

BMTS E-Bike & E-Scooter Multi-use Trail Regulations Guide



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**Binghamton Metropolitan
Transportation Study (BMTS)**

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BMTS E-Bike & E-Scooter Multi-use Trail Regulations Guide 2022

INTRODUCTION

As will be explained in the study below, due to lack of specific text and guidance, the current New York State e-bike and e-scooter legislation necessitates regulations to be established by each municipality with jurisdiction of multi-use trails for e-bikes to be permitted on multi-use trails, along with consideration of other micromobility devices such as e-scooters. Furthermore, the municipal regulations need to provide a safe, comfortable, and enjoyable trail user experience by delineating trail use rules. This study proposes use regulations for municipalities to adopt for their respective trails comprising the Two Rivers Greenway.

PURPOSE OF STUDY

To compile best practices for regulating the use of e-bikes, e-scooters, and other micromobility devices on off-road multi-use trails, and to use the information to guide municipalities in the development of local trail use regulations. The intent is to maximize trail users' safety and enjoyment by creating uniform trail use regulations across the entire Two Rivers Greenway trail system, realizing that each municipality will be responsible for their own regulations and that customization may be needed to address issues unique to each municipality's trail segments.

DEFINITIONS:

E-bike – A bicycle with electric assist, with an electric motor of less than 750 watts, and equipped with pedals, thereby meeting the equipment and manufacturing requirements for bicycles adopted by the Consumer Product Safety Commission in 2002. There are three classes of e-bikes:

- **Class 1:** The electric motor provides assistance only when the rider is pedaling. The maximum assisted speed is 20 miles per hour.
- **Class 2:** The electric motor may be used without pedaling, but stops providing assistance at 20 miles per hour.
- **Class 3:** The electric motor may be used without pedaling, but stops providing assistance at 25 miles per hour.

[1 & 2 \(Pg. 74\)](#)

E-scooter –Every device weighing less than one hundred pounds that (a) has handlebars, a floorboard or a seat that can be stood or sat upon by the operator, and an electric motor, (b) can be powered by the electric motor and/or human power, and (c) has a maximum speed of no more than twenty miles per hour on a paved level surface when powered solely by the electric motor. [2 \(Pg. 74\)](#)

Micromobility – Transportation using lightweight vehicles such as bicycles or scooters, including electric models. Other current micromobility devices include e-skateboards and self-balancing devices such as hoverboards and unicycles.

Multi-use Trails – Trails, typically paved, that are separated from motor vehicle traffic and dedicated for non-motorized travel such as walking, wheelchair users, and biking. The focus of this study is on the Two Rivers Greenway multi-use trail system.

BACKGROUND – THE NEED FOR E-BIKE/E-SCOOTER REGULATIONS FOR MULTI-USE TRAILS

A New York Times article, dated March 2, 2021, reported that, according to data from the NPD Group, bicycle sales rose 65% in the United States between 2019 and 2020, and electric bike (a.k.a. e-bike) sales grew by 145% in the same period.³ Fueled by the COVID-19 pandemic, this increase in bike and e-bike sales was also occurring locally, and evidence of significant bike use has been documented on the multi-use trails segments comprising the Two Rivers Greenway.⁴

