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Active Transportation Plan

ADOPTED SEPTEMBER 10, 2025

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EXECUTIVE SUMMARY

The Bluffdale Active Transportation Plan (hereafter, the ATP) establishes a vision for improving the safety, comfort, and utility of the active transportation network in Bluffdale City (City). A guiding principle of the plan is ensuring each resident has easy access to explore the City and region via active transportation. The ATP builds off of work done in the most recent update of the Bluffdale Transportation Plan (TP) and the Bluffdale City Parks, Trails, Recreation and Open Space (PTROS) Plan in order to create an action plan for implementing proactive safety measures, prioritizing projects, and obtaining funding to build those projects. The proposed active transportation network is shown in its entirety in [Figure A](#).

Throughout this report, the terms “shared use path,” “paved trail,” or simply “trail” are used to denote paved facilities that are designated for shared use by pedestrians, bicyclists, and other active mode users. Facilities of this type that run adjacent to a roadway can also be referred to as “sidepaths”. These facilities were the primary focus of this planning effort due to the context and needs of the City. For facilities with natural surfaces that are designated for hiking and mountain biking use, the term “unpaved trail” is used to specify. The term “equestrian trail” denotes natural surface trails that are designed with horses in mind.



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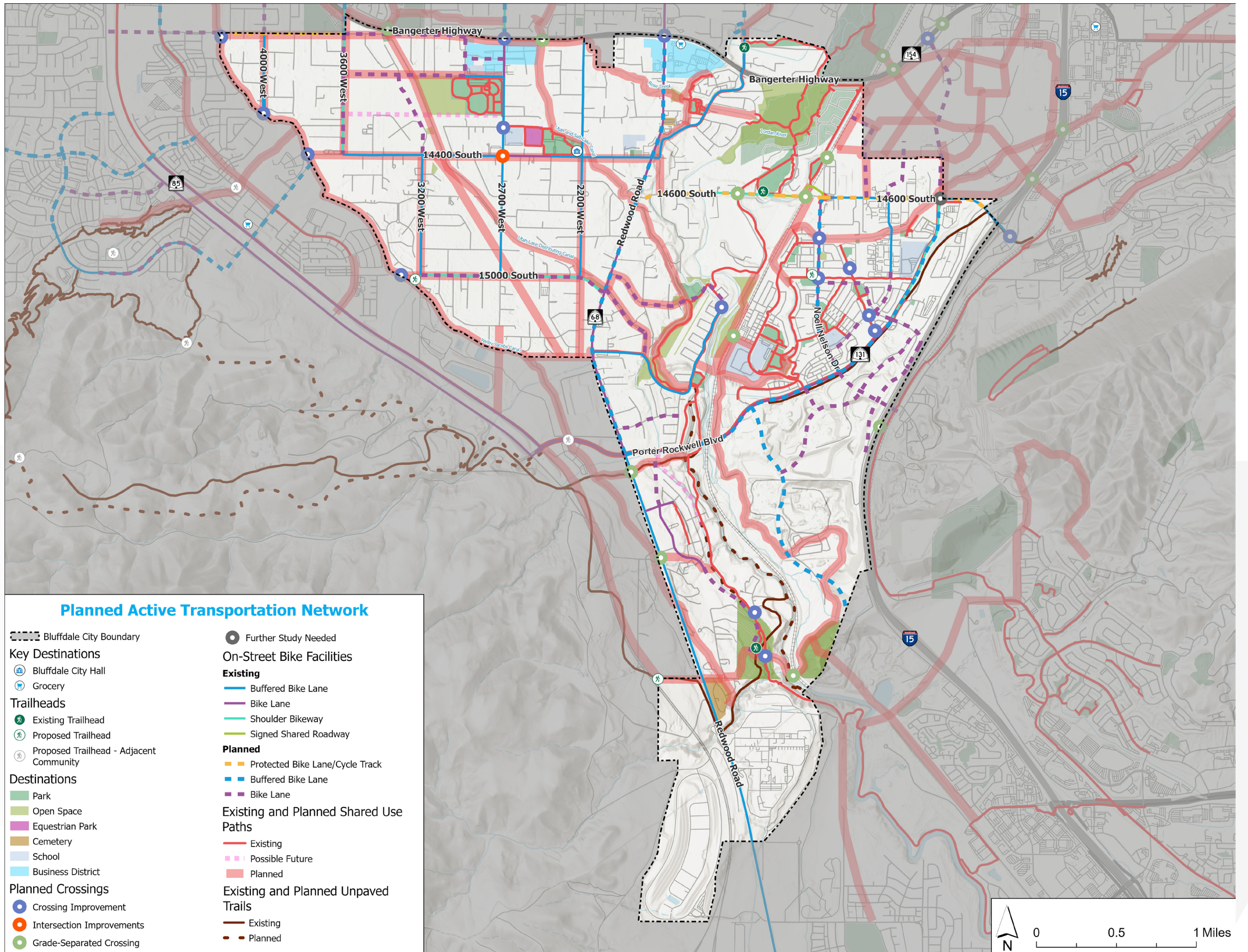
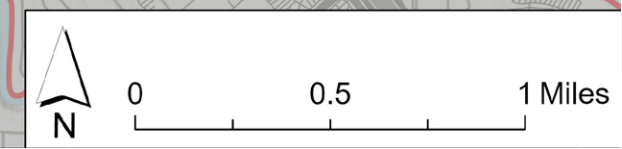


FIGURE A: Proposed Active Transportation Network



I. INTRODUCTION

Bluffdale lies at a crossroads for transportation and utilities between Salt Lake and Utah Counties. Both of these counties are seeing rapid growth, which creates economic opportunities and spurs innovative development; however, careful planning is needed to mitigate the transportation challenges and loss of community character that can sometimes result from unstructured growth. Proper guidance from decision makers with input from residents and stakeholders can spur development that enhances community character, creates a diversity of housing options for residents at all stages of life, and provides amenities that all community members can benefit from.

The Bluffdale Active Transportation Plan envisions a robust network of facilities that will provide safe ways for residents to access open spaces and other destinations in the community and broader region without the need for an automobile. The 2020 Transportation Plan and the in-progress Parks, Trails, Recreation and Open Space Plan each lay the groundwork for this planned network, and this plan expands on these to identify policies, goals, and funding opportunities that will help Bluffdale make this vision into reality.

Why Active Transportation?

Research from the National Association of Realtors¹ shows that an increasing number of Americans would like to live in walkable and bikeable communities. These kinds of communities provide transportation options and enable a lifestyle that is less reliant on motor vehicles, particularly for shorter trips. This research also demonstrates a correlation between those who perceive their community as walkable and those who express increased satisfaction with their quality of life. In addition to personal preference, some community members may not be able to drive and must walk or bike to get around independently; this includes children, aging adults, people with disabilities, and people who lack access to a vehicle. A well-connected, safe active transportation system creates more autonomy and freedom of choice for these residents. Encouraging more walking and bicycling in Bluffdale can help maintain the City's quiet, small-town character and create opportunities for spontaneous social interaction among residents. Other benefits of active transportation include:

- A healthy, active lifestyle
- Greater aesthetic appeal in neighborhoods and along roadways
- Lower transportation costs
- Better air quality
- Improved access to destinations, even when using a motor vehicle for most of the journey
- Greater spatial efficiency and connectivity than is feasible with motor vehicle facilities alone
- First/last mile access to public transit

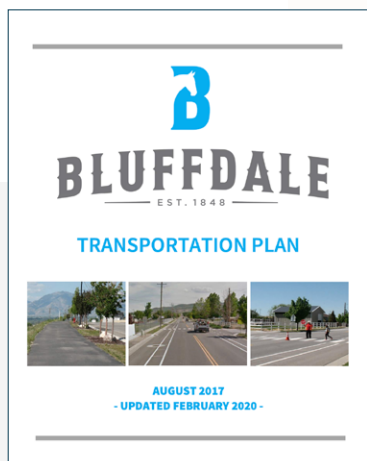
Plan Goals

At the beginning of the planning process for this report, the City established a vision for what the plan should accomplish. The City hopes to facilitate connection, safety, and independence for all citizens by creating a plan for active transportation facilities that is realistic, implementable, and focused on the needs of the community. The plan will do this by:

- Building on and updating City information on the existing network and amenities.
- Designing a diverse network that provides seamless access from homes, to trails, to destinations, and back.
- Using best practices from the City's traffic manual and other sources to build facilities that are not just good, but great.
- Ensuring that the network connects coherently to the broader region and is in line with plans for neighboring communities.
- Defining an actionable implementation plan to build the network step-by-step and get access to funding.
- Getting public and stakeholder buy-in to the need for this network through a process of engaging, building great facilities, and engaging again to show the benefits. When they see it, they will believe in it.

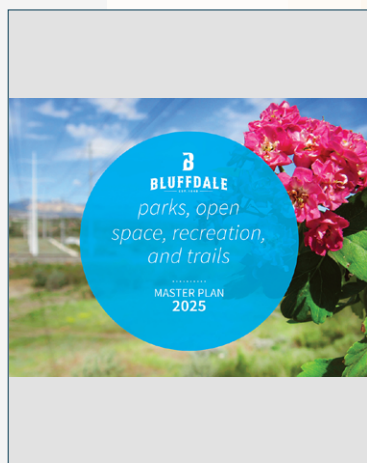
1. <https://www.nar.realtor/commercial/create/survey-americans-prefer-walkable-communities>

Previous Studies



Bluffdale City Transportation Plan (2020)

The 2020 update to the Bluffdale City Transportation Plan recognizes the implications that current and future development will have for the transportation network in Bluffdale and the surrounding area and seeks to lay out a framework that will allow Bluffdale to improve mobility and quality of life, maintain the City’s character and economic vitality, and keep the system in good repair. The plan includes a survey of the current functional classification and level of service of the roadway network, a crash history report, travel forecasting, and other analyses to inform recommendations for mobility and safety improvements.



Bluffdale City Parks, Trails, Recreation and Open Space Plan (2025)

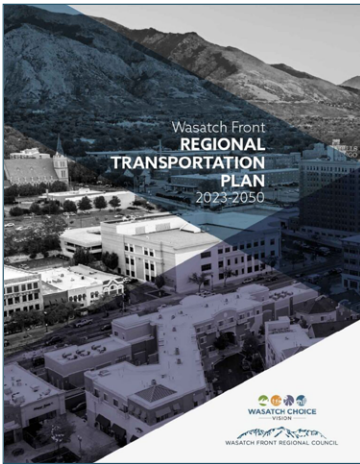
Per the City’s website: “This Parks, Trails, Recreation and Open Space (PTROS) Plan is a five year guide and strategic plan for managing and enhancing park, trail and recreation opportunities in Bluffdale...”

“The Plan provides a vision for the City’s park and recreation system, outlines park and facility classifications and addresses citywide goals, objectives and other management considerations toward the continuation of high-quality recreation opportunities to benefit residents of Bluffdale. This Plan was guided with input and direction of city residents and the Parks and Recreation Committee.

“The plan inventories and evaluates existing park and recreation areas, assesses the needs for acquisition, site development and operations and offers specific policies and recommendations to achieve the community’s goals.”

At the time of this writing, Bluffdale City was in the process of updating the PTROS Plan, last updated in 2015. The WCG team worked closely with Bluffdale City’s Parks and Recreation Department to keep abreast of the work being done for the PTROS Plan, which was integral to the creation of this ATP. This coordination helped inform the mapping of the existing trail network and the planning for future trails. An extensive survey of residents’ preferences for parks, trails, and recreation was also conducted as part of the PTROS Plan development, and the results of this survey provided important guidance for the ATP as well. This ATP will complement the PTROS Plan by integrating its vision for providing access to recreation facilities with the City’s broader goal of creating safe, attractive transportation options for all trips.



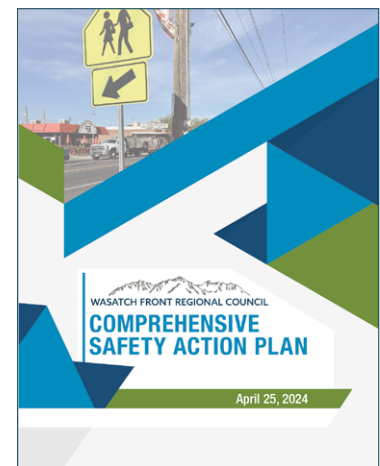


WFRC Regional Transportation Plan (2023)

The Wasatch Front Regional Council (WFRC) is a metropolitan planning organization (MPO) that is comprised of elected officials from Box Elder, Davis, Morgan, Salt Lake, Tooele, and Weber counties. In 2023, the MPO updated their Regional Transportation Plan (RTP), with regional roadway, transit, and active transportation projects planned through the year 2050. Recommendations and projects from this plan were incorporated into this ATP to ensure regional cohesion and better facilitate implementation.

WFRC Comprehensive Safety Action Plan (2024)

Per WFRC, “Before local jurisdictions can apply for (Safe Streets For All) grants, a roadway safety plan must be in place. To fulfill this requirement and to set a cohesive regional safety vision, WFRC completed a Comprehensive Safety Action Plan (CSAP) for its council area, including Davis, Salt Lake, Morgan, Tooele, Weber, and southern Box Elder counties, in April 2024. Development of the plan began in July 2023 and involved extensive stakeholder engagement and in-depth roadway safety analysis spanning several months.” The CSAP included several recommended projects and policies affecting the Bluffdale area that were incorporated into the final ATP where relevant.



Salt Lake County Active Transportation Implementation Plan (Ongoing)

At the time of this writing, Salt Lake County was in the process of updating their active transportation implementation plan with the aim of identifying projects with regional significance that will be good candidates for county funds. The 2017 plan — in conjunction with information about the in-process update gleaned from conversations with Salt Lake County staff — was valuable to the development of this plan, particularly with regard to prioritizing projects and identifying potential funding sources.



Bluffdale City Profile

Bluffdale is a city with a unique mix of suburban and rural character that is home to open spaces, views of the Wasatch range, a significant portion of the Jordan River, and a wide variety of lot and housing sizes. Due to Bluffdale’s location on the border between Salt Lake and Utah Counties (see vicinity map in [Figure 2](#)), the City is experiencing growth pressure from all sides. The Independence community has brought a different development style and level of density than has previously been seen in Bluffdale, and the Point development northeast of the boundary will also generate significant new demand on the transportation network in the region. A summary of demographics in Bluffdale is provided below:

- Bluffdale’s population has increased from 4,700 in 2000 to 19,393 in 2024. (US Census Bureau, Census Quick Facts)
- On average, Bluffdale has larger households (3.31 people per) than Salt Lake County and the State of Utah, and a slightly lower median age (31.2 years). Additionally, Bluffdale has a higher percentage of its residents in the labor force, higher median income, and a lower poverty rate than the averages for the county and State of Utah. (Source: US Census, ACS five-year estimates)
- About 29% of Bluffdale residents work in Bluffdale, while the remainder leave the city to work. The mean travel time to work is 22 minutes for residents of Bluffdale. (Source: US Census, ACS five-year estimates)
- Currently, 69% of Bluffdale residents drive alone to work, 7% carpool, 2% walk, 0% bike, less than 1% take transit, and 22% work from home (Source: US Census, ACS five-year estimates)
- Moderate population growth is expected to continue in Bluffdale with a projected population in 2035 of 24,641 and 32,197 in 2050 as shown in [Figure 1](#). (WFRC 2023 RTP)

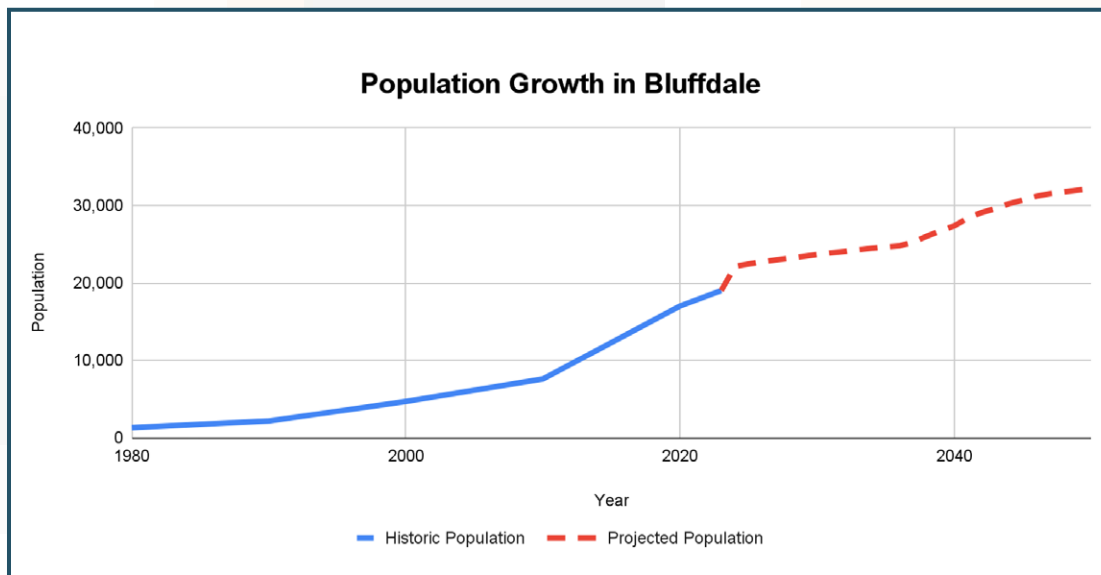


FIGURE 1: Population Growth in Bluffdale

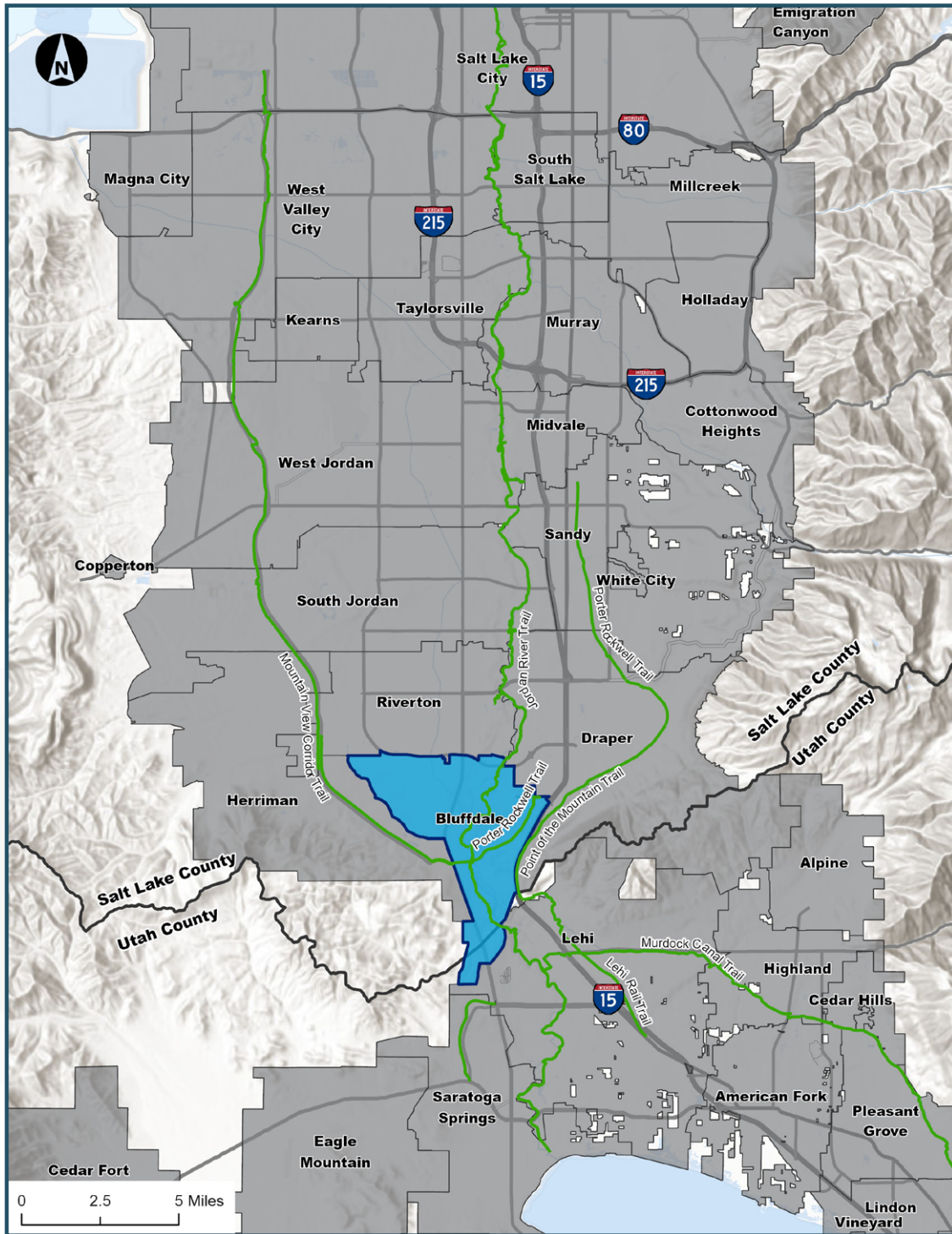


FIGURE 2: Bluffdale Vicinity Map

Land Use

Bluffdale consists of mostly low-density residential uses, with the exception of some commercial zones along the northern boundary and some significant mixed-use and multifamily zones in the eastern part of the City. The 2022 General Plan developed a vision for the future land use in as-yet undeveloped areas of the City, with established areas planned to maintain their current character and intensity. The future land use map as established in the General Plan is shown in **Figure 3**.

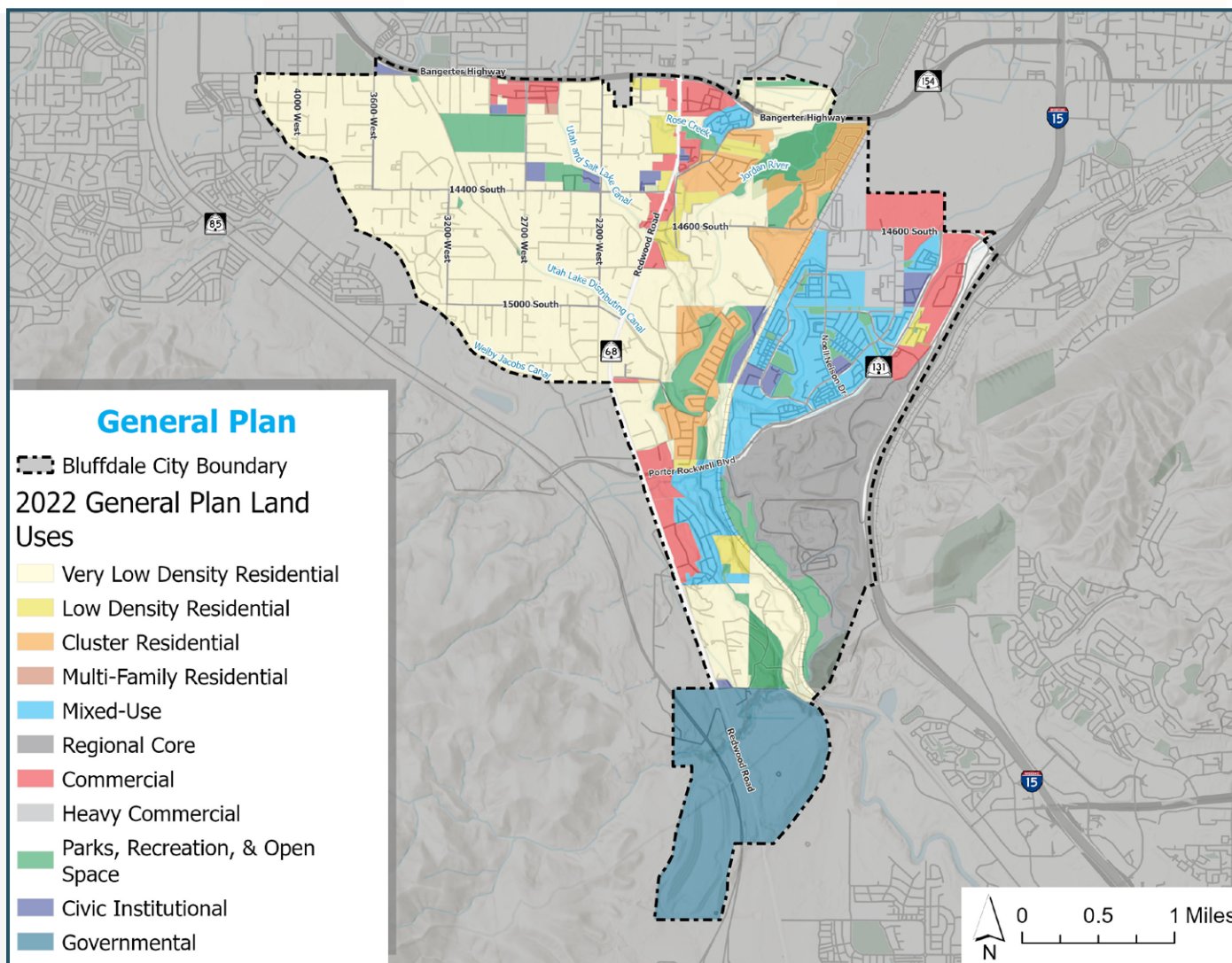


FIGURE 3: Future Land Use in Bluffdale

The Wasatch Front Travel Demand Model (WF-TDM) includes current and projected population and employment numbers at each traffic analysis zone (TAZ) within the City. This data combined with the land use within Bluffdale is invaluable for prioritizing projects and determining the number and proximity of residents that will be served by each new active transportation corridor and connection. **Figure 4** documents the current and projected population in each TAZ, and **Figure 5** documents the same for the number of jobs. The highest concentration of residences is found in the Independence area of the City. Major employment centers now and in the future include commercial areas along Redwood Road near Bangert Highway and along 14600 South east of the railroad, and a planned regional core of heavy commercial, office, and residential uses southeast of Porter Rockwell Boulevard.

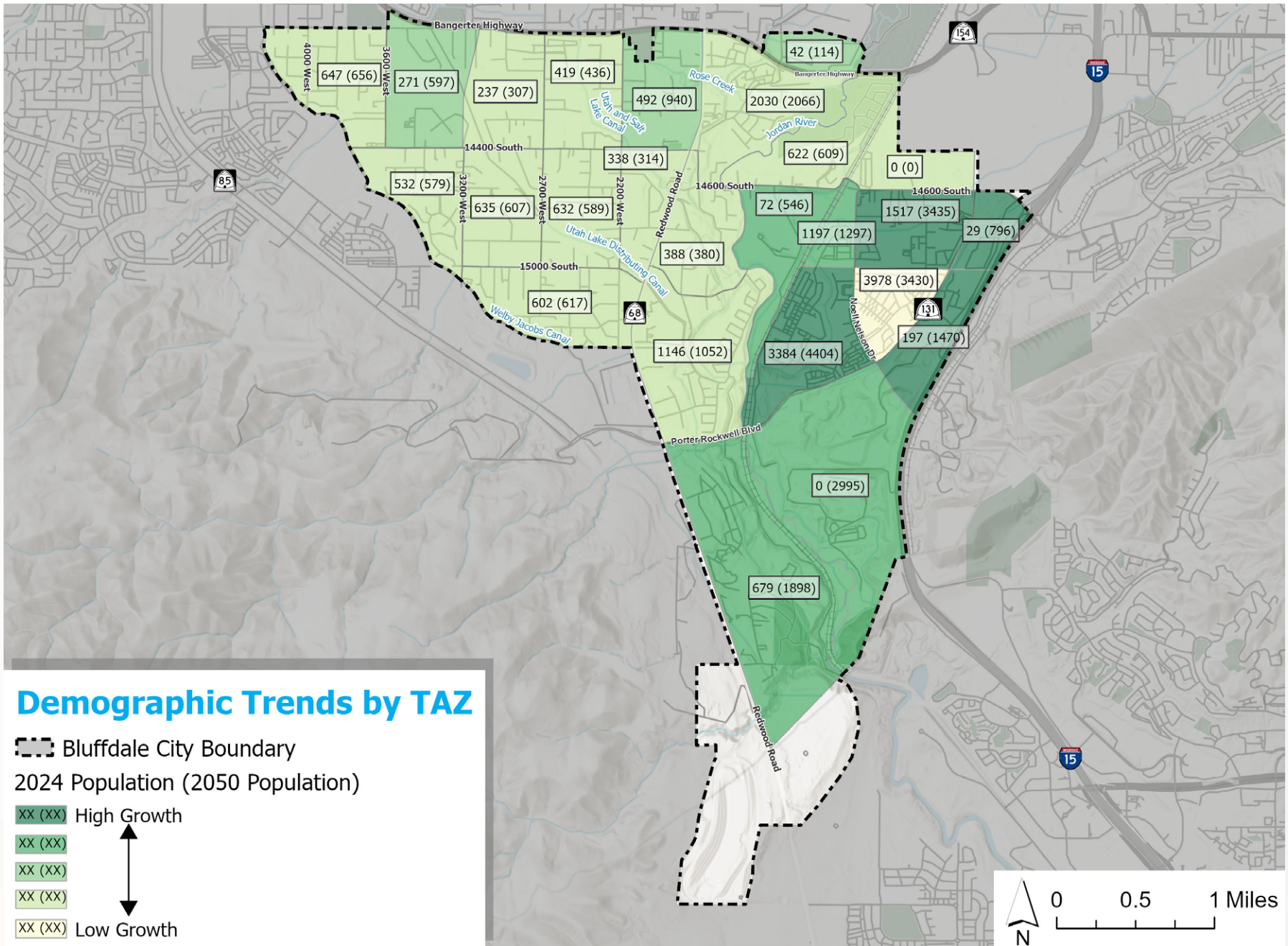


FIGURE 4: Current and Projected Population by TAZ

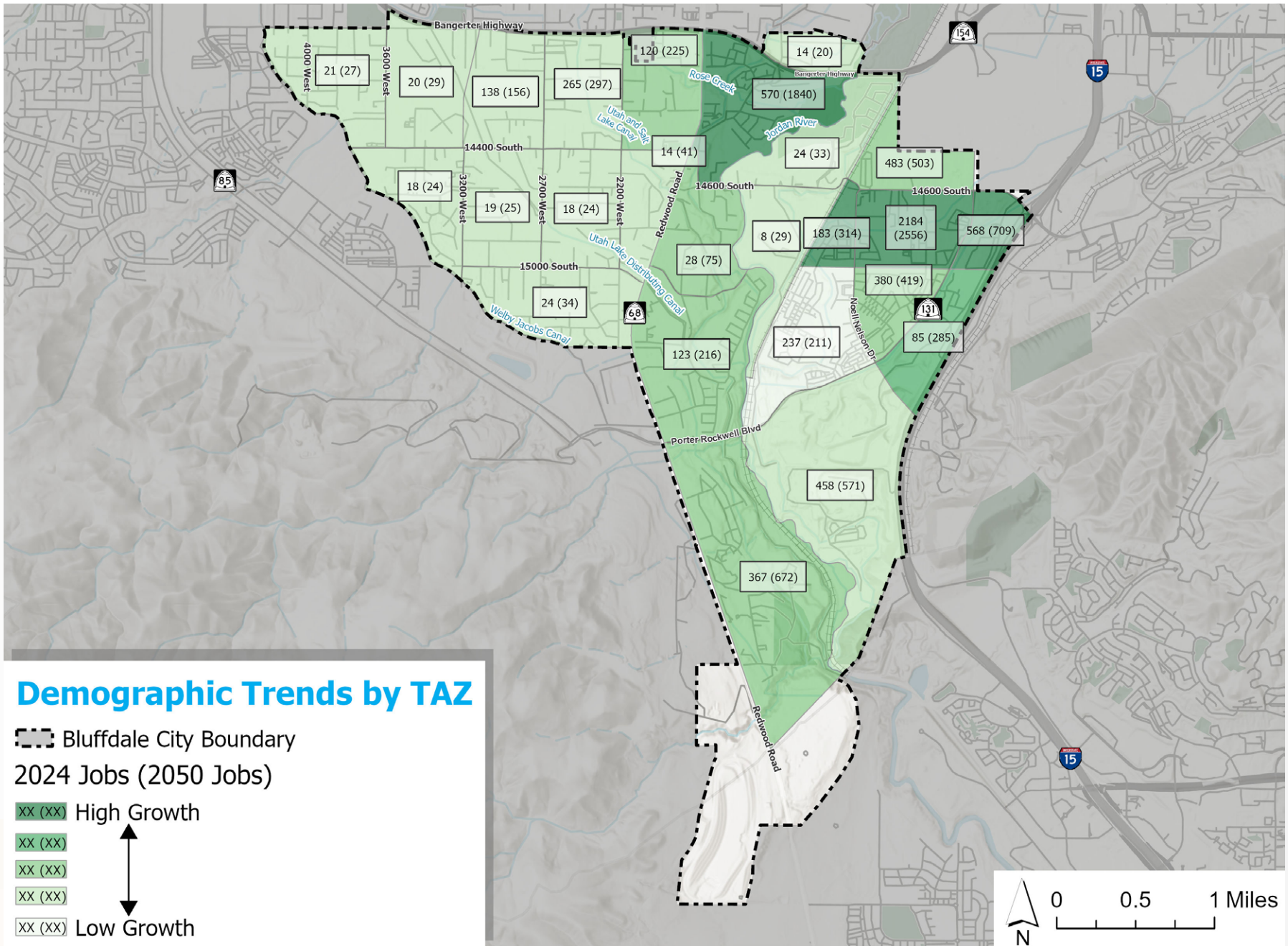


FIGURE 5: Current and Projected Employment by TAZ



II. PUBLIC AND STAKEHOLDER ENGAGEMENT

Project Website

An ArcGIS StoryMap was created at the beginning of the project and regularly updated with information as the plan progressed. The StoryMap included a link to a survey where respondents could mark locations on a map and explain where they wish to see crossings or new facilities, where they have safety concerns, and provide any other insights they had from their experience walking and biking in the City. Commonly expressed desires and concerns were as follows:

- Canal service roads should be made accessible as trails, with crossings under Bangert Highway.
- Safer and more frequent crossings of Redwood Road should be implemented.
- Safer, separated active transportation facilities should be added along 14600 South, including a separate tunnel under the railroad.
- The City should build more separate equestrian pathways and educate the public on where they are, in addition to educating drivers and trail users on how to safely share space with horses.

Appendix E includes a detailed summary of the comments that were left, including a map of all locations that were tagged by commenters.

