TRUCKEE RIVER PATH
INVENTORY STUDY REPORT

RTC

REGIONAL
TRANSPORTATION
COMMISSION

Table of Contents

Executive Summary

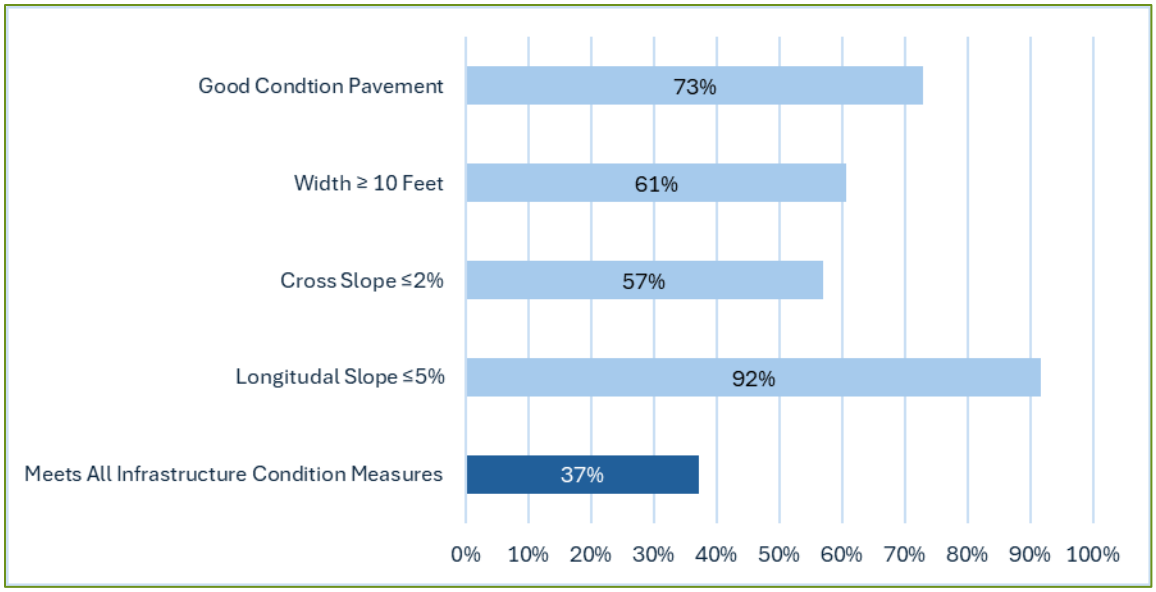
This report provides an inventory of the Truckee River Path, a 11.2 mile corridor of paved shared-use path, for non-motorized users, located along the Truckee River from Riverhaven Drive in Reno to Larkin Circle in Sparks. The inventory was conducted in July and August of 2024 and includes both the physical infrastructure of the path and observations of the surrounding environment that may impact user experience.

This inventory assesses the condition of paved infrastructure, the presence of amenities such as bathrooms, lighting, benches, and trash cans, the locations of access points for pedestrians and cyclists, roadway crossings, signage, and other elements that contribute to the overall user experience.

The inventory presented in this report is a snapshot of conditions observed during field visits in the summer of 2024 and does not include any improvements or amenities installed after August 2024. The purpose of this inventory is to identify the current conditions of the path, which may assist in future planning efforts.

Key findings from the inventory include:

- **Infrastructure Condition:** Approximately 73% of the path surface was found to be in good condition. The path was found to have an average width of 10.85 feet, with 61% of the path meeting the Federal Highway Administration (FHWA) recommended minimum width of 10 feet for two-directional shared-use paths. The average longitudinal slope of the path was 1.97%, with 92% of the path within the FHWA's recommended maximum of 5%. The average cross slope was 2.73%, ranging from 0% to 15%. Approximately 57% of the path complies with the FHWA's recommended maximum cross slope of 2%. As shown in the graph below, 37% of the path was found to meet all three FHWA recommendations (width, cross slope, and longitudinal slope) and was found to have good pavement surface condition.



- **Amenities:** A total of 172 amenities were inventoried, including 99 lights, 36 benches, 36 trash cans, and 1 bathroom. Amenities were primarily clustered within designated park areas as well as along sections of the path within the City of Reno. It should be noted that amenities have been installed since this inventory was conducted and are therefore not captured in this report
- **Observations:** General observations were conducted along the path to document key features, including 67 obstructions, 9 signs, 12 road crossings, and 44 access points. Obstructions included tree branches, tree trunks, utility poles, fencing, and overgrown shrubs. Signage observed along the corridor primarily included wayfinding markers for the Tahoe Pyramid Trail, local city parks and warning signs indicating potential hazards, such as low-clearance bridge crossings. Road crossings, locations where the path intersects with roadways, were found to be either at-grade or through grade-separated facilities. A total of 44 access points, through adjacent asphalt or concrete paths, were observed.

Introduction

Background

The Truckee River Path is a paved, off-street facility that accommodates nonmotorized users, including pedestrians, bicyclists, and individuals using mobility devices. In 2024, the RTC Board of Commissioners identified the Truckee River Path as a priority and set a strategic goal for Fiscal Year (FY) 2025 to explore the Truckee River as a mobility corridor. This inventory report is an initiative of the FY 2025 goal.

Objective

This inventory report documents the existing conditions and characteristics of the Truckee River Path and provides a count of observed amenities as well as general observations of conditions that may impact user experience. This report assesses both the physical infrastructure of the path and the surrounding environment. Additionally, data collected for this report will be utilized to develop a publicly available Geographic Information System (GIS) dataset, provided through stand-alone GIS files and ArcGIS Online.

Scope and Limitations

The inventory area is the Truckee River Path, from Riverhaven Drive in Reno to Larkin Circle in Sparks (Figure 2). The inventory area spans approximately 11.2 miles and traverses a range of land uses, including industrial, commercial, residential, and downtown districts (Figure 2). Access points and recreational destinations near the inventory area include Idlewild Park, Wingfield Park, Downtown Reno, the Reno Aces Baseball Stadium, Fisherman's Park, Cottonwood Park, and major north-south roadways. The inventory presented in this report is a snapshot of conditions observed during field visits in July and August of 2024 and does not include any improvements or amenities added after the inventory data collection. This report also does not include long-term forecasting or an analysis of future infrastructure needs.