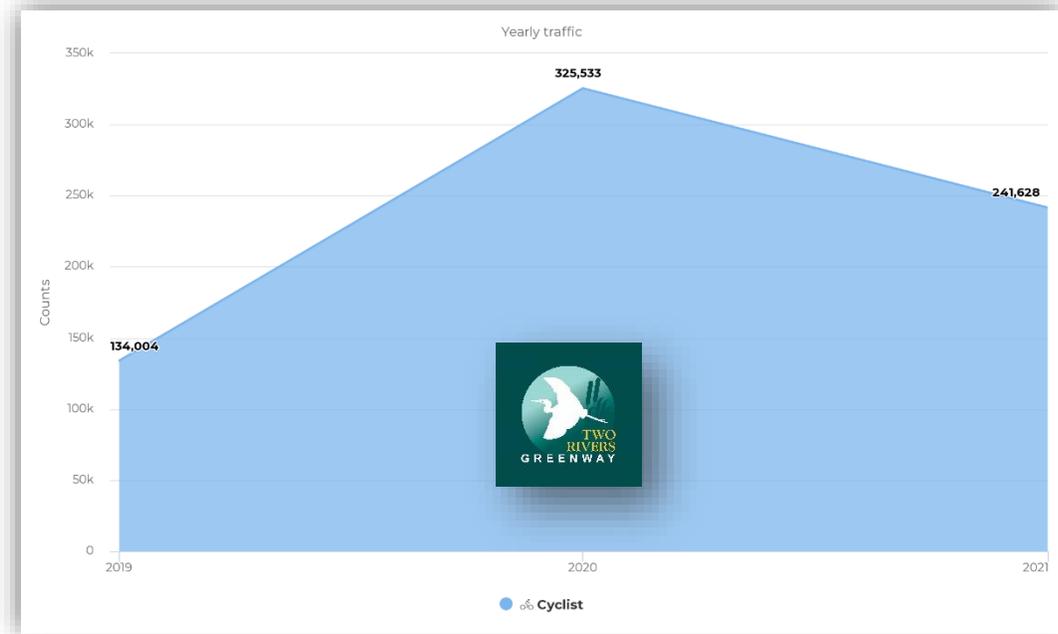


Figure 1:
BMTS
Bicyclist
Counts on
the Two
Rivers
Greenway

E-bike technology, along with other micromobility devices such as e-scooters, continues to rapidly develop. With strong sales trends continuing and plans for e-bike library and e-bike share programs being pursued locally, demand for e-bike use on the Two Rivers Greenway trails is likely to continue to increase along with other forms of micromobility.

During 2020, New York State E-Bike and E- Scooter Legislation² was passed, which defined both devices and where they can be operated on the roadway. Though the current New York State legislation specifies legal use of e-bikes and e-scooters on roadways, it appears to effectively ban both from multi-use trails as they are not specifically defined or permitted in the list of locations where an e-bike can operate. Local legislation by the appropriate municipality or agency is therefore necessary to allow e-bikes on these facilities.¹

THE CASE FOR PERMITTING E-BIKES ON MULTI-USE TRAILS

Multi-use trails, like those comprising the Two Rivers Greenway, have typically been recognized for their recreational value for walkers, runners, bicyclists, and other wheeled devices. As the Two Rivers Greenway continues to expand and become more contiguous, its function as a transportation resource continues to grow in importance. With that in mind, the following are a list of e-bike benefits that provide justification to permit them to use multi-use trails.

Benefits of E-bikes: ¹

- Accessibility
 - Enables riders of diverse ages & abilities
 - Makes longer-distance trips more feasible
 - Makes routes with hills easier
- Health
 - Benefits heart, lung, and muscle health
 - Provides a low-impact exercise option
 - Outdoor activity is good for mental health
- Environment
 - Often replaces motor vehicle trips
 - No use of gasoline
 - No emissions

E-scooters also have many of the same benefits as e-bikes.

Typical multi-use trails, including those of the Two Rivers Greenway, have been serving pedestrians, bicyclists, and other non-motorized users. Including e-bikes, e-scooters and other electric-powered devices among the existing trail users should not be a problem as long as they are operated in compliance with common trail etiquette practices such as maintaining safe speeds and heeding all posted speed limits; keeping right, passing left with an audible warning; and yielding to pedestrians and other slower trail users.

ISSUES WITH MULTIPLE TYPES OF USERS SHARING THE TRAILS

Upon corresponding with local municipal officials from municipalities with jurisdiction of trails comprising the Two Rivers Greenway, the following were the most common trail user issues observed or reported:

- erratic behavior of trail users
- speed of wheeled devices
- controlling and cleaning-up after dogs

For an enjoyable and safe experience, all trail users regardless of travel mode must use the trail with respect for one another.

RAILS-TO-TRAILS CONSERVANCY (RTC) FINDINGS AND POSITIONS

The RTC, formed during 1986, is one of the most recognized organizations nationally for expertise on multi-use trail development and management issues. The following are its findings and positions on e-bike and other micromobility device use on multi-use trails.