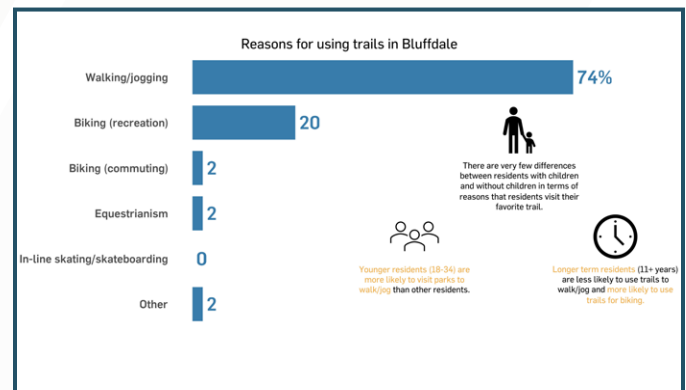
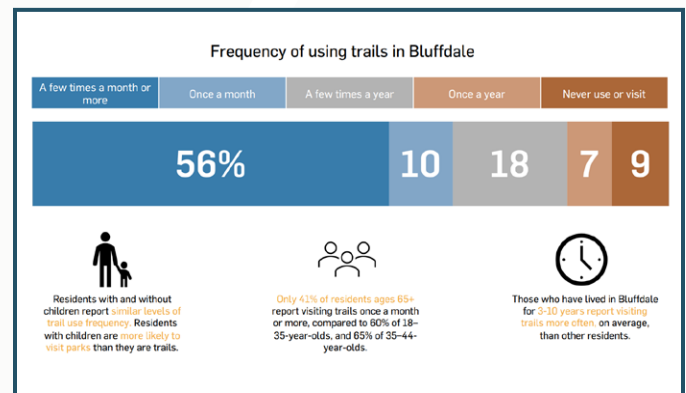
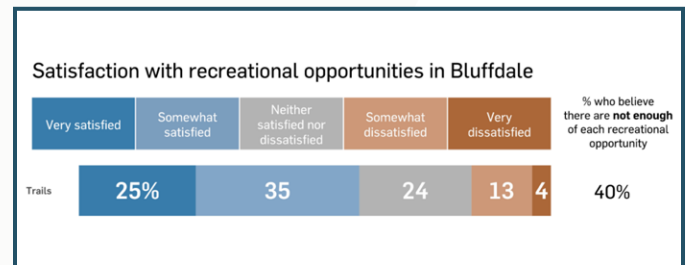
Community Survey

During the recent update to the PTROS Plan, a survey was conducted inquiring about residents' desires and preferences for parks, trails, and other amenities. The survey indicates that the Jordan River Parkway is the most popular trail among residents. A primary barrier to trail usage is the lack of information, with 50% of respondents citing this as the main reason for not utilizing trails. Additionally, 44% of respondents mentioned other reasons for non-use, such as a lack of interest in using trails.

When considering surface preferences, asphalt and natural surfaces were favored over concrete. There is a strong desire for better connectivity, with many respondents noting the importance of linking the Day Ranch community to the Jordan River Parkway.

Residents also expressed a need for more trails on the west side, specifically in the "Old Bluffdale" area. Key improvements suggested include linking neighborhoods, providing more lighting, and ensuring better maintenance for year-round use, including winter conditions. Additionally, there was a clear preference for trails to be within walking distance of residents' homes.

In terms of amenities, parks and trails were highly valued, with 67% of respondents considering parks very important and 63% placing a high value on trails. Graphs detailing the results of all trail-related questions from this survey are presented to the right and throughout the rest of this chapter.

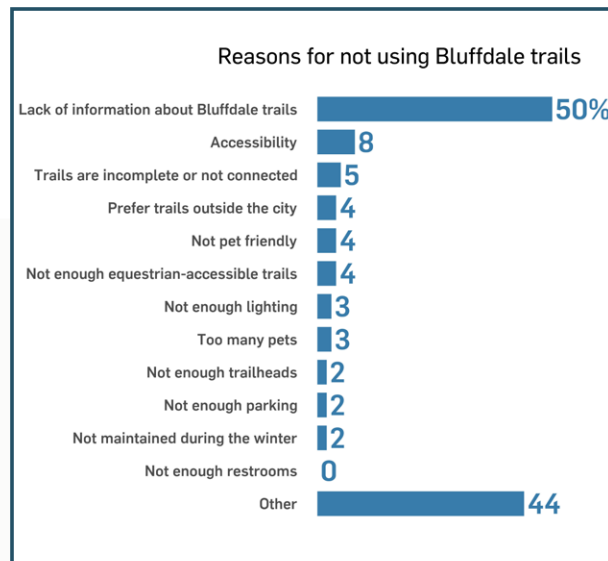


Stakeholder Engagement

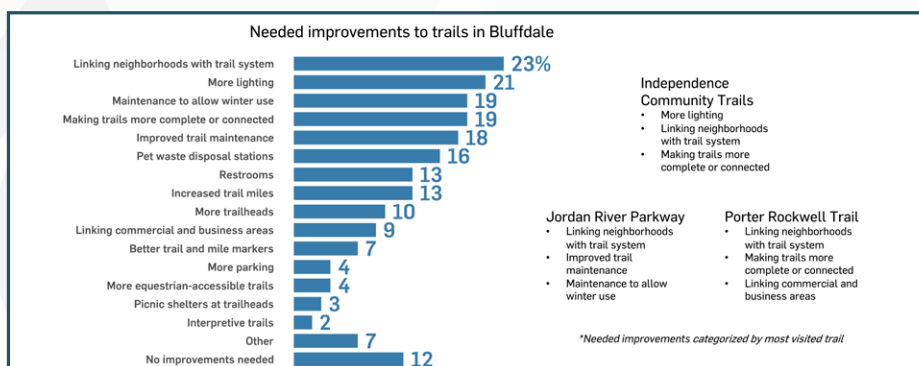
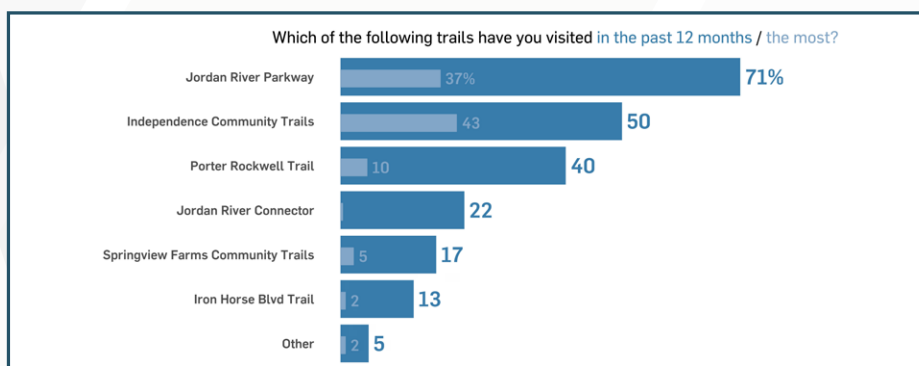
Two stakeholder meetings were held during the development of the Bluffdale Active Transportation Plan. Both saw a strong turnout of attendees, including key representatives from the City such as the Mayor, City Council members, and Planning Commission as well as representatives from UDOT, WFRC, Jordan School District, Salt Lake County, community advocacy groups, and local HOAs.

During the first meeting, large posters displaying existing conditions were presented, and participants were provided with markers to annotate their thoughts and suggestions. Attendees were encouraged to indicate desired facilities, areas for improved connectivity, key crossings, and to raise any safety concerns. These considerations were found to be consistent with data collected throughout the survey including several requests for connectivity and implementing a more comprehensive trail network in the “Old Bluffdale” area. High priorities include canal agreements, safe crossings along Bangerter Highway, Porter Rockwell Boulevard, and Redwood Road, and improved connectivity between trails. With regards to the latter point, the following projects and locations were mentioned: the Welby Jacobs Canal Trail, Jordan River Parkway, Porter Rockwell Trail, a connection along Cinch Way, connections near Wardle Fields, and general improvements to connectivity between the east and west sides of Bluffdale.

The feedback gathered from the first session, along with data from relevant plans and other public feedback, was utilized in drafting the final planned network. This draft was then presented again to key stakeholders for further input before finalizing the plan. In this second stakeholder meeting, the group welcomed the updated Active Transportation Plan and a productive conversation followed regarding specific implementation recommendations and requests within the report. Among these requests includes updated project prioritization, a grant proposal framework, legislative considerations for easement acquisition on canal trails, and specific legal provisions that could be adopted by the city regarding motorized vehicle regulation and enforcement. The finalized plan was to be presented to the Bluffdale Planning Commission and to the City Council for adoption.



See Community Survey section for source



See Community Survey section for source

Community Events

Walking Audits

Two walking audit events were held in collaboration with the Healthy Bluffdale Coalition. Several routes within the City were selected for members of the Coalition to walk and provide feedback on a worksheet. **Figure 6** shows an example of some of the routes selected for this exercise. The worksheet contained prompts about a facility’s objective condition as well as subjective feelings of comfort, safety, and accessibility.

Feedback from these audits is included in **Appendix C**, with some suggestions informing maintenance recommendations and crossing improvement projects included later in this plan. Healthy Bluffdale was excited at the prospect of repeating this exercise on a regular basis, and it was decided that the walking audit worksheets would be made available on the City’s website together with the existing facilities maps so that members can coordinate to walk the existing trail network annually during the spring at their convenience. This will provide a valuable resource for the City to monitor the ongoing condition of the trail network in a cost-effective manner.

Healthy Bluffdale Coalition Board Meeting

Throughout the project, the project team maintained close contact with the Healthy Bluffdale Coalition. The planned active transportation network was presented at the Coalition’s board meeting. This presentation initiated valuable involvement from key members of the community. Preceding the meeting, the project team had one-on-one conversations with members of the board and active members of the community, receiving helpful feedback regarding needs in the current system. Notable items addressed in these conversations included connectivity between trails within the community and with other cities, safety along Porter Rockwell Boulevard, and the desire to acquire easements and pave the canal trails.

Healthy Bluffdale Event

A booth was held at the Healthy Bluffdale Event including information about the Active Transportation Plan and maps where members of the community were able to mark their concerns and hopes for the future of Bluffdale’s Active Transportation Network. This interactive booth allowed for productive face-to-face conversations and generated excitement in the community regarding future possibilities. Similar commentary was given regarding the hope for paving canal trails and greater connectivity within Bluffdale’s current network and with neighboring cities.

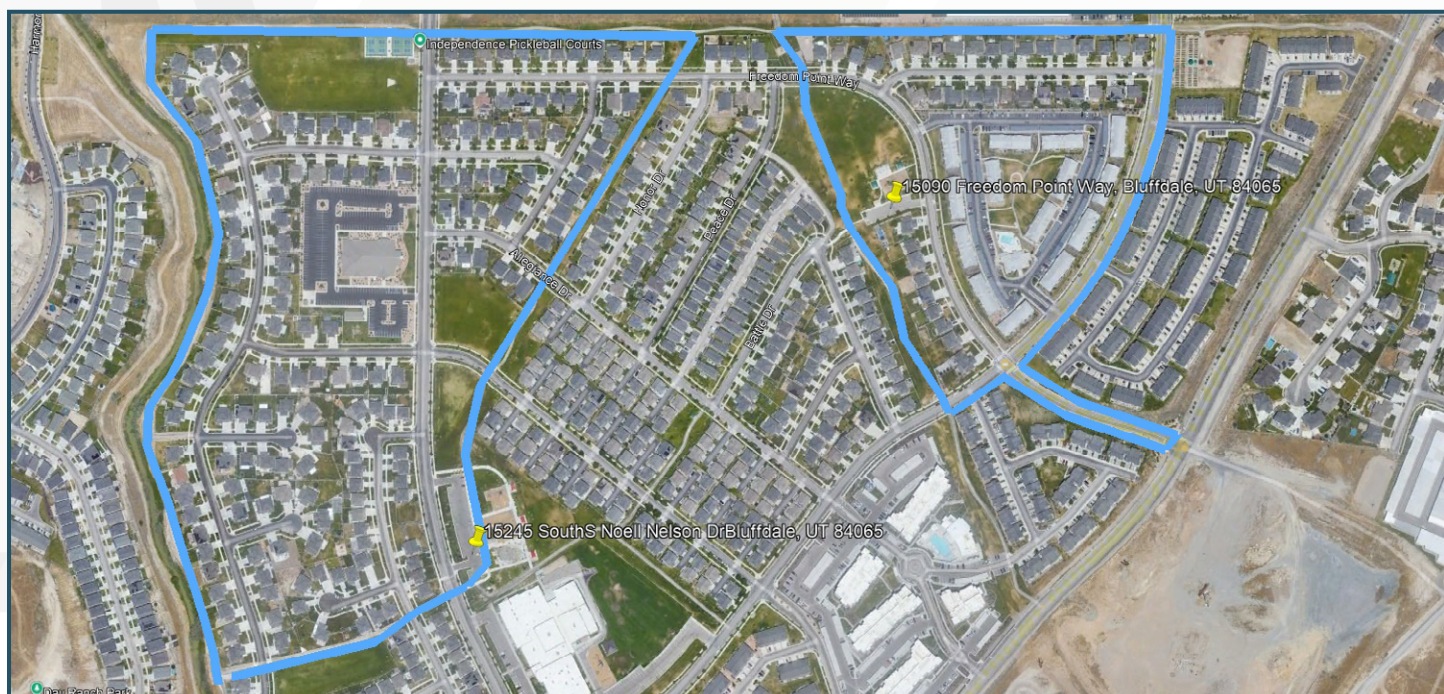


FIGURE 6: Example Walking Audit Routes

Social Media, City Newsletter, & Website

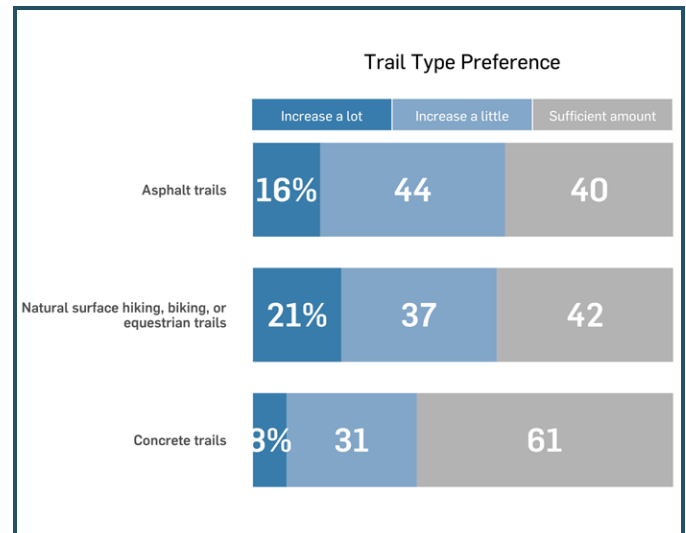
Throughout the development of the ATP, updates and prompts to participate in Bluffdale’s planning process were posted on the front page of Bluffdale’s website. Along with this, information, flyers, and links were included in the City Newsletter. Multiple posts were made on social media through the City’s Facebook account encouraging the community to participate. Using multiple avenues for online outreach allowed the project team to reach a wide cross-section of the City’s residents and obtain well-rounded feedback.

Neighboring Jurisdiction Plans

This section summarizes active transportation plans that have already been developed by neighboring cities, Salt Lake County, WFRC, and UDOT. It was essential to harmonize work done on the Bluffdale ATP with these existing plans.

UDOT and the Utah Trail Network

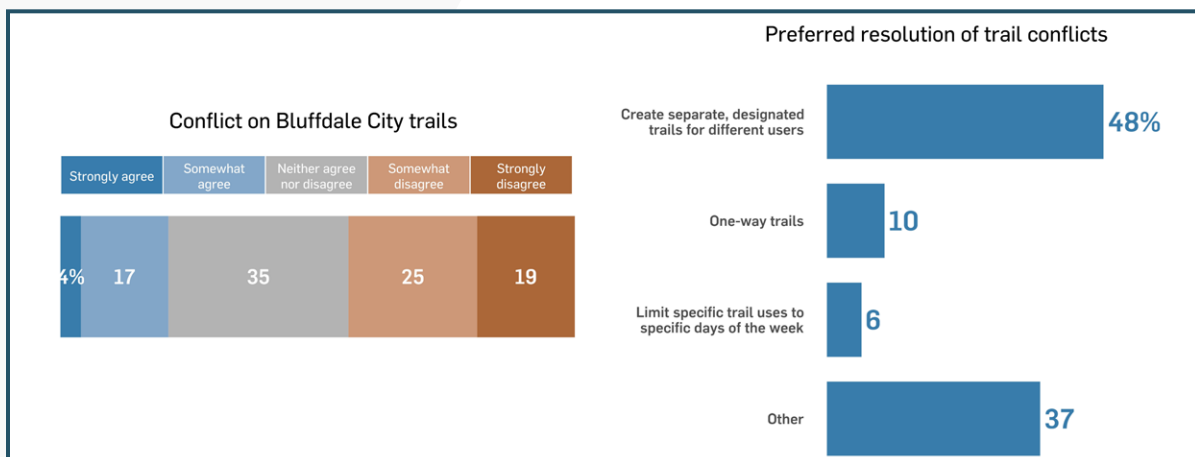
The Utah Department of Transportation (UDOT) has begun an endeavor to develop a paved trail network that will provide regional connections across the entire state of Utah. This network, called the Utah Trail Network (UTN) will be developed in close collaboration with local municipalities and MPOs to direct funds towards the next-most crucial facilities to complete the network. The development of the UTN will extend long past the adoptions of the Bluffdale ATP, and thus some adjustments to the final planned network may still be made as the UTN planning effort progresses. As of the date of this writing, two trail projects are funded by the UTN initiative in and near Bluffdale. These are noted in [Figure 7](#).



See Community Survey section for source

WFRC Regional Transportation Plan and Beehive Bikeways

The Wasatch Front Regional Council (WFRC) updates their Regional Transportation Plan (RTP) on a regular basis. Included in this plan are projects to improve the active transportation network across the MPO region. Additionally, the WFRC leads the “Beehive Bikeways” initiative, which envisions a network that connects key destinations identified in the Wasatch Choice Vision plan with a focus on trails that will provide a more local focus than is possible for the Utah Trail Network effort. [Figure 7](#) maps the projects planned for Bluffdale by WFRC and Beehive Bikeways. Also included are the projects that have already received funding from UDOT as part of the UTN initiative, as described above.



See Community Survey section for source



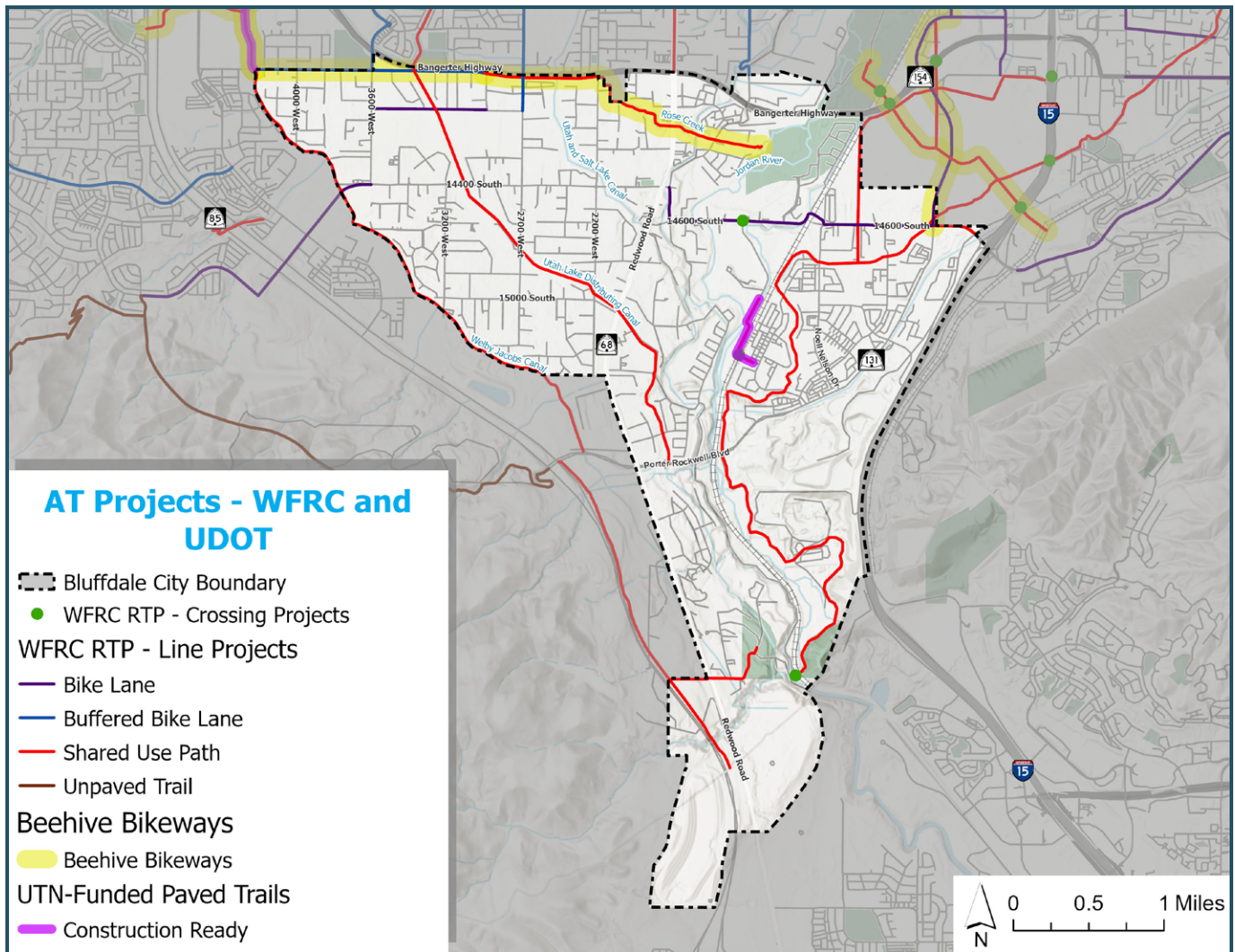


FIGURE 7: AT Projects from the 2023 WFRC RTP, UTN Funding Included

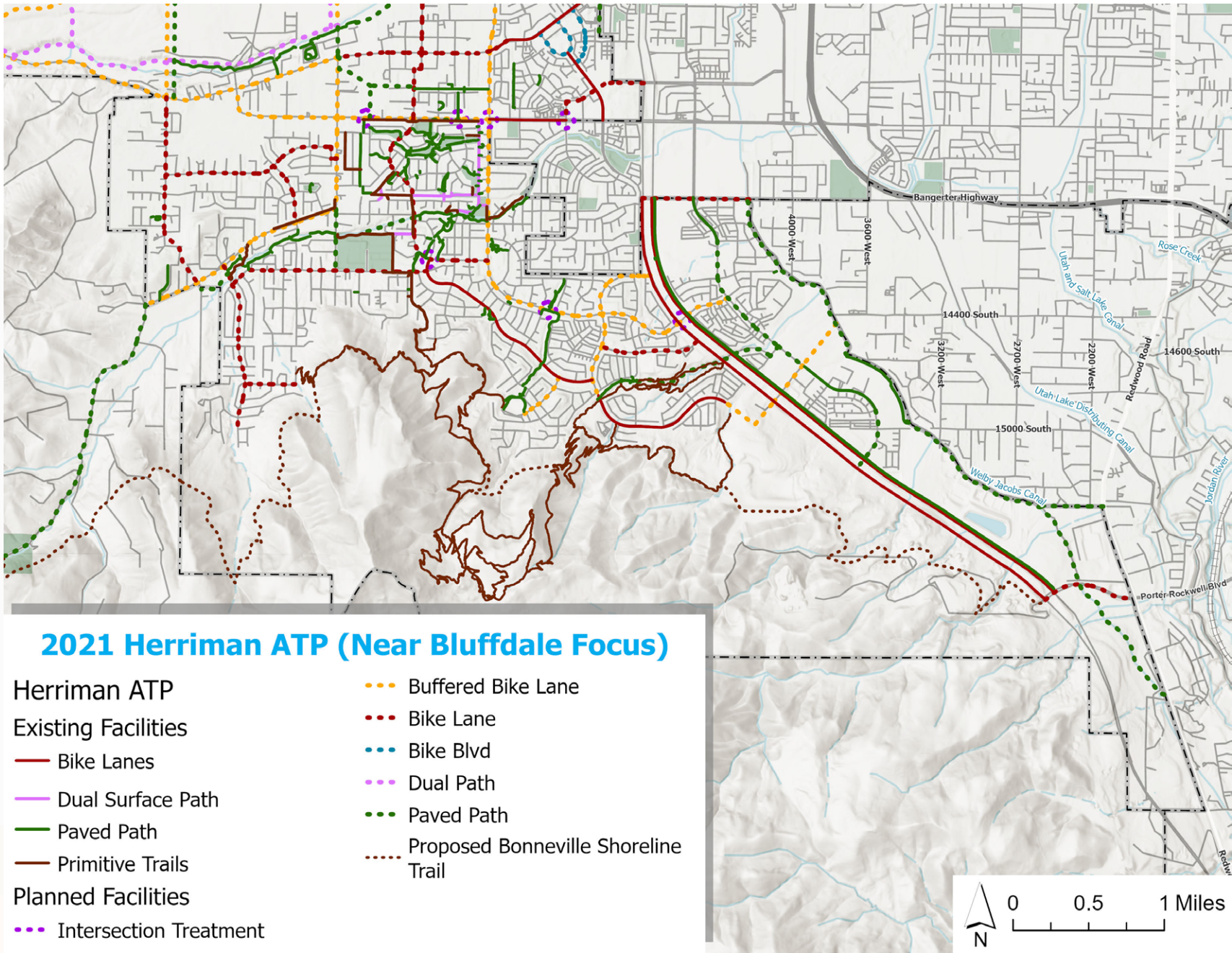
Salt Lake County Active Transportation Implementation Plan (Ongoing)

At the time of this writing, Salt Lake County was in the process of updating their active transportation implementation plan with the aim of identifying projects with regional significance that will be good candidates for county funds. The 2017 plan in conjunction with information about the in-process update gleaned from conversations with Salt Lake County staff were valuable to the development of the ATP, particularly with regard to prioritizing projects and identifying potential funding sources. The 2017 plan is summarized in an online map [here](#).

Neighboring City ATPs

The following **Figures 8** through **11** are maps from the respective active transportation plans of Herriman, Riverton, Draper, and Lehi. Efforts were made to harmonize connections along the border of Bluffdale with the planned networks of neighboring cities to ensure a coherent active transportation network across the region.





2021 Herriman ATP (Near Bluffdale Focus)

Herriman ATP

Existing Facilities

- Bike Lanes
- Dual Surface Path
- Paved Path
- Primitive Trails

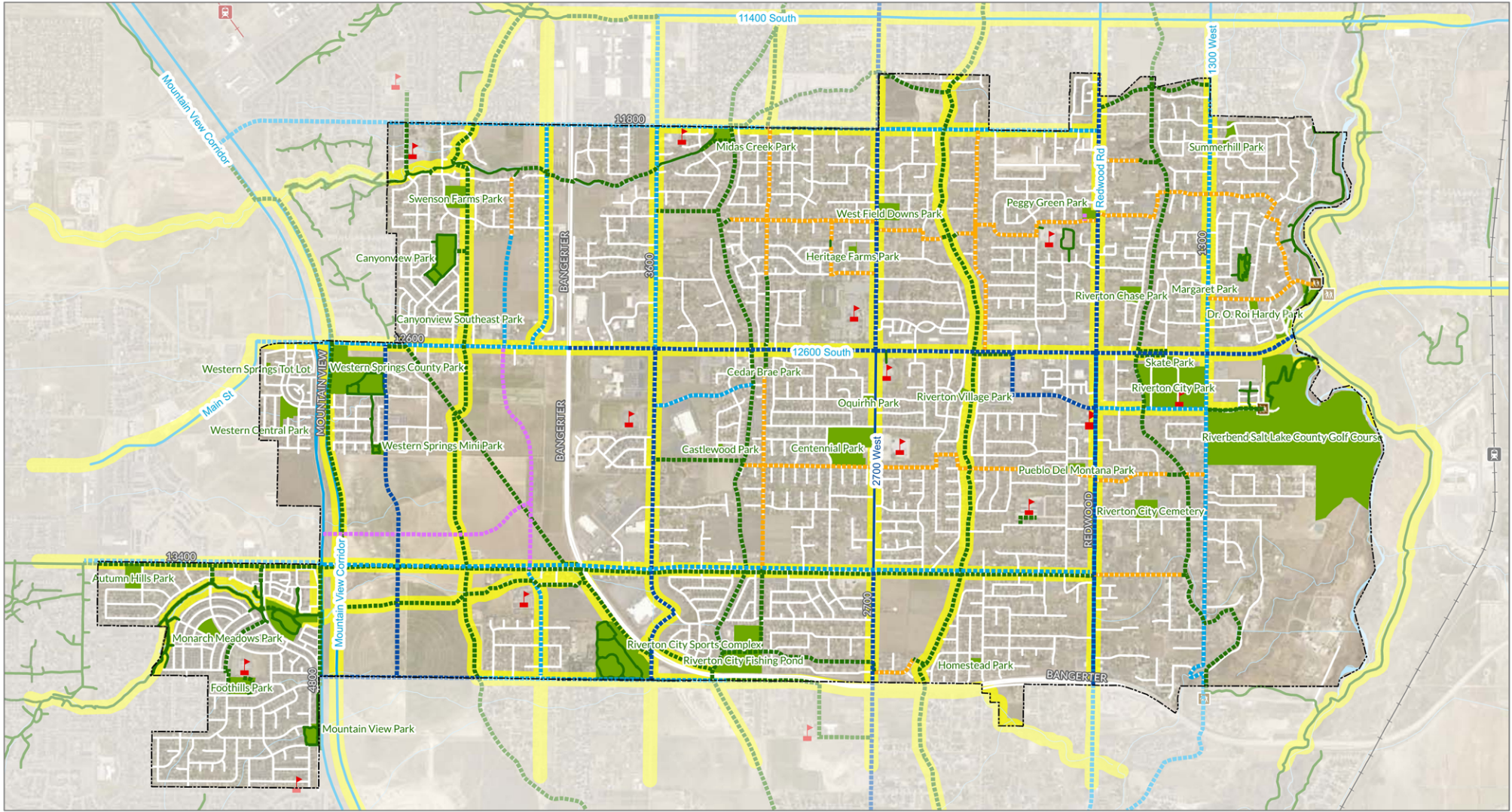
Planned Facilities

- - - Intersection Treatment

- - - Buffered Bike Lane
- - - Bike Lane
- - - Bike Blvd
- - - Dual Path
- - - Paved Path
- - - Proposed Bonneville Shoreline Trail

FIGURE 8: Herriman ATP





Map 3.5 Proposed Regional Connections

Riverton, UT Active Transportation Plan

<p>Regional Connections</p> <ul style="list-style-type: none"> — Previously Identified Regional Corridor 	<p>Proposed Facilities</p> <ul style="list-style-type: none"> — Shared-use Path — Protected Bike Lane — Buffered Bike Lane — Bike Lane — Neighborhood Byways 	<p>Existing Facilities</p> <ul style="list-style-type: none"> — Bike Lane — Buffered Bike Lane — Shared-use Paths M Trailheads 	<ul style="list-style-type: none"> + TRAX Stations — TRAX Routes + FrontRunner Stations — FrontRunner Routes ▲ Schools ■ Parks City Boundary
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RIVERTEN
UTAH



alta
PLANNING + DESIGN



0 0.25 0.5 1 Miles



Map Produced Dec 2, 2015. Data from AGRC, ESRI, and Riverton City

FIGURE 9: Riverton ATP



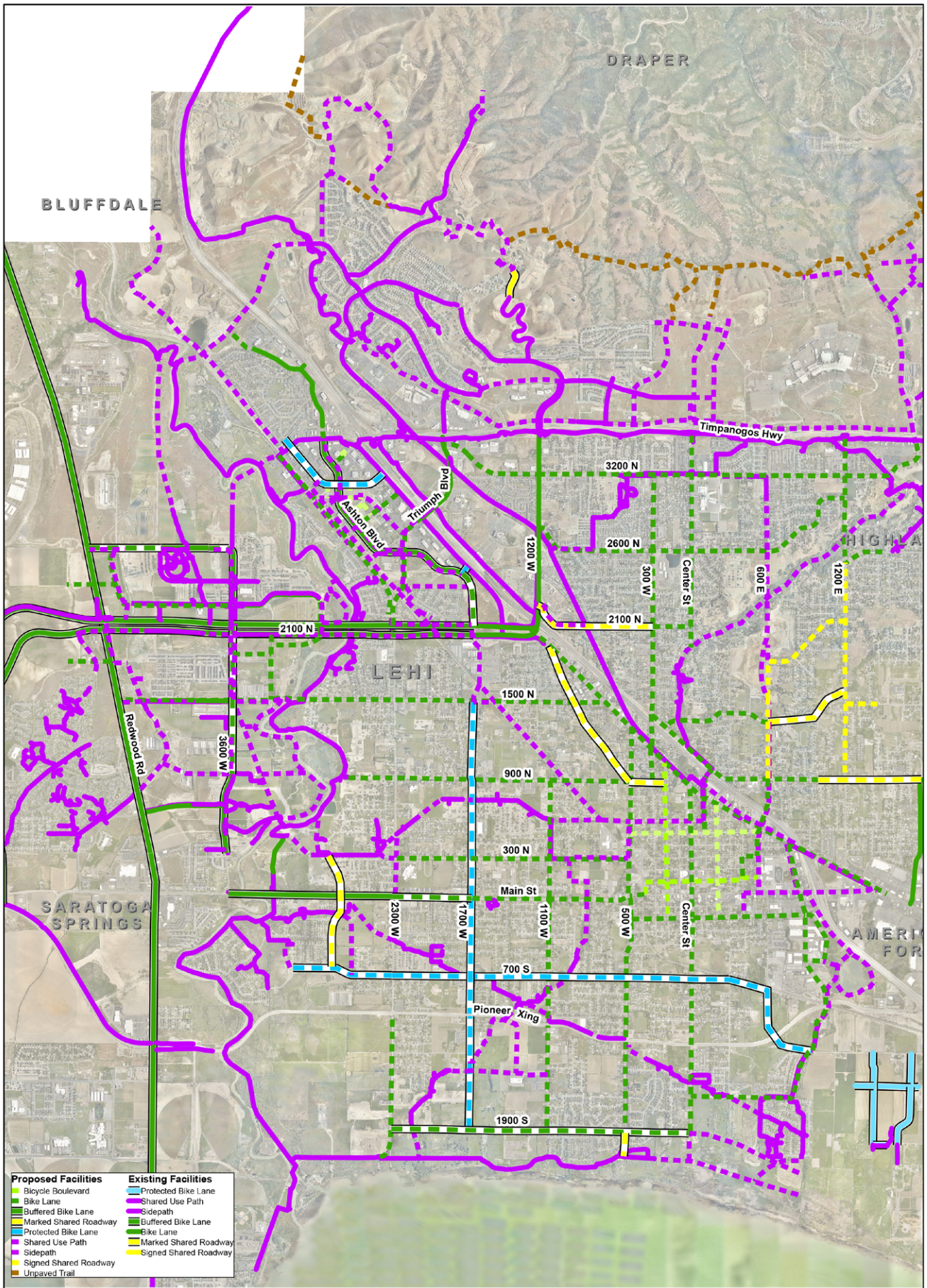


FIGURE 11: Lehi Bike Plan

III. EXISTING CONDITIONS

The Existing Conditions section of this plan documents the current trends in active transportation usage and the extent and quality of the existing active transportation network.