Figure 1-Types of Land Use: Industrial, Residential, Downtown

Figure 1-Truckee River Path Inventory Area

Methodology and Guidance

Path Classification

The Truckee River Path is classified in this report as a shared-use path. The term shared-use path is defined by the American Association of State Highway and Transportation Officials (AASHTO) as "a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way." Shared-use paths may be used by pedestrians, skaters, wheelchair users, joggers, and other nonmotorized users." According to the Federal Highway Administration (FHWA) University Course on Bicycle and Pedestrian Transportation, common shared-use path types include rail-trails, rails-with-trails, greenway paths, side paths, towpaths, utility corridors, and paths on institutional or private developments. Based on the FHWA guidance, the Truckee River Path can be further classified as a shared-use greenway path, since it can be integrated within the larger natural corridor of the Truckee River.

Data Collection

RTC recruited two University of Nevada, Reno (UNR) student interns, one undergraduate and one graduate student, to collect data for the Truckee River Path Inventory Study. The inclusion of UNR students in this initiative highlights RTC's ongoing commitment to strong community partnerships. Data were collected during July and August of 2024 through in-person field visits. Cellphones were utilized to enter data points through the ESRI ArcGIS Field Maps Cellphone App. The Field Maps App was selected for this effort as it provides accurate location tracking and easy integration with desktop GIS. Data input screens from the App are shown in Figure 2.

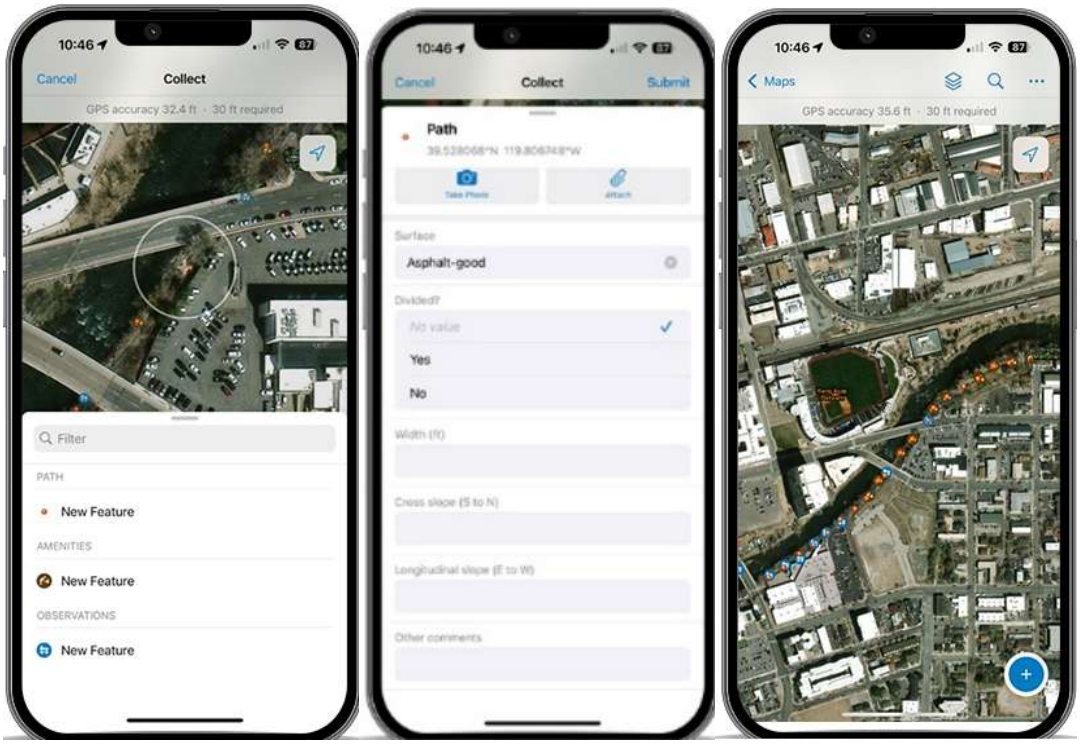


Figure 2-Field Maps Data Collection Cellphone App

Path data were collected at 100-foot intervals along the 11.2 mile inventory area, resulting in a total of 578 collection locations. About 0.25 miles were not measured due to accessibility or safety reasons. Segments not measured are labeled as "Other" in the analysis. At data collection locations, data points were entered into the App, and a photograph was taken to provide visual context. The data points were processed using GIS, allowing for spatial analysis and geotagging of the photographs taken at each location.

The following path infrastructure data were collected at each 100-foot interval:

1. GPS Coordinates
2. Path Width
3. Longitudinal Slope
4. Cross Slope
5. Path Surface and Condition
6. Path Striping

In addition to the path infrastructure data, the inventory also documented amenities and notable features as they were encountered along the path. Each amenity and feature was recorded with associated GPS coordinates. The following amenities and features were collected:

1. Lighting
2. Benches
3. Restrooms
4. Trash Cans
5. Obstructions
6. Access Points
7. Road Crossings
8. Signage

Guidance Document

The Federal Highway Administration (FHWA) Guide for the Development of Bicycle Facilities was utilized to determine data collection parameters for the width, longitudinal slope, and cross slope of the Truckee River Path. The FHWA recommended shared-use path measurements are further described in this section.

Width

The appropriate paved width for a shared-use path is dependent on the context, volume, and mix of users. The FHWA recommended minimum paved width for a two-directional shared-use path is 10 feet (3.0 meters). Typically, shared-use path widths range from 10 to 14 feet (3.0 to 4.3 meters), with the wider values applicable to areas with high use and/or a wider variety of user groups. In rare circumstances, a reduced width of 8 feet (2.4 meters) may be appropriate.

Longitudinal Slope

The FHWA recommends a maximum longitudinal slope of 5% for shared-use paths. When paths are located adjacent to a roadway, they may match the roadway's grade even if it exceeds 5%. Paths on independent rights-of-way should keep grades at or below 5%, especially on long inclines, for accessibility and user comfort.