Observing proper trail behavior—especially safe speeds—is not just the right thing to do, it is absolutely critical to maintaining a high standard of safety for all trail users. The top electric motor speed of Class I and Class II e-bikes is 20 mph, and the top speed of a Class III e-bike is 28 mph. By comparison, Google Maps uses an average speed of 10 mph for their bicycle directions, and a person of average health typically cycles at about 13 mph. The average speed of a Tour de France bicycle racer is 25 mph. The RTC, feels that user conflicts caused by speed are more about behavior than technology. Both traditional cyclists—especially fit cyclists or racers—and e-bike users have the potential to cause speed-related user conflicts. While e-bikes could exacerbate trail conflicts, it is most important to educate all cyclists and trail users about trail etiquette. In order to maintain a safe experience for everyone, cyclists—whether using an e-bike or a regular bike—must respect the experiences of pedestrians, other cyclists and other trail users by using safe speeds and signaling when passing. In short, it is user behavior, not the technology of an e-bike, that determines the trail experience. ⁵

Broadening of the micromobility market could expand the constituency for trails and other bicycle facilities. RTC supports e-bike use on trails, to the extent that those e-bikes fall into classes deemed appropriate for trail use following the legislative guidelines. RTC's perspective is that e-bikes ensure that biking is as inclusive as possible, especially in the context of aging adults and the needs of people living with disabilities. Scooters, hoverboards and powered skateboards are increasingly popular and appear to be drawing a younger, more diverse demographic, which could help to increase trail use and diversify trail users. The distance profile for scooters (1–2 miles) is shorter than bikes (2–4 miles), and many scooter users are not bicyclists.

Nevertheless, we are in a transition period; mobility providers, local governments, trail managers and the public are all learning how micromobility devices fit into communities. Currently, there's a lack of infrastructure designed with the suite of new devices in mind. Most people currently assume that they may use these devices anywhere, but that is not sustainable given safety concerns. Infrastructure that can accommodate new users without endangering or inconveniencing existing users will be of increased value, in turn encouraging greater investment in creating and maintaining these resources.

Initial introduction of new technologies can be chaotic. Responses appropriate to local context need to be devised for basic questions such as where to operate, how to behave and where to park such devices. The trails community—users and managers alike, policy makers and the public—together will need to learn and adjust expectations over time as pilot studies, research and overall experience advances. ⁶

BMTS CENTRAL STAFF POSITION

BMTS Central Staff is in general agreement with the RTC findings and positions. Permitting e-bike use on the trails comprising the Two Rivers Greenway, except for those that currently prohibit bicycles, will be most inclusive for cyclists of all ages and abilities. Allowing the use of other micromobility devices will need to be determined on a case-by-case basis for each trail with safety among all users being the

main criteria. Regulating the speed of all wheeled devices is also important, recognizing that speed is not an issue exclusive to e-bikes. Educating the public regarding trail use rules and etiquette is essential. Enforcement is also critical for trail use regulations to be effective. Regular evaluation of trail use regulations will be valuable to assess their effectiveness and to determine necessary adjustments.

Each municipality with jurisdiction of multi-use trails, needs to create clear trail use regulations to provide a safe and enjoyable experience for all trail users.

EXISTING TRAIL REGULATIONS ON THE TWO RIVERS GREENWAY

Broome County

Otsiningo Park Trails *(Updated December 2021 and will be on the Otsiningo Park website soon.)*

1. Combustion engine powered bikes are prohibited on trails.
2. Use of Class 1 & 2 E-bikes are permitted on trails.
3. Riders must abide by the speed limit signs posted along the trail at all times.
 - a. Riders must ride at a safe speed (15 MPH Speed Limit). Slow down and form a single file in congested conditions, reduced visibility, and other hazardous conditions.
4. Trail users must practice proper trail etiquette.
 - a. Be courteous to all trail users and yield to pedestrians.
 - b. Give audible warning when passing pedestrians or other bicyclists.
 - i. Keep right and pass left
 - c. Riders are responsible for the safe operation of the vehicle under City, Park, County, and State Codes.

City of Binghamton

The Department of Parks & Recreation informed BMTS that Binghamton does not have formal regulations for using its trails. However, the following link provides an interactive map of City park facilities: <https://www.binghamton-ny.gov/government/departments/parks-recreation/city-parks-pools-fields>. When clicking on the River Trail, the following trail use rules are listed:

- Dogs must be on a leash
- Please pick up after your pet
- No motorized vehicles

Any formal trail use regulations that are created would need City Council approval and be enforced by the Binghamton Police Department.