Current Trends

As mentioned in the Bluffdale City Profile in [Chapter 1](#), the American Communities Survey reports that 2% of Bluffdale residents walk to work, and none bike to work. While the ACS results are valuable for assessing current travel patterns and engagement with active transportation, they form only one data point for one type of trip. Other types of trips that may be more feasible and desirable for residents of Bluffdale to make via active transportation are not accounted for in this data. These include trips to access schools, parks, grocery stores, social activities, and other destinations, as well as those made simply for exercise and recreation. Also unaccounted for is the latent desire to make more trips with active transportation that is not accommodated by the existing network.

Survey Results

To gauge the level of interest in active transportation, a number of public engagement activities provided valuable information. The previously-discussed survey conducted as part of the recent PTROS Plan update yielded the following results relating to trail usage:

- The Jordan River Parkway is the most popular trail among residents.
- A primary barrier to trail usage is the lack of information, with 50% of respondents citing this as the main reason for not utilizing trails. 44% of respondents mentioned other reasons for non-use, such as a lack of interest in using trails.
- 63% of respondents considered it important to have trails within walking distance of home.

Additional insight into the priorities of residents and stakeholders with regards to active transportation was gained through the two stakeholder meetings and the second online survey as discussed in Chapter II. Stakeholders expressed a strong desire to provide safe facilities and crossings connecting to parks, trails, schools, and recreation amenities. They were particularly interested in creating a safe system for children to traverse the City independently.

Trail Utilization

Current trail utilization is a valuable data point to assess travel and recreation behavior in the City. It can also be used to illustrate the fact that trails are worth investing in; “if we build it, they will come” is a common refrain in planning, and tracking trail utilization can either confirm this assumption, or indicate to the City whether a new approach is needed. The benefits of these facilities are manifold both in improving individual health and increasing engagement with the community, and it’s in the public interest to ensure that people are using them and enjoying them.

24-Hour Manual Counts in Bluffdale

In-situ count data is an important piece of assessing the success and popularity of active transportation facilities. As discussed below, Salt Lake County maintains automated count stations at various locations along key trails. It is recommended that the cost of buying and maintaining similar counters be incorporated into the design of Bluffdale City trails going forward, as these represent a powerful way to collect ongoing performance metrics and evaluate the growth in active transportation usage as the network improves. As part of the development of this plan, manual counts were collected over a 24-hour period at one location using footage from a portable camera. These counts were conducted on Saturday, April 26, 2025. The weather on the date of collection was partly cloudy, with mild temperatures and no precipitation.

The counts were collected at the location marked in [Figure 12](#). 340 users were observed using the trail over the course of the day, with usage peaking during the late morning and again during the evening. The daily trail users for this location in Bluffdale represented about 25% of the weekend-day average for other locations on the Jordan River Trail, as shown in the Salt Lake County Data section below. Raw count data are included in [Appendix B](#). These counts will serve as a valuable baseline for ongoing trail utilization monitoring.



FIGURE 12: Manual Count Location

Salt Lake County Data

Data from county-maintained count stations in southwestern Salt Lake County were gathered to serve as a comparison for trail usage across the region. Usable data for the year 2024 was available for 3 counters, the locations of which are mapped in **Figure 13**.

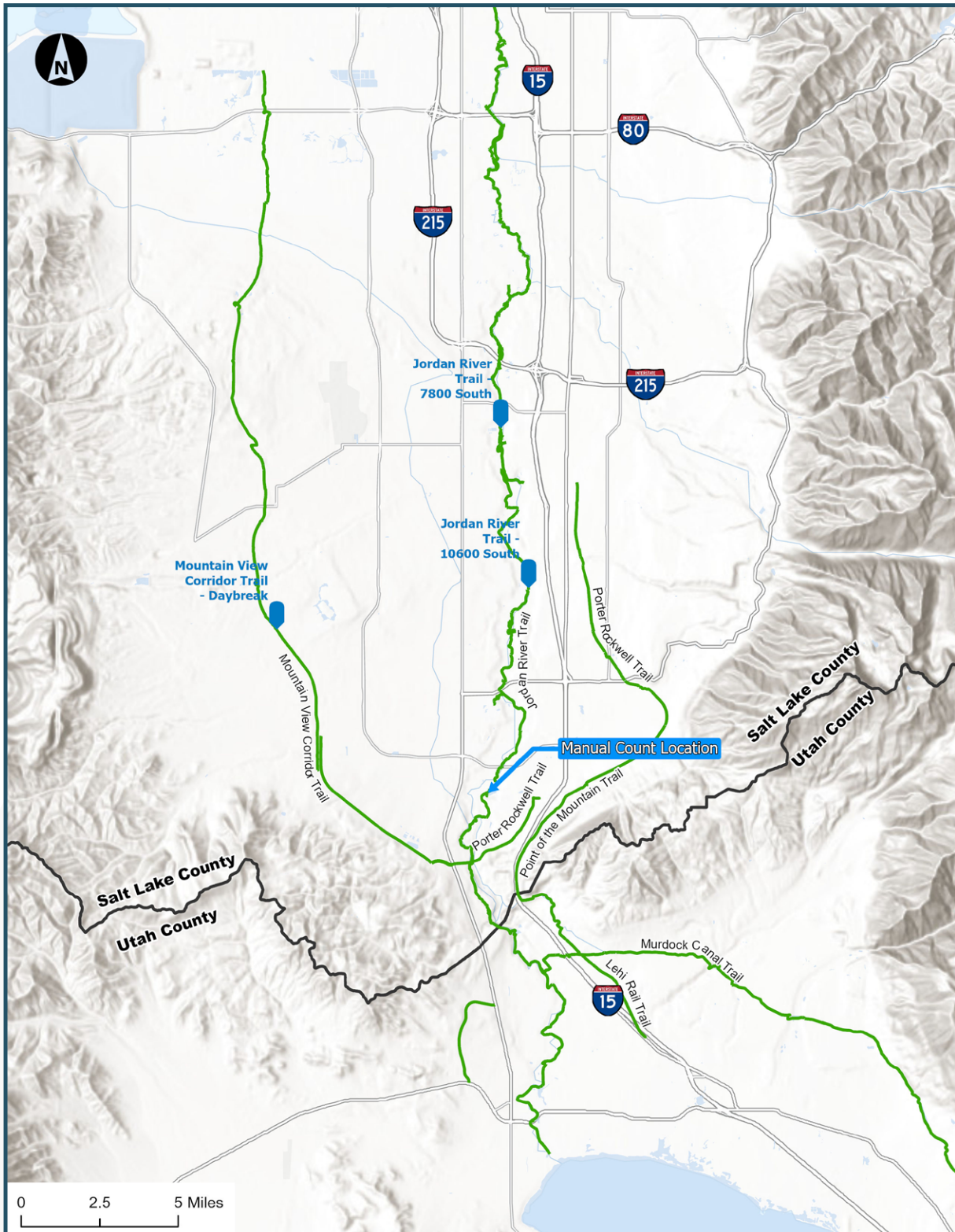


FIGURE 13: Count Station Locations in Southwestern Salt Lake County

Figure 14 summarizes the monthly total users for each count location during the Summer months of 2024. Additional summary statistics are included in **Table B-1** of **Appendix B**. These data illustrate the significance of contextual factors for trail utilization. The Jordan River Trail follows a natural corridor with limited interaction with the roadway network, making it a more comfortable facility to use than the trail that runs parallel to Mountain View Corridor. The two count stations on the Jordan River Trail are also located in highly developed areas, with many nearby destinations including lifestyle centers and sports facilities. By contrast, Mountain View Corridor is still in the process of developing and provides access to few destinations that active transportation users wish to access. This means that this facility currently provides less utility for both recreation and mobility as compared to the Jordan River Parkway Trail. This lesson was applied when planning and prioritizing active transportation projects for this plan.

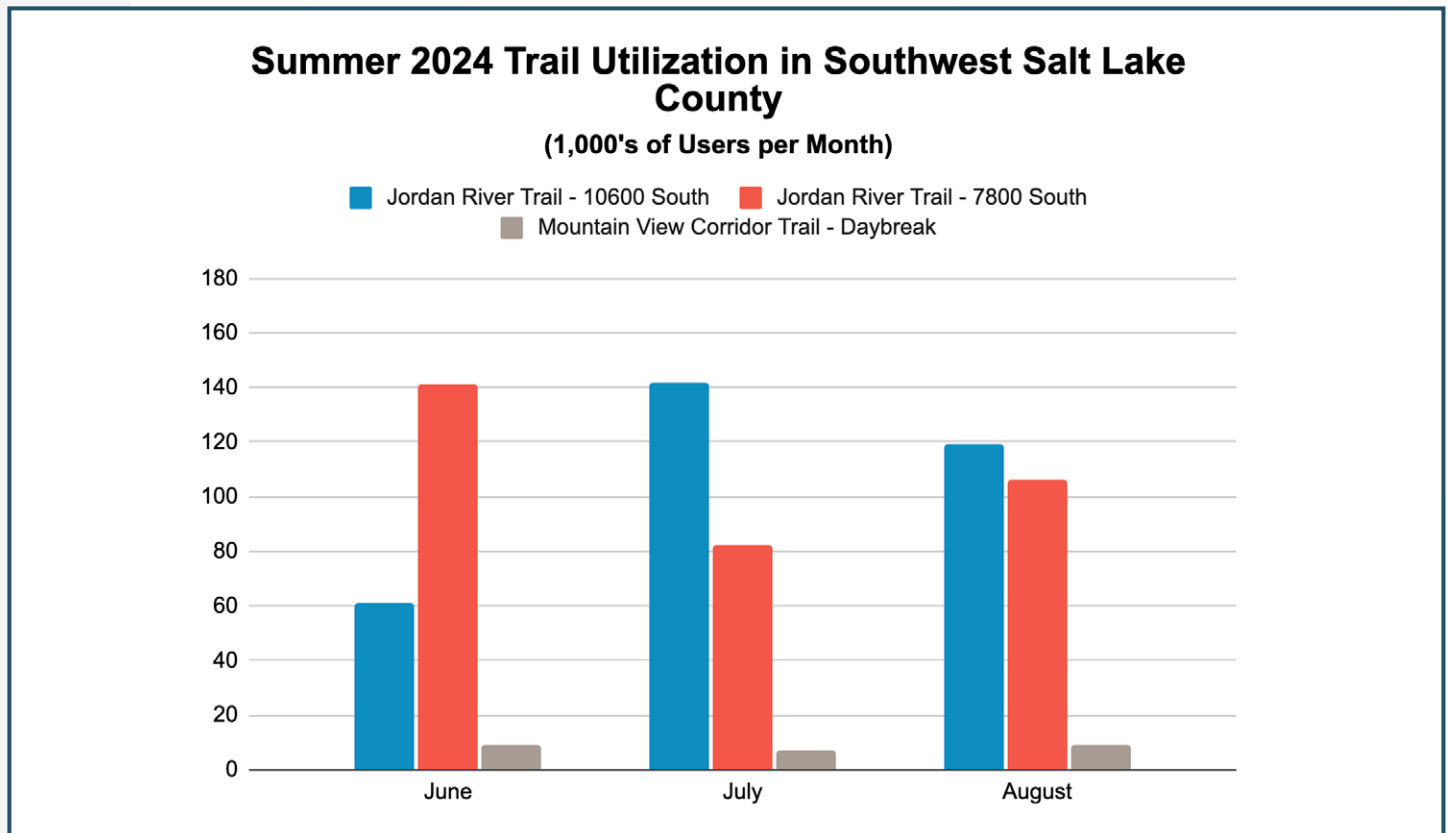


FIGURE 14: Trail Utilization

Strava Data

[Strava](#) is a service where users can track activities like walking, running, cycling, and hiking to share their routes and metrics with friends. Strava Metro disaggregates the data users submit and makes them available to agencies so they can see origins and destinations for trips, the most popular routes for active movement, and other useful information for active transportation planning. Data from Strava were used to understand which roadways and trails users in the city bike, walk, or run on most frequently for leisure or commuting. This served as an additional source for public feedback when assessing which active transportation projects would provide the most additional value to residents. **Figure 15** depicts the data obtained from Strava, with streets and trails colored by the number of trips recorded in 2024. As can be seen, the Jordan River Parkway Trail is a popular facility, as are 15000 South, 14400 South, Loumis Parkway, and 14600 South.

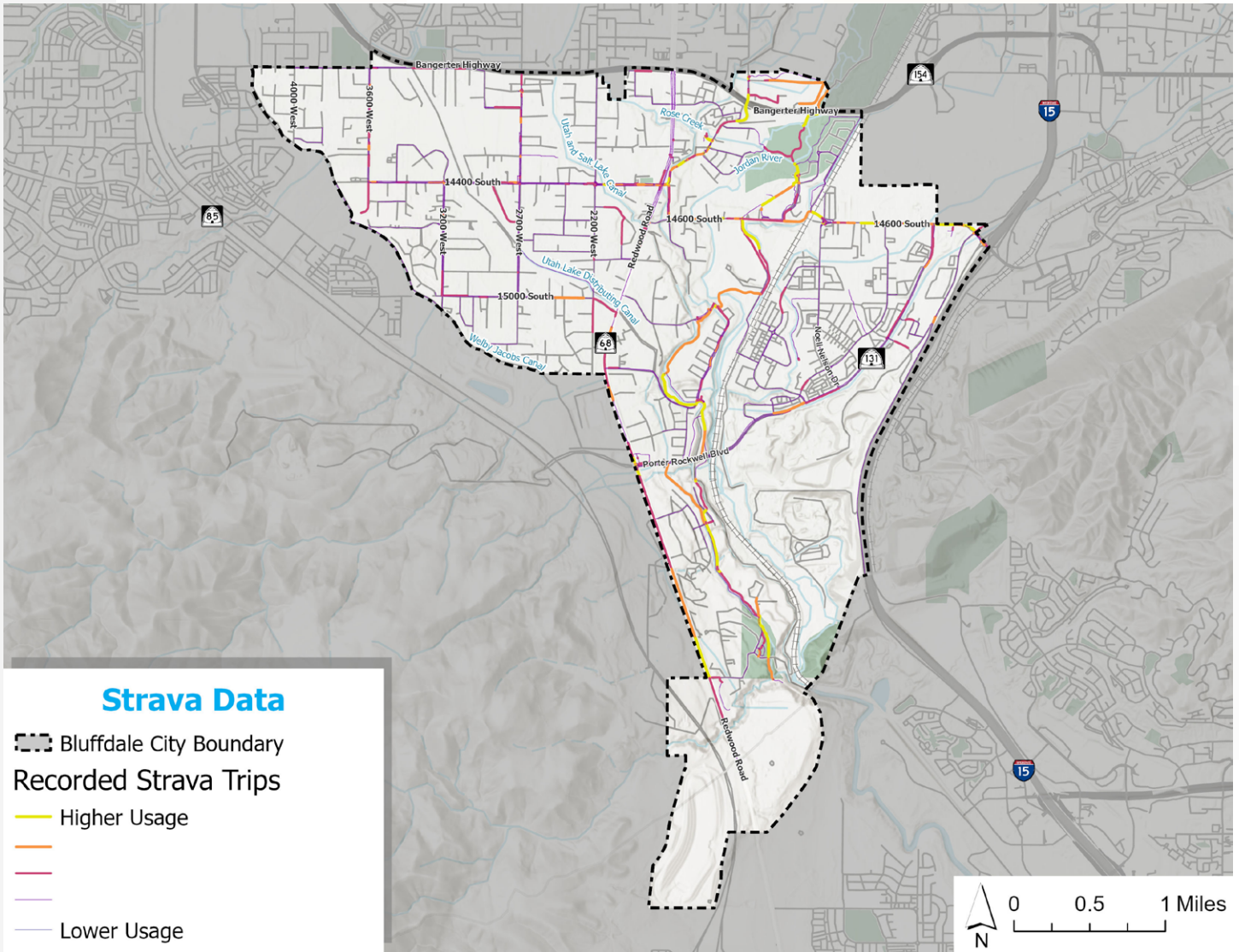


FIGURE 15: Recorded Strava Trips on Bluffdale Streets and Trails

Facility Inventories

This section summarizes the state and extent of the existing sidewalk and active transportation networks, including on-street bicycle facilities, off-street shared use paths, enhanced crossings, and trail access points.

Sidewalk Inventory

The 2017 Transportation Plan for Bluffdale City included an inventory of existing sidewalks and their availability for use in Student Neighborhood Access Plans (SNAP) as safe routes to school. This plan updates data gathered during the development of the 2017 TP based on subsequent development.

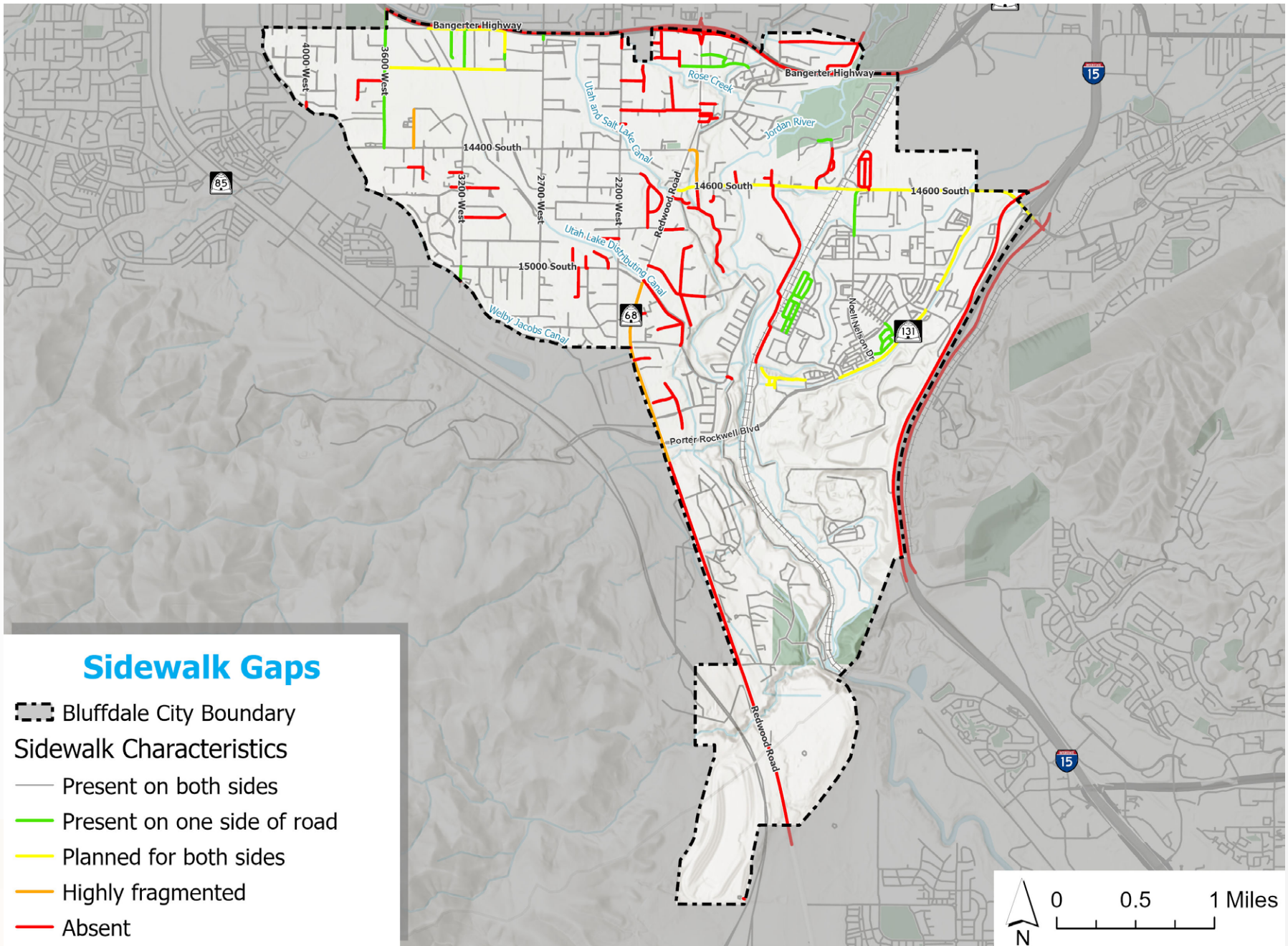
Safe and continuous sidewalks are an important component of an active transportation system. Bluffdale currently requires sidewalks on all roadways in the City, but some streets in older neighborhoods do not have sidewalks because they were developed prior to establishment of current ordinances. Other rural locations are missing sidewalks because they have yet to be developed, though all new developments in Bluffdale will have sidewalks according to city ordinance. The 2017 TP recommended that Bluffdale “prioritize the construction of new sidewalks and pedestrian crossing projects on the arterial and collector streets that are currently missing these facilities”; to this end, the [Project Recommendations](#) section of the ATP identifies a few priority locations where sidewalk completion is needed. Gaps in the existing sidewalk network are documented in [Figure 16](#), together with locations where new sidewalks were planned in the 2020 update to the TP and the 2023 WFRC RTP.

Existing Active Transportation Network

Today, Bluffdale’s active transportation network consists of facilities totaling approximately 51.3 miles in length, composed of on- and off-street facilities as shown in [Table 1](#). Major facilities contributing to this mileage include the Jordan River Trail, which bisects the City from north to south, a significant network of trails in the Independence area and along Porter Rockwell Boulevard, and long stretches of continuous on-street facilities on Porter Rockwell Boulevard, Redwood Road, 14400 South, and 2700 West. [Figure 17](#) shows the full existing active transportation network in Bluffdale, including on-street bike facilities, off-street shared-use paths, and major crossing locations.

Facility Type	Length (Miles)
Bike lanes (with or without a buffer)	18.9
Other on-street facilities	3.3
Paved trails	29.1
Total	51.3





Sidewalk Gaps

Bluffdale City Boundary

Sidewalk Characteristics

- Present on both sides
- Present on one side of road
- Planned for both sides
- Highly fragmented
- Absent

FIGURE 16: Sidewalk Gaps



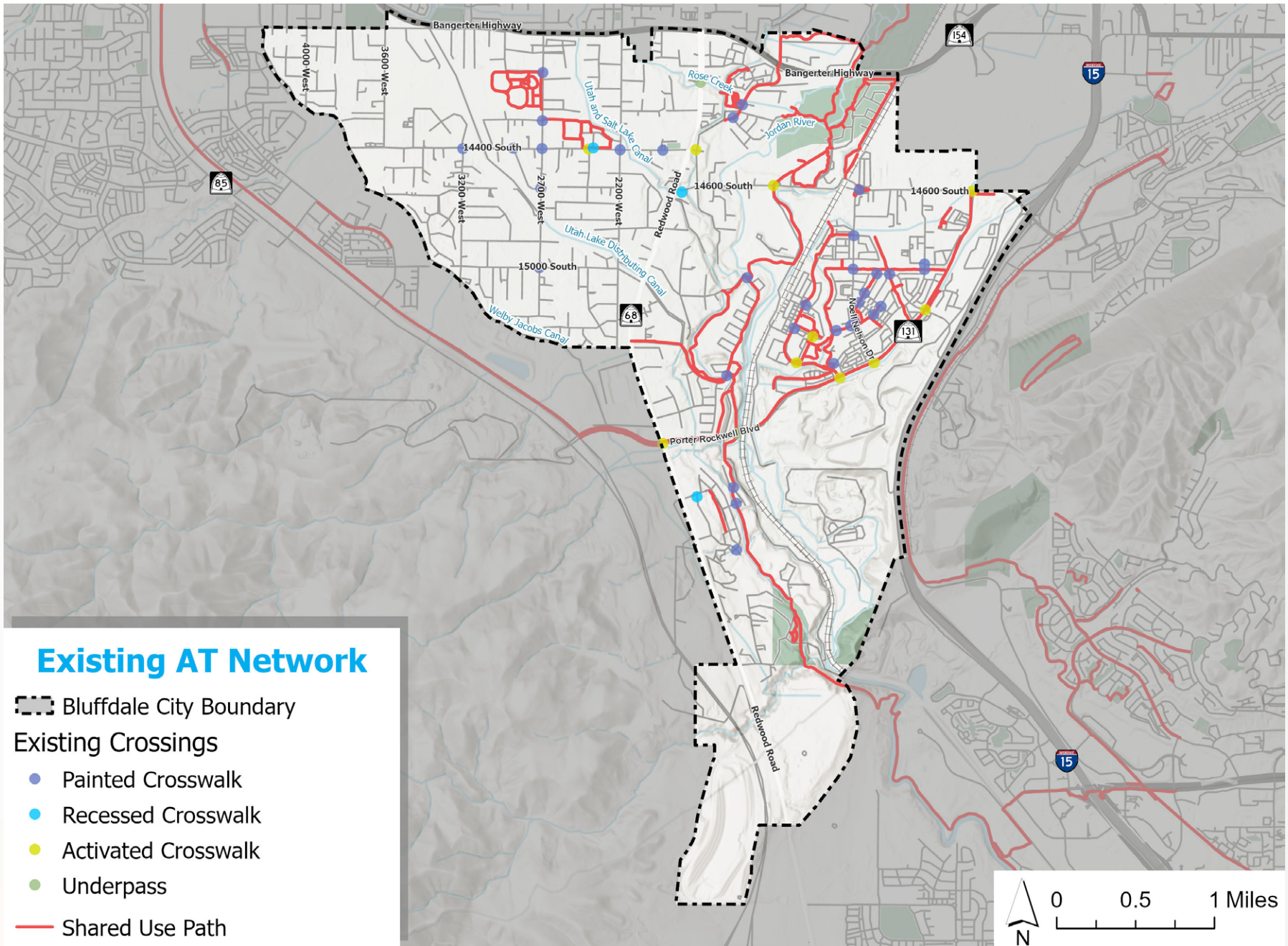


FIGURE 17: Existing Active Transportation Network



Trail Access Points

In order for a shared-use path network to be usable by the public, frequent access points must be provided from the road and sidewalk network. For street-adjacent trails, the level of accessibility is high, but separated shared-use paths can often be difficult to access because they run behind private structures or along one side of a barrier like a canal or river. To the maximum extent possible, the City wishes to avoid a scenario where a trail runs adjacent to a neighborhood but is completely inaccessible to its residents.

As discussed earlier, the desire to have active transportation and recreation facilities easily accessible was also expressed by a large majority of respondents in the recent parks and trails survey conducted in the City, with 88% of respondents considering it at least somewhat important to have trails within walking distance from home.

Using satellite imagery, all existing trailheads and access points to the shared-use path network were mapped. These are shown in **Figure 18**. These proved valuable for plotting the existing and future [trail service areas](#), which are discussed later in the report. Recommendations for new access points to the existing and planned trail network are discussed in the [Project Recommendations](#) section.



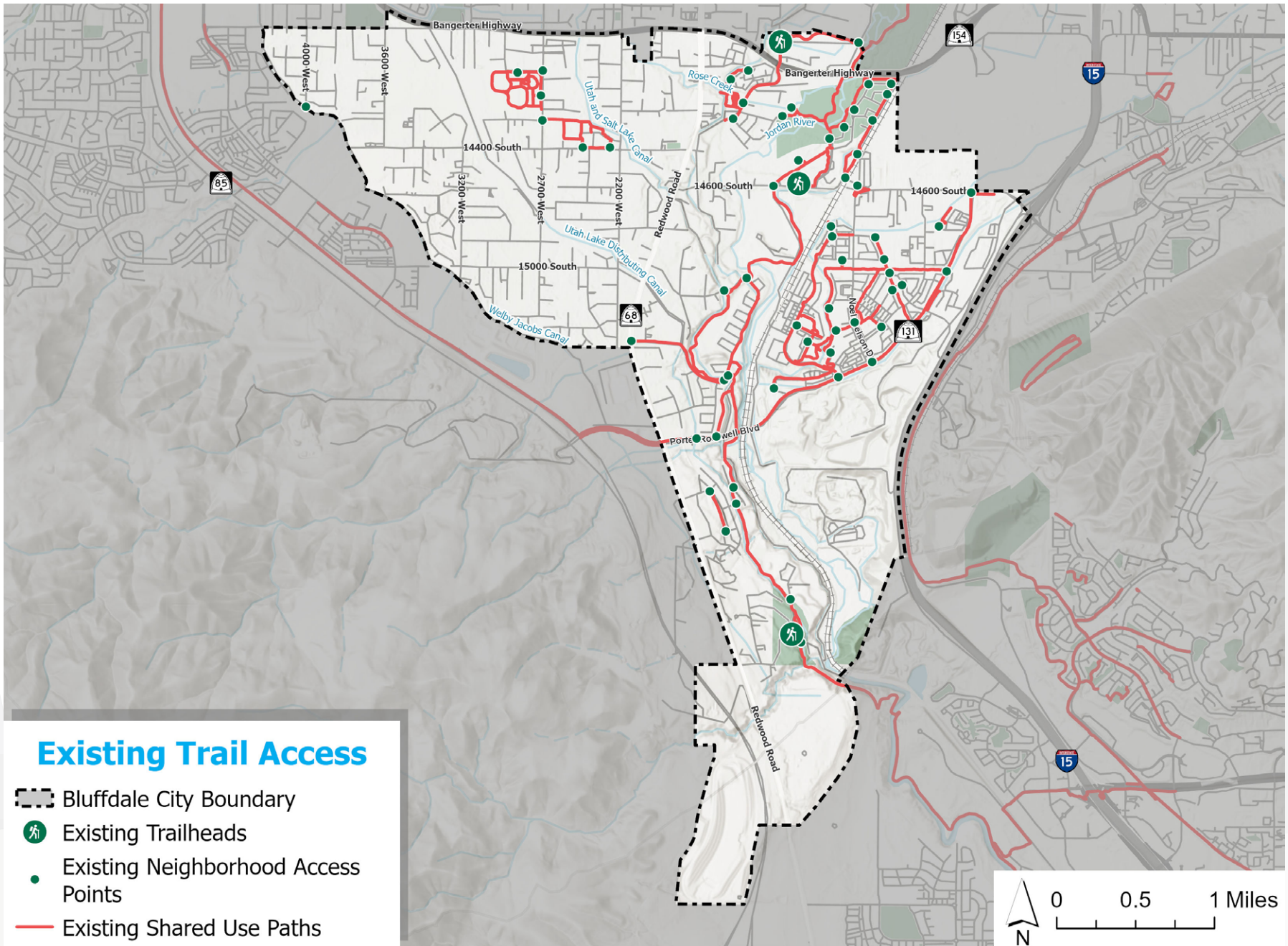


FIGURE 18: Trailheads and Access Points for the Existing Trail Network

Key Destinations

With feedback from the public and stakeholders and in collaboration with the City, a list of key active transportation destinations in the City and surrounding area was gathered. Destinations that residents wish to access on foot or by bike include parks, schools, trails, entertainment and shopping centers, and restaurants. There are also some anticipated developments that respondents hoped would be well-connected to the active transportation network, including the Point development and the associated FrontRunner station. The key destinations considered when planning and prioritizing active transportation projects are as follows:

- Trailheads along the Jordan River Parkway
- Trailheads in Herriman
- Mountain View Village shopping center in Riverton
- Walmart in Riverton
- Wardle Fields Park
- Bluffdale City Hall/Park
- Smith’s, Fat Cats entertainment center, and other nearby retail
- Bluffdale Elementary
- Summit Academy
- Summit Academy - Independence
- Summit Academy High School
- Independence Pickleball Courts
- Mountain Point Elementary
- Hidden Valley Middle School
- Day Ranch Park
- Bluffdale Community Garden
- Mountain View Trailhead
- Secret Canyon Trailhead
- Zion’s Bank Stadium
- The Point future development
- The future mixed-use center south of Porter Rockwell Boulevard

Figure 19 depicts the existing active transportation network together with the key locations, districts, and areas identified above, presenting a picture of the current ease of access to these destinations via active transportation.

Improving access to these destinations was a key consideration when prioritizing projects for the implementation plan. To reflect the expressed priorities of City staff and the public, particular emphasis was given to those projects that connect to schools and parks in order to best serve children, who are the most vulnerable and reliant on active transportation for independence.



Photo | Bluffdale.gov

Level of Traffic Stress

A key indicator of how well a bicycle network serves all users is the level of traffic stress (LTS). This is a measure of how comfortable and safe a facility is to use based on its proximity to traffic and the speed and volume of traffic.

WFRC supplied LTS data for bicycle facilities in Bluffdale. This data was checked, adjusted, and supplemented for facilities that were missing using their methodology (documented [here](#)) to produce **Figure 21**.

The methodology establishes four levels of stress based upon the level of confidence expected for a rider to choose to use a given facility. The four levels are defined as follows:

- 1 = Comfortable for all ability levels**
- 2 = Comfortable for most adults**
- 3 = Comfortable for confident cyclists**
- 4 = Generally used only by the “strong and fearless”**

An LTS value was assigned to each roadway, including those without an existing bicycle facility, to reflect the reality that bicyclists will use the routes they need to, whether or not space is explicitly allocated for them. Assigning LTS values presents an opportunity to prioritize the creation of future on-street facilities. Local roads are assumed to have an LTS of 1 or 2 and are appropriate for incorporation into the active transportation network provided that proper speed management policies are implemented. These roads are not symbolized in **Figure 21** to preserve the readability of the figure. Some roads that would be assigned an LTS of 1 under the WFRC methodology were instead classified as LTS 2 due to the presence of a centerline and speed studies indicating vehicles regularly exceed the speed limit of 25 mph.