Cross Slope

Cross slope is essential for drainage, preventing water accumulation and minimizing the risk of surface deterioration or slipperiness. FHWA recommends 1% cross slope for most shared-use paths. This provides adequate drainage while remaining comfortable for users, including those with disabilities. The maximum recommended cross slope is 2%, as required by accessibility guidelines. This applies whether the path is adjacent to roadways or in independent rights-of-way. A center crown design with 1% slope in each direction may also be used for drainage and accessibility.

Existing Conditions Inventory

Infrastructure

Path Surface and Condition

The path surface was found to consist of three primary materials: asphalt, concrete, and wood (bridges). It is estimated that 8.83 miles are asphalt, 2.06 miles are concrete, and 0.06 miles are wood bridge surfaces. Approximately 0.25 miles of the path were not assessed due to accessibility or safety constraints. Surface material and condition were visually assessed at each data collection location. Surfaces showing noticeable wear and deterioration were classified as being in "poor" condition. Surfaces without visible wear or deterioration were classified as being in “good” condition. Surface material and condition were assigned one of the following five classifications:

1. Asphalt-Good Condition
2. Asphalt- Poor Condition
3. Concrete-Good Condition
4. Concrete- Poor Condition
5. Bridge (i.e., Wooden Bridges)

Examples of photos taken as part of the surface condition assessments are shown as Figure 4. About 8.2 miles (73%) of the path surface was found to be in good condition (Figure 6). Asphalt comprises a significant portion of the path, with around 6.1 miles (54.5%) in good condition and 2.73 miles (24.4%) in poor condition, while concrete sections account for another 2.0 miles (18.1%) in good condition and 0.04 miles (0.3%) in poor condition.

Figure 3-Path Surface Material and Condition

Figure 4 (Continued)-Path Surface Material and Condition

The remaining 0.06 miles (0.5%) consist of bridges, which are constructed with a variety of wood products. All wooden bridge surfaces were found to be in good condition. About 0.25 miles (2.2%) of the path was not assessed due to accessibility or safety reasons. These segments are classified as "Other". Path locations with the most concentrated areas of poor surface condition were between Lake Street and Galletti Way, where sections of asphalt displayed wear, including horizontal and vertical cracking, crumbling edges, and uneven surfaces (Figure 6).

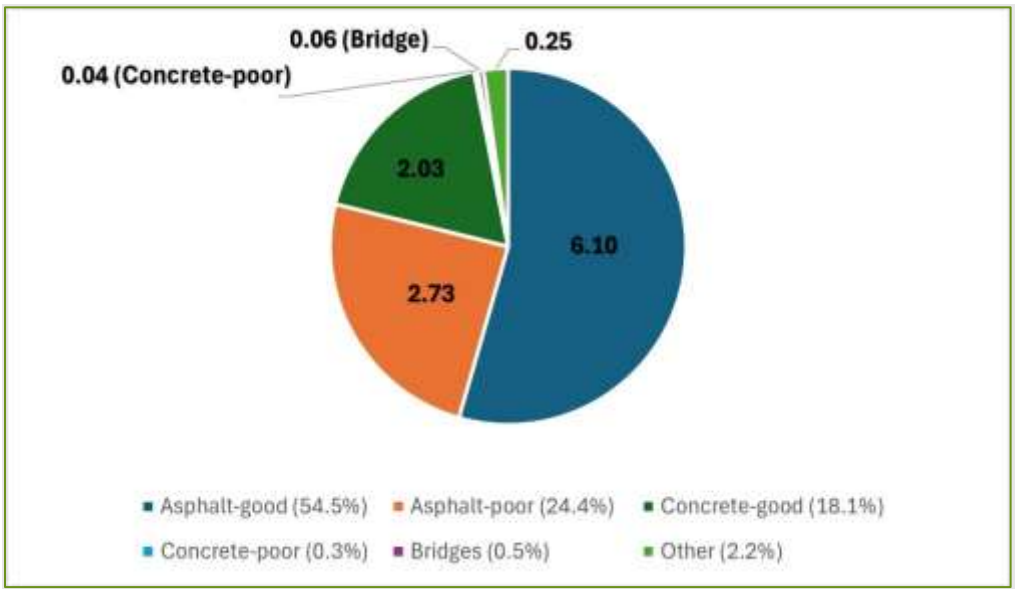


Figure 5-Surface Material and Condition

Figure 6-Areas of Poor Surface Condition

Width

The path was found to have an average width of 10.85 feet, with 61% of the path meeting the FHWA recommended minimum width of 10 feet for two-directional shared-use paths. Figure 7 shows locations of the path where the width meets the 10-foot recommendation. The mileage and percentage of the path meeting or not meeting the FHWA recommended width are shown in Figure 8.

Most of the path was found to measure between 7 feet and 14 feet (Figure 10). Locations wider than 10 feet were generally within parks and adjacent open spaces. Path locations less than 10 feet wide, were generally those in residential areas, including along Idlewild Drive. In the locations where the path was narrower, widths were between 3 and 5 feet.

Examples of path locations less than 10 feet wide include neighborhood areas with sidewalk infrastructure connecting to the path, locations on bridges or overpasses, and some pedestrian-focused sections such as along Riverside Drive, where bicycle users are transitioned to the Bicycle Boulevard corridor (Figure 11).

Figure 7- Path Width Meeting FHWA Recommendation (10 feet)

