Pennsylvania Yearly Routine Rail-Trail Maintenance Costs Per Mile

rails-to-trails conservancy	Armstrong Trails	Delaware & Lehigh Trail	Ghost Town Trail	Lackawanna River Heritage Trail	Lebanon Valley Rail-Trail	Schuylkill Banks
Location	Western Pennsylvania	Eastern Pennsylvania	Western Pennsylvania	Northeastern Pennsylvania	Central Pennsylvania	Philadelphia, Pennsylvania
Trail Surface	Stone Dust - Rural	Stone Dust - Mostly Rural	Stone Dust - Rural	Varied Surfaces - Urban	Stone Dust - Rural	Asphalt - Urban
Visitation	69% increase from 2019 to 2020	65,042 per Eco-Counter	80,000 per TRAFx Counters	375,000 per Eco & TRAFx	60,000 from highest of 3 Eco-Counters	2019: 1,726,215 user trips
Primary Maintenance Performed By	Nonprofit Staff and Volunteers	County Parks Staff	County Parks Staff	Volunteers and Heritage Area Staff	Volunteers	City and Nonprofit Staff
Length Studied	36 miles	12 miles	28 miles	15.5 miles	18 miles	1 mile
Total Yearly Cost Per Mile	\$2,377	\$2,496	\$1,765	\$6,764	\$3,833	\$102,322
Volunteer Hours	1,908	0	0	3,552	1,158	1,228
Surface and Structures	2468-foot tunnel and seven bridges	Resurfaced one section in 2005	21 bridges from 20-225 feet	100' section floods yearly, use excavator for mud	15 bridge, 3 tunnel inspections \$6,750/year	Trail located between active tracks and river
Vegetation	Emerging high-tree canopy over trail	Trim with 20' Boom Mower	Sickle Bar Mower for Edge	Knotweed and other species	Several flower beds	Extensive grass areas and plantings
Level of Amenities	Low	Mid - Gates/Bollards are most time-consuming	Mid -Two 1840 Iron Furnaces	High - 60 benches, 18 gates, 5 sets of bollards, 3 pavilions, fishing & observation platforms	Mid - 5 trailheads totaling 197 parking spaces	Very high and very rich level of design
Cleanliness and General Comments	"Pack it in, pack it out" policy	Receptacles at 2 trailheads	Litter only after events	16 sites with receptacles emptied twice a week	No litter or grafitti	Trash receptacles emptied daily, floods annually



Routine Trail Maintenance Costs Per Mile

The costs of rail-trail and multiuse trail maintenance are not well documented as a discipline—thus making it very difficult to compare practices for gaining cost savings and efficiencies. The purpose of this table is to quickly give a general sense of the routine maintenance cost per mile of various types of multiuse trails in different regions of the United States. With this information, the viewer can gain an understanding of the wide range of costs, help determine what a new project's costs will be, or make some general comparisons to their existing trail.

This table is a continuation of Rails-to-Trails Conservancy's (RTC's) 2015 study, "Maintenance Practices and Costs of Rail-Trails," which looked at 200 trails across the country. While very useful in determining standard maintenance tasks and their frequency, the 117-question study showed that trail maintenance costs are not readily available. The study also determined that even when they are available, they are not always easily understood and, therefore, not often helpful in determining the cost of new trail maintenance. Far too often, advocates don't have good data when trying to make the case for trails.

Explanation of Table Components

The table represents the distilling of the study's many questions into four broad, general categories: surface, vegetation, amenities and cleanliness. While trail elements are similar from one trail to another, trail managers have many various descriptions and methods for describing practices and costs. No one method is wrong, but the divergence in methodologies makes it difficult to meaningfully share them collectively among professionals. Even more of a challenge is the fact that one trail could have tasks performed by a number of cross-sector partners and groups—for example, a state entity, a contractor, a local municipality and a volunteer group. The trails portrayed here represent about one-third of those studied and are selected for their completeness, national representation and validity. The numbers shown here are a product of a peer-designed worksheet that captures essential maintenance-task costs. Other larger and more intricate templates were tested, after which we narrowed down the focus to those tasks deemed most important in the process, to ensure efficiency and ease of use.

Routine tasks are defined as occurring at least once a year. These can include frequently scheduled tasks such as mowing and trash dumping, or as-needed tasks like fallentree or graffiti removal. Routine costs as defined here do not include management, operations and programming, just hands-on work.

Capturing the costs of sporadic (or "periodic") tasks is sometimes difficult and hard to differentiate from routine. Often, as budgets shrink, this list increases and can become deferred maintenance. This can result in the need to rebuild—potentially at many times over the original cost of the maintenance—and can impact the funding available for the construction of new trails. This dynamic needs to be studied more; for the purposes of this study, certain tasks, such as the cutting of tree roots, re-decking of bridges and inspection of bridges or tunnels, was included if they are part of a plan where specific sections of the trail have them performed on a yearly cycle or budgeted over many years.

Given the change in frequency of floods brought on by climate change, many trail managers now cite removal of debris and mud as routine, and those costs are included here.

Trail volunteers are essential to the maintenance and ultimate success of America's trails. Without them, paid staff or contractors would need to be hired; thus, the value of volunteer hours has been quantified and is a part of the total cost shown here. The hours portrayed here are for just routine tasks as defined in the worksheet, not for one-time free labor to construct a kiosk, for example, or for trail patrolling, or for many other operational duties performed by trail volunteers across the country.

Now that rail-trails and other similar pathways are part of America's mainstream infrastructure, RTC needs to build on this information and seeks comment and data-sharing in order to provide the trail community with better technical insight. This table is just the start of a more robust list of data points that can help inform maintenance costs and best practices for many types of trails, locations and other variables.

Thank you very much to those individuals that took the time to calculate these costs. If you are a trail manager and you would like to share your data with RTC, please contact Regional Director, Tom Sexton (tom@railstotrailsconservancy.org). The more data we acquire, the faster we'll get on the right track in supporting trail managers across the country with these critical maintenance issues.