This way of breaking up the population by confidence level has its roots in multiple studies that have asked adults who are interested in cycling about their preferences regarding active transportation facilities. The [FHWA Bikeway Selection Guide](#) summarized the results of one such study, illustrating the types of users that need to be accommodated by the bicycle network and describing types of facilities that can do that effectively. This summary is depicted in **Figure 20**.

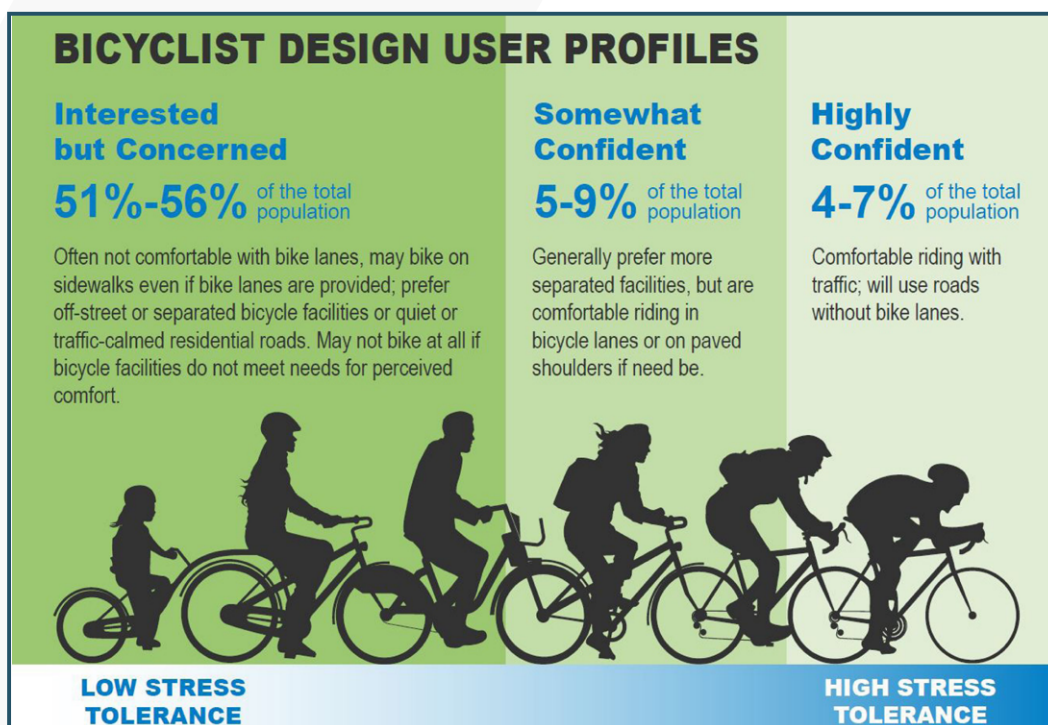


FIGURE 20: Bicyclist Design User Profiles (Source: FHWA)



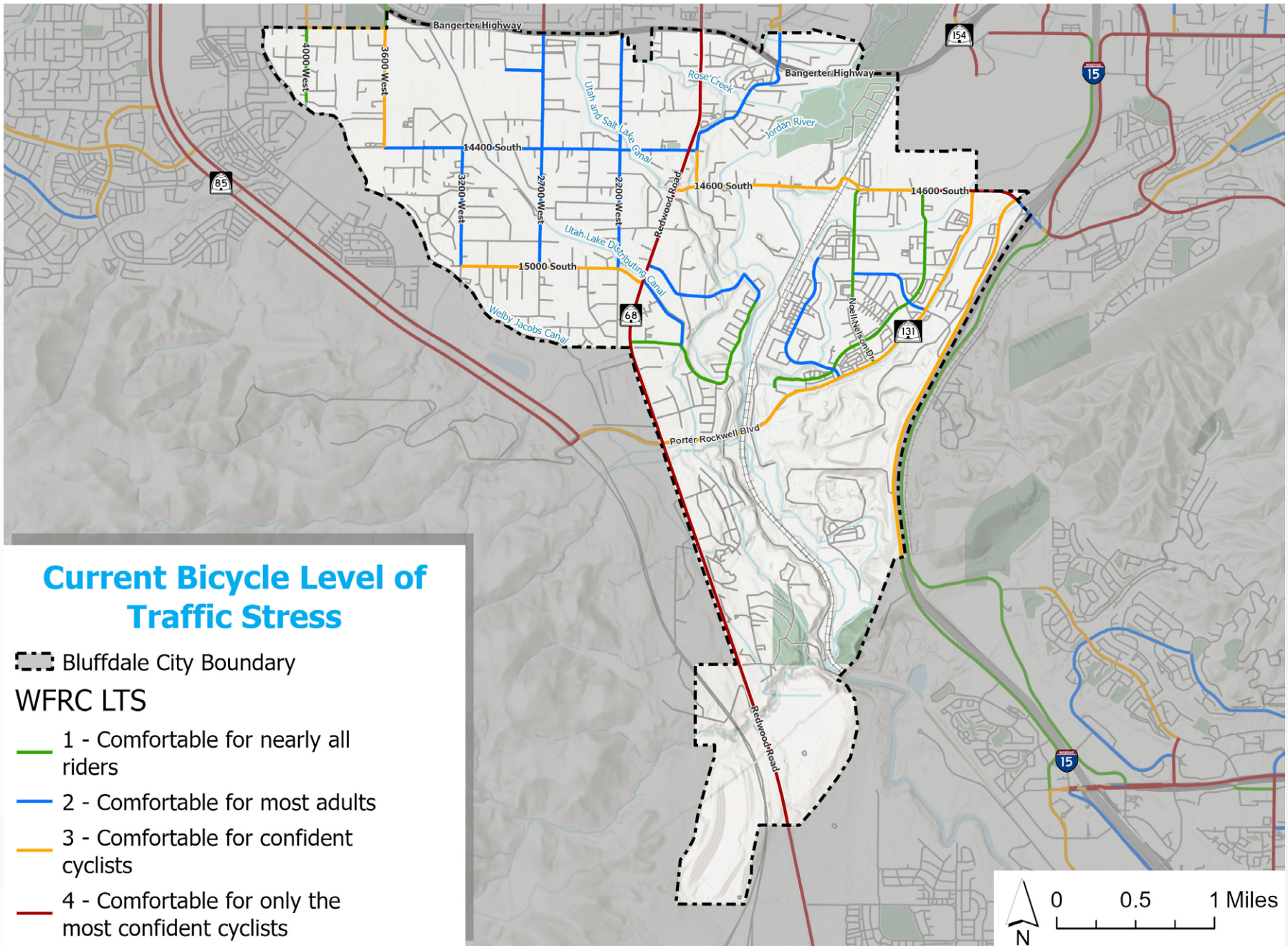


FIGURE 21: Current Bicycle Level of Traffic Stress



IV. ANALYSIS

Latent Demand

Latent demand refers to the extent to which active transportation trips are desired but not facilitated by the current transportation network. Factors like population density, travel times, quantity and types of destinations within a reasonable distance, and others can indicate how much of this demand is likely to exist, which can help planners understand where active transportation investments will be most effective at attracting use and meeting the needs of the community. The WFRC has developed a methodology for assigning bike and pedestrian demand scores to all roadway segments and microzones in the region. The level of analysis provided by the WFRC was determined to be sufficient for the purposes of this plan.

The scores assigned to Bluffdale's streets and microzones by WFRC methodology fell between 0 and 30 on a 100-point scale. This reflects the fact that Bluffdale has a primarily rural, residential character, with fewer destinations within walking or biking distance of people's homes compared to more urban areas of the valley. While demand for commuting or shopping trips may not be as high in Bluffdale as in other cities, comparing demand scores across areas of Bluffdale was invaluable for determining which projects would be most effective at addressing residents' desires to travel to schools, parks, and retail areas, or to simply have a pleasant walk or bike ride around their neighborhood.

As part of the project prioritization process, each shared-use path, on-street bicycle facility, and crossing improvement project received a score based on the level of demand in the area that it serves. During this analysis, manual adjustments upward were made to certain areas in anticipation of major pedestrian and bicycle attractors that will be constructed in the future, like the Point development and the associated FrontRunner Station. The results of the project prioritization process are discussed in the [Project Prioritization](#) section of this plan. The potential active transportation demand for each microzone and roadway segment in the city as determined by WFRC is mapped in [Figure 22](#).

Trail Service Areas

One of the City's goals with this plan and with the PTROS Plan was to design and build a trail network that will eventually serve the whole city area, with every resident having access to a trail within walking distance.

For the purpose of analysis, the service area of the trail network was defined as all points that lie within a 10-minute walking distance of any trail access point. All points where the existing trail network can be accessed from the roadway and sidewalk network were identified as part of the [Existing Conditions](#) analysis. These were used to calculate a 10-minute walk-shed along the roadway network, and the resulting service area for the existing trail network is shown in [Figure 23](#).

A similar analysis was conducted for the PTROS plan, using a half-mile buffer distance instead, and both of these analyses together were used to approximate the area that will be well-served by the existing and proposed trail networks. The analysis on the future network is discussed in the [Project Recommendations](#) section, together with additional needed access points that were identified with the aim of serving the whole city area.

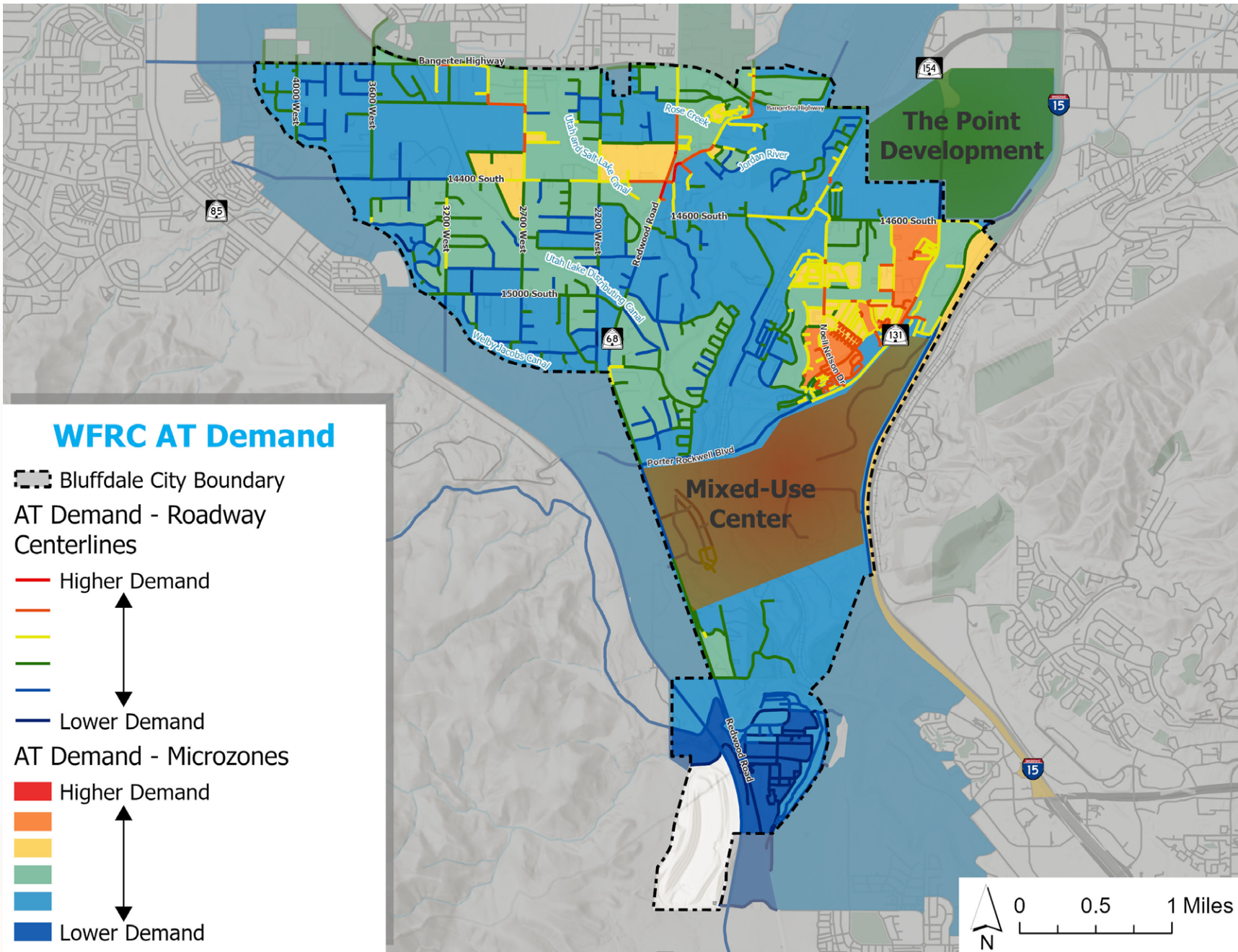


FIGURE 22: Latent Active Transportation Demand Scores in Bluffdale

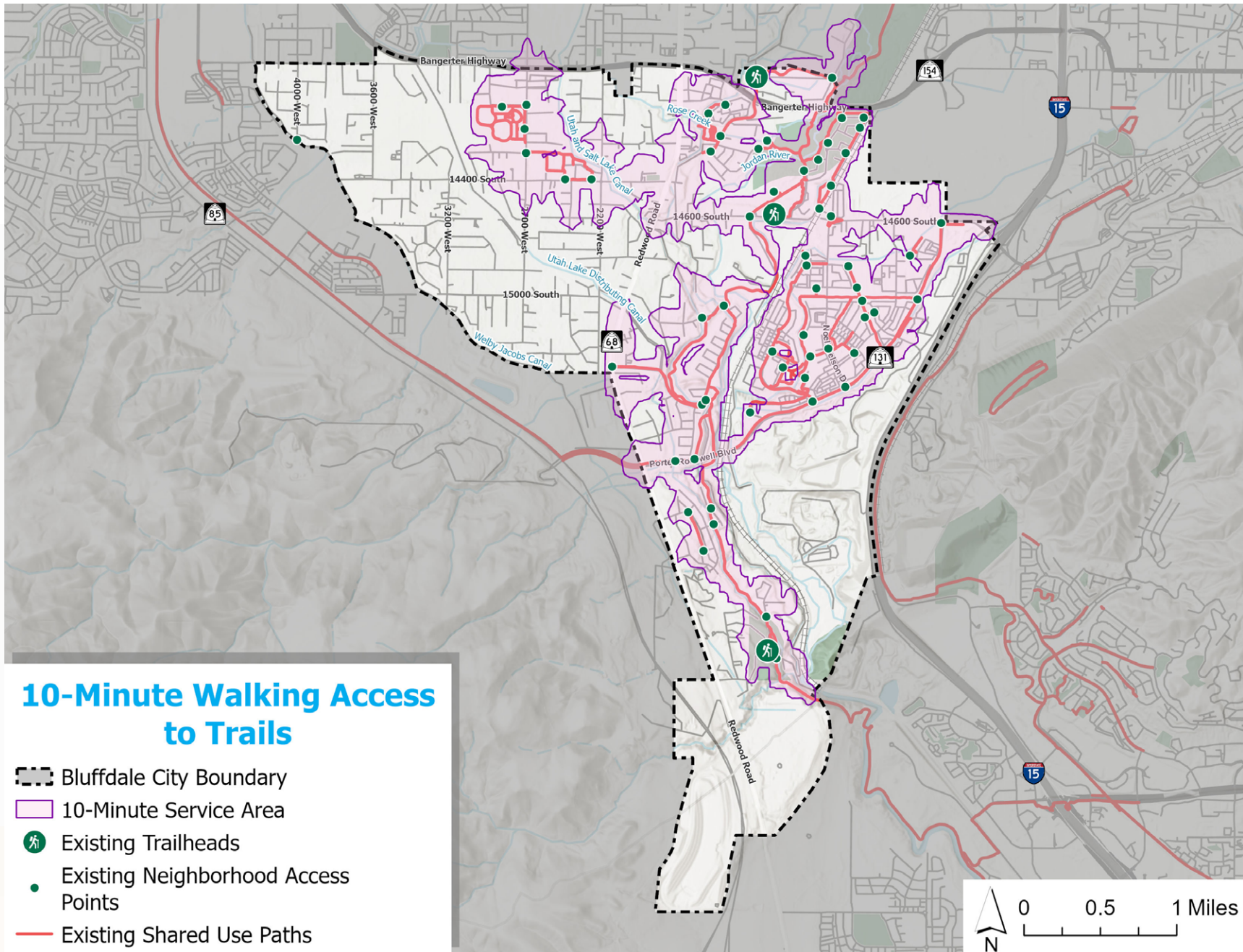


FIGURE 23: 10-Minute Service Area for the Existing Trail Network



Level of Traffic Stress

The Existing Conditions section included an examination of the current LTS for all roadways in the city based on the methodology used by WFRC. LTS values were reassigned to each roadway in the network for a future condition with all recommendations from this plan implemented. The City can continue to update the LTS information gathered during this planning effort as new changes are implemented, with up-to-date information being made available in the StoryMap. The future Level of Traffic Stress for all roadways and facilities in Bluffdale is summarized in [Figure 24](#).

Active Transportation Safety Analysis

A safety analysis was performed for all roadways within Bluffdale City, focusing on crashes involving pedestrians and bicyclists. All full years of available crash data (January 1, 2010 to December 31, 2024) from the UDOT Traffic & Safety tool AASHTOWare were used to perform the analysis. Crash patterns were analyzed within Bluffdale City to develop project and policy recommendations.

In total there were 38 active transportation crashes reported within Bluffdale City between January 1, 2010 and December 31, 2024. Of these, 4 (10.5%) involved suspected serious injuries and 2 (5.26%) were fatal. Fatal crashes occurred in 2016 and 2022. [Figure 25](#) shows total crashes and severe crashes (fatal and suspected serious injury) year-to-year. 2022 saw the most crashes of any analysis year, including active transportation crashes. Due to the relatively small number of crashes in a given year, distinct trends year-to-year and location-to-location are difficult to discern from random variability; as such, the location and nature of crashes are used to guide overall policy decisions, rather than assuming that solely addressing an issue in the location it manifested will solve the problem completely. This analysis is provided below.



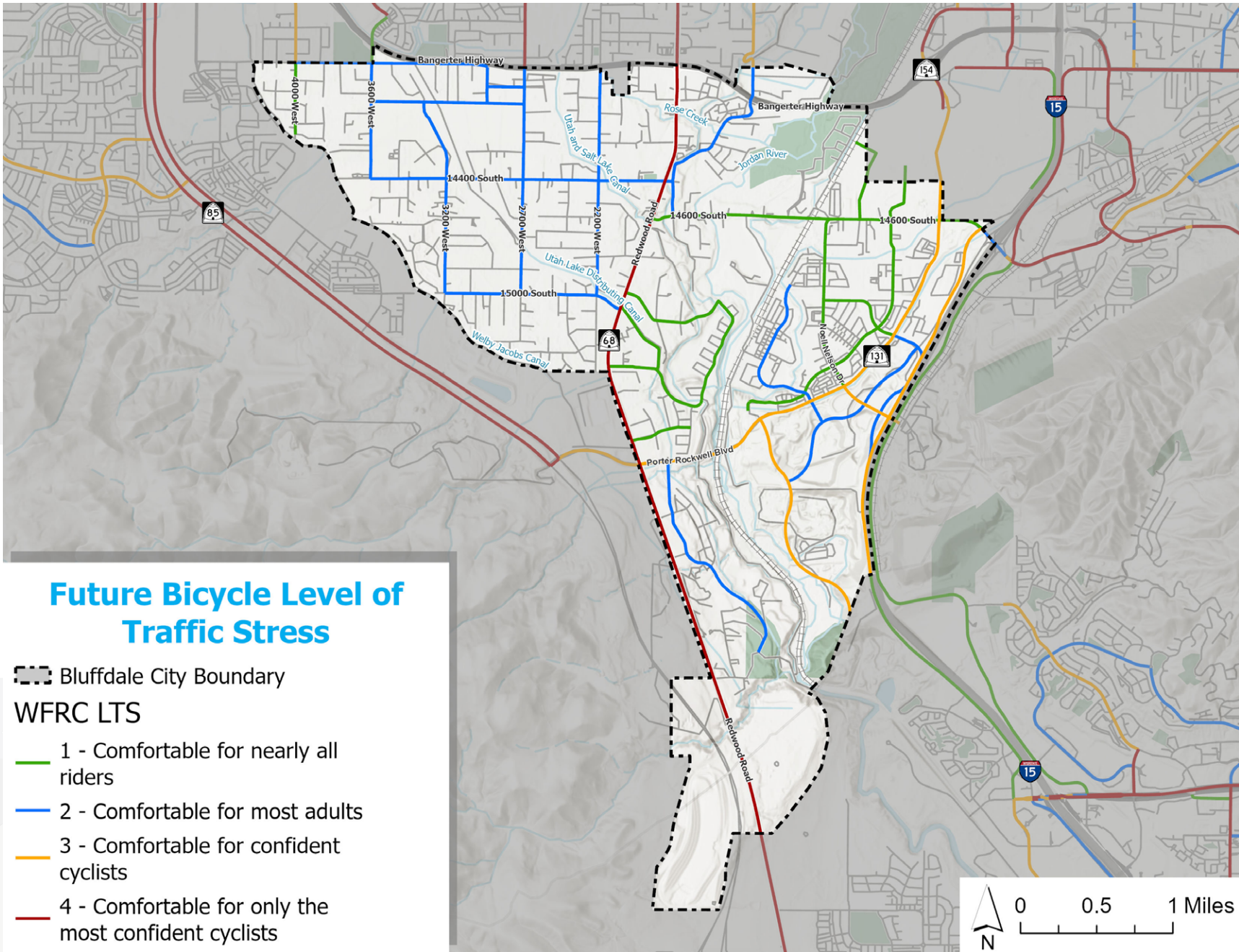


FIGURE 24: Future Bicycle Level of Traffic Stress

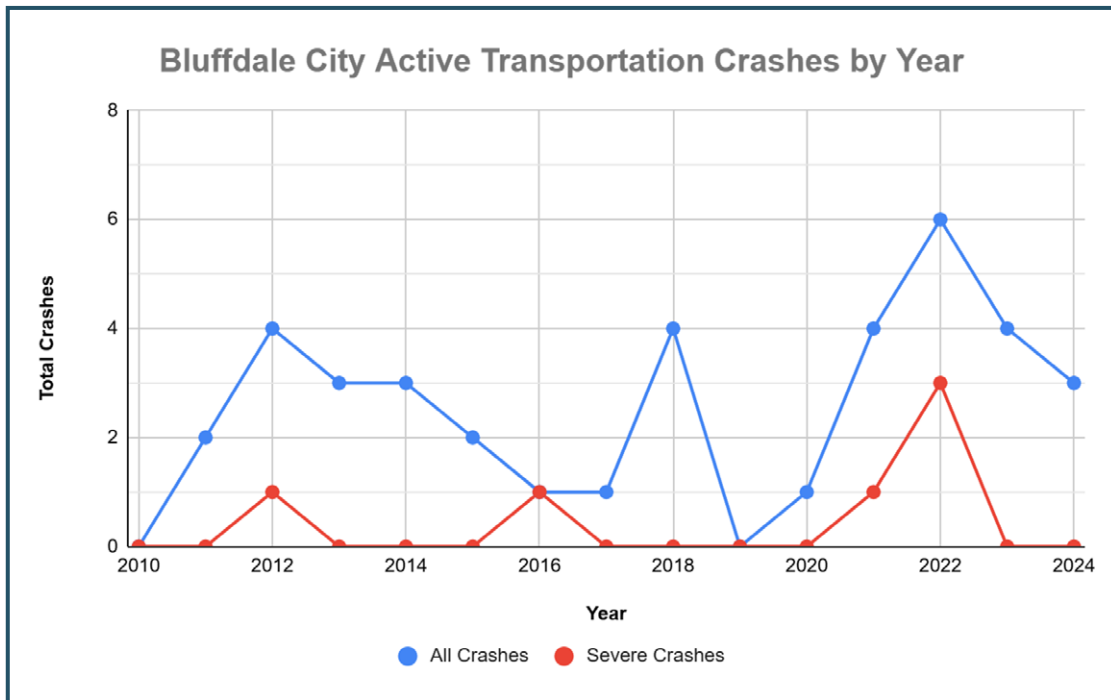


FIGURE 25: Bluffdale City AT Crashes

Table 2 compares active transportation crash rates as a percentage of all crashes during the analysis period in Bluffdale, neighboring cities, and Salt Lake County. Notably, Bluffdale displays the lowest rate of active transportation crashes as a share of all crashes; this could be due to many factors, including lower-volume, safer roadways, lower active transportation use due to socioeconomic or cultural factors, random variability, or a combination thereof.

TABLE 2: PERCENT AT CRASHES BY CITY	
City	Percent Active Transportation Crashes
Salt Lake County	3.02%
Herriman	2.84%
Riverton	2.18%
Draper	1.32%
Lehi	1.23%
Bluffdale	1.05%

Crash severity is reported according to a five-category scale ranging from property damage only to fatality. UDOT, like many other agencies, has taken on the goal of Zero Fatalities. This zero fatalities approach is guided by the Safe System Approach. The five elements of the Safe System Approach are summarized in the infographic below:



FIGURE 26: The Safe System Approach

As noted in the infographic, the Safe System Approach acknowledges that “humans are vulnerable”, and “death and serious injuries are unacceptable”. This vulnerability and risk of death or serious injury is particularly acute for pedestrians and bicyclists, who bear the bulk of the consequence from a collision with a motor vehicle regardless of which party, if any, is at fault. With this in mind, the policies and treatments recommended in this safety analysis seek to clearly communicate to road users how they should behave, anticipate human error, and implement redundant checks and protections for situations where one measure is not enough. The 6 recorded severe crashes received particular attention during the analysis.

Figure 28 plots all active transportation crashes in the city during the analysis period. Of the 6 severe crashes that occurred, 5 were on city roadways. This could reflect the relatively small number of UDOT-managed facilities in the city, and also speaks to the tendency for bicyclists and pedestrians to shy away from faster, busier roadways. It is important to match the perceived safety offered by lower-volume roads with proactive measures that manage speeds, enhance visibility, and clarify expectations for all road users. Proactive measures should be used in lieu of relying solely on crash data to guide safety improvements because active transportation crashes often go [underreported to police](#) and the reports that are filed often [underdiagnose the severity of injury](#). Additionally, a lack of crashes does not necessarily indicate that a roadway is safe; the case could also be that a roadway’s lack of accommodations for active transportation push walkers and bikers away or force them to drive instead.



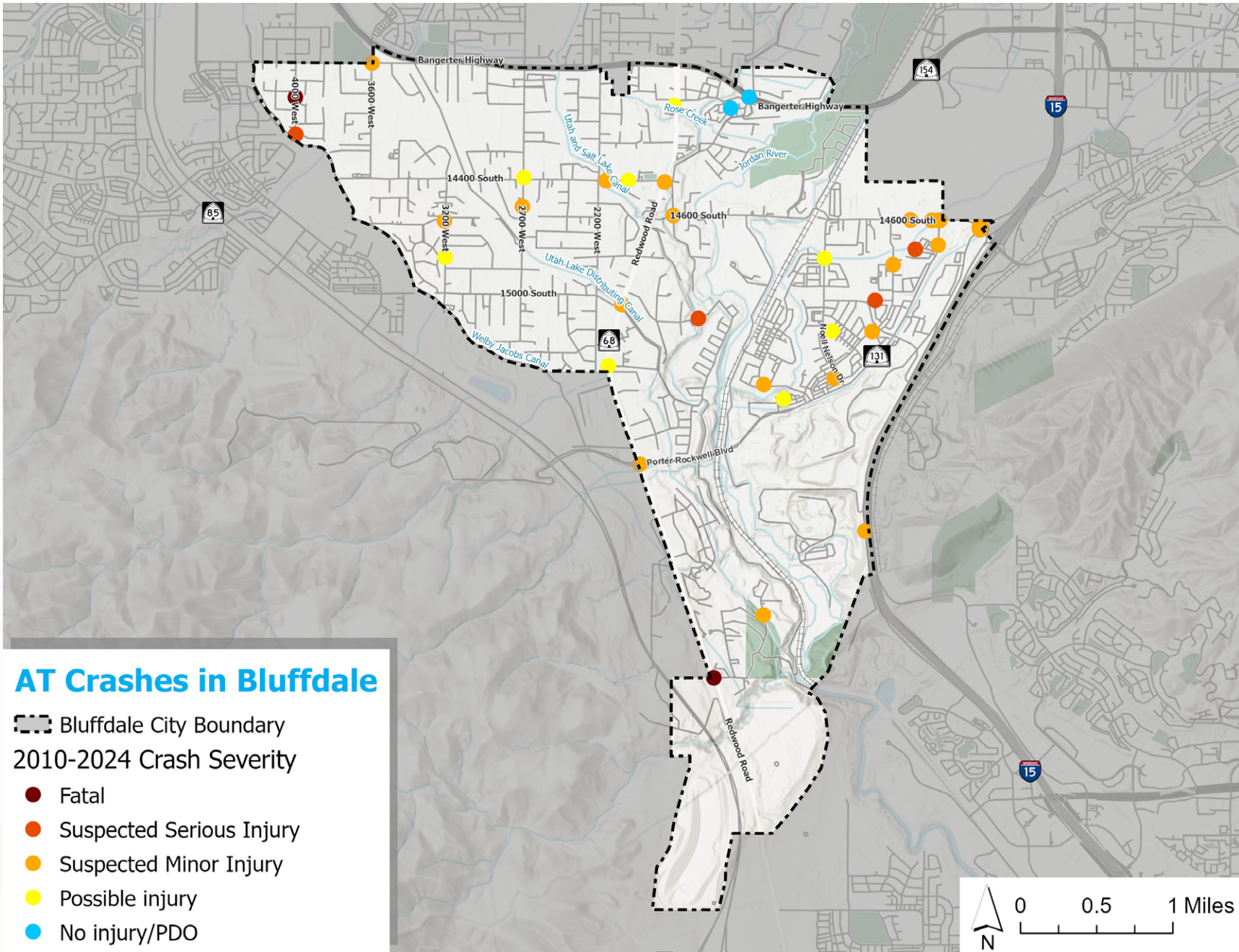


FIGURE 27: Active Transportation-Involved Crashes in Bluffdale (2010-2024)



4000 West / Fawn Hill Lane and Other Residential Streets

4000 West was the site of two severe crashes involving pedestrians during the analysis period, including the tragic death of a child. The non-fatal crash involved a vehicle swinging wide around the turn into Fawn Hill Lane and hitting a jogger in the roadway. This occurred at night, and it’s likely that the dim light combined with limited visibility around the corner contributed to this accident. The fatal crash occurred on the straight segment of 4000 W. This crash occurred almost 10 years ago in 2016, and no other incidents involving pedestrians have occurred on the straight segment since this time. Additionally, the crash report indicates that the driver involved in this crash was not exceeding the speed limit; however, whether this tragedy was due to inattentiveness, lack of visibility, or speed factors, systemic changes can help make all neighborhood streets safer and prevent incidents like this from happening again. The wide shoulders and straight alignment of this roadway may contribute to excessive speeds or inattention, which increase the severity of crashes for pedestrians, make it more difficult to stop, and make it more difficult to navigate a sharp curve like the one into Fawn Hill Lane.

The proposed trail network includes plans for a trail that runs along 4000 West between the Welby Jacobs Canal and the border with Riverton. Building this trail presents an opportunity to narrow the roadway, which currently has more than 40 feet of asphalt, to make room on one side for the trail. Additional traffic calming measures like radar speed signs and others discussed in Bluffdale City’s [Traffic Manual](#) can be applied relatively quickly and to good effect. **All streets with residential frontage that are wider than 32 feet should also be considered for some traffic calming measures and active transportation improvements.**

To further encourage drivers to take the turn into Fawn Hill Lane with more caution, **the City should consider adding horizontal alignment warning signs as discussed in Chapter 2C of the MUTCD.** This would constitute adding a speed advisory sign to the signpost with the W1-1L sign that is currently in place on 4000 W, and placing sign W1-6 ([Figure 29](#)) and speed advisory signs at the zenith of the curve facing both directions to provide drivers with a reflective marker for the exact location of the curve. **Additional street lighting should also be added at the curve** to improve visibility around the corner. Finally, **the pedestrian ramp on the northeast corner of this curve should be moved**, as this placement encourages pedestrians to cross at a location with very poor visibility.

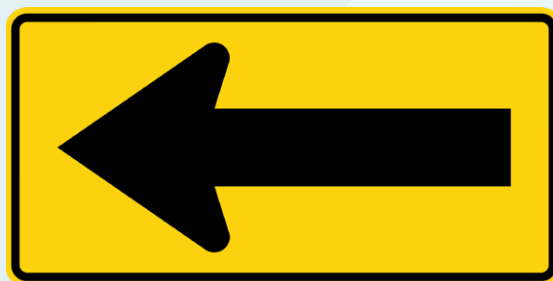


FIGURE 28: MUTCD Sign W1-6L



Collectors and Arterials

The most common crashes involving pedestrians and bicyclists that occur on collector and arterial roads are due either to drivers failing to see pedestrians in the roadway or drivers failing to yield to a pedestrian or bicyclist when turning across an AT facility. The high-visibility, comfortable crossings recommended in the final network are intended to mitigate the risks associated with pedestrians crossing in unexpected places or drivers failing to see them. **The City should continue to monitor to determine crossing needs beyond the work done for this plan.** The crossing treatment decision table included as **Table 4** in the [Crossing Treatment Selection](#) section can serve as guidance for selecting treatments.