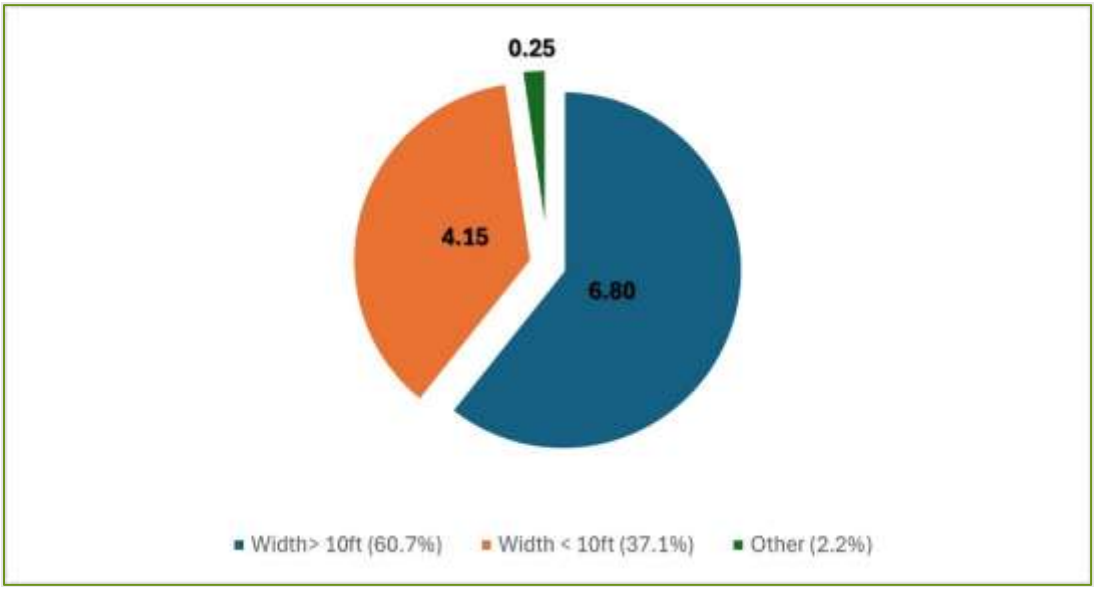


Figure 8-Path Width Mileage

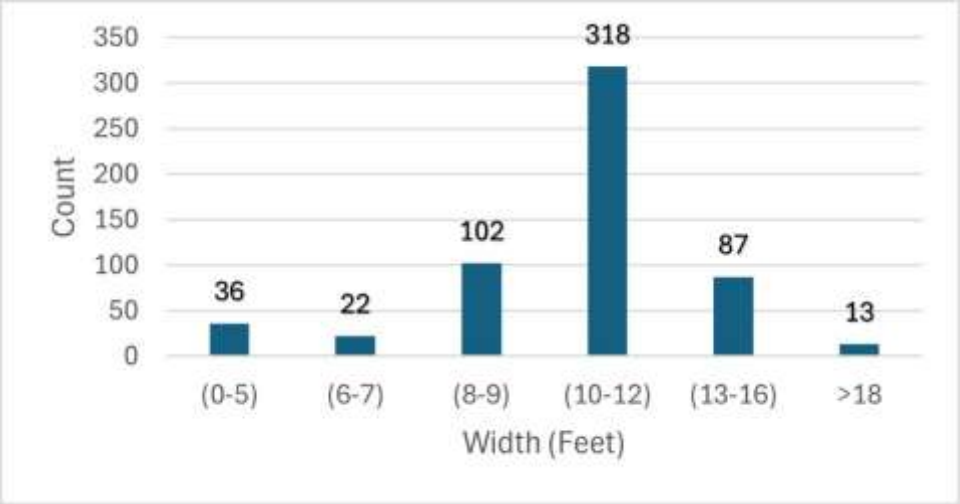


Figure 9-Path Width

Figure 10-Path Width Examples (Meets Recommendation / Does Not Meet Recommendation)

Slope

The path was found to have an average longitudinal slope (east to west) of 1.97% (Figure 11), with 92% of the path within the FHWA recommended 5% slope (Figure 12). However, throughout the path, there were several outlier slope measurement locations, including short inclines and hill-like rises. These variations in slope were primarily due to the natural topography of the area, as well as adjustments made to navigate bridges, overpasses, and other infrastructural elements.

