj.gov/ttfa/>

Tri-State Transportation Campaign (2019). *Missing Links: Trail Development Strategies*. Retrieved from: <https://tstc.org/wp-content/uploads/2019/09/Missing-Links-Trail-Development-Strategies-2019.pdf>

Trust for Public Land (2023). *TPL LandVote Database*. Retrieved from: <https://tpl.quickbase.com/db/bbqna2qct?a=dbpage&pageID=10>

Trust for Public Land (2024). *Park Investment and Economic Vitality*. Retrieved from: https://www.tpl.org/wp-content/uploads/2024/09/TPL-Park-Investment-and-Economic-Vitality-in-Cities-09_19_24.pdf

USDOT, Federal Highway Administration (2006). *Evaluation of Safety, Design, and Operation of Shared-Use Paths: Final Report*. Retrieved from: <https://www.fhwa.dot.gov/publications/research/safety/pedbike/05137/05137.pdf>

USDOT, Federal Highway Administration, Office of Policy and Governmental Affairs (2017). *Funding Federal-Aid Highways*. Retrieved from <https://www.fhwa.dot.gov/policy/olsp/fundingfederalaid/index.cfm>

USDOT, Federal Highway Administration (2022). *Transportation Alternatives Set-Aside Guidance as Revised by the Infrastructure Investment and Jobs Act*. Retrieved from: https://www.fhwa.dot.gov/environment/transportation_alternatives/guidance/ta_guidance_2022.pdf

USDOT, Federal Highway Administration (2022). *Carbon Reduction Program Implementation Guidance*. Retrieved from: https://www.fhwa.dot.gov/environment/sustainability/energy/policy/crp_guidance.pdf

USDOT, Federal Highway Administration (2024). *Federal-Aid Highway Program Funding for Pedestrian and Bicycle Facilities and Programs*. Retrieved from: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/

USDOT, Federal Highway Administration (2024). *Recreational Trails Program*. Retrieved from: https://www.fhwa.dot.gov/environment/recreational_trails/

USDOT (2023). *Pedestrian and Bicycle Funding Opportunities: US Department of Transportation Highway, Transit, and Safety Funds*. Retrieved from: <https://www.transportation.gov/grants/dot-navigator/pedestrian-and-bicycle-funding-opportunities-us-department-transportation>

USDOT (2024). *Zero Deaths and Safe System*. Retrieved from: <https://highways.dot.gov/safety/zero-deaths>

Virginia Department of Transportation (2024). *State Trails Office*. Retrieved from: <https://www.vdot.virginia.gov/about/programs/state-trails-office/#ResourceHub2>

END NOTES

- ¹ NV5 (2019)
- ² Rails to Trails Conservancy (2019)
- ³ NACTO (2017)
- ⁴ League of American Bicyclists (2018)
- ⁵ Rails to Trails Conservancy (2019)
- ⁶ Rails to Trails Conservancy (2019)
- ⁷ Trust for Public Land (2024)
- ⁸ Rails to Trails Conservancy (2019)
- ⁹ Rails to Trails Conservancy (2019)
- ¹⁰ Moudon et al (2005)
- ¹¹ Rails to Trails Conservancy (2019)
- ¹² Litman (2024)
- ¹³ NJDOT (2020)
- ¹⁴ CRS (2022)
- ¹⁵ CRS (2022)
- ¹⁶ CRS (2022)
- ¹⁷ NJ Bicycle & Pedestrian Resource Center (2024)
- ¹⁸ NJDEP (2024)
- ¹⁹ USDOT, FHWA (2022)
- ²⁰ USDOT, FHWA (2024)
- ²¹ Rails to Trails Conservancy (2024)
- ²² USDOT, FHWA (2024)
- ²³ USDOT, FHWA (2024)
- ²⁴ DVRPC (2020)
- ²⁵ USDOT, FHWA (2022)
- ²⁶ NJDOT (2016)
- ²⁷ NJ Bike Ped Resource Center (2023)
- ²⁸ NJDEP (2024)
- ²⁹ NJTIB (2023)
- ³⁰ USDOT, FHWA (2023)
- ³¹ ANJEC (2001)
- ³² Morris County (2024)
- ³³ Morris County (2024)
- ³⁴ NYSA (2019)
- ³⁵ DelDOT (2018)
- ³⁶ PennDOT (2024), MTF Awards
- ³⁷ PADCED (2024), GTRP Program
- ³⁸ NYREDC (2024), CFA Projects
- ³⁹ DelDOT (2016)
- ⁴⁰ NJDOT & NJDEP (2021)