Even the most comfortable pedestrian or bicycle facilities that are well-separated from a roadway will inevitably cross driveways and minor streets that vehicles need to turn into. The danger is even greater for on-street bicycle facilities, where vehicles have less room to stop for bicyclists once they have begun their turn. Drivers need highly-visible, redundant reminders to watch for bicyclists and pedestrians in their respective facilities early, and yield to them when they are present. With this in mind, **roadways with speeds of 30 MPH or greater will benefit from the following:**

- Green dashed lines in conflict zones with bicycles.
- Painting all minor street crosswalks.
- Recessing minor street crosswalks where feasible (the intersection of Iron Horse Boulevard with Redwood Road is a good candidate for this).
- Using MUTCD signs R4-4, R10-15 (see [Figure 30](#)), and other regulatory signs as relevant.
- Adding bulb-outs to mid-block crossings and intersections to slow vehicle turning speeds and increase visibility for crossings.

The above recommendations address concerns highlighted by crashes on 3200 West north of 14865 South, 14400 S at Heritage View Cove, 14600 South and 1700 West, and other locations. MUTCD Chapters 9B, 9C, and 9E can be consulted for more recommendations relating to markings and signage. Examples of recommended markings and signage from these chapters are presented in [Figure 29](#).

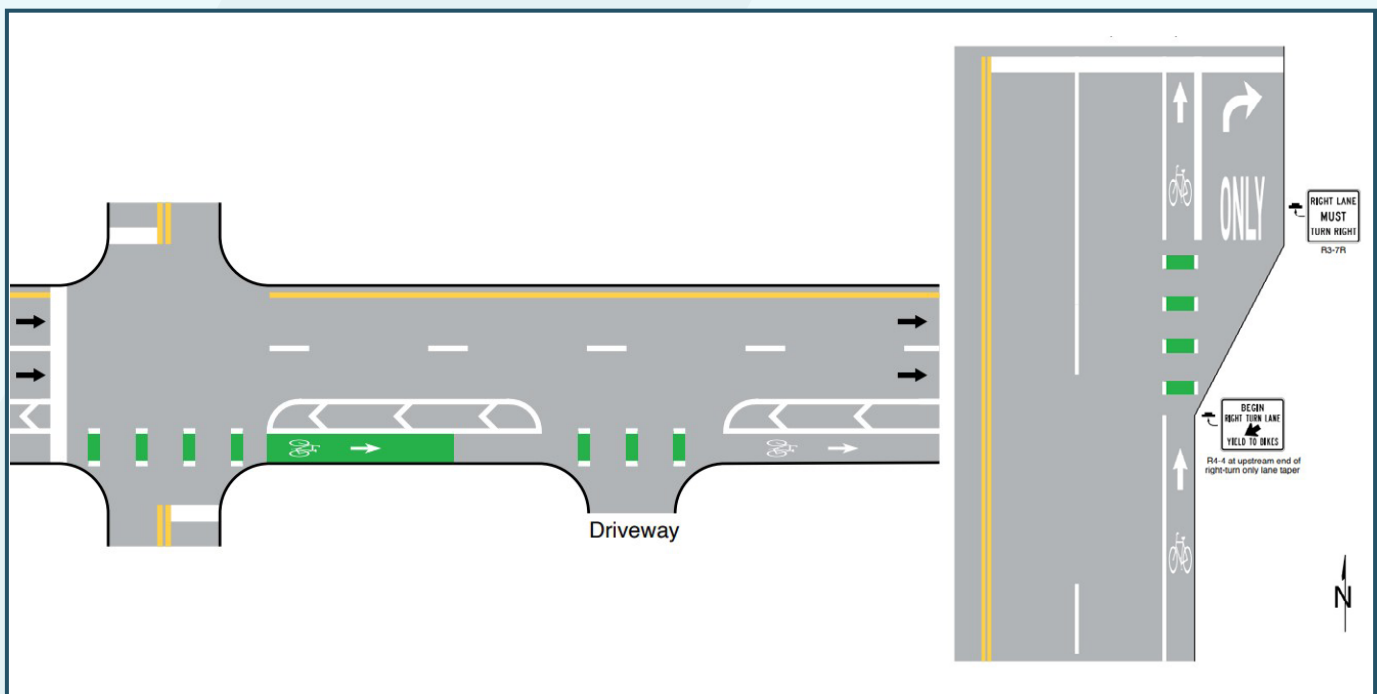


FIGURE 29: On-Street Bicycle Facility Markings and Signage



Incremental changes that add up over time are key to implementing the safe-systems approach. To this end, any city-managed collectors and arterials would make good candidates for the relevant treatments discussed above during repaving and reconstruction, and the City can request the same from UDOT when they do work on their facilities.



FIGURE 30: MUTCD Sign R10-15R

Signalized Intersections

Drivers have many things competing for their attention when turning at a signalized intersection, and oftentimes they will fail to see pedestrians and bicyclists in a crosswalk as they turn across it. For example, at 14000 South and Redwood Road a driver turned right into a bicyclist entering the crosswalk because they were focused on looking for gaps in oncoming traffic. A similar crash occurred at 14400 South and Redwood Road with a driver turning left, likely during a left-turn-permitted phase. The following treatments can mitigate these kinds of crashes if traffic conditions permit:

- Implementing protected-only phasing for left turns prevents left turn hook crashes by removing overlap with the pedestrian phase.
- Prohibiting right turns on red (RTOR) forces drivers to turn only when conflicting pedestrians are within their line of sight.
- Adding MUTCD Sign R10-15 to turn approaches reminds turning drivers to yield to pedestrians in the crosswalk.
- Implementing leading pedestrian intervals when crosswalks are actuated allows pedestrians to establish their presence in the crosswalk early.

Independence at the Point

Despite its status as newly-developed relative to the rest of Bluffdale, the Independence at the Point (or simply, Independence) community saw a notably higher density of active transportation crashes than was present in other areas in the City during the analysis period. This is not particularly surprising given the fact that Independence has a higher population density and a greater number of active transportation facilities and destinations. Great care was taken during the planning process for this area to make it safe for families to traverse the community on foot or by

Daylighting

When daylighting a crossing at an intersection, [research](#) indicates that parking prohibitions alone can worsen safety concerns because they allow for more aggressive turning maneuvers; infrastructure like a bulb-out needs to be added as well to enforce slower turning speeds.

bike, but the number and severity of crashes that have occurred here offer some insight into areas that still need improvement.

While parked vehicles serve to calm traffic, they can obscure sightlines for vehicles approaching pedestrian crossing locations; as such, **parking prohibitions should be put in place on all approaches to crosswalks** – with increased enforcement where parking demand is high – to ensure users entering the crosswalk are visible at an appropriate distance. This is known as “daylighting” the crossing.

The most important thing for addressing the above issues is to set speed limits that are appropriate to a roadway’s context and reinforce them with design elements and traffic calming measures. [Figure 31](#) illustrates how even small increases in speed can make crashes much more deadly for pedestrians.

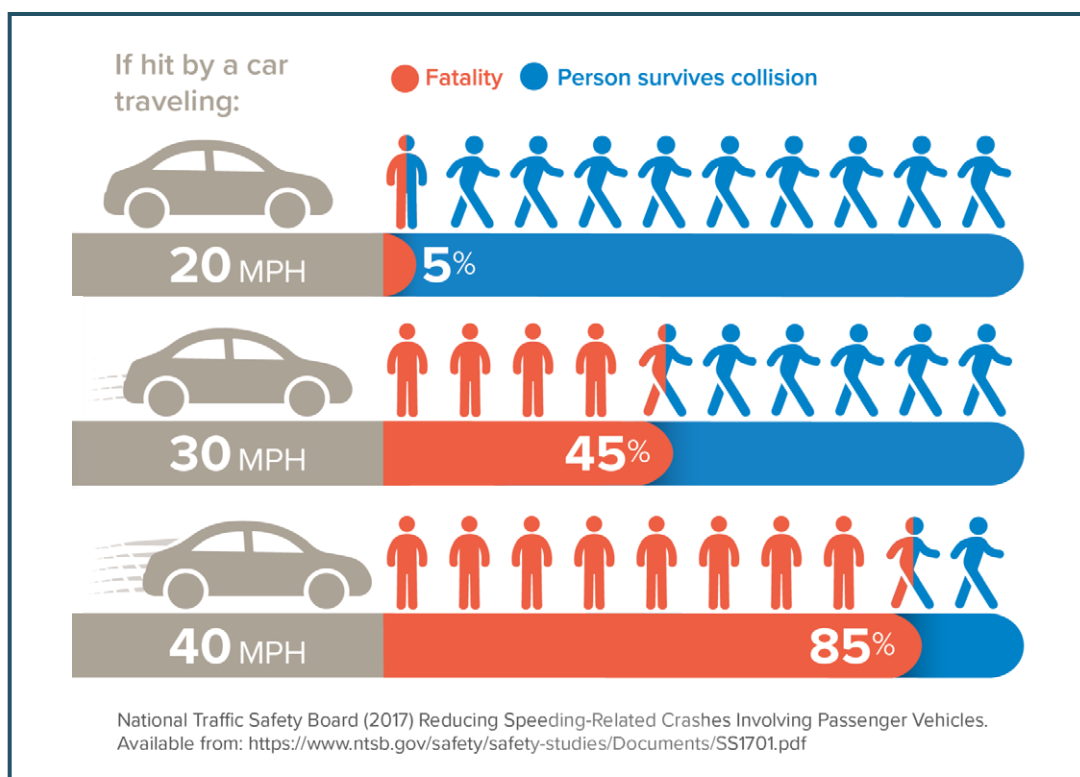


FIGURE 31: Pedestrian Fatality Rates by Vehicle Speed

Bluffdale City has recently conducted speed studies on a few roadways in this area with widths less than 30 feet. As examples, the 85th percentile speed on Freedom Point Way was 30 mph, and on Star Spangled Drive it was 28 mph. As corroborated by these studies, it is common for drivers to shy towards exceeding a speed limit by 3-5 miles per hour, even on narrow residential streets. **On certain roadways with widths less than 30 feet, particularly those with many driveways and intersecting approaches, a 20 mph speed limit may be more appropriate.**

While the WFRC CSAP does cite some research indicating that lowering the speed limit on its own can reduce vehicle speeds, this is not typically considered an effective measure for speed reduction. Nevertheless, it may be a necessary first step to lower the baseline, though where possible it should be coupled with traffic-calming measures as discussed in the Bluffdale Traffic Manual, with an emphasis on physical measures at trail crossings and intersections like curb extensions, raised crossings, and raised center medians or hardened centerlines where median space is not available. A low-cost solution for horizontal deflection has been used previously on Freedom Point Way, where the travel lanes have been flared out at each trail crossing with a blue median painted in the middle, as shown in **Figure 32. The City should monitor this location to assess the effectiveness of this measure.**



FIGURE 32: Independence Trail Crossing at Freedom Point Way

Attention should also be paid to locations where vehicles are transitioning from higher-speed facilities to lower-speed ones. For example, adding bulb-outs to the intersection of Heritage Crest Way and Freedom Point Way would help establish for vehicles who are turning in from Porter Rockwell Boulevard that they are entering a slower, pedestrian-oriented area.

There are some trail crossings that are as yet unmarked, which should be remedied given the high use these crossings receive. **Each crossing should receive paint and MUTCD warning signs (Figure 33) as appropriate.** This should be coupled with measures to “daylight” the approaches to these crossings, which typically involves painting the curb red or extending it inward for an appropriate distance. Placards and pavement markings reminding cyclists to check for vehicles before continuing through the crossing should also be posted on trails. Many crossings and intersections that need this attention are included in the [Project Recommendations](#) section of this report. **The City should adopt an incremental approach to implementing these and all other changes recommended in this section, setting aside funds on a regular basis and capitalizing on routine maintenance.**

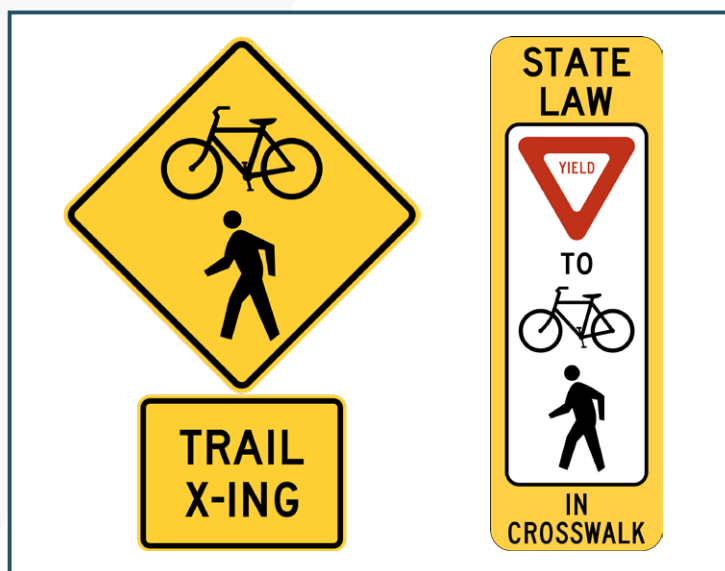


FIGURE 33: MUTCD Sign Assembly W11-15(P) and R1-6D (Placed on a Post in the Median to Calm Traffic)

Trail Crossings

Certain problems that have manifested at trail crossings within the Independence development are also apparent at trail crossings throughout the city. **Efforts should be made to ensure that vehicles are aware of all trail crossings and prepared to stop, and that bicyclists slow down for crossings enough to stop in the event that a vehicle fails to yield to them.** The treatments recommended above are relevant for these, and there are a number of signs that can be put in place along trails to encourage users to slow down and exercise caution in a crossing — for example, a sign that says “cross traffic may not stop”. **As the City designs new trails they should also take opportunities to build horizontal diversions in advance of trail crossings to encourage cyclists to slow down.** This would typically take the form of adding horizontal curves to the trail alignment. Physical gates are sometimes used, but they can be dangerous if not clearly visible, and if used they should be easy to traverse without dismounting to avoid frustration for people wishing to use the trail. Additionally, where gates and bollards are used, they need to be designed with adaptive use or mobility assistance devices in mind.

WFRC Comprehensive Safety Action Plan

The WFRC Comprehensive Safety Action Plan explored general measures that can be applied across the region to implement the Safe Systems Approach to roadway safety. The USDOT’s [Proven Safety Countermeasures](#) toolbox provides an excellent resource for roadway design elements that proactively prevent severe crashes. The following measures are highlighted by the WFRC in the CSAP, and should be considered by the City as part of their proactive safety policy:

- The WFRC highlighted the importance of speed management for both preventing and decreasing the severity of crashes. As discussed above, **the City should implement traffic calming on roadways where speeds regularly exceed the safe limit**, with particular focus in areas with high bicycle and pedestrian traffic. **Speed limits of 20 MPH should be considered for residential roadways less than 30 feet wide**, keeping in mind that accompanying traffic calming measures are needed to ensure a meaningful reduction in speed.
- **Roundabouts should be considered as a default option for intersection control**, to replace stop-controlled intersections and even signals up to a certain volume threshold. The design of a roundabout decreases the frequency and severity of crashes by reducing vehicle speeds, inducing a shallower angle of collision between vehicles, decreasing the number of conflict points, and providing shorter crossing distances for pedestrians.
- There are significant safety improvements associated with median refuge islands at pedestrian crossings, reducing pedestrian crashes by about 50%.

The [Crossing Treatment Selection](#) section includes **Tables 4** and **5**, which define minimum treatment standards for active transportation crossings based on roadway context. **The City should adopt these tables as the minimum standards for new crossings that are built**, coupled with a statement recommending higher levels of comfort than the minimum where feasible. This will ensure that all crossings begin with an appropriate level of visibility, traffic calming, and control for their roadway context.

The City should also implement the adjustments to their standard cross sections as discussed in the [Standard Cross Sections](#) section, including **establishing standard 10-11 foot travel lanes, having the flexibility to narrow the roadway to make room for off-street facilities, and adding guidance to prioritize the most comfortable active transportation facility possible while allowing for discretion from the City Engineer.** An example of this would be to install bollards or curbed protection as a default for buffered bike lanes, at a minimum where they approach a conflict point, or barring that, install a ramp in advance of intersections to allow bicyclists to access the sidewalk and avoid a conflict with the right-turn lane.



Summary

In summary, the following safety improvements are recommended within Bluffdale City:

- Implement traffic calming on 4000 W and other residential streets with widths greater than 32 feet.
- Add MUTCD W1-6 signs and speed advisory signs at appropriate places surrounding the curve between 4000 W and Fawn Hill Lane
- For all collectors and arterials (including 3200 West, 2700 West, 14400 South, 15000 South, and 14600 South) as opportunities arise:
 - Add green dashed lines to conflict points with bicycle facilities
 - Paint all minor street crosswalks, preferably recessed from the major street with proper signage as discussed in the Facility Design Standards and Best Practices section.
 - Add MUTCD signs R4-4, R10-15, and other signs as relevant to communicate to turning vehicles that they must watch for and yield to pedestrians and bicyclists.
- For all signalized intersections where feasible:
 - Consider implementing protected-only phasing for left turns to avoid overlap with the pedestrian phase.
 - Consider prohibiting right turns on red (RTOR) on key approaches with frequent pedestrian crossings — like the eastbound approach to Redwood Road on 14000 South.
 - Add MUTCD Sign R10-15 to sign posts to remind turning drivers to yield to pedestrians in the crosswalk.
 - Consider implementing leading pedestrian intervals when crosswalks are actuated to allow pedestrians to establish their presence in the crosswalk early.
- Consider 20 mph speed limits for residential streets with widths less than 30 feet, accompanied with requisite traffic calming measures.
- Focus traffic calming efforts on transition points from high-speed facilities to low-speed ones.
- Ensure all trail crossings are painted with signage (MUTCD W11-15(P) on the side with optional R1-6D in the center median)
- Place placards on trails before crossings reminding trail users to slow and watch for vehicles.
- Consider horizontal deflections on trails to encourage bicyclists to slow down for crossings.
- Consider installing roundabouts as a default traffic control device in lieu of stop signs or signals.
- Adopt [Tables 4](#) and [5](#) as standards for new active transportation crossings.
- Adjust the standard cross sections as discussed in the [Standard Cross Sections](#) section.

Many of the above recommendations are given generally and are intended to be implemented system-wide. The City should regularly set aside resources to undertake these often-simple projects and establish a policy to install these measures whenever additional opportunities arise during routine maintenance. More aggressive measures like curb extensions, median barriers, raised crossings, protected bike lanes, and other physical treatments can often be implemented using temporary materials at first. Options include rubber speed tables, plastic bollards placed in a bike lane buffer, or the posting of R1-6D signs on a rubber post in a median. These “pilot” measures can save money and give time for evaluation and public feedback without overcommitting resources.



V. PLANNING AND DESIGN COMPONENTS

Complete Streets Policy

A Complete Street is one that serves all members of the community and allows them to comfortably use it in the way that they want - whether that's walking, riding a bicycle or other mobility device, driving, or taking transit. To this end, a Complete Street provides space and consideration for all modes, shifting the paradigm towards a safety-first approach rather than one that seeks to prevent vehicle congestion above all else. Complete Streets need not look the same in every context - it is important to consider the demand for each mode along a corridor to “right-size” the space allocated for each - but a Complete Streets policy sets a minimum standard of accommodation for each mode.

The City has determined that a **Complete Streets policy will need to be developed as part of the upcoming update to the transportation master plan**. Salt Lake City has adopted a [Complete Streets ordinance](#) that can be used as a template for the City's own policy.

Standard Cross Sections

An important component of a Complete Streets policy is ensuring that the City's design standards provide the flexibility needed to build Complete Streets as a default. Bluffdale City's [standard drawings](#) feature typical cross sections for each roadway functional classification in the City. The standard drawings also include a typical cross section for a paved trail. As part of the upcoming update to the transportation master plan, the City should consider making the following alterations to the typical cross sections to improve the proactive accommodation of active transportation as part of a Complete Streets approach to roadway design:

- Per AASHTO and UDOT guidelines, **11-foot travel lanes are considered an acceptable standard for roadways with operating speeds of 45 MPH or less**. A lane width of 10 feet would also be acceptable on the Minor Collector cross-section, allowing even more room for a comfortable active transportation facility with limited impacts to vehicle operations.
- The City should add language noting that limited right-of-way could necessitate foregoing a park strip on one side to provide room for a paved side path, or that shoulder space may be sacrificed to move the curb in and implement a side path or cycle track.
- The City should establish rules governing how to accommodate street parking and bicycle facilities together.
 - At minimum, a parallel parking lane requires 8 feet of width. Bicycle lanes require 5 feet. Where both are present, a minimum of 3 feet for buffer space is required between the two to allow disembarking motorists to open their door without bicyclists needing to swerve around or run into the door. The parking lane should be placed between the bike lane and the vehicle travel lane to protect the bike lane. **In all, this comes to a required 16 feet of shoulder space on one side for a parking lane, buffer, and bicycle lane**. An alternative for scenarios with inadequate ROW could be to have a shared use path at sidewalk level in lieu of separated sidewalk and bicycle lanes.
- The City should add language clarifying that **the most comfortable active transportation facility that is feasible should be constructed on any given roadway**, while leaving room for discretion from the City Engineer.
- **The City should add a required clear zone of 2-5 feet to the paved and unpaved trail sections**, with a required 1-3 feet of shy distance to obstacles. This matches AASHTO guidance as depicted in [Figure 34](#), and ensures that the entire width of the path can be utilized comfortably while providing a safe buffer for bicycles to veer off the path if a collision is imminent.
- **The City should add to the paved trail section the option to construct a wider shoulder to designate as an equestrian trail**. According to the [Forest Service](#), a horse and rider require about 4 feet of unobstructed tread width at a minimum. A preferred minimum tread width of 5 feet should be established in the standard section, with the designated equestrian path requiring a flat, well-compacted surface. The design of equestrian facilities is discussed further in the [Equestrian Trails](#) section of this plan.



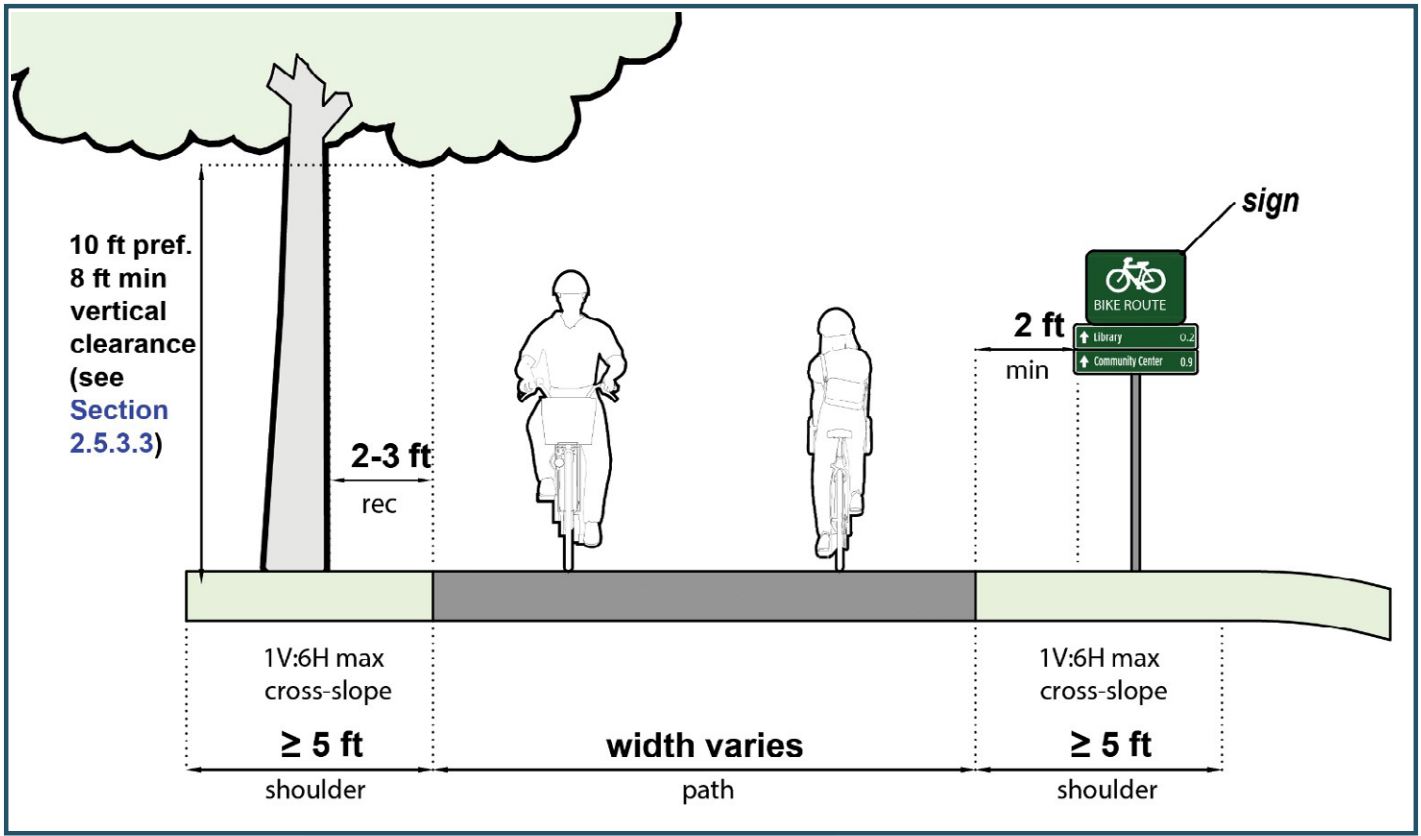


FIGURE 34: Shoulders and Shy Distance on Shared Use Paths (Source: AASHTO)



Supportive Amenities

Bicycle Parking

The provision of appropriate bicycle parking is an important piece of a bicycle network, as users’ ability to make non-recreational trips by bicycle is severely limited if they do not have a secure place to store their bicycle. Parking solutions selected should accommodate a wide range of bicycle sizes and types and be simple to use. The City should refer to Chapter 16 of the AASHTO *Guide for the Development of Bicycle Facilities, 5th Edition*, herein referred to as the “AASHTO Bike Guide”, for guidance on bicycle parking best practices. **Figure 35** documents the types of bike racks that are recommended by AASHTO, along with those that are not recommended.

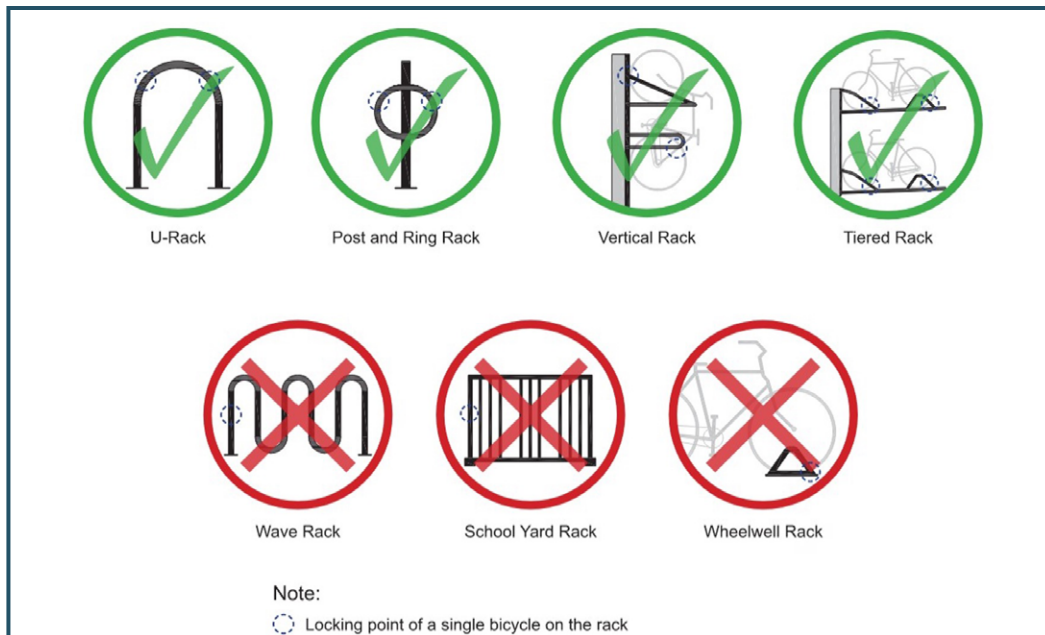


FIGURE 35: Examples of Recommended and Not Recommended Bike Racks (AASHTO)

Bluffdale City Code 11.150.060(C)(12) currently defines requirements for the provision of bicycle parking in new developments. It is recommended that this requirement be transposed into the Off-Street Parking ordinance as well for clarity. A set of bike parking requirements helps the city partner with development to create a more complete and usable bicycle network. The City should also encourage existing developments to add bike racks where needed. A program modeled after the Salt Lake City “[Request a Bike Rack](#)” scheme could help the City select locations and engage with the public.

Recommendations:

- Reflect established guidance for bicycle parking in the Off-Street Parking ordinance.
- Implement a “Request a Bike Rack” program for public rights-of-way and encourage existing developments to consider installing new bike racks where needed.



Wayfinding Sign on the Jordan River Trail

Wayfinding

Wayfinding is an important consideration when planning an accessible active transportation network. Wayfinding is a system of signs, pavement markings, and maps intentionally placed to inform network users of recommended routes and help them orient themselves without needing to rely solely on GPS devices. These devices increase the utility of on- and off-street active transportation facilities as a transportation option and provide an opportunity for cohesive branding across the City. As a major regional facility, the Jordan River Trail already has [standards](#) for wayfinding signage that Bluffdale City can use as a template for wayfinding on City-owned and managed trails.

Recommendations:

- Develop wayfinding guidelines for City-owned trails and on-street bike routes that match the Jordan River Trail standards in style and functionality.
- Include wayfinding in the planning, design, and cost-estimating for new active transportation projects, including on-street bike routes.

Trailheads and Rest Areas

Trailheads and rest areas make up an important part of an active transportation system that is accessible and pleasant to use. The PTROS Plan outlines plans for some new parks and trailheads to be built in open spaces along planned trails. In this plan, refer to the [Trailheads and Access Points](#) section within the Project Recommendations for recommended points to provide access to the existing and future trail network from the roadway network. Each of these points should have an appropriate level of rest amenities and accessibility features to be determined during the planning phase of a project.

Recommendations:

- Construct new trailheads and minor access points to the trail network as prescribed in this plan and in the PTROS Plan.
- Establish a standard to ensure restroom facilities, shade, and places to sit are placed at an appropriate frequency along all trails in addition to full trailhead facilities.



Minor Access Point from the Roadway Network





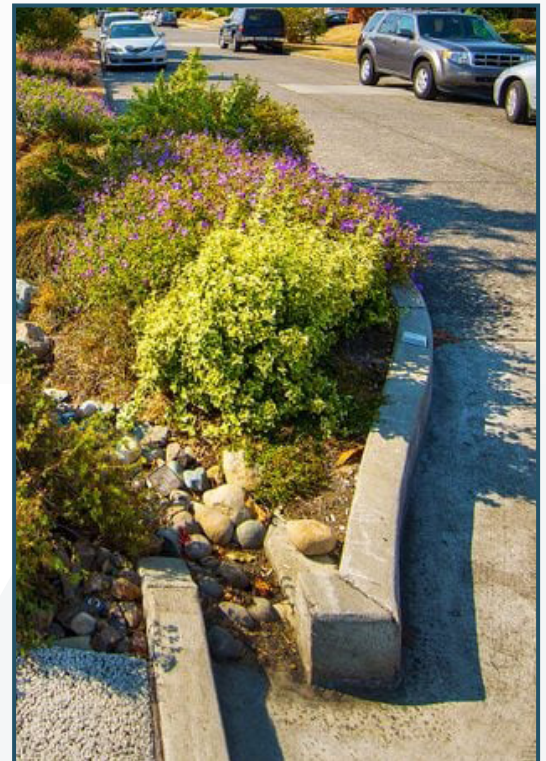
Rest Area Along a Trail

Green Infrastructure

“Green infrastructure” refers to design elements that add foliage and restore a more natural pattern of drainage and infiltration. These elements help to manage stormwater, mitigate the urban heat island effect, and improve air quality. Examples include bioretention swales, permeable pavement, shade trees, landscaping, and many others. Bioswales can be included as part of curb extension or traffic circle projects to synergistically calm traffic, improve stormwater management, and beautify a corridor. A dense urban canopy provides shade and beauty, making the experience of walking or biking pleasant even on hot days. New trails, streets, and other facilities should incorporate landscaping and shade trees to create safer roads, improve water management and quality, grow Bluffdale’s urban canopy coverage, and improve the active transportation experience.

Recommendations:

- Incorporate green infrastructure into traffic calming efforts.
- Incorporate thoughtful urban forestry into corridor planning and maintenance.



Bioswale & Curb Extension on a Neighborhood Street

Photo | [American Homeowners Association](#)

Lighting

Sufficient lighting helps to increase both perceived and actual safety for bicyclists and pedestrians. Lighting is especially critical at intersections and crossings and along bike corridors. According to the FHWA, a single luminaire placed directly over a crossing is not sufficient; instead, lights should be placed forward of a crossing on both approaches to illuminate users on all sides and avoid a silhouette effect. Glare should be minimized through careful lens selection and calibration of the illuminance. Light posts at mid-block crossings should be shorter to avoid casting overhead shadows, and using a contrasting color helps distinguish the crossing from the surrounding area. Selecting attractively-designed lights can also improve the character of a corridor and make the area more inviting, and adjustments to light heads and color can reduce light pollution and glare. More discussion about lighting for safety can be found in the [FHWA PedSafe guide](#). The Dark Sky Association also provides [guidance](#) for how to minimize light pollution and only light what is needed.

Recommendations:

- Place lighting ahead of crosswalks on all approaches, instead of directly above.
- Use shorter light posts for crossing illuminance.
- Use contrasting colors to other streetlights when implementing lighting at crossings.
- Consider luminaire and light post selection as an opportunity to add character and aesthetic appeal to the community.



Maintenance Plan

As the city expands its bicycle and pedestrian network a robust maintenance plan will be required to ensure that these investments will remain accessible and not go underutilized. The aim of this section is to establish a basic maintenance plan and schedule, to be refined by City staff based on ongoing monitoring and reassessment. The City’s vision for maintenance is to preserve the City’s investments in active transportation through effective and timely maintenance in order to provide safe, reliable, and accessible options for transportation and recreation. The following goals were set to guide the City in its pursuit of this vision:

- Demonstrate financial responsibility by maintaining trail pavement in good condition, deferring the need for costly reconstruction.
- Maintain the reliability and usability of the network by clearing snow, ice, and debris in a timely manner after weather events.
- Keep facilities clean and inviting by performing regular litter cleanup and landscape maintenance.
- Engage the community and conserve City resources by facilitating regular volunteer walking audits and providing opportunities to report maintenance issues.
- Meet annually with staff from relevant agencies to coordinate maintenance on regional facilities.
- Engage in regular internal coordination between City departments on the topic of active transportation maintenance.