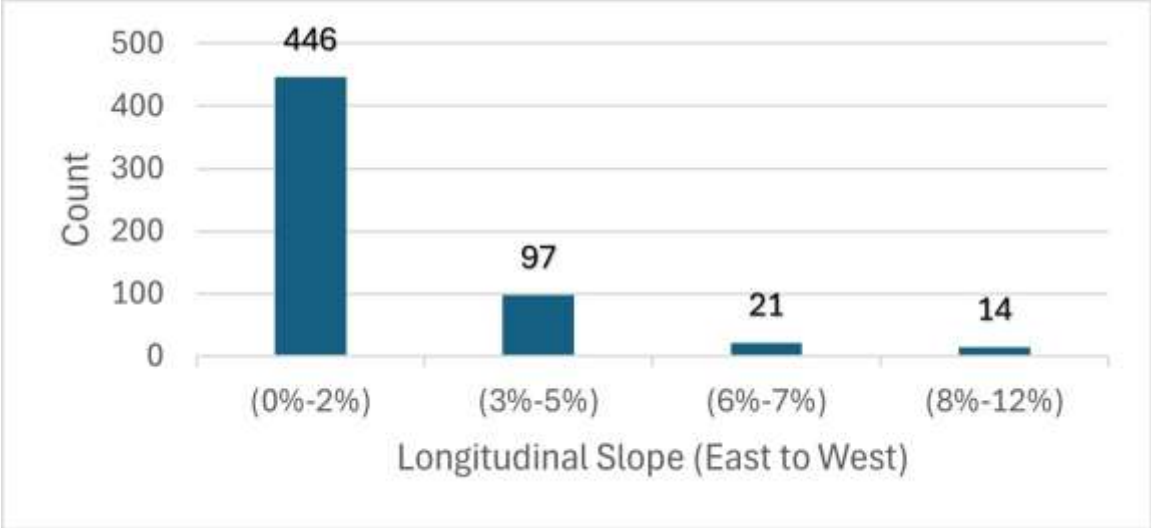


Figure 11- Longitudinal Slope

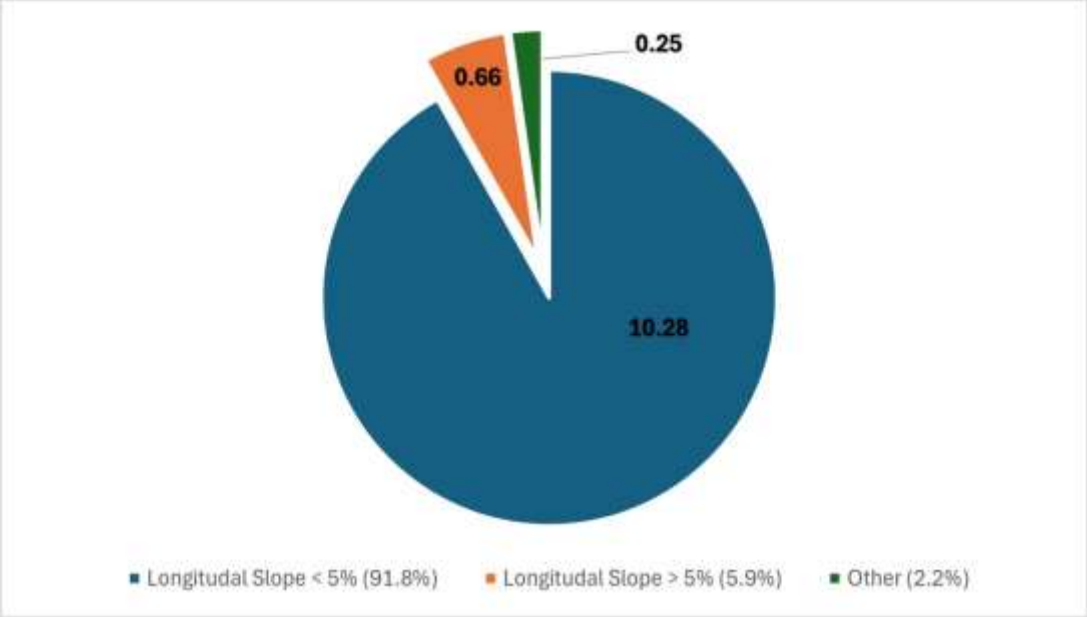


Figure 12-Longitudinal Slope Mileage

The path was found to have an average cross slope (north to south) of 2.73% (Figure 13), with slope varying between 0% and 15%, with about 57% of the path meeting the 2% cross slope recommended maximum (Figure 14). The outlier areas with higher grade slopes were primarily associated with specific features such as sidewalks and driveway access in residential areas, particularly along Idlewild Drive in Reno. These sections typically had steeper inclines due to the presence of driveways and residential access points. In addition to these outliers, higher-grade slopes were also observed in multiple concrete sections along Riverside Drive and asphalt areas throughout the path.

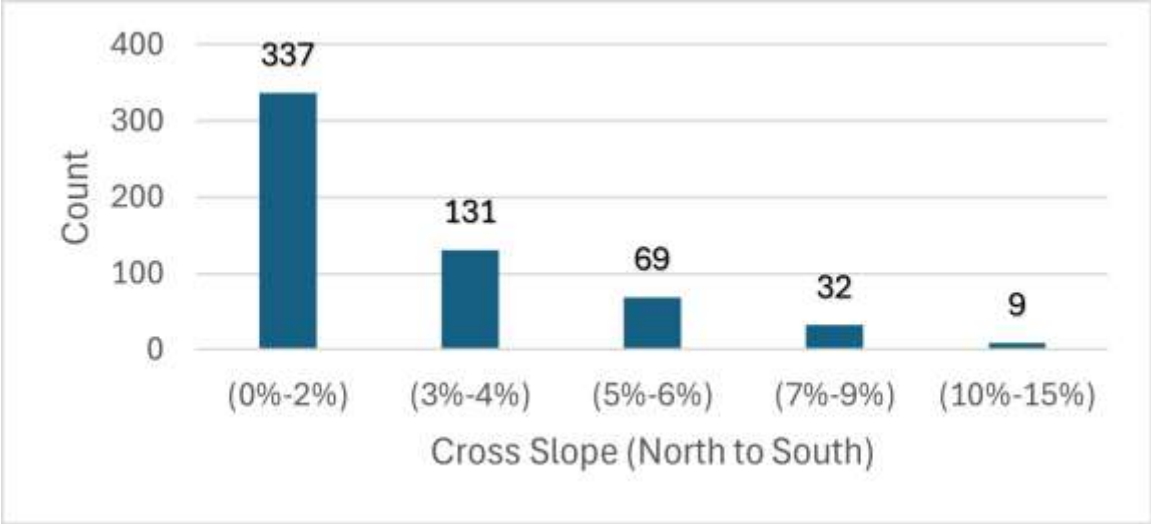


Figure 13-Cross Slope

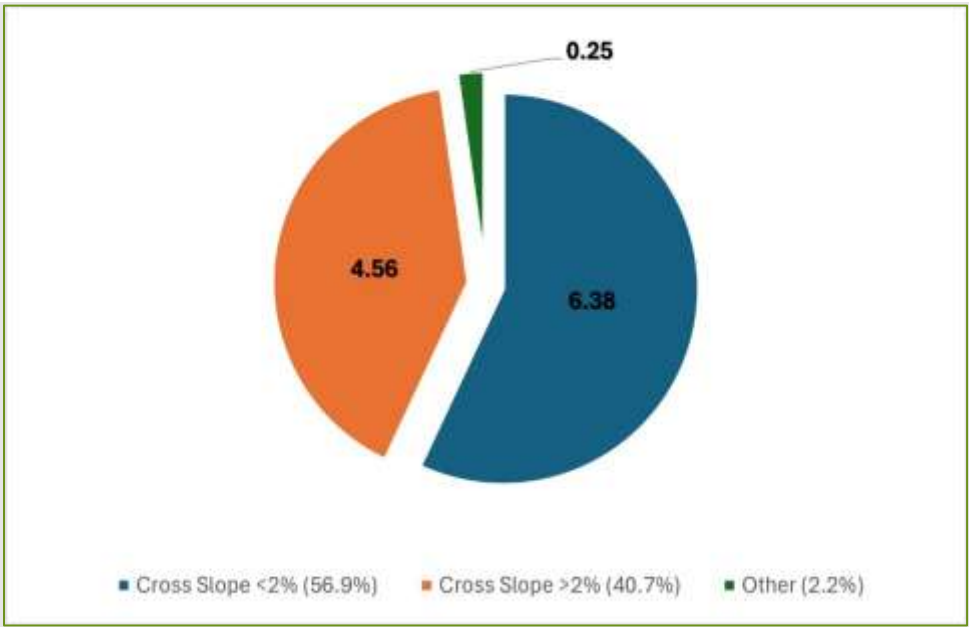


Figure 14-Cross Slope Mileage

The inventory found approximately 35 locations along the path where the longitudinal slope measurements exceeded 5% and approximately 241 sites that had cross slope measurements exceeding 2%. These sites are dispersed throughout the path, with a combination of areas exhibiting both good and poor surface quality, as well as varying surface material. Figure 15 shows examples of locations with different longitudinal slopes and surface material.