Town of Vestal

Vestal Rail-Trail

https://www.vestalny.com/departments/parks/rail_trail.php

The Rail Trail hosts a multitude of user groups engaged in a wide range of activities.

The following are helpful tips to keep your visit safe and enjoyable:

Walkers and Runners

- Keep to the Right
- Pass to the Left
- Keep children close and to the right
- Do not block the full width of the trail
- Dogs on four-foot leash

- Clean up after your pet
- Earphones may impair hearing which may be unsafe

Wheel Traffic

- Keep speed below 10 MPH Speed Limit
- Ride to the right
- Pass on the left
- Audible signals are helpful: Ring a bell or, Verbalize (Pass)
- Single file
- No pets with bikes, or scooters or rollerblades
- Keep speed at a Safe Pace! Children are Unpredictable!

SMILE - Say Hi - We are all neighbors!

Also see https://www.vestalny.com/document_center/park/Map_of_Rail_Trail.pdf

The screenshot shows the website for the Vestal Rail Trail. At the top, there is a logo for 'RAIL TRAIL VESTAL' and a navigation menu with tabs for 'RAIL TRAIL', 'EAST TRAIL', 'WEST TRAIL', 'RULES', and 'DOG RULES'. Below the navigation is a large photograph of a paved trail curving through a wooded area, crossing a small wooden bridge. Overlaid on the bottom of the image is a dark blue box with the title 'TRAIL RULES' in white. Below the title, there are three columns of text providing rules and guidelines for trail users.

TRAIL RULES

The following are helpful tips to keep your visit safe and enjoyable:

Hours:
The trail is open half an hour before sunrise and half an hour after sunset.

Permitted:
Walking, jogging, biking, skateboarding, roller blading, cross country skiing, use of skateboards, strollers, and wagons.

Prohibited:
Alcohol, loitering, littering; this is a "Carry in - Carry Out" recreational area.

Walkers and Runners:

- Keep to the Right
- Pass on the Left
- Keep children close and to the Right
- Do not block the Full Width of the trail
- Dogs on four foot leash
- Clean up after your pet
- Earphones may obstruct hearing

Wheel Traffic:

- Ride to the right
- Pass on the Left
- Audible signals are helpful:
Ex: Ring a bell, Verbalize ("Pass")
- Single File
- Dogs must be under control of a person who is walking. Said person shall not be on a bicycle, roller blades or similar device.
- Keep speed below 10 MPH

Village of Endicott

Chugnut Trail/Riverwalk

<https://www.endicottny.com/parks>

- Signed as pedestrians only; No bicycles, motorized vehicles, skateboards, rollerblades, rollerskates.
- No trail use rules are available online.

Village of Owego

Owego Riverwalk

- Signed as skateboards and bicycles prohibited.
- No trail use rules available online.

Village of Port Dickinson

Community Park

<https://www.portdickinsonny.us/about/community-park/>

The Chief of Police and Village Trustee informed BMTS there are currently no formal trail-use regulations, but they do have signs suggesting that bikers and walkers go the opposite direction on the trails. There are no restrictions on the use of bicycles, and the Police Department has been following the State's definition of what is considered legal.

EXISTING TRAIL REGULATIONS ON OTHER TRAIL SYSTEMS

Cayuga Waterfront Trail – Ithaca, NY

<https://www.friendsofstewartpark.org/cwt-visit/#rules>

The Cayuga Waterfront Trail is used by pedestrians, cyclists, roller bladers, dog walkers, and people with disabilities. As you use the trail, please be courteous to other trail users.

Please Remember:

- Stay right except when passing.
- Signal audibly before passing on the left.
- Dismount bikes where indicated.
- Bicyclists and skaters yield to pedestrians. Please maintain a speed that promotes the safety and comfort of pedestrians (below 10 MPH).
- Electric-assist wheelchairs, recreational bicycles, scooters, and skateboards are allowed on the trail but should maintain a speed that promotes the safety and comfort of pedestrians (below 10 MPH). Other motorized vehicles are prohibited from using the trail.
- Dogs are welcome on short leash. Please clean up your dog's waste. Mutt Mitts are provided at dog care stations in Stewart Park and Cass Park.

Please help us keep the trail clean, and contact info@friendsofstewartpark.org about any trail maintenance problems.