The Case for Maintenance

Active mode users have different needs and tolerances than motor vehicle users, and maintenance on the facilities they use is particularly important for the following reasons:

Safety

- Bumps, cracks, or other issues can cause on-street bicyclists to veer into the roadway.
- Ice, dirt, cracks, and debris can lead to slipping, tripping, or crashing.

Reliability

- These facilities provide transportation options, especially for those who cannot drive, and they need to remain safe and usable.

Accessibility

- Obstacles and discontinuities in the pavement are difficult for wheelchairs to traverse and hazardous for all users, especially for people with visual impairments.
- Ramps are especially important to maintain to ensure access to facilities.

Beyond ensuring that users have a good experience, proactive maintenance of the active transportation network will save the City money over time, demonstrating good stewardship over public funds. This is best illustrated by the principle that “good roads (or trails) cost less”; frequently applied preventative maintenance treatments cost less over the long-term than occasional rehabilitation or reconstruction projects, while also keeping pavements in good condition for longer. **Figure 36** plots the pavement condition (scored out of 100) of an example facility when applying two alternative maintenance plans - one in which pavement preservation techniques are employed regularly, and one in which the pavement is allowed to deteriorate until its condition drops below the red “complaint line” and becomes unacceptable, at which point it undergoes rehabilitation.

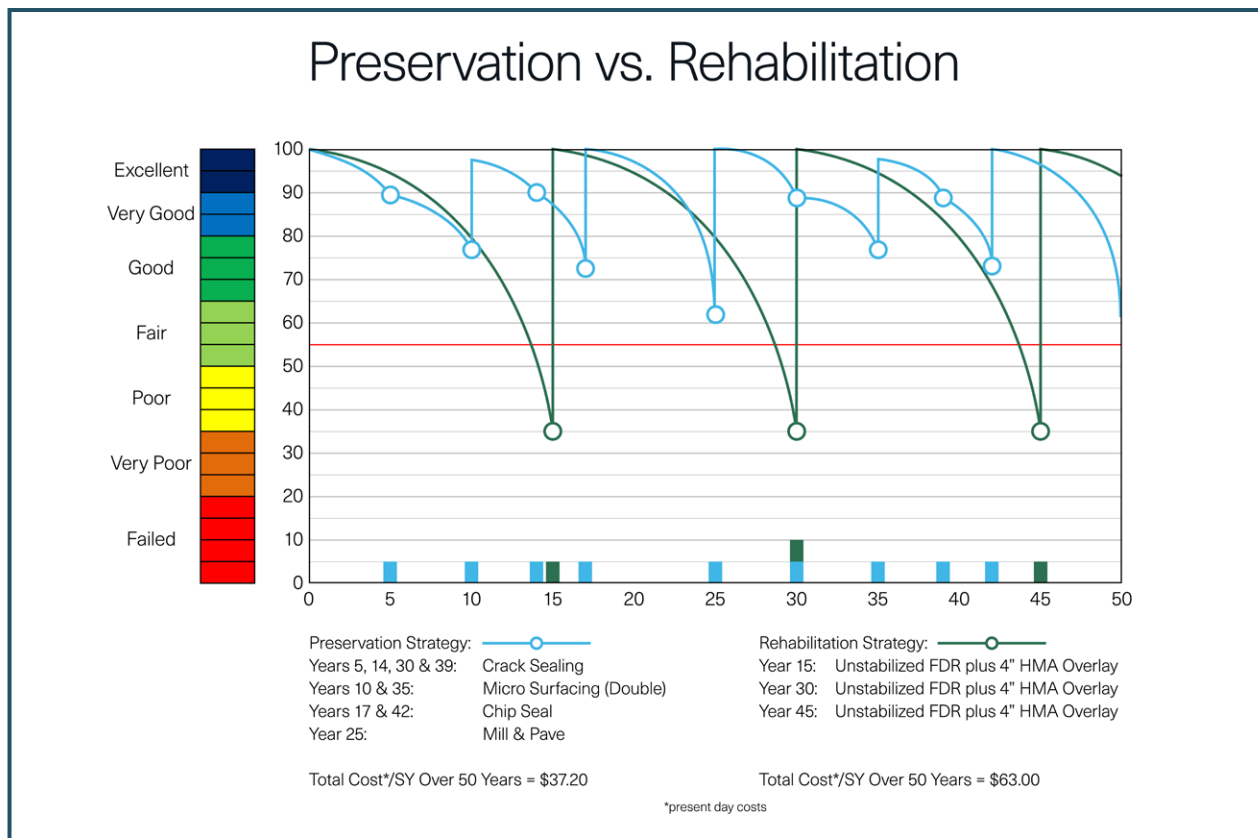


FIGURE 36: Life-Cycle Cost for Two Pavement Maintenance Strategies

Source: Indus Incorporated

As shown in the figure, the life-cycle cost of the preservation strategy is much lower than that of the rehabilitation strategy, while also keeping the pavement in good condition throughout its life. Because wheeled users of active transportation facilities are particularly sensitive to bumps, cracks, and other discontinuities in pavement, this latter benefit is especially important for these facilities.

Maintenance Activities

Table 3 presents a list of needed maintenance activities together with optimal frequencies of application. Subsequent sections of the report discuss general principles relating to maintenance activities.



TABLE 3: MAINTENANCE ACTIVITIES AND SCHEDULE

Maintenance Activity	Maintenance Activity							Notes
	Weekly	Monthly	Quarterly	Annually	Spring / Fall	After Storm	Other	
General Maintenance								
Safety Inspection	X					X		Can use volunteer walking audits for spot reports, conduct technical inspection every 2-3 years.
Debris and Trash Pickup	X					X		Organize community events
Vandalism Inspection	X							Work with Salt Lake County cleanup team
Pavement Management								
Pavement Survey					X			Can use volunteer walking audits for spot reports, conduct technical inspection every 2-3 years.
Crack sealing							Reactionary	
Patching							As Needed	
Fog Seal							As Needed	Lifespan approximately 1-2 years
Sealcoat							As Needed	Lifespan approximately 2-4 years
Slurry Seal							As Needed	Lifespan approximately 5-7 years. Not to be used on roadway-separated facilities.
Overlay							As Needed	Lifespan approximately 15 years
Reconstruct							As Needed	
Vegetation								
Mowing, General Landscape Maintenance	X	X						Remove weeds in pavement cracks
Sight Line Trimming at Intersections		X						Roads, other trails, driveways, etc.
Trail Sweeping / Blowing					X	X		Up to weekly frequency in Fall
Root Cutting							As Needed	Prune a year in advance, only cut in the Spring or Early Summer, fertilize and backfill or cover immediately.
Drainage								
Standing Water Repair				X		X		
Structures								
Overlay							As Needed	Lifespan approximately 15 years
Reconstruct							As Needed	

TABLE 3: MAINTENANCE ACTIVITIES AND SCHEDULE (continued)

Maintenance Activity	Maintenance Activity							Notes
	Weekly	Monthly	Quarterly	Annually	Spring / Fall	After Storm	Other	
Amenities								
Empty Trash Receptacles	X							Frequency may vary depending on trail use
Restroom Maintenance	X							Frequency may vary depending on trail use
Pet Station Restocking	X							Frequency may vary depending on trail use
Information Kiosk Inspection				X				
Update Information Kiosk Graphics/Maps							As Needed	
Bench, Bike Rack, Picnic Table, Trash Receptacle Inspection			X					
Signage Inspection				X				
Lighting Inspection			X					
Fence Inspection				X				
Bollard Inspection				X				
Winter								
Install/Remove Winter Use Signage					X			
Plow Trail						X		
Plow Trailheads and Parking						X		

Sweeping Maintenance and Snow Removal

On-street bikeways require similar upkeep to the drive lanes but are often overlooked during the overall maintenance of the road. Being located on the side of the road, bike lanes are the most likely to become clogged with snow and debris, especially as it's cleared from the center of the roadway. Extra care should be taken during maintenance activities to ensure that this debris doesn't accumulate but is instead removed from curbed roadways or pushed onto gravel shoulders when a curb isn't present. If debris is allowed to accumulate, it can force bicyclists to veer suddenly into the road, contributing to crashes. The presence of debris can deter bicyclists from using either kind of facility because of the risk of flat tires or skidding, which is a concern for wheelchair and other wheeled users as well.

In addition to snow removal, off-street trails also require some sweeping maintenance, especially during the Fall when the trees shed leaves. The City has a prioritized list of facilities to be cleared after winter storms that includes trails currently under its jurisdiction; this list should be expanded to include all new trails as they are constructed, and a plan should also be put in place to clear leaves from trails in the Fall.

Litter and Graffiti Cleanup

An unfortunate reality of maintaining public spaces is that litter and graffiti inevitably accumulate over time. If left unchecked, those things can make a space feel uninviting and discourage use as has been seen with an existing pedestrian tunnel where Rose Creek crosses under Redwood Road (see the photo below). There are a number of approaches and resources the City can utilize to keep litter and graffiti in check:

- Signage discouraging littering should be coupled with trash receptacles at parks, trailheads, and access points.
- The Healthy Bluffdale Coalition can organize community cleanup events to tackle litter and report on other maintenance concerns. These could be connected to the walking audits or they could be separate events
- Graffiti is a common concern with trail underpasses, particularly in low-visibility, lower-traffic areas. The Salt Lake County Unified Police Department has a graffiti cleanup team called Residents Against Graffiti that can paint over graffiti as it appears. Signage can be posted near underpasses listing the graffiti hotline (reporters can dial 385-468-9769 or email graffiti@saltlakecounty.gov). Additionally, as the trail network expands and becomes better connected traffic is expected to increase on the trail network, which will provide natural surveillance to deter vandalism. Underpasses along the Jordan River Parkway, for example, see little vandalism due to the trail's popularity. Installing lighting and security cameras can also serve as a deterrent.



Pavement Surface

Bicyclists and other wheeled active transportation users are more sensitive to uneven pavement surfaces than motor vehicles. These kinds of discontinuities can occur through freeze-thaw stresses, root heaving, or natural deterioration, but even certain styles of concrete joint construction can create a bumpy ride for wheelchair users, skaters, or cyclists. Regular repainting of on-street facilities is also necessary to ensure that these facilities remain inviting and effective. The following are some guidelines to incorporate when constructing or maintaining pavement to best preserve a smooth riding surface:

- Follow the City standards for pavement materials and compaction. This ensures optimal durability of the pavement structure.
- Use saw-cut joints instead of tooled joints for concrete facilities. This provides a smoother ride across joints.
- Ensure that in new roadway construction, the finished surface for on-street bikeways does not vary more than ¼ inch.
- Avoid using chip seals on pavements that bicycles will use, as they create a rough riding surface that carries a greater injury risk in the event of a crash.
- Regular surface sealing of asphalt constitutes important preventative maintenance, and paved paths should be added to this maintenance schedule.
- Cracks should be filled as they appear and progress. Especially critical are cracks with a width that could accept a bicycle tire.
- Patching is recommended for Portland cement concrete facilities in areas where cracks in the pavement exceed 0.5 inches in width, or where there is significant concrete pavement degradation.
- Monitor all facilities for drainage issues and fix grading where needed.

Street Trees

Street trees carry many benefits for active transportation facilities, including the shade and beauty they provide. A well-maintained tree canopy creates a “forest” effect that dampens road noise, cools paths in the summer, and makes a walk or a bike ride an activity to seek out for its own sake. However, their roots can grow too close to the surface underneath the adjacent facility, leading to the heaving up and cracking of the pavement surface. The Arbor Day Foundation provides useful guidance on planning and maintenance related to street trees. Careful planning to prevent conflict between tree roots and pavements is much more cost-effective than trying to address heaving that has already happened. Some guidance is summarized below:

- Select tree species that are appropriate for the available space, and leave space for the trees that are already present when possible.
- Park strips of 4-6 feet in width are appropriate for small trees, 6-8 feet is appropriate for medium trees, and 8+ feet is appropriate for large trees.
- Plan around existing trees during path construction if possible.
- Consider tree barriers to direct the roots away from pavement surfaces.
- Plant trees with the roots as deep as is healthy to promote deeper growth.
- When root cutting, ensure the stability of the tree won't be compromised, prune a year in advance, only cut in the Spring or Early Summer, and fertilize then backfill or cover immediately after cutting to keep the roots moist.
- Where root heaving is a risk, consider using paving stones or placing concrete joints in a tight grid pattern. This way, when heaving occurs, the pavement will crack along neater lines and conform itself to the hump created by roots, which creates a smoother riding surface than occurs with traditional concrete or asphalt pavement styles.



Deterioration Monitoring

Although preventative maintenance and proper vegetation management will delay the development of surface distresses, they are inevitable on both concrete and asphalt pavements. Trails should be added to the City’s pavement management program, with regular inspections on facilities as they age to monitor the development of cracks. This should include planning for maintenance based on a standard deterioration curve, which can be calibrated using in-situ data collected during regular inspections. These regular inspections are also a good opportunity to observe the condition of signage and replace faded or damaged signs.

Because studies on trail deterioration rates are limited, the City will need to make adjustments to the treatment schedule based on observations over the years. A rule of thumb used by other agencies in the region is to apply seal coats or other preventative treatments to each facility on a 4- or 5-year rotation, and this is a good baseline from which to adjust based on observations over time.

Additionally, roadways with on-street bike facilities should receive special attention in the pavement management program, including setting a lower deterioration threshold as the trigger to apply surface treatments to the bikeway.

A deterioration curve used for maintenance scheduling would look something like the one presented in **Figure 37**, courtesy of the AASHTO Bike Guide, 5th Edition. During its life cycle, pavement deteriorates gradually at first until enough distresses accumulate, at which point deterioration accelerates. Applying cheaper preventative treatments more often while pavement is still in a fair condition is much more cost-effective than waiting for pavement to reach a critical condition and then rehabilitating or reconstructing. Preventative treatments like crack seals, slurry seals, patching, and others extend the effective life of a facility, deferring more costly maintenance, which yields significant savings. This approach carries the added benefit of keeping pavements in good condition for longer, ensuring that residents can continue to safely enjoy these community investments. In short, “good trails cost less.

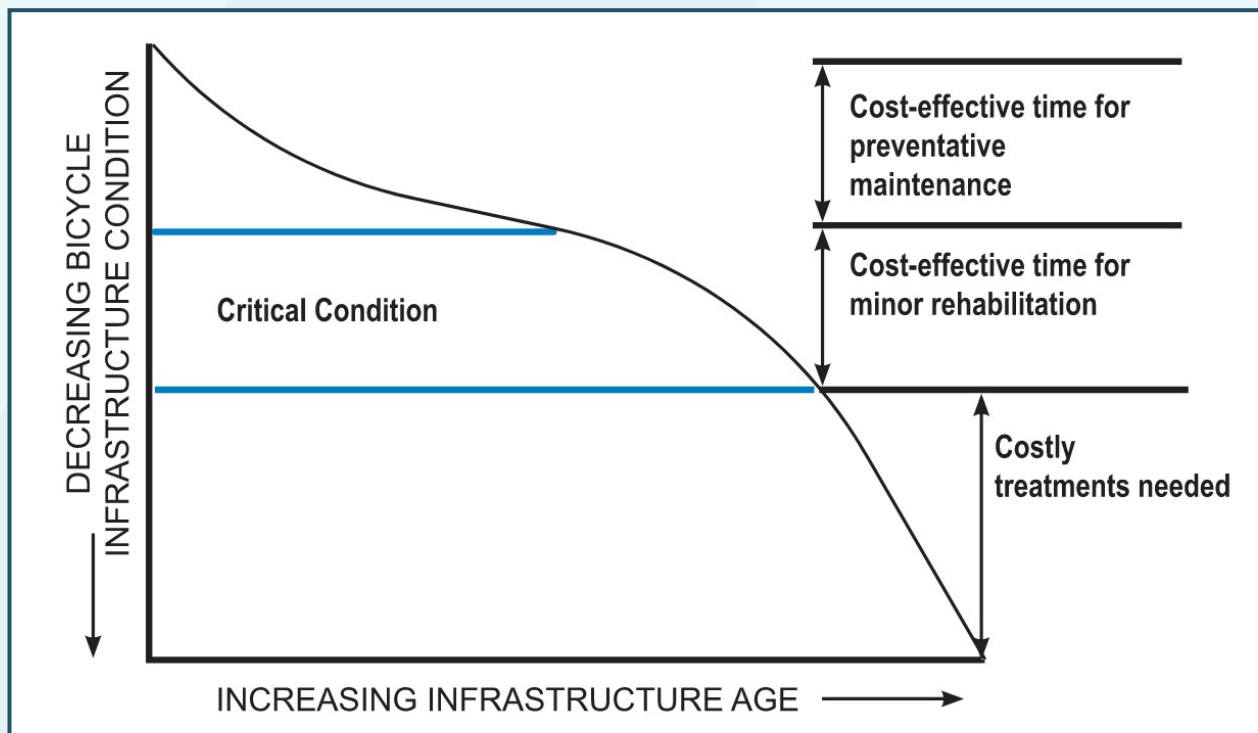


FIGURE 37: Bicycle Infrastructure Life Cycle (AASHTO)

Costs, Scheduling, and Budgeting

When it comes to transportation infrastructure, there are often more funding sources available for the construction of new facilities than there are for ongoing maintenance of facilities after they are constructed. As such, this section discusses the yearly costs to expect for performing reliable maintenance on these facilities, establishes a schedule to help City Staff plan their efforts, and sets a preliminary budget based on the tasks needed. Potential funding sources for maintenance in particular are discussed later in the [Implementation Plan](#).

For the purposes of high-level planning, WFRC uses an estimated yearly maintenance cost for paved trails of \$13,000 per mile. This is likely skewed higher than Bluffdale will need to plan for their trails due to the inclusion of high-cost facilities like the Provo River Trail and others that are located in rugged canyon environments. The [Rails to Trails Conservancy](#) provides research on trails across the nation, and they have gathered cost analyses for facilities in various states. **Figure 38** shows some of these facilities together with their associated costs and level of amenities. As a local example, Basin Recreation in Summit County reports spending \$10,000-\$11,000 per mile each year, though they estimate that would be about 30% less if they had flatter topography and milder weather. In light of this comparison and considering the environment in Bluffdale and the level of amenities planned, it appears that the City can expect yearly per-mile costs for paved trails to fall in the \$7,000-\$9,000 range.

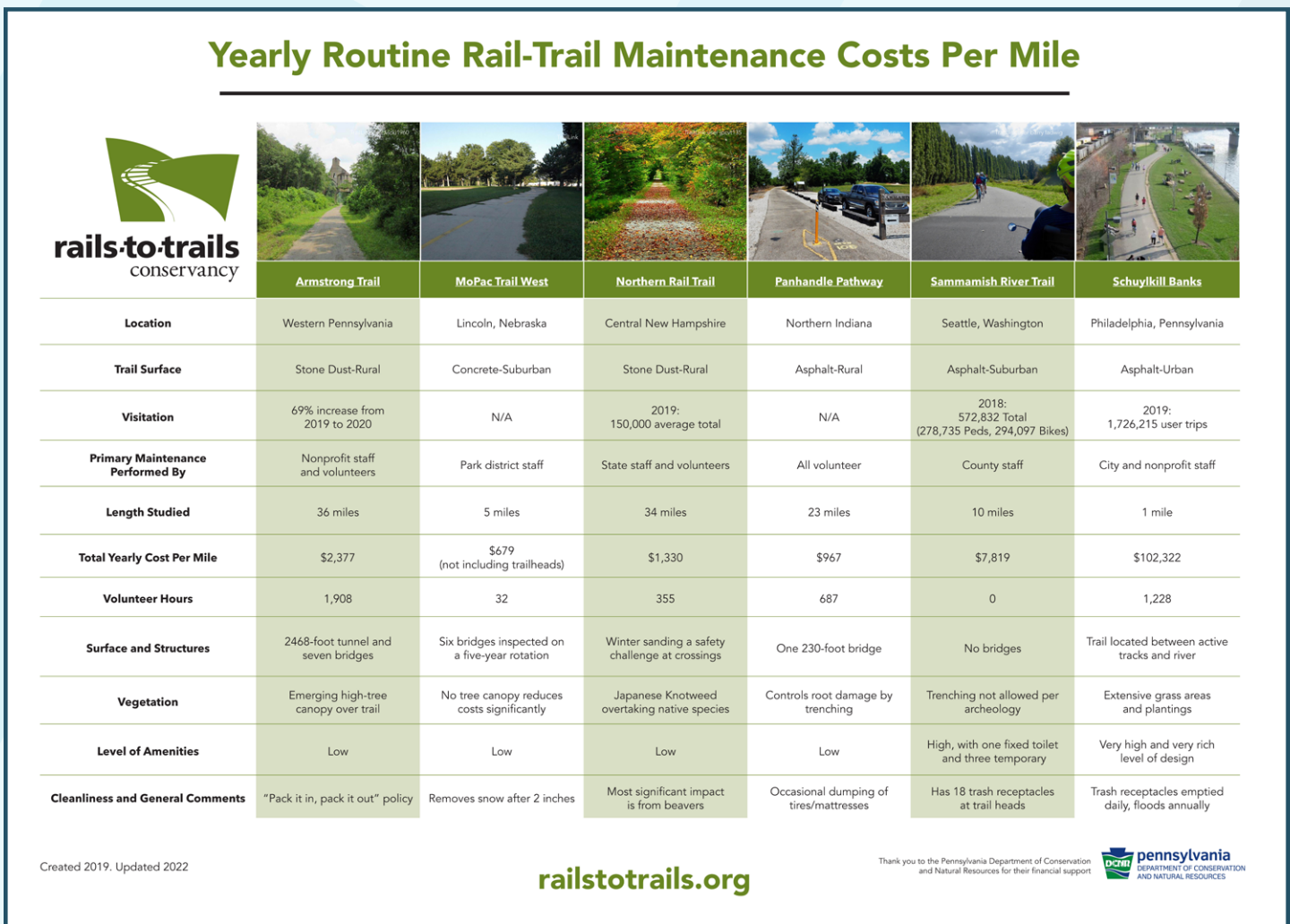


FIGURE 38: Yearly Routine Rail-Trail Maintenance Costs Per Mile

Resources

Listed below are additional resources discussing appropriate treatments, quantifying the performance impacts of treatments, and outlining good planning principles for facility maintenance.

- AASHTO Guide for the Development of Bicycle Facilities, 5th Edition, Chapter 15
- [FHWA: Pavement Performance Measures and Forecasting and the Effects of Maintenance and Rehabilitation Strategy on Treatment Effectiveness](#)
- [FHWA: Guide for Maintaining Active Transportation Infrastructure for Enhanced Safety](#)
- [APWA: Manual of Standard Specifications, Amendment 1](#), Chapter 32 (Pavement treatments and street tree maintenance)

Equestrian Trails

Bluffdale is a city that values open space and the ability to keep and ride horses despite its semi-urban setting. Accommodations for horse owners are reflected in the City Code and historic planning efforts.

Making accommodations for comfortable horseback riding along paved paths requires some forethought, but it is not particularly expensive or space-intensive. The trails in Bluffdale that have designated equestrian tracks include sections of the Jordan River Parkway near 14600 South and near Loumis Parkway and 1300 West, with an additional equestrian trail beginning at Arrow Trailhead and running from Bluffdale to Draper. As discussed in the section on the Standard Cross Sections, the City wishes to establish as a policy that parallel horse tracks should be constructed with shared-use paths wherever the space allows and where the route supports equestrian use. The following design standards will apply to these facilities:

- A rideable width of 5 feet must be provided.
- There should be a buffer of about 1 foot between the horse track and the paved portion of the path. The required shy distance of 1-3 feet for trail side obstacles also applies to horse tracks, with a greater vertical clearance requirement than that required for bicycles.
- The track must consist of moderately compacted natural materials. The base can simply be native soil. Wood chips on the path provide a softer, quieter tread surface, though they can exacerbate the need for sweeping on the paved path portion of the facility. A layer of appropriate aggregate can increase traction and improve drainage, but can be noisy and also present a hazard when they are kicked onto a paved path.
- The route or loop should be complete and follow alignments that are separated from the roadway with no under- or overcrossings that are inappropriate for horses to navigate. When constructing or reconstructing a shared use path, the City will evaluate the corridor for its suitability and determine whether a parallel equestrian track can be constructed.
- Trailheads that accommodate equestrian use need sufficient space in the parking lot for horse trailers, with watering stations and other necessary amenities.

The National Forest Service provides a [guide for the design of horse trails](#) that can provide more detail about the design and planning of these facilities.

E-Bikes and Motorized Mobility Devices

Electronically-assisted devices like E-bikes and E-scooters are increasing in popularity for use on paved trails. These devices greatly increase the range and speed that people can travel without an automobile, making the active transportation network more appealing and accessible, but these benefits can present challenges to other users. Residents occasionally express concern to the City about bicyclists travelling at excessive speed and failing to give proper warning when passing, and electronically-assisted devices are cause for particular concern in this regard.

The [League of American Bicyclists](#) separates E-bikes into three classes based on their level of assistance and top speed, as shown in [Figure 39](#). The city could consider adopting an ordinance to restrict E-bikes of class 3 and possibly class 2 on shared-use trails and posting signage to reflect this policy. Additional signage should emphasize a prohibition of all-terrain vehicles (ATVs) and motorcycles of any class.

THE LEAGUE OF AMERICAN BICYCLISTS		Overview of the 3-Class System for E-bikes	
		Characteristics	Regulations
Class 1 E-bike	Provides Assistance:	Only when pedaling	Generally treated like a standard bicycle.
	Top Assisted Speed:	20 mph	
Class 2 E-bike	Provides Assistance:	When pedaling or by throttle	Generally treated like a standard bicycle. May be restricted from shared use paths or trails.
	Top Assisted Speed:	20 mph	
Class 3 E-bike	Provides Assistance:	Only when pedaling	More likely to be restricted from shared use paths or trails. May require use of a helmet, have minimum age requirements, or be subject to other regulation.
	Top Assisted Speed:	28 mph	

FIGURE 39: The 3-Class System for E-Bikes (League of American Bicyclists)

Anecdotally, Basin Recreation in Summit County has conducted speed studies on their trail network and observed that e-bike and e-scooter riders typically do observe speed limits and navigate curves and slopes safely; nevertheless, it would be beneficial for the City to implement some guidance measures to help all trail users share the space safely and respectfully. Some of these include the following:

- Post signs advising faster users to use a bell or their voice to warn other users when passing (see right).
- Post speed limit signs of 15 or 20 MPH.
- Post restrictions on vehicle types and classes as discussed above.
- For high-traffic facilities, consider delineating separate travelways for pedestrians and those on faster wheeled mobility devices.
 - Bicycle (and scooter) lanes should employ MUTCD-compliant symbology, including yellow lines, bicycle symbols, and optional green paint.
 - At least 5 feet of cross-sectional width is needed for each direction of bicycle travel, and 6 feet should be reserved for pedestrian use.
 - If appropriate, such facilities will also have the highest need for a horse track along the side of the path, as it is particularly dangerous when high volumes of higher-speed users are passing horses closely.



Crossing Treatment Selection

UDOT recently updated its [Marked Pedestrian Crosswalk Guidelines](#), which establish a process for selecting treatments for crosswalks on UDOT roadways based on road context, crash history, and pedestrian demand. Additionally, the Bluffdale Traffic Manual includes a flowchart to guide the selection of appropriate traffic calming measures, which often go hand-in-hand with improved active transportation facilities. Both of these resources were used to develop a treatment selection process for Bluffdale-managed roadways, with adjustments to fit Bluffdale’s goals and preferred treatments. A decision table defining the level of treatment warranted based on the functional class and volume of a roadway was created based on the table provided in the UDOT guidelines, and is shown in **Table 4** below, together with a list of available treatments in **Table 5**. This table should be adopted as part of the City’s proactive safety policy to set the minimum level of treatment for every new crossing that is constructed. Wherever possible, the most comfortable facility that is feasible should be put in place, but these guidelines should be treated as minimums for each roadway context.

TABLE 4: CROSSWALK TREATMENT DECISION TABLE			
Functional Class	Low Volume	Medium Volume	High Volume
Residential (2 Lanes)	C	C	-
Collector (2 Lanes)	C	L	L
Major Collector (3 Lanes)	L	L	H
Major Arterial (5 Lanes)	L	H	H

*Median refuge islands recommended for these crossings

C = MUTCD-compliant marked crosswalk is sufficient

L = Low-level supportive treatments are needed

H = High-level supportive treatments are needed

TABLE 5: TREATMENT OPTIONS	
Low-Level Supportive Treatments	High-Level Supportive Treatments (Additional warrants must be met)
Advanced Pedestrian Warning Signing	Pedestrian Hybrid Beacon (PHB)
High Visibility Crosswalk	Pedestrian-Activated Signal
Median refuge Island	Overhead School Pedestrian Assembly
Bulb-Outs (Curb Extensions)	Grade-Separated Crossing
Pedestrian Activated Flashing Beacons (Overhead or Shoulder Mounted)	
Pedestrian Activated Rectangular Rapid Flashing Beacon (RRFB)	
Reduced Corner Radii	
Installation of Yield or Stop Lines with "Yield Here to (Stop Here For) Pedestrians" Signs	
Special Pavement Markings such as "Pedestrian Look Left" or "Watch for Turning Vehicles"	
Install Overhead Lighting	
Install Directional Pedestrian Ramp	
Implement Parking Prohibitions to Improve Pedestrian Visibility	

Facility Design Standards and Best Practices

When designing for the projects outlined in the project recommendations section, a set of design standards can ensure consistent active transportation facilities across both Bluffdale City and the rest of the region. The [Design Guidelines for the Jordan River Parkway](#) developed by the Jordan River Commission, the [AASHTO Guide for the Development of Bicycle Facilities, 5th Edition](#) (AASHTO Bike Guide) and the [FHWA Report “Characteristics of Emerging Road and Trail Users and Their Safety”](#) were consulted in the development of these standards. Graphics from the [Salt Lake County Bikeway Design Guidelines](#) are included in this section.

Linear Facilities

Conventional Bike Lanes

Bike lanes use signs and pavement markings to delineate street space that is exclusive for bicycling. Bike lanes provide the benefit of encouraging predictable traffic flow from both cyclists and motorists, though they provide no physical protection for cyclists from errant vehicles, and little visual separation between the two types of road users. As such, careful attention should be paid to the speed and traffic volumes of the roads they are applied on, and they will tend to best serve only more confident cyclists. The following design standards apply to conventional bike lanes:

- The preferred width for bike lanes given in the Salt Lake County Bikeway Design Guide is at least 5 feet.
- When approaching an intersection, colored pavement markings should be used to remind right-turning drivers of the bike lane. If possible, provide a ramp for the bike lane to transition to the sidewalk to cross the intersection to reduce conflicts with right turning vehicles.
- Bike boxes should be utilized as a queuing area for bicyclists to prepare to cross an intersection, whether they come from the left to make a left turn or are proceeding straight.
- Further guidance is available in Chapter 9 of the AASHTO Bike Guide.

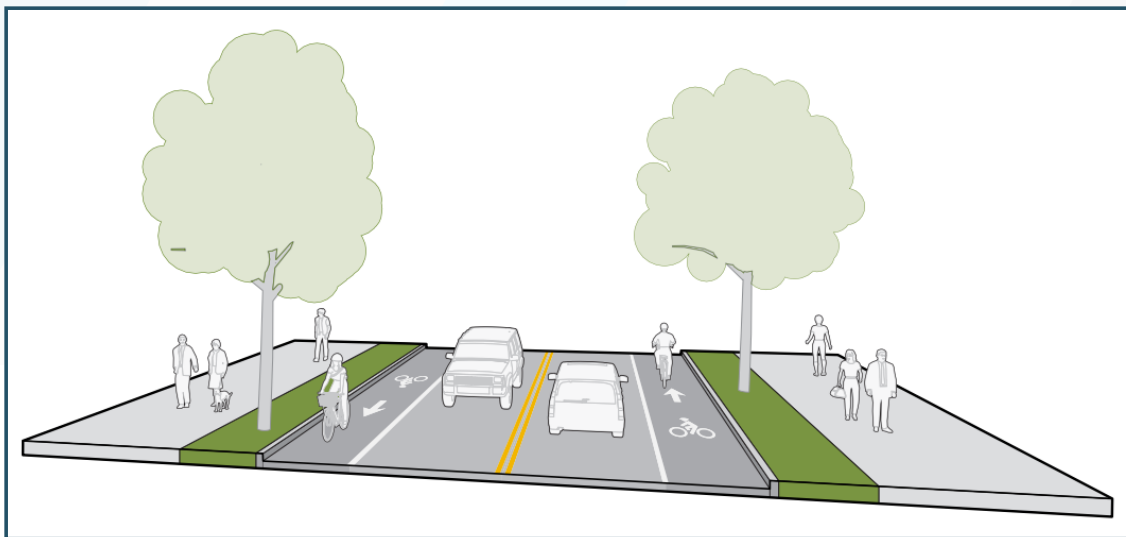


FIGURE 40: Bike Lane Example

Buffered Bike Lanes

Buffered bike lanes use painted buffers that improve the level of comfort for cyclists by increasing the distance between traffic and cyclists. As with conventional bike lanes, signs and pavement markings are to designate on-street space exclusive to bicycling, and no physical protection from encroaching vehicles is provided.