Figure 15-Longitudinal Slope Examples: Concrete Within Recommended Slope / Asphalt Outside Recommended Threshold)

37% of the path was found to meet all three FHWA recommendations (width, cross slope, and longitudinal slope) and was also found to have good pavement surface condition (Figure 17).

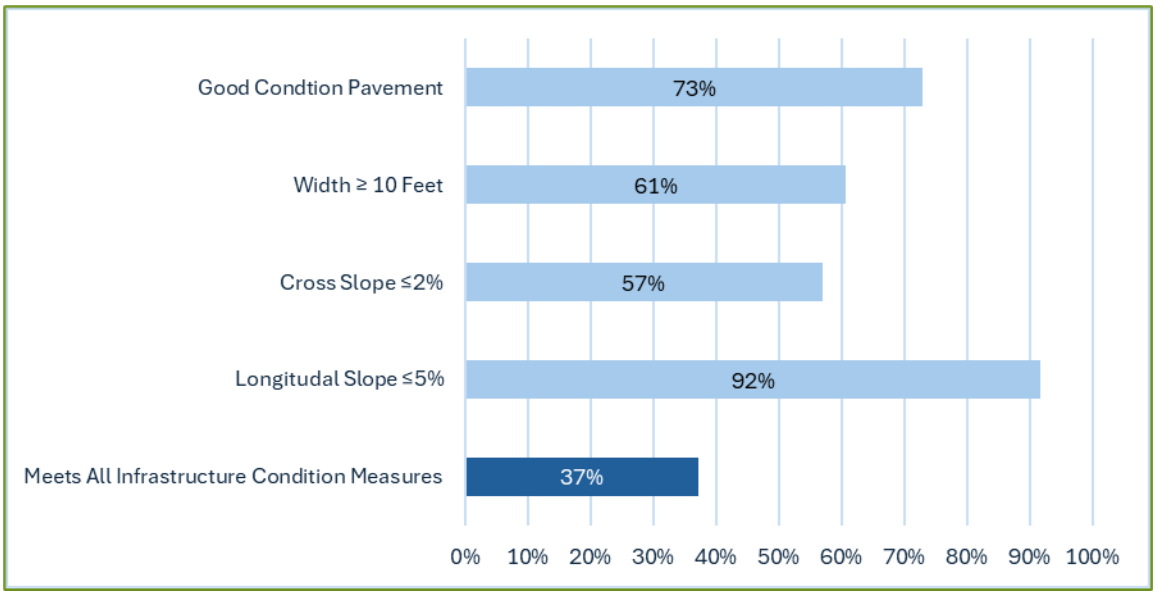


Figure 17-Percent of Path Meeting all Measures

Striping

Throughout the path, some sections were clearly divided by a striped center line (Figure 18). Most of the striped path sections were within the city of Sparks, but there was also a continuous segment through Idlewild Park in Reno (Figure 19). In total, approximately 5.6 miles of the path were found to be marked with striping (Figure 20).

Figure 18-Striped Path

Figure 19-Striped Path Location

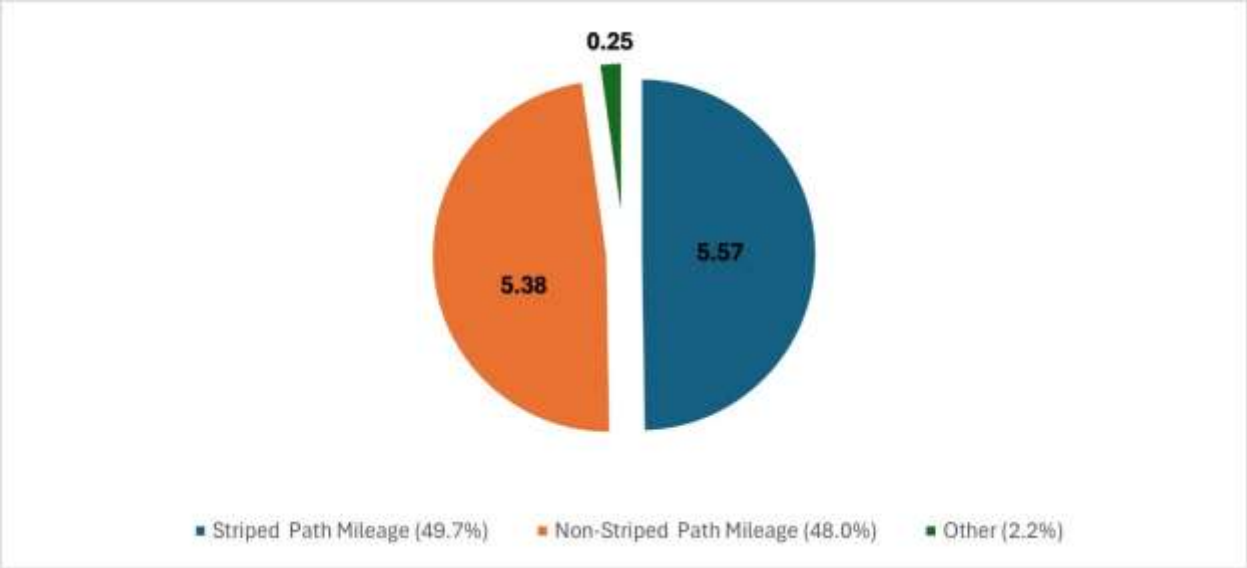


Figure 20-Striped Path Mileage

Amenities

Restrooms

One restroom, located within Cottonwood Park (Figure 21), was counted in the initial inventory. As observations were only collected every 100 feet, no restroom facilities between data collection locations were included in the initial inventory. Recognizing the limitations of the data collection methodology for the identification of restrooms, a post-inventory desktop analysis was conducted in the spring of 2025. At that time five additional publicly available restrooms along the path were identified, including three "Portland Loo" restrooms (Figure 22). The additional restrooms were located within Rock Park, John Champion Memorial Park, Brodhead Memorial Park, City Plaza Park, and Crissie Caughlin Park (Figure 23).