PROPOSED MULTI-USE TRAIL REGULATIONS & MICROMOBILITY DEVICE POLICY GUIDELINES

Based on the information gleaned for this Study, BMTS proposes the following multi-use trail user regulation guidelines, including e-bike and micromobility device use policies. Their purpose is to serve as a guide for each municipality to form their own customized regulations, while also having a degree of uniformity, which is important so trail users can generally know what to expect when using trails that are part of the Two Rivers Greenway, but under different jurisdictions.

PROPOSED MULTI-USE TRAIL REGULATION GUIDELINES:

- Combustion engine powered bikes and other wheeled devices are prohibited.
- Motorized wheelchairs are permitted.
- Class 1 & Class 2 E-bikes are permitted.
- Permit the use of other micromobility devices as they are determined to be safe for use among all trail users when trail etiquette rules are followed.
- Speed Limit of 10 - 15 MPH for ALL bicycles and wheeled devices.
- ALL trail users must practice trail etiquette rules.
 - Riders must abide by the posted speed limit along the trail at all times.
 - Riders must ride at a safe speed according to trail conditions. Slow down and form a single file in congested conditions, reduced visibility, and other hazardous conditions.
 - Practice courtesy among all trail users.
 - Wheeled devices yield to pedestrians.
 - Keep right and pass left
 - Give audible warning when passing pedestrians or other trail users.

IMPLEMENTATION ELEMENTS

The key to successful implementation of trail use regulations is for them to be clearly conveyed to trail users. This can be achieved through education and outreach methods such as, but not limited to, those listed below.

- **EDUCATION & OUTREACH METHODS:**
 - Signage of speed limit and trail etiquette rules.
 - Provide public information using multiple mediums such as printed brochures, websites, social media, news & media coverage
 - Engage with community partners and events such as the Southern Tier Bicycle Club, Binghamton Fresh Cycles, area bike shops, and the Binghamton Bridge Pedal to educate members and the public.

Regulations will not be effective if they are not enforced, and compliance is encouraged by monitoring trail user behavior and providing corrective instruction when necessary. Below are some methods of enforcing trail use regulations.

- **ENFORCEMENT & COMPLIANCE METHODS:**
 - Police or security bike-patrols.
 - Trail user enforcement with friends of the trail or trail ambassador programs.
 - Solar powered speed indicators

- A painted centerline (yellow) may help with trail users staying to the right.
 - See [MUTCD Section 9C.03](#) Marking Patterns and Colors on Shared-Use Paths.
- Geofencing with e-bike and e-scooter share programs.

Evaluating trail-use regulations periodically is important to measure their effectiveness and make changes as necessary. Below are some items that can be useful for the evaluation process.

- EVALUATION METHODS
 - Evaluate effectiveness of regulations annually or more frequently as needed.
 - Observed compliance
 - Number of security/enforcement “actions”
 - Trail user crashes
 - Trail user survey

E-BIKE POLICY PILOT PROGRAMS

Descriptions of several e-bike policy pilot programs are available on the Rails-to-Trails Conservancy website at <https://www.railstotrails.org/build-trails/trail-building-toolbox/management-and-maintenance/e-bikes/>.

One pilot program that stood out as a possibility to be emulated by local municipalities was done in Seattle, Washington.

Seattle, Washington

Below is a summary of the Multi-use Trail Pilot that the Seattle Department of Parks & Recreation used to regulate e-bikes on its trails.



Multi-Use Trail Pilot

Seattle
Parks & Recreation



Overview

Seattle Parks and Recreation (SPR) is implementing a phased policy change on how we manage multi-use trails under our jurisdiction. The first phase will include a pilot project that institutes a 15-mph speed limit, allows Class 1 and Class 2 electric-assisted bicycles, and conducts an education and outreach campaign on trail use and etiquette. The pilot project will take place on five multi-use trails (Burke-Gilman Trail, Elliott Bay Trail, Mountains to Sound Trail, Melrose Connector Trail, and Duwamish Trail) starting August 1, 2018 and lasting for one year.



Background

Previously, Seattle's multi-use trails had no speed limit and inconsistent regulations across multiple jurisdictions. SPR also receives many comments related to conflicts of use on these trails. Recently, a new state law classified e-bikes and now allows some of them on multi-use trails, where not otherwise prohibited. The goal of this policy change is to create a safe, clear, and consistent experience for all users on these shared use paths.