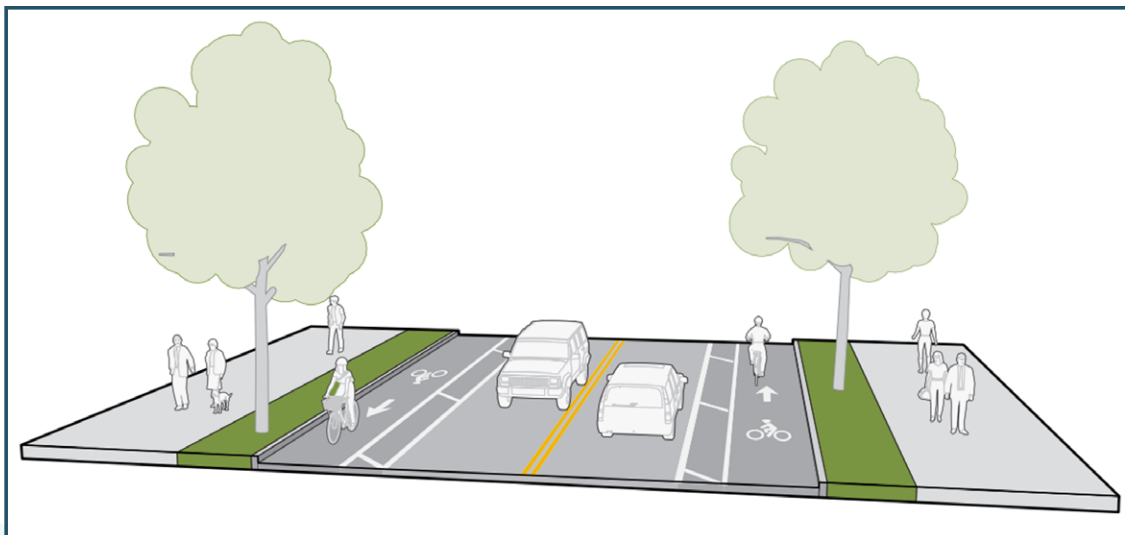


FIGURE 41: Buffered Bike Lane Example

- The same amount of rideable space should be available as for conventional bike lanes, with added buffer striping of at least 18 inches.

Protected Bike Lanes and Cycle Tracks

Where there is space for a buffer between a bike lane and the road, the use of bollards, curbing, or a landscaped buffer can provide further protection and comfort. For the purposes of this report, a facility that is at street level that employs these hard protective measures constitutes a “protected bike lane”. These measures can be applied across the whole facility, or selectively where conflicts between vehicles and bicycles are likely to occur such as before right turns, as they can encourage vehicles to yield to bicycles proceeding straight through and make their turn more slowly. When implementing the buffered bike lane projects from the [Project Recommendations](#), the City should consider adding these protective measures to upgrade to a protected bike lane. For example, the City has partnered with Riverton City to apply for funding with the aim of installing a curb-protected bike lane at street level on 13800 South along the city boundary.

In this report, the term “cycle track” refers to dedicated bicycle facilities that are behind the curb and raised to the level of the walkway. There is one such facility planned in Bluffdale — on 14600 South.

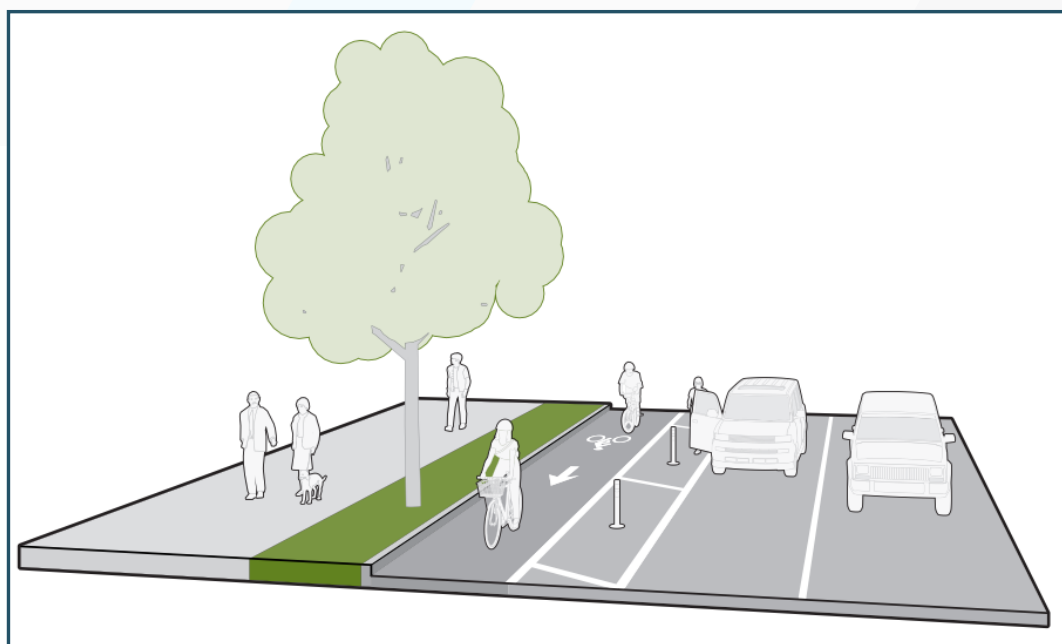


FIGURE 42: Protected Bike Lane Example

More Guidance on Protected Bike Lanes and Cycle Tracks:

- The buffer space should be filled with a physical barrier of some kind. Plastic bollards as shown in [Figure 42](#) are a low-cost alternative, but function only as a visible deterrent to encroachment by motor vehicles, not full protection. Preferred options for the buffer include curbing, a landscaped island, planters, a concrete barrier, an on-street parking lane, or constructing a cycle track at the level of the sidewalk with or without a park strip separating it from the roadway. While this latter option functions similarly to a shared-use path, it employs measures to delineate the bikeway from the walkway—different pavement types, green pavement markings, signage, a landscaped buffer, etc.
- Protected bike lanes and cycle tracks can be designed either as two one-way facilities, one on either side of the roadway, or as one two-way facility, with both directions of travel being accommodated on the same side of the roadway. Combining the directions of travel saves space because it requires only one buffer and it reduces the number of conflict points by funneling cyclists away from the driveways on one side of the street; however, a two-way facility on one side can be frustrating to use if both sides of the street have desirable destinations and an insufficient amount of access is provided to cross the street.

Shoulder Bikeways

Under Utah law, bicyclists using the roadway have the same privileges and are under the same obligations as those operating any other vehicle, including the right to use the full travel lane where necessary and unless specifically prohibited. They are also permitted to ride in the shoulder if there is no bike lane available. For the Existing Conditions inventory, it was useful to note sections of roadway with shoulders that are wide enough for cyclists to use (at least 5 feet), as they presented opportunities for space to be explicitly set aside for cyclists in the future. These facilities on their own do not constitute sufficient accommodation for cyclists.

Shared-Use Paths

Shared-use paths, also known as multi-use paths, paved trails or greenways, are off street, paved facilities for bicyclists and pedestrians that are physically separated from motor vehicle traffic. These facilities are the most family-friendly and are preferred by less experienced cyclists, but more experienced cyclists may avoid them due to out of direction travel and the need to share the right-of-way with slower users. Special care needs to be taken to address the risk of conflict between faster users, like those on electric-assisted devices, and slower users. [Table 6](#) Summarizes guidance from the aforementioned sources on the design of shared use paths. Where shared-use paths run adjacent to a roadway, they are often referred to as “sidepaths”.

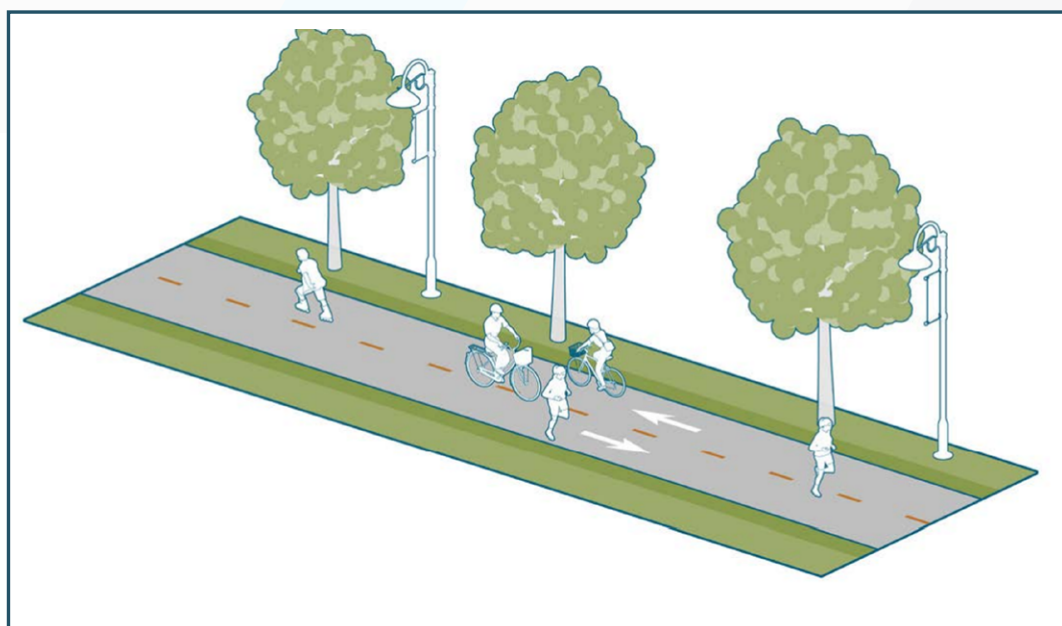


FIGURE 43: Shared Use Path Example

TABLE 6: SELECTED GUIDANCE ON THE DESIGN OF SHARED USE PATHS

Width	Geometric Design	Pavement Design
The preferred width is at least 12 feet.	In general, the top design speed should be 20 MPH. Effort should be made to deter speeds in excess of this, particularly on downgrades with blind corners.	Pavements should be machine laid over a compacted subgrade and proper aggregate base. Soil sterilizers should be used underneath the pavement to prevent plants from erupting through the pavement.
Facilities where high user volumes are expected can benefit from having up to 15 feet of width.	AASHTO recommends a minimum curve radius of 90 feet. 2% superelevation can be used where appropriate.	Paths can be paved with either asphalt or concrete. Asphalt is typically preferred by wheeled users because of the absence of joints, and it provides a softer surface that is more comfortable for runners.
Where right-of-way is constrained, 10 feet of width is the minimum for two bicyclists to pass each other safely.	Grades exceeding 5% trigger a need for mitigations--handrails, switchbacks, temporary path widening, and others. Utilize warnings signs for downgrades of this severity, with ample recovery zones at the bottom.	Asphalt thickness should be a minimum of 3 inches deep for good soil, but more is required for poorer subgrade. Thicker asphalt will yield greater durability.
	<p>Table 20 from the FHWA outlines stopping distances and the minimum lengths of vertical curves for common path users. The AASHTO Bike Guide chapter 6.6 provides more guidance on calculating appropriate dimensions for horizontal and vertical geometries.</p>	Concrete is more expensive to install, but it is more durable than asphalt. If used for a path, concrete joints should be saw-cut to create a smoother transition. Each transition point between pavement types or a path and a bridge should be monitored for smoothness.
		Broom-finished or burlap-dragged concrete is preferred for its skid resistance.
		The shoulders of pavements can erode if motor vehicles drive on the facility. While this is not normally a concern, the shoulders should still have extra reinforcement to accommodate occasional emergency or maintenance vehicles, whose extra weight may be too much for the pavement to handle otherwise.

The resources listed at the beginning of the section provide more details about various design elements and can serve as a further resource.

Crossings

Painted Crosswalk

The most basic method of designating a crosswalk is by painting the desired crossing path using one of the styles approved in the MUTCD. As shown in [Figure 44](#), UDOT uses transverse markings for most crosswalks, with ladder markings being used for crossings needing special emphasis, and longitudinal bar markings being used for school crossings. **It is recommended that the City use ladder markings for all non-school shared-use path crossings**, as transverse markings alone can provide limited visibility. Stop bars and yield markings are also required as suits the level of control at the crossing. **MUTCD Sign W11-2** should also be used to draw attention to the crossing. Pedestrians in a crosswalk have the right of way, and the paint and signage increase visibility for the crossing while encouraging drivers to check for pedestrians as they approach. Wherever a pedestrian ramp indicates a permitted crossing location, a crosswalk should be clearly marked. At signalized intersections, crosswalks should be striped on all legs. Along major roadways, crosswalks should be marked across all minor street intersections. For mid-block crossings, using paint and signage alone is appropriate on low speed, low volume roads where drivers expect pedestrians, crossing distances are small, and drivers have enough sight distance to safely stop once they've seen a pedestrian. This treatment alone typically sees the lowest compliance from drivers relative to more aggressive treatments.



MUTCD W11-2

Activated Beacon

An activated beacon device is typically mounted on the sign or sign pole marking a crossing location, and can be activated by touch or proximity as a person approaches the crossing. One such device is installed in Bluffdale at 2395 West and 14400 South, and it consists of activated LEDs placed around the border of a **MUTCD W11-2** sign. When activated, the beacon flashes for a set period of time. This increases visibility for drivers, especially at night and at a distance. The beacon reminds drivers to yield to pedestrians, but does not constitute full control. These devices are appropriate for most crossings on low speed, mid-volume roads. Rectangular Rapid Flashing Beacons (RRFBs, see [Figure 45](#) and section 4L.02 of the MUTCD) are the most common device related to an activated beacon. Other related devices can be mounted overhead and use larger lighting heads to be visible at a greater distance on higher speed roads. Care should be taken to avoid overusing this treatment in a given area, which can lead to decreased effectiveness.



FIGURE 45: RRFB Design (Source: MUTCD Figure 4L-1)

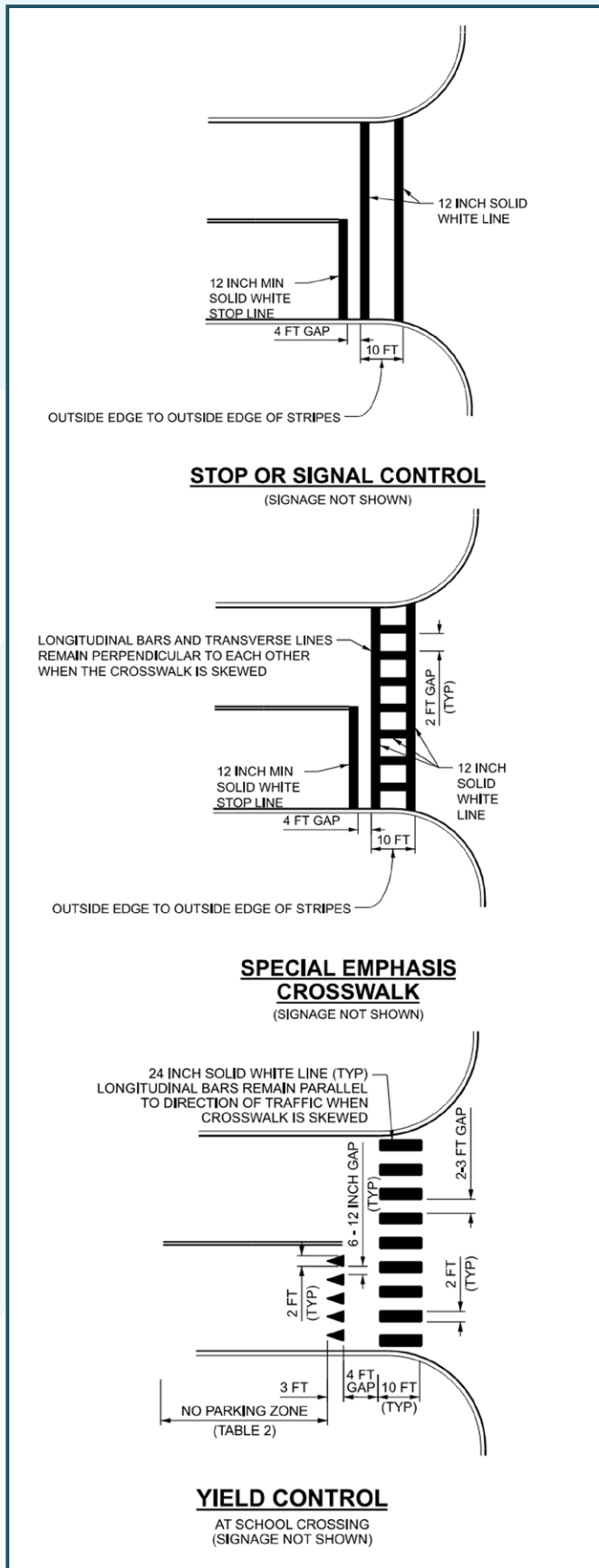


FIGURE 44: UDOT Crosswalk Details (Standard Drawings ST1-2)

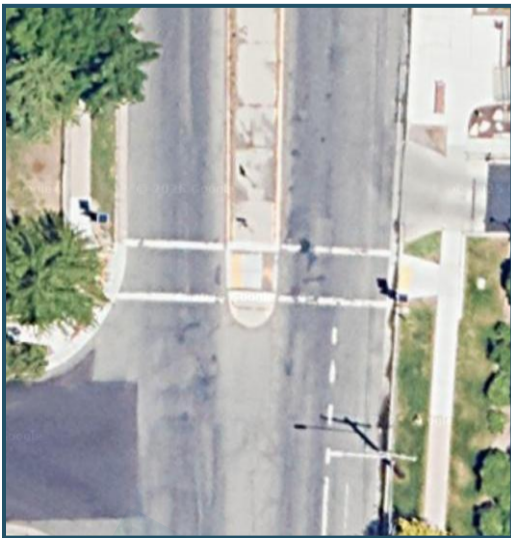
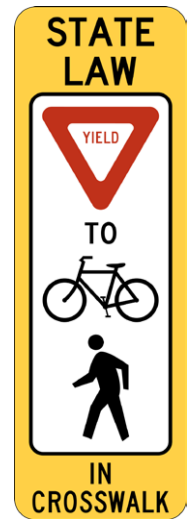


FIGURE 46: Median Refuge Island Example

Median Refuge Island

Median Refuge Islands consist of a raised barrier that occupies the center median of a roadway, with a channelized path for a crosswalk to cut through. These barriers act to calm traffic and allow users to cross the roadway in two shorter, distinct stages. They also provide space for landscaping and lighting to create a more inviting environment. A related treatment is known as “centerline hardening”, which uses raised strips and bollards over the centerline on either side of a crossing to create a physical warning for drivers where no center median exists. An example of a median refuge island at 2100 East and Laird Drive in Salt Lake City is shown in **Figure 46**. This treatment pairs well with **MUTCD sign R1-6d**.



MUTCD R1-6d

Bulb-out / Curb Extension

At mid-block and intersection crossings, it can be beneficial to flare the curb outward so that it occupies the entire shoulder space, with ramps for the crossing cut out of the extended curb. This shortens the distance pedestrians must cross, calms traffic, encourages drivers to make slower, more cautious turning movements, and enforces shoulder parking prohibitions in the vicinity of the crossing, which in turn increases visibility for those using the crossing. An example of several bulb-outs in use in the Daybreak development of South Jordan, Utah is shown in **Figure 47**. This treatment may require additional accommodations and channelization or be altogether inappropriate for certain locations with on-street bicycle lanes.



FIGURE 47: Bulb-out Example

Raised Crossing

A raised crosswalk, also known as a speed table with crosswalk markings, is a traffic-calming measure that elevates the crosswalk to the same level as the sidewalk, creating a physical bump in the road that encourages drivers to slow down. This design improves pedestrian visibility and safety by making pedestrians more noticeable to drivers and reducing vehicle speeds. [Figure 47](#) diagrams this treatment being used in conjunction with bulb-outs.

Recessed Crossing

Where a sidewalk or path crosses a street at its intersection with another street, it can often be difficult for drivers turning across the crosswalk to watch for pedestrians and search for gaps in oncoming traffic at the same time. Similarly, vehicles turning off of a major road who do not have to stop will often fail to see pedestrians and cyclists entering the crosswalk, leading to dangerous encounters. These issues can be mitigated by recessing the crosswalk at least a car-length back from the parallel street, with the stop bar on the perpendicular street being placed on the far side of the crosswalk. This allows vehicles to stop for pedestrians and make their turning movement as discrete events, simplifying the experience and improving safety. Because this is not a typical configuration, care must be taken to clearly communicate to drivers approaching from all directions that the crossing exists, where they should yield to pedestrians, and where they should yield to oncoming traffic. More information on the design of these crossings can be found in the FHWA Report [Improving Intersections for Pedestrians and Bicyclists](#)

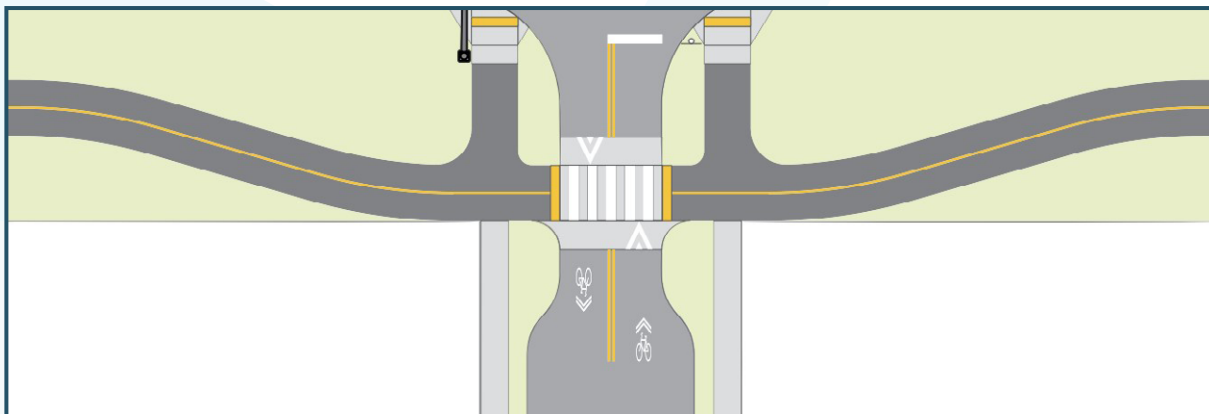


FIGURE 48: Recessed Crossing Design Example (Source: FHWA)

Proactive Safety Policy

A proactive safety policy for the active transportation network uses the principles of the [Safe System Approach](#) to create Safer Roads that promote safe behaviors through evidence-based measures. Monitoring and responding to crashes as they occur is important, but the City has a responsibility to do all in its power to design facilities that prevent crashes from the beginning. Defining clear policies for facility design, education, and post-crash response can streamline the decision-making process and create a cohesive and safe urban environment for community members.

The WFRC Comprehensive Safety Action Plan explored general measures that can be applied across the region to implement the Safe Systems Approach to roadway safety. The USDOT's [Proven Safety Countermeasures](#) toolbox provides an excellent resource for roadway design elements that proactively prevent severe crashes. The following measures are highlighted by the WFRC in the CSAP, and should be considered by the City as part of their proactive safety policy:

- As mentioned in the [Safety Analysis](#), decreasing vehicle speeds along key bicycle and pedestrian routes increases the chances of survival in the event of a collision involving a vulnerable road user. While decreasing speed limits alone without added traffic calming measures typically does not result in lower speeds, reducing speeds from 25 to 20 MPH in certain urban or residential settings, particularly those with narrow rights-of-way, is a worthwhile goal to supplement with traffic calming measures as feasible.

- Roundabouts should be considered as a default option for intersection control, being able to replace stop-controlled intersections and even signals up to a certain volume threshold. The geometry of roundabouts reduces vehicle speeds, decreases the angle of collision with other vehicles, and results in reduced crossing distances for pedestrians with fewer conflict points, all of which decrease the frequency and severity of crashes.
- There are significant safety improvements associated with median refuge islands at pedestrian crossings, in their various forms reducing pedestrian crashes by about 50%.

As mentioned in the [Crossing Treatment Selection](#) section, the City should adopt **Tables 4** and **5** as the minimum standards for new crossings that are built, with guidance to seek higher levels of comfort than the minimum where feasible. This will ensure that all crossings begin with an appropriate level of visibility, traffic calming, and control for their roadway context.

The City should also implement the adjustments to their standard cross sections as discussed in the [Standard Cross Sections](#) section, including establishing standard 10-11 foot travel lanes, having the flexibility to narrow the roadway to make room for off-street facilities, and adding guidance to prioritize the most comfortable active transportation facility possible while allowing for discretion from the City Engineer. An example of this would be to install bollards or curbed protection as a default for buffered bike lanes, at a minimum where they approach a conflict point, or barring that, install a ramp in advance of intersections to allow bicyclists to access the sidewalk and avoid a conflict with the right-turn lane.



VI. PROJECT RECOMMENDATIONS

Sidewalk Projects

After updating the sidewalk inventory the City identified the following street segments as top priorities to complete the sidewalk, curb, and gutter as feasible:

- 13800 South; 2950 West to Utah Lake Distributing Canal.
- 14600 South.

Other road segments with incomplete sidewalks are expected to be addressed as a result of greenfield development or planned trail and roadway projects, or they lie on small local roads that were built before City ordinances required sidewalks. These latter roadways should have sidewalks built as feasible, but do not warrant particular efforts by the City to acquire right-of-way. Refer to **Figure 16** in the [Existing Conditions](#) report for a complete inventory of incomplete sidewalk segments.

On-Street Bike Network

Based on the Complete Streets approach and with the aim of minimizing the level of traffic stress on all roadways, a set of On-Street Bike Facility projects have been identified by the City and are shown in **Figure 49**. A prioritized list of these projects is provided in the [Implementation Plan](#). Of note are projects to install raised cycle tracks on 14600 South and a shared effort with Riverton City to install curb-protected bike lanes on a portion of 13800 South.

Shared-Use Path Network

The recent Parks, Trails, Recreation, and Open Space Plan includes a robust plan for a shared-use path network. The planned network from the PTROS Plan is shown in **Figure 50**, with projects in a few new corridors as identified during the ATP development. These include the power corridor on the west side of the City and the South Jordan Canal road in the northeast. The PTROS Plan recommends a shared-use path, or sidepath, along 14600 South. The recommended facility for this alignment has been refined to consist of a separate sidewalk and raised cycle track, instead of a shared facility; as such, though the functionality and level of comfort will be very similar, for this plan the 14600 South facility appears on the on-street bicycle project list instead of the shared-use path project list.

Crossings and Intersection Improvements

Mid-block locations and intersections where new or improved active transportation crossings are needed have been identified and are presented in **Figure 46**. These projects are composed of proposals from the WFRC RTP and CSAP, the City's PTROS Plan, as well as locations newly identified during the development of this ATP. The scope of this project list was limited to new mid-block and grade-separated crossings serving existing facilities, spot improvements that address safety concerns, pedestrian bridges spanning canals or rivers, and existing crossings that need additional markings and treatments; the crossings that are implied where planned trail projects intersect with roadways are not included. These latter projects are assumed to be part of the associated trail projects, and the crossing treatment selection standards included in this ATP will be used in the design phase of those projects.

Trailheads and Access Points

To increase accessibility to the existing and future trail network, a number of locations were identified where access from the roadway network should be added. These access points can vary from a simple connection to the sidewalk with an accessible roadway crossing, to a full trailhead with parking, bathroom facilities, and other amenities. The PTROS Plan included proposals for major trailheads to serve the planned network. Beyond these proposals, the scope of all access points will need to be determined on a project-by-project basis based on the intended service area. Each major trail should have at least one full trailhead and appropriately spaced bathroom facilities. All other access points can be neighborhood-level links. **Figure 52** depicts the existing and proposed trailheads from the PTROS plan together with existing and proposed neighborhood access points that were identified for the ATP. As discussed in the [Trail Service Areas](#) section, these points were used to determine service areas for each existing and future trail based on a 10-minute walking distance. After accounting for future roadways and sidewalks in addition to the future trails and access points, it was determined that the service area for the completed trail network will cover virtually the entire city.