Figure 21-Restroom (Cottonwood Park)

Figure 22-Restroom (Portland Loo)

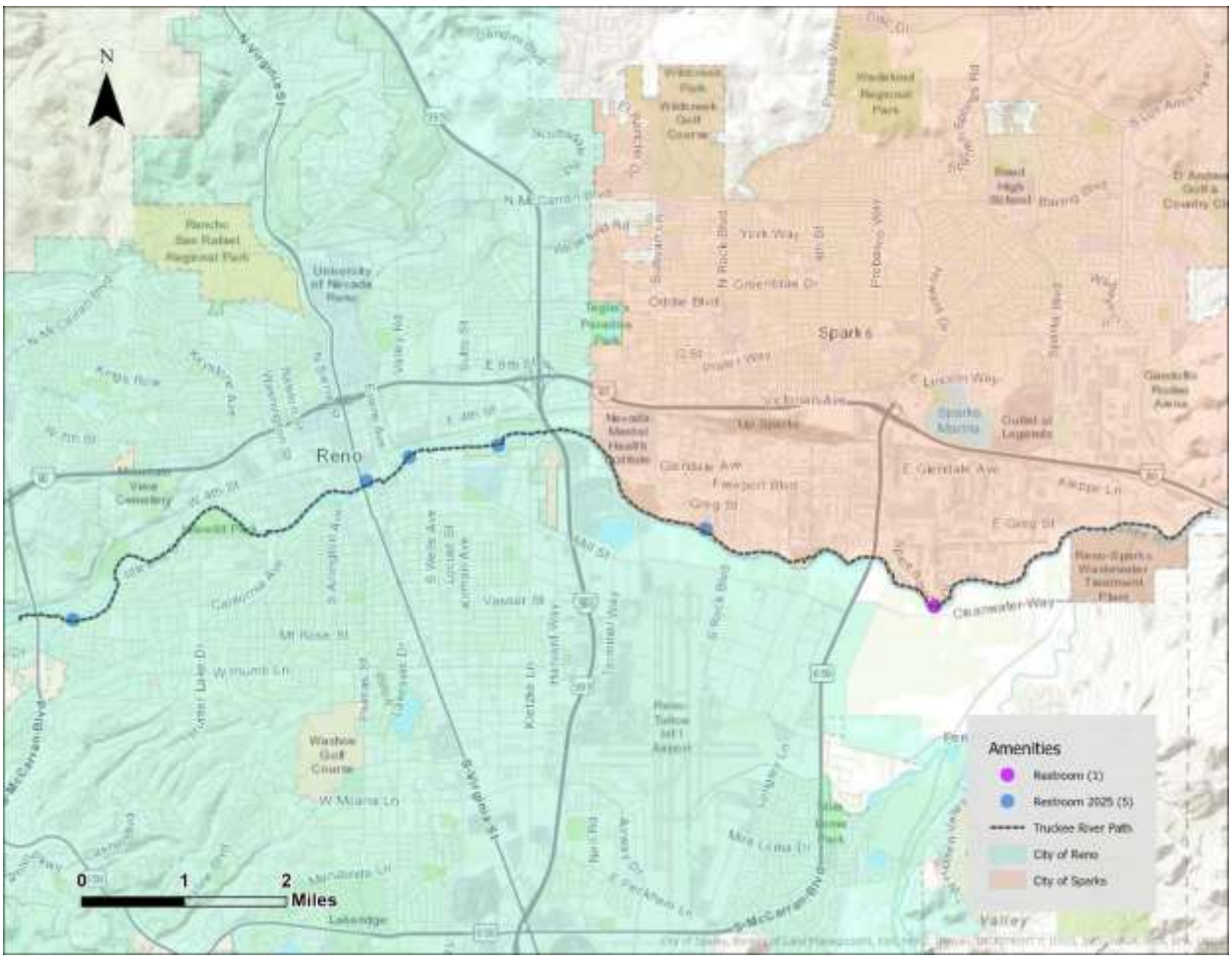


Figure 23-Amenities Across Entire Path (Restrooms)

Benches

The design and quality of the benches varies along the path, with cement, wood, and metal being the three main materials used for bench construction (Figure 24). Some benches

feature more modern, ergonomic designs, while others are simpler and more traditional. Benches were found to be located throughout the path corridor (Figure 25), with fewer benches found within Sparks.

Figure 24-Benches (Wood, Cement, and Metal)

Figure 25-Amenities Across Entire Path (Benches)

Trash Cans

Trash cans were found to be distributed along the path, however more trash cans were found within the City of Reno. (Figure 26). The design and condition of the trash cans varied by location. While some were found to be in good condition, others exhibited signs of deterioration, including physical wear, aging materials, and evidence of vandalism such as graffiti and tagging.

Figure 26- Amenities Across Entire Path (Trash Cans)

Lighting

Lighting infrastructure found along the path was limited in the City of Sparks, with extended segments lacking lighting fixtures. In Reno, lights were found to be concentrated within the Riverwalk District and along the path adjacent to Kuenzli Street (Figure 27). A variety of light fixture styles were observed, including units designed to emit light omnidirectionally, laterally, and downward (Figure 28). The type of lighting technology also varied by location, with a mixture of LED and non-LED bulbs observed. As the inventory was conducted during daylight hours, the functionality and illumination quality of the lighting fixtures could not be assessed.

Figure 27-Amenities Across Entire Path (Lights)

Figure 28-Light Styles

User Experience Observations

Obstructions

Obstructions were defined as vertical barriers within seven feet of path clearance and horizontal barriers within two feet of the path edge. A total of 67 obstructions were identified along the path, consisting of 54 horizontal obstructions and 13 vertical obstructions. Obstructions observed along the path included trees, foliage, and fencing, either along or through the path. Tree branches were the primary vertical obstructions. Both horizontal and vertical obstructions were found to be present throughout the path (Figure 29). Horizontal obstructions observed consisted of narrow fencing, poles, depressions in the path, and tree roots (Figure 30).