Legend

- Existing Multi-Use Trail
- Proposed Multi-Use Trail
- Proposed E-Bike Routes
- Proposed 15-Mph Speed Limit
- Existing Path

Speed Limit



For the first time, the pilot will place a 15-mile per hour speed limit for all users on the five multi-use trails included. This aligns with existing speed limits on King County's regional trails and other trail owners in the region. At all times, people should continue to travel at speeds that are safe for the conditions of the trail.

E-Bikes



Electric-assisted bicycles were recently classified by Washington State and permitted on multi-use trails unless prohibited by local laws. The pilot allows Class 1 and Class 2 e-bikes (which stop assisting riders at 20 mph). All rules and apply to these bikes, including the speed limit. No other form of motorized vehicles is permitted as part of this pilot, except ADA-compliant mobility devices, which are currently allowed.

Education



The pilot includes signs describing proper trail rules and etiquette, and an outreach and engagement campaign with the Seattle Department of Transportation and community partners. Surveys and observations will be conducted to gather user data and perceptions throughout the pilot.



Seattle.gov/parks/multiusetrail

Submit comments and questions to:

Seattle Parks and Recreation
100 Dexter Ave N, Seattle, WA 98109

206-684-4075

PKS_info@seattle.gov

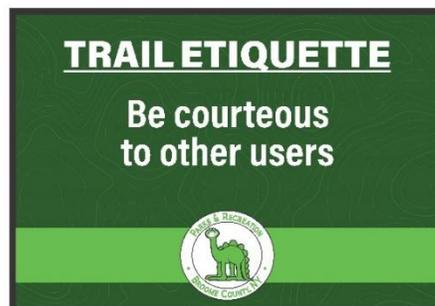
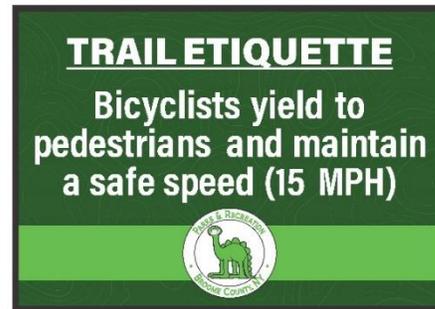
Broome County – Otsiningo Park

The Broome County Department of Parks & Recreation is working with BMTS to establish trail use regulations that emulate Seattle’s Pilot Program.

As noted earlier in this report, during December of 2021, Broome County Parks & Recreation updated the Administrative Guidelines for Otsiningo Park with the Trails Use Policy as follows:

1. Combustion engine powered bikes are prohibited on trails.
2. Use of Class 1 and Class 2 E-bikes are permitted on trails.
3. Riders must abide by the speed limit signs posted along the trail at all times.
 - a. Riders must ride at a safe speed (15 MPH Speed Limit). Slow down and form a single file in congested conditions, reduced visibility, and other hazardous conditions.
4. Trail users must practice proper trail etiquette.
 - a. Be courteous to all trail users and yield to pedestrians.
 - b. Give audible warning when passing pedestrians or other bicyclists.
 - i. Keep right and pass left
 - c. Riders are responsible for the safe operation of the vehicle under City, Park, County, and State Codes.

Lawn signs (see below) have been placed along the trails so users will clearly see the trail etiquette rules.



Enforcement will be undertaken by Broome County Security. A survey is in development to be administered to trail users during the Spring/Summer of 2022, as well as a second time several months later. It will be used to evaluate effectiveness of the public's education about the trail use regulations and compliance to the regulations.

BMTS will continue to work with Broome County Parks to implement and evaluate the new trail regulations.

Other Municipalities with Trails Comprising the Two Rivers Greenway

As stated earlier in this Study, due to the way the New York State E-bike & E-Scooter legislation is written, each municipality with jurisdiction of multi-use trails needs to create clear trail use regulations to enable e-bikes, e-scooters, and other micromobility devices to be used on their trails while providing a safe and enjoyable experience for all trail users.

The proposed multi-use trail regulations serve as a guide for municipalities to establish uniform rules for trail use with flexibility to customize them as needed. Additionally, through regular evaluation, municipalities will be able to learn which methods of regulation, public education, and enforcement are most effective, and guide adjustments that may be necessary.

BMTS Central Staff will be available to assist municipalities in the development and implementation of their multi-use trail regulations.

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