



Planning for Management & Maintenance

When planning for a greenway trail, a few simple but critical questions should be addressed early on:

Who will ultimately own and maintain the completed greenway?

The planning process for a greenway should include a preliminary plan for its operation and maintenance, identifying responsibilities, required maintenance tasks, and the jurisdictions of each entity involved. It should also assess the owning/managing entity's capacity to maintain the property and anticipate future needs. Maintenance responsibilities can be assigned to local, state, federal agencies, or non-profits, or shared through agreements with volunteer organizations. The trail manager will handle routine maintenance, ensure accessibility and safety, and plan for long-term repairs. Understanding the role that the owning entity will play in partnership with the trail manager (if the owning entity will not be responsible for management and maintenance), and how the trail manager will delegate responsibilities, should be established before construction begins.

How will greenway trail design impact maintenance and management?

Design considerations should be made in concurrence with an effective management structure, maintenance plan, and maintenance schedule. Even minor maintenance tasks will require a monetary investment and time commitment and should always be factored into the trail design and location. Factors such as surface type, route alignment, grade, or trailside amenities may require specialized equipment or personnel, and will therefore directly influence maintenance considerations. During the planning process, greenways can be designed to accommodate maintenance equipment, such as ensuring that entrance points are sufficiently wide to allow maintenance vehicles to access the greenway, or that any bollards installed at entrance points are moveable. Where possible, machinery and/or fleet standards should be maintained to minimize additional costs and eliminate a potential burden for the party responsible for maintenance.

Four keys for planning with maintenance in mind

SUSTAINABLE MAINTENANCE

Volunteers will be an integral part of the management and maintenance puzzle. Ranging from the efforts of formal "Friend Groups" and organizations that "adopt" a section of the trail to actions by individual trail users who pick up the occasional piece of litter or report a trail condition problem.

While the City of Buffalo and a future trail manager welcomes citizen participation, volunteer efforts involving the use of motorized or non-motorized equipment needs to be integrated into a formal written Management Agreement. Individual citizens who undertake maintenance activities such as mowing or removing downed trees and limbs need to do so under the umbrella of the City or the Trail Manager that has entered into a formal written agreement with the City of Buffalo. Volunteers and volunteer organizations may also provide maintenance assistance through "adopt-a-trail" style permits. These are generally for low-risk occasional maintenance like mowing, weed removal and litter pick-up. The City of Buffalo already has this permit type available for parks and is available here. This type of agreement could help supplement regular maintenance throughout the year and would likely be carried out by neighborhood groups, scouts and school groups.

Volunteer Safety

The City of Buffalo and the Trail Manager will maintain a comprehensive worker and volunteer safety program, that trains all staff undertaking maintenance activities on the safe use of all pieces of equipment prior to their use, shall always comply with applicable Occupational Safety and Health Administration (OSHA) requirements, and shall provide appropriate Personal Protective Equipment (PPE) to all maintenance personnel. Additionally, all volunteers will be trained by the City of Buffalo or the Trail Manager on the safety protocols associated with the volunteer tasks.

Emergencies and Complaints

In the event of an emergency a trail user should immediately call 911 to report the emergency. After 911 has been notified, the City of Buffalo Parks Department and the Trail Manager should be notified so that any safety situations arising from design or maintenance (such as damaged trail or a downed tree) can be rectified.

Maintenance Activities

The Scjagquada NE Greenway Trail is designed to operate as active transportation infrastructure with a minimum amount of maintenance. The recommendations limit high maintenance landscape features such as flower beds or rain gardens to the area along Scjagquada Street and do not suggest other high maintenance decorative features along other sections of the trail. Shade trees and woody shrubs will be native species that are disease tolerant and suitable for urban conditions. No trees or shrubs will be planted in any locations where tree growth could impact overhead utilities or block the user's visibility of the trail. Trees should be planted in strategic locations to provide shade for seating areas or create "gateways".

Routine maintenance activities generally associated with basic trail upkeep are listed below along with the recommended responsible party and recommended frequency (suggesting required maintenance and enhanced tasks). Secured maintenance activities are essential for ensuring the safety, functionality, and accessibility of the trail. Typically performed on a regular basis to address routine maintenance needs. Enhanced maintenance activities go beyond the basic requirements and focus on improving the trail experience, aesthetics, and user satisfaction. For example, mowing of the grass margins parallel to the trail at least eight times per year to prevent vegetation leaning into the users on the trail (required) versus mowing every two weeks (or up to 16 times per year) during the growing season to create a pristine aesthetic (enhanced).

1. Establish a Maintenance Plan

Maintenance will fall into two categories - routine and larger scale capital maintenance. A maintenance plan within the feasibility study should outline who would be responsible for each of those categories of maintenance work, as well as provide detail on specific activities (i.e., sweeping/ blowing debris from the trail, mowing of shoulders, vegetation management, trash pickup, cleaning graffiti and drainage), costs, timeframe, and staffing responsibilities for maintaining a trail. The plan should enable the trail manager to understand on-going and anticipated maintenance needs and associated staffing requirements. A maintenance plan and maintenance schedule provide trail managers with a systematic and thorough process for identifying, tracking, and addressing maintenance needs.

Page from the East Side Trails Feasibility Study (2024), highlighting aspects of their Management & Maintenance Plans.



2. Plan to respond to issues and concerns

While it can be time consuming to address inquiries from the general public, trail users will often seek out a point of contact for questions, comments, or concerns about the trail, or in response to an encountered issue. Some users prefer to speak with someone directly, while others may prefer to send an email. In either scenario, a point of contact should be established at this stage, so that when the trail opens, trail users know exactly how to report an issue, and who they should report the issue to. The process for collecting, tracking, and responding to issues can be challenging, especially when certain issues are within the purview of the owning/managing entity (i.e., maintenance considerations) and others that fall outside of it (i.e., law enforcement matters). Clarifying exactly what issues are within the scope of the trail manager or owner, and publicizing this information provides the general public with guidance and can help filter inquiries received from the general public. Depending on the circumstances, a public email, phone number, or online form could be used to capture this information.

3. Consider long-term maintenance

The feasibility study should also identify the potential need for significant capital repair or reconstruction after a period of time has passed. For example, if the greenway trail is envisioned with a paved, asphalt surface, at what point will the trail need to be repaved with fresh asphalt? While routine maintenance will help prolong the life of the trail surface and other trail assets, these will likely need eventual replacement. If routine maintenance is deferred, issues can snowball into more significant issues that negatively impact the trail user experience and require costly, capital repair work.



4. Take advantage of volunteer support

Local volunteer groups can also offer supplemental services, free of charge, to assist with light maintenance needs along a greenway trail. While the potential for volunteer stewardship of a greenway should be considered at this point, without a guaranteed long-term agreement, volunteer work should not be substituted for a true maintenance plan for a greenway. Stewardship should be viewed as a way to enhance or augment planned maintenance activities.

Examples of Management & Maintenance Plans

- **East Side Trails: A Vision for Connecting Communities on Buffalo's East Side. (2024). GoBike Buffalo. Pages 62-70. Accessed from: <https://gobikebuffalo.org/project/eastsidetrailconnections>**
- **Cheektowaga Area Trails Study. (2023). GoBike Buffalo. Pages 67-68. Accessed from: [https://www.gbnrta.org/bikebuffaloniagaraTrails Study \(2023\)](https://www.gbnrta.org/bikebuffaloniagaraTrails%20Study%20(2023))**

*Greenways Guides are a series of resources developed from **Trails Across New York: A Grassroots Guide to Developing Greenway Trails** guide. Read and download the full guide at ptny.org/greenways*