Figure 29-Vertical and Horizontal Obstruction Locations

Figure 30-Vertical Obstruction (Branch) and Horizontal Obstruction (Depression and Tree Root)

Signage

Signs along the path were found to serve two primary functions, wayfinding and hazard warnings. Wayfinding signs help users orient themselves by indicating the direction of travel, with some displaying approximate travel times to key locations along the trail and a map of the path (Figure 31). Tahoe Pyramid Trail signs, found throughout the path, are an example of a wayfinding sign. The other type of sign found along the path were hazard warning signs, which alert users to potential dangers, particularly related to overpass clearance heights. Other signs along the path notified path users of city ordinances and city boundaries.

Figure 31-Signage Along Path

Road Crossings

Two crossing types were observed at the eleven locations, at-grade crosswalks and grade-separated underpasses. The crosswalks had different styles of markings, which included standard and continental lines (Figure 32). The crosswalk on Sierra Street had signage on light poles to indicate to drivers the presence of a crosswalk. The underpasses varied in height, with high clearance on the underpass for I-580, and lower clearance on Glendale Avenue, which had a 7 feet -11 inches clearance (Figure 33). The path was found to cross over a roadway at 11 locations (Figure 34).

Figure 32-Crosswalk Styles (Standard and Continental Lines)

Figure 33-Low Bridge Underpass

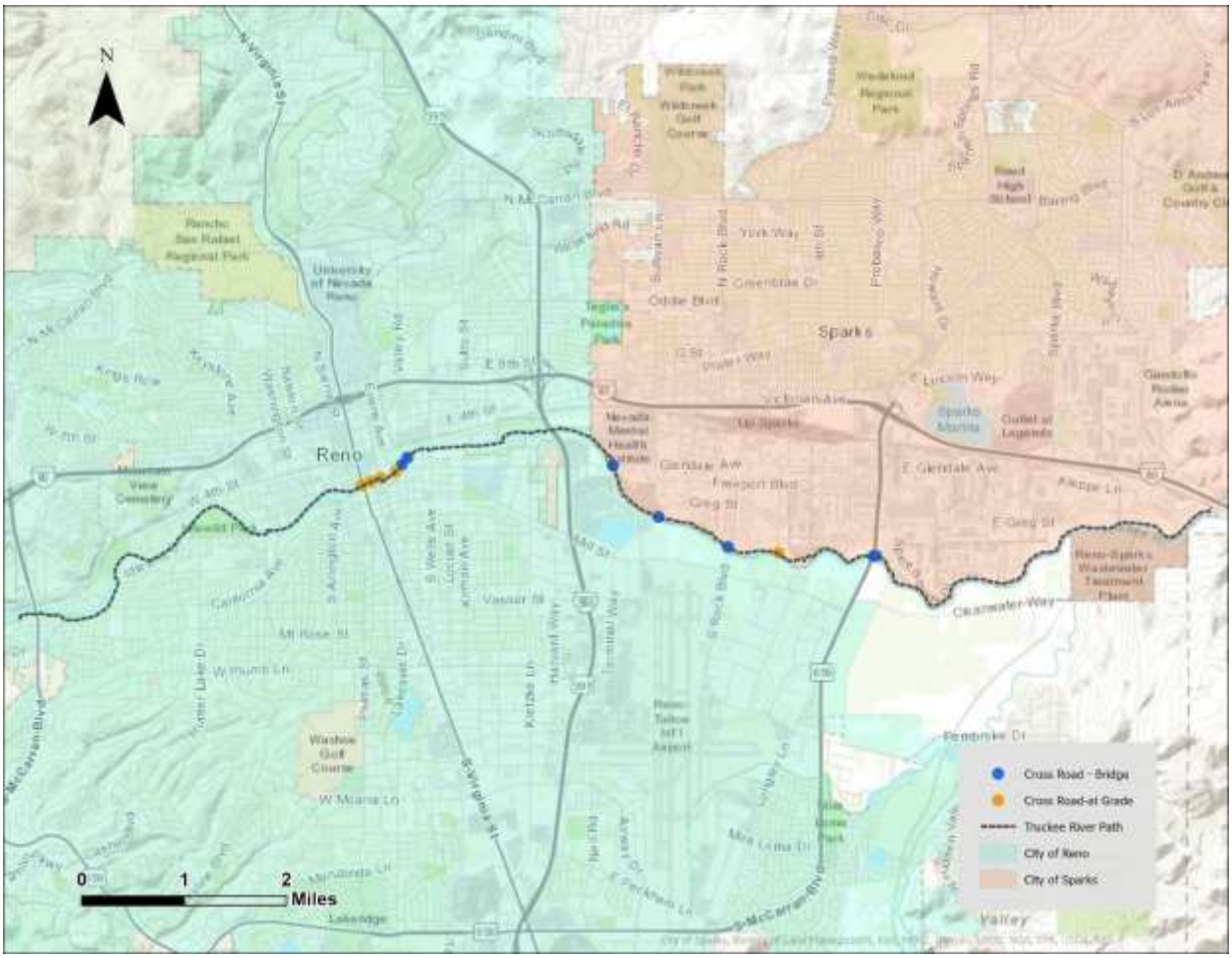


Figure 34-Road Crossings Locations

Access Points

A total of 44 access points were observed along the path, with a high concentration located in the Riverwalk District of Reno (Figure 35). The access points included pedestrian walkways, curb ramps, paths, inclined ramps, stairways, and river access ramps (Figure 36). Several of these access points were connected to parking lots. The access points were distributed throughout the corridor and varied in surface material and condition.

A potential point of path segmentation was observed along the path within the downtown Reno corridor. Specifically, the segment between South Center Street and Lake Street included two fences with lockable gates controlled by the private property owner (Figure 37). If these gates were closed, users would need to detour via East 1st Street, resulting in an additional travel distance of approximately 600 feet.

Figure 35-Access Point Locations

Figure 36-Access Point Types

Figure 37-Privately Owned Parcel with Gate (AT&T Communications of Nevada)

Additional Observations

The presence of unhoused people and their belongings was observed on the path, particularly between the Grand Sierra Resort (GSR) and John Champion Memorial Park, near the Riverwood Apartments, and in Broadhead Memorial Park. Accumulations of personal items and debris were noted as potential obstacles and obstructed the path in some locations.