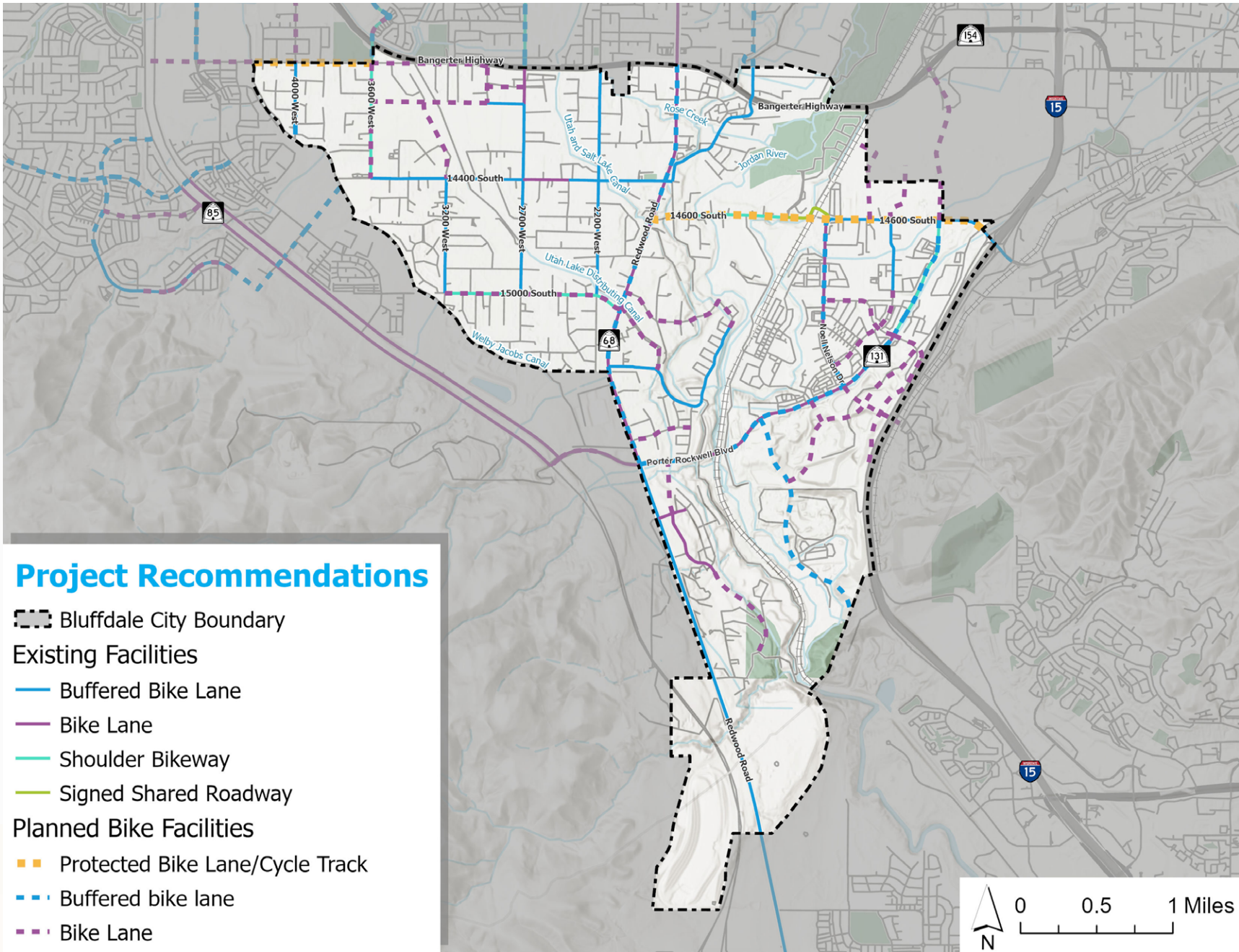


FIGURE 49: Recommended On-Street Bike Network



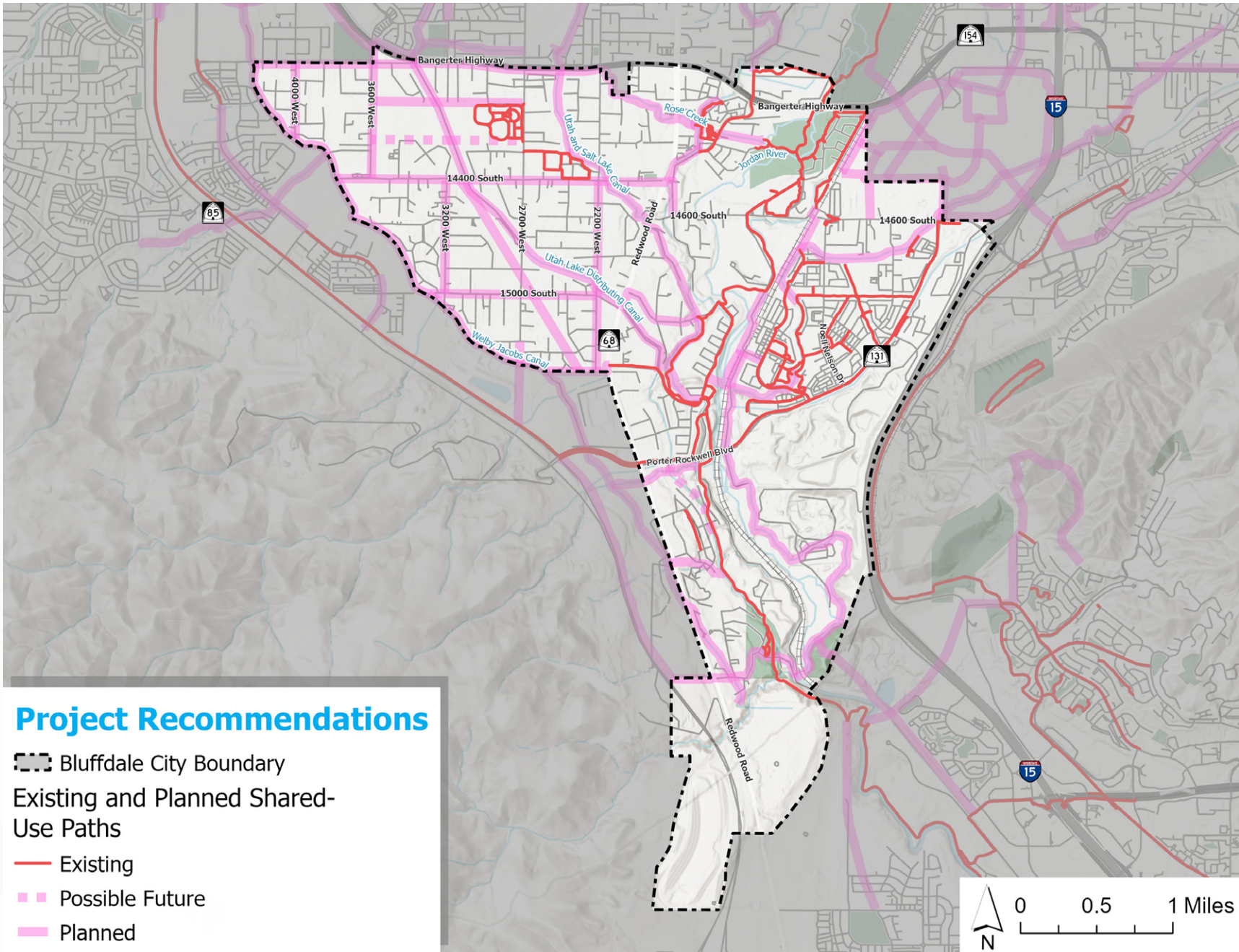


FIGURE 50: Recommended Shared-Use Path Network



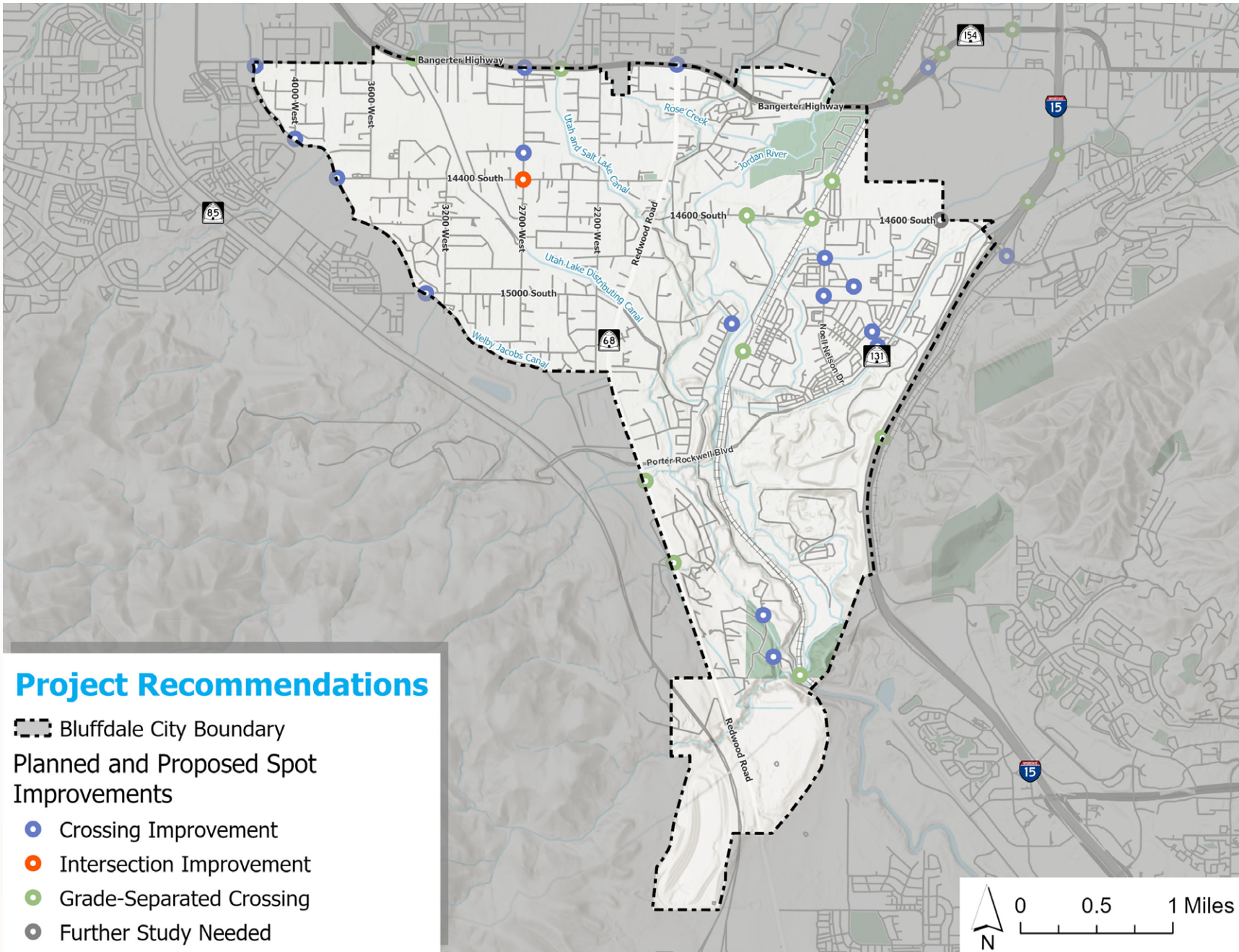


FIGURE 51: Recommended Crossings and Intersection Improvements



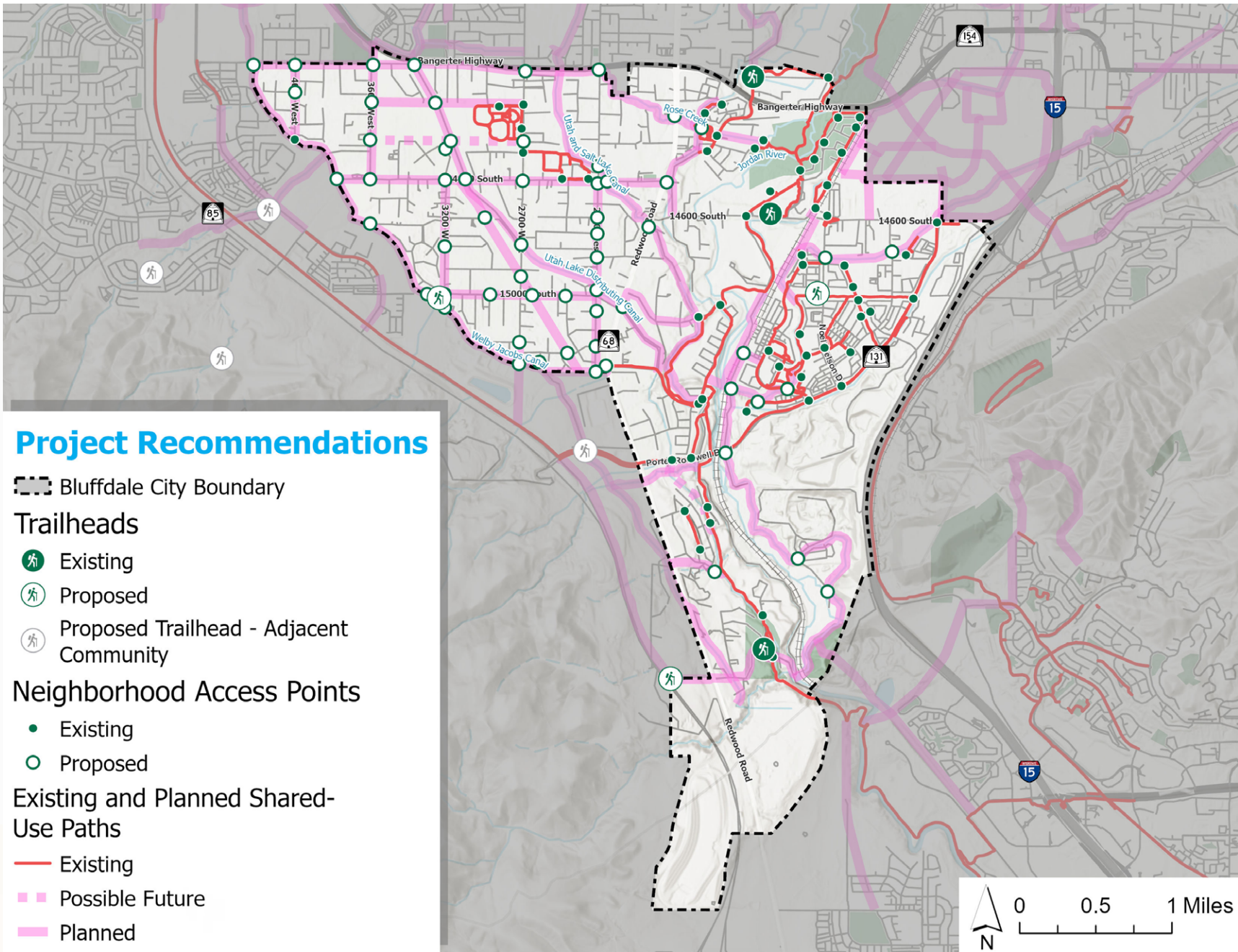


FIGURE 52: Trailheads and Access Points for the Existing and Future Trail Network



VII. IMPLEMENTATION PLAN

Project Prioritization

An analysis was conducted to rank each project based on how well they accomplish the City's goals. This approach is intended to guide the City in selecting which projects to focus on first; the City should be flexible in its approach as priorities may change based on further studies or as opportunities for cost savings arise through collaboration with new development, roadway projects, or other events.

In organizing projects by priority, all projects were given scores and ranked based on a series of value measures. These measures were developed to reflect the City's goals and priorities with the aim of quantifying the benefit of each project.

The measures received weights between 1 and 4 based on how important they were to the City, and then each project received scores between 0 and 2 for each measure. Multiplying the scores by the weights and adding them up yielded a total value score for each project. **Table 7** lists all value measures and their assigned weights; for each value measure, explanation is given for what each possible score means in the context of that measure, and references are given to any relevant sections in the report that document analysis relating to the measure.



TABLE 7: VALUE MEASURES AND SCORING WEIGHTS

Criteria	Score	Score Description	Reference
Addresses Public Feedback	0	Received opposition during interactions with stakeholders	Chapter II
	1	Was not considered a priority by stakeholders	
	2	Received strong support during interactions with stakeholders	
Addresses Safety Concerns	0	No relevant crash history or identified risk	Chapter IV - Active Transportation Safety Analysis
	8	Responds to crash data or mitigates a risk	
Connects to Local Network	0	No connections	
	2	Connects to one local facility	
	4	Connects to multiple local facilities	
Connects to Regional Network	0	No connections	
	3	Connects to one regional facility	
	6	Connects to multiple local facilities	
Connects to Parks or Recreational Facilities	0	No connections	Figure 19
	4	Connects to one park or recreational facility	
	8	Connects to multiple parks or recreational facilities	
Connects to Schools	0	No connections	Figure 19
	4	Connects to elementary school	
	8	Connects to a middle school or high school	
Connects to Transit	0	No connections	Figure 19
	4	Connects to future FrontRunner station or bus route	
Connects to Urban District or Other Key Destination	0	No connections	Figure 19
	2	Connects to one key destination	
	4	Connects to multiple key destinations	
In an Area with High Latent Demand	0	Latent demand score of 0-10	Figure 22
	3	Latent demand score of 10-15	
	6	Latent demand score of 15-30	
Provides a Low Level of Traffic Stress	0	LTS 3 or 4	Figure 24
	3	LTS 2	
	6	LTS 1	
Max Score	56		



In addition to a value analysis, each trail project was evaluated for its ease of implementation with regards to right-of-way availability. To ensure that this “opportunity measure” was weighted slightly more heavily than the value measure, a score between 0 to 50 was assigned to each trail project based on whether the needed right-of-way is publicly owned, owned by a single private entity, or intersects with many privately owned parcels. The highest score of all was assigned to projects that can be done in conjunction with future roadway projects, which will streamline the funding process tremendously. **Table 8** summarizes the scoring for each level of right-of-way availability. With the opportunity scores added to the value scores, a composite priority score was obtained for each trail project.

TABLE 8: OPPORTUNITY SCORES	
ROW Status	Score
New Roadway	50
Publicly Owned	40
1 Private Owner	20
2+ Private Owners	0

Priority Levels for Crossings and On-Street Bicycle Facilities

Once raw scores were obtained for each project, projects were assigned priority levels based on their score and on input from City staff. For on-street bike projects and crossing projects, priority levels are defined as follows:

- **High Priority** - These are the highest-value projects. Some of these can be implemented as part of a larger project that is imminent – for example, the 14600 S railroad crossing reconstruction or the UTA FrontRunner station; others will need to be prioritized in the City’s budgeting and pursuit of funding.
- **Medium Priority** - These are next-highest value projects. Projects that are relatively simple to implement, like marking certain trail crossings in the Independence area, should be implemented ASAP; others, like the under-crossing of 14600 S for the Jordan River Parkway, will require additional funding that can be prioritized after the high priority projects have been addressed.
- **Low Priority Projects** - These are projects that provide less immediate value, but should be implemented as feasible.
- **Opportunistic Projects** - These projects ranked lowest on the priority list due to relative lack of demand or other factors. In the case of on-street bike facilities, many that are marked “opportunistic” lie in yet-to-be-developed areas, where they can be implemented as development necessitates the construction of new roadways.

Priority Levels for Trail Facilities

The priority levels were assigned slightly differently for the trail projects, and they are defined as follows:

- **High Opportunity** - These projects came to the forefront as projects that will provide a high value and that are also highly implementable in conjunction with future roadway projects. Funding acquisition efforts can be combined with those for the roadway network, and then the City need only ensure that trails are incorporated into the design for these roadway projects and that all active transportation facilities and crossings meet the standards defined in this ATP.
- **High Priority** - These are high-value projects that will require additional efforts to acquire right-of-way and funding distinct from a roadway project. Two of these projects - the Welby Jacobs Canal Trail and the Rose Creek Trail, were identified as the highest-priority by the City, and funding applications for these were drafted by WCG as part of the ATP development. For all of these projects, the City should begin immediate efforts to open discussions with land owners and canal companies on right-of-way and easement acquisition. Once funding is secured for the top-two projects, the City can begin the application process for the other High Priority Projects.
- **Medium and Low Priority** - These projects represent the subsequent phases of the implementation plan for trails projects after funding and right-of-way needs for the High Priority projects have been addressed. The breakpoint between medium and low priority was selected to divide the projects into roughly equal-sized groups.

Approximate costs were also estimated for each project based on per-mile or per-crossing costs developed by WFRC for the 2023 RTP that were inflated to represent 2025 dollars. These costs are a useful tool for planning and budgeting, but it should be noted that they are based on average construction costs statewide with contextual factors like topography and right-of-way acquisition contributing a high degree of variability. It was determined that construction costs would not be a good measure for prioritization as it would place too much weight on the simple length or type of crossing, taking focus away from project benefits and constructability.

Figures 53, 54, and 55 present the on-street bike facility, trail, and crossing projects colored by their level of priority and labelled with project ID numbers. As mentioned earlier, the trail projects received scores and corresponding priority levels that were a composite of project value and project opportunity, while the other project types were simply evaluated for project value. **Table 9** through **Table 11** present prioritized project lists, including project ID numbers and estimated costs. As these assumptions are very high-level, a contingency of 30-percent or more should be afforded to account for cost variations associated with final engineering and design, mobilization, traffic control, permitting, inflation, land acquisition, or the removal of existing pavement markings. **Appendix G** provides detailed breakdowns of the scoring for each project to facilitate further refinement as conditions in the city evolve.

Rough, planning-level cost estimates were calculated based on unit costs from the 2023 WFRC Regional Transportation Plan and other sources, all inflated to the current year (2025). As these assumptions are very high-level, a contingency of 30-percent or more should be afforded to account for cost variations associated with final engineering and design, mobilization, traffic control, permitting, inflation, land acquisition, or the removal of existing pavement markings. **Appendix F** provides more details on the cost assumptions used for this plan. At the time of this writing, the 13800 South Protected Bike Lanes project (OS-8a) as well as the Welby-Jacobs Canal (R2-20) and Rose Creek (A-S-106) Trails had more detailed, concept-level cost estimates associated with them because of recent or imminent applications for funding. These estimates are included in the tables in lieu of those using the more generalized assumptions.



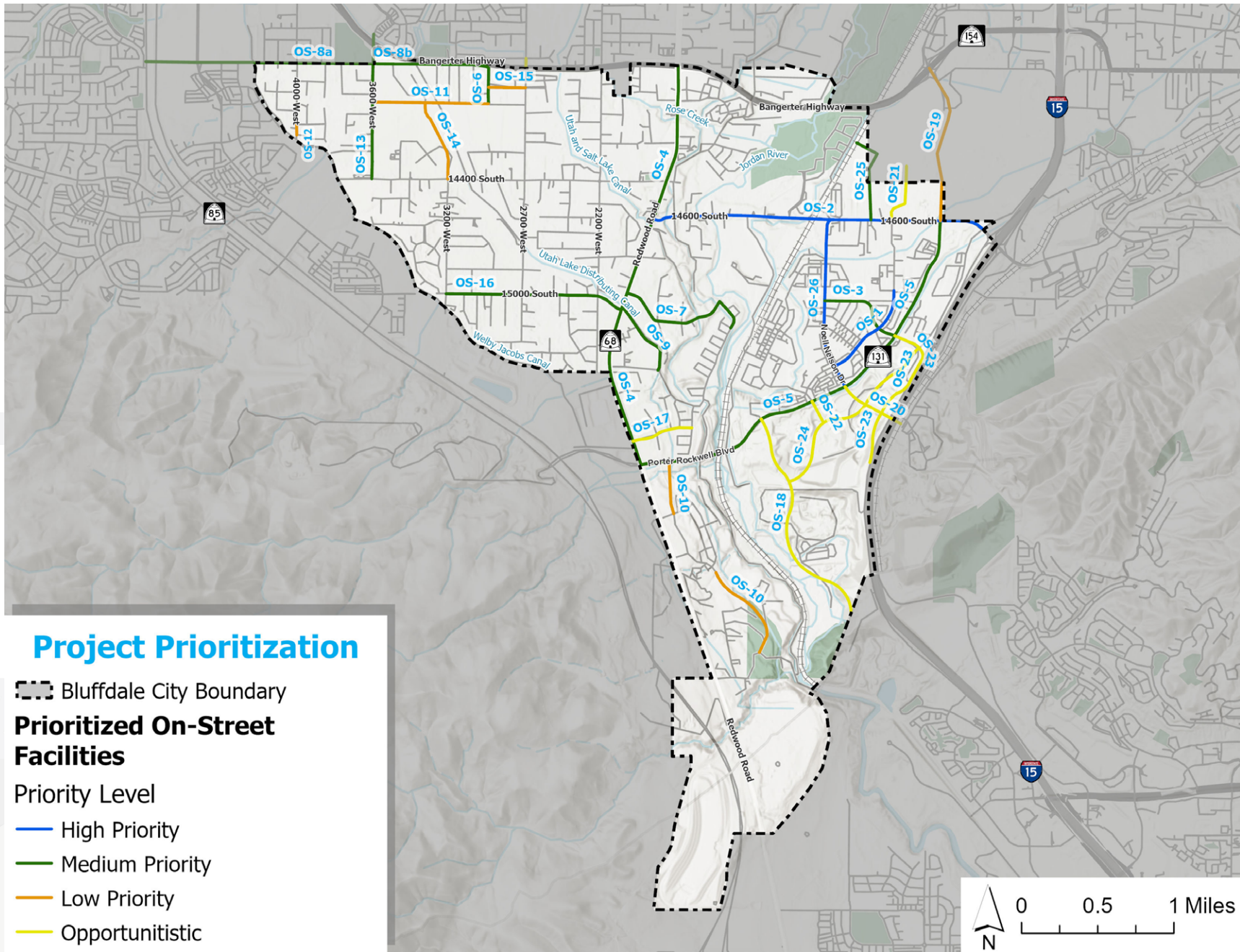


FIGURE 53: Planned On-Street Facilities by Priority

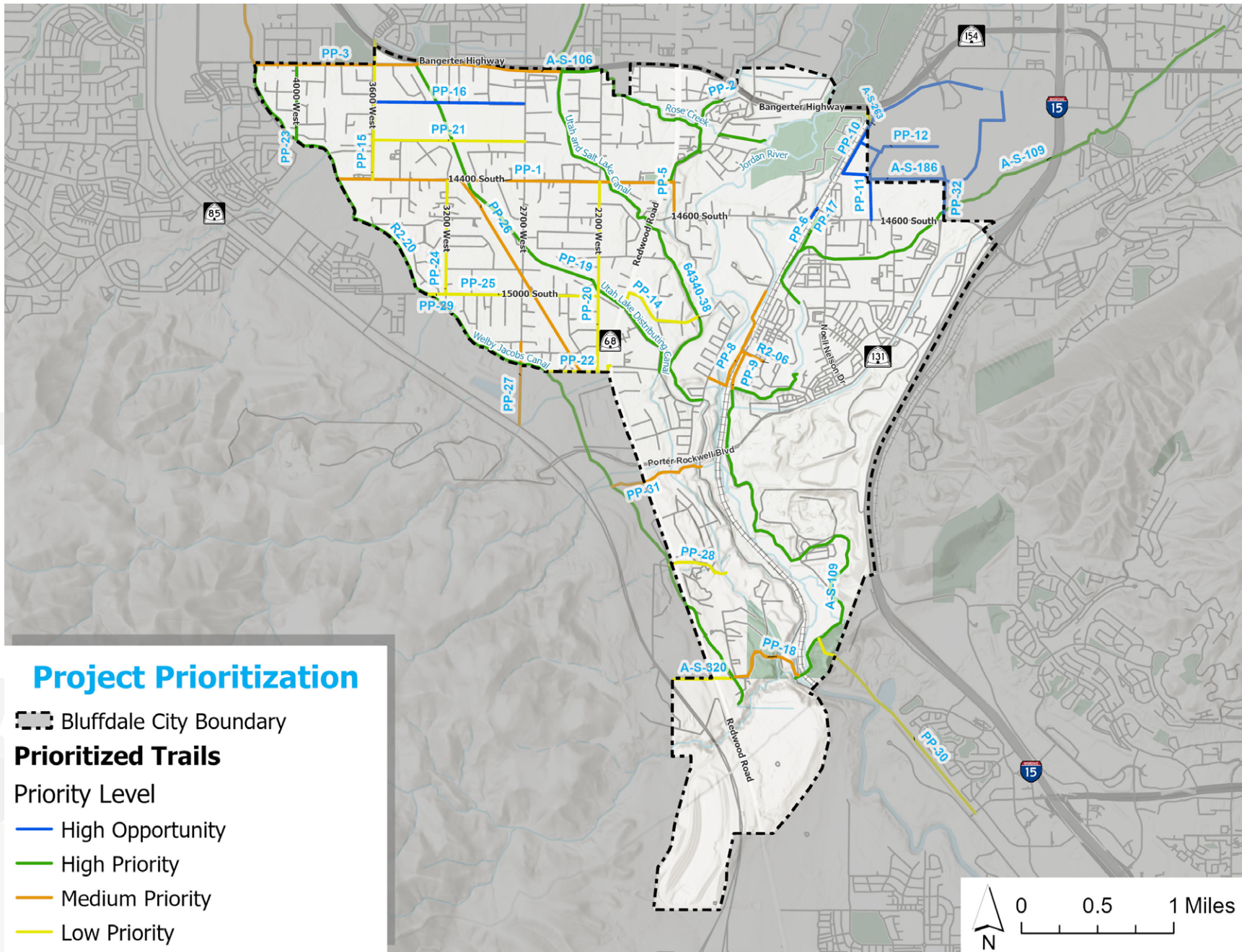


FIGURE 54: Planned Trails by Priority

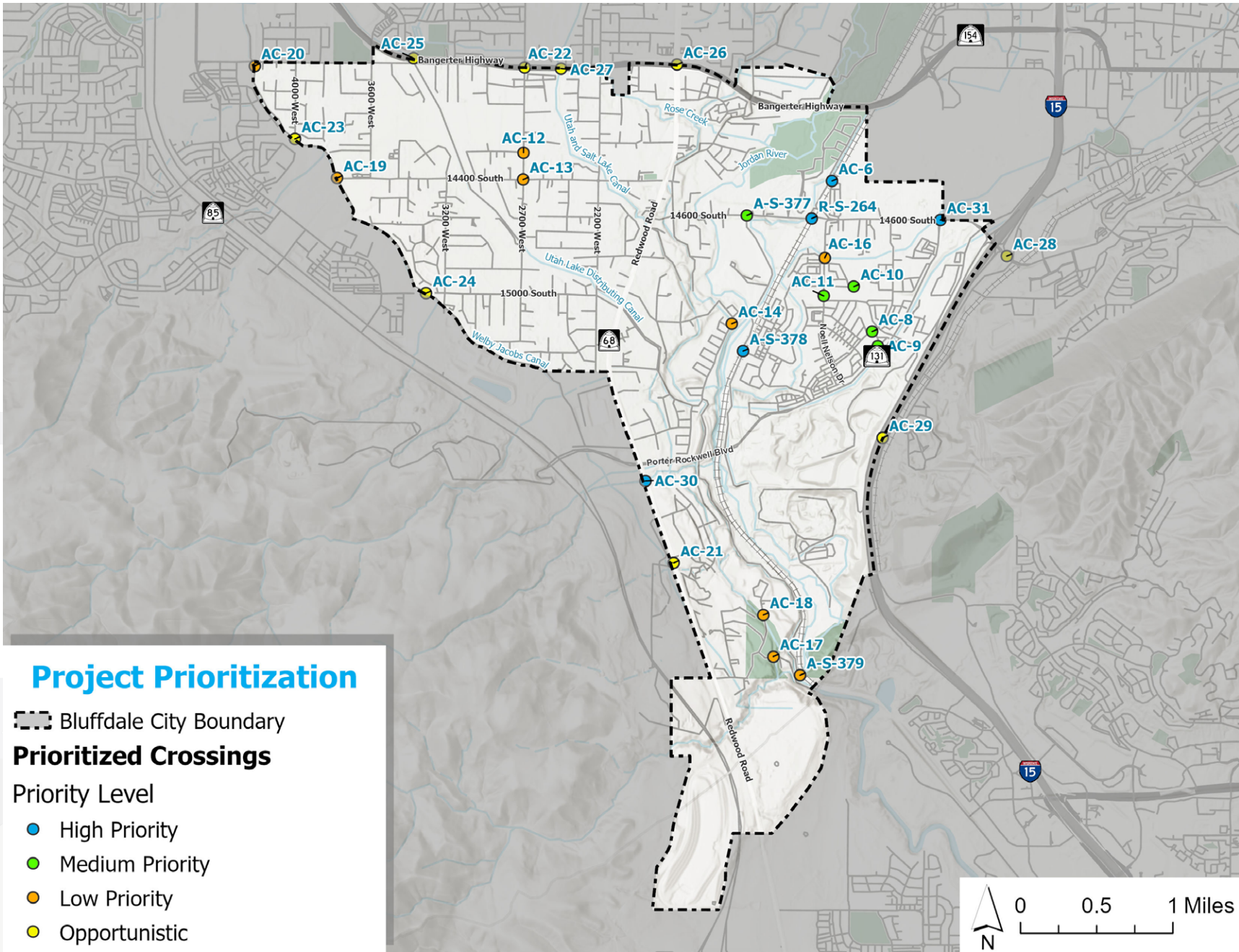


FIGURE 55: Planned Crossings by Priority

TABLE 9: PRIORITIZED ON-STREET BIKE PROJECTS

	Project ID	Project Name	Facility Type	Jurisdiction	Regional/Local	Length (mi)	Estimated Cost
High Priority	OS-2	14600 S Cycle Tracks	1C Cycle track, raised and curb separated	UDOT	Regional	2.14	\$2,853,409
	OS-1	Heritage Crest Way Bike Lanes	2B Bike lane	Bluffdale	Local	0.66	\$88,462
	OS-26	Noelle Nelson Dr Buffered Bike Lanes	2A Buffered Bike Lane	Bluffdale	Local	1.09	\$227,049
Medium Priority	OS-9	Pine Hollow Rd Bike Lanes	2B Bike lane	Bluffdale	Local	0.52	\$69,078
	OS-13	3600 W Bike Lanes	2B Bike lane	Bluffdale	Local	0.95	\$139,610
	OS-7	Iron Horse Blvd Bike Lanes	2B Bike lane	Bluffdale	Regional	0.97	\$128,724
	OS-8a	13800 S Protected Bike Lanes	1B Curb-protected bike lane	Bluffdale, Riverton	Regional	0.79	\$3,718,110
	OS-8b	13800 S Bike Lanes	2B Bike lane	Bluffdale	Regional	0.76	\$101,741
	OS-3	Freedom Point Way Bike Lane	2B Bike lane	Bluffdale	Local	0.59	\$78,391
	OS-4	Redwood Road Buffered Bike Lane	2A Buffered bike lane	Bluffdale	Regional	2.73	\$545,477
	OS-5	Porter Rockwell Blvd Buffered Bike Lanes	2A Buffered bike lane	UDOT	Regional	2.78	\$555,739
	OS-6	2950 W Bike Lanes	2B Bike lane	Bluffdale	Regional	0.23	\$31,290
	OS-25	550 E Bike Lanes	2B Bike lane	Bluffdale	Regional	0.61	\$81,336
	Low Priority	OS-11	14010 S Extension and Bike Lanes	2B Bike lane	Bluffdale	Local	0.76
OS-12		4000 W Buffered Bike Lanes	2A Buffered bike lane	Bluffdale	Regional	0.16	\$31,857
OS-19		600 W Bike Lanes	2B Bike lane	Bluffdale, Draper	Local	1.05	\$140,367
OS-14		3200 W Bike Lanes	2B Bike lane	Bluffdale	Regional	0.54	\$71,844
OS-10		Bringhust Blvd Bike Lanes	2B Bike lane	Bluffdale	Local	1.02	\$136,114
OS-15		13900 S Bike Lanes	2B Bike lane	Bluffdale	Local	0.24	\$32,362
Opportunistic	OS-16	15000 S Bike Lanes	2B Bike lane	Bluffdale	Local	1.18	\$156,965
	OS-17	River View Dr Bike Lanes	2B Bike lane	Bluffdale	Local	0.40	\$53,817
	OS-18	17000 S Bike Lanes	2A Buffered bike lane	Bluffdale	Local	1.52	\$304,155
	OS-24	Gravel Pit Roads - Bike Lanes	2B Bike lane	Bluffdale	Local	1.31	\$174,726
	OS-20	Noell Nelson Dr Bike Lanes	2B Bike lane	Bluffdale	Local	0.44	\$59,225
	OS-21	Heritage Crest Way Bike Lanes	2B Bike lane	Bluffdale	Local	0.41	\$55,027
	OS-22	Gravel Pit Roads - Bike Lanes	2B Bike lane	Bluffdale	Local	0.16	\$21,363
	OS-23	Pony Express Rd Bike Lanes	2B Bike lane	Bluffdale	Local	1.08	\$143,561

TABLE 10: PRIORITIZED TRAIL PROJECTS

	Project ID	Project Name	Involved Agencies	Ease of ROW Access	Length (Mi.)	Estimated Cost
High Opportunity	PP-10	Jordan and Salt Lake City Canal Trail	Bluffdale, Canal Owners	New Roadway	1.21	\$1,554,263
	A-S-186	Point of the Mountain Transit Ext Path	Bluffdale, Draper, UTA	New Roadway	1.61	\$2,076,937
	PP-11	The Point - FrontRunner Connection	Bluffdale, Draper, UTA	New Roadway	0.75	\$966,507
	PP-12	The Point Trail	Bluffdale, Draper	New Roadway	0.55	\$706,438
	PP-17	14600 S to FrontRunner Station Connection	Bluffdale, UTA	New Roadway	0.08	\$101,362
	PP-16	14010 S Sidepath	Bluffdale	New Roadway	0.98	\$1,266,354
High Priority	PP-32	Porter Rockwell Trail - The Point	Bluffdale, Draper	New Roadway	0.352	\$453,171
	R2-20	Welby-Jacobs Canal Trail South - Herriman/Bluffdale	Bluffdale, Herriman, UDOT, Canal Owners	1 Private Owner	6.06	\$5,357,100
	A-S-106	Rose Creek Trail	Bluffdale, Salt Lake County	2+ Private Owners	2.44	\$4,725,000
	PP-23	4000 W Sidepath	Bluffdale, Riverton	Publicly Owned	0.49	\$627,275
	PP-2	South Jordan Canal Trail	Bluffdale, Canal Owners	1 Private Owner	0.76	\$977,295
	PP-6	East Jordan Canal to 14600 S Connection	Bluffdale	1 Private Owner	0.24	\$307,326
	A-S-109	East Jordan Canal Trail	Bluffdale, Canal Owners	1 Private Owner	5.96	\$7,677,134
Medium Priority	64340-38	Utah Salt Lake Canal Path	Bluffdale, Canal Owners	1 Private Owner	2.80	\$3,607,094
	PP-19	Utah Lake Distributing Canal Path	Bluffdale, Canal Owners	1 Private Owner	2.19	\$2,822,234
	PP-1	14400 S Sidepath	Bluffdale	2+ Private Owners	2.17	\$2,792,857
	PP-3	13800 S Sidepath	Bluffdale	2+ Private Owners	1.06	\$1,360,071
	PP-5	1690 W Sidepath	Bluffdale	2+ Private Owners	0.23	\$290,902
	R2-06	Jordan River Parkway Trail Connection at 1300 West	Bluffdale, Salt Lake County	2+ Private Owners	0.59	\$763,463
	PP-26	West Side Powerline Corridor Path	Bluffdale, Utility Owners	1 Private Owner	1.48	\$1,910,676
	PP-9	1300 W Sidepath - Cinch Way to East Jordan Canal	Bluffdale	2+ Private Owners	0.25	\$322,660
Low Priority	PP-31	Jordan River to Welby-Jacobs Connection	Bluffdale	1 Private Owner	0.63	\$811,865
	PP-18	Jordan Narrows Road Trail	Bluffdale, Salt Lake County	Publicly Owned	0.62	\$796,908
	PP-8	Iron Horse Blvd to 1300 W Connection - South	Bluffdale	2+ Private Owners	0.38	\$489,096
	PP-27	Wood Hollow Path	Bluffdale	1 Private Owner	0.14	\$184,755
	PP-14	Rock Hollow Dr Sidepath	Bluffdale	2+ Private Owners	0.65	\$841,204
	PP-15	3600 W Sidepath	Bluffdale	2+ Private Owners	0.91	\$1,175,935
	A-S-320	Jordan Narrows	Bluffdale	2+ Private Owners	0.40	\$518,643
	PP-30	Lehi Connection	Bluffdale, Lehi	1 Private Owner	1.56	\$2,008,454
	A-S-263	Point of the Mountain Connection	Bluffdale, Draper	1 Private Owner	0.07	\$6,763,431
	PP-20	2200 W Sidepath	Bluffdale	2+ Private Owners	1.25	\$1,606,862
PP-21	14200 S Sidepath	Bluffdale	2+ Private Owners	1.01	\$1,296,264	
PP-22	Redwood Rd to Welby-Jacobs Connection	Bluffdale, UDOT	2+ Private Owners	0.47	\$604,004	
PP-24	3200 W Sidepath	Bluffdale	2+ Private Owners	0.74	\$955,637	
PP-25	15000 S Sidepath	Bluffdale	2+ Private Owners	1.00	\$1,286,006	
PP-29	15000 S Sidepath	Bluffdale	2+ Private Owners	0.11	\$144,158	
PP-28	Welby Jacobs to Jordan River Parkway Connection	Bluffdale, UDOT, Salt Lake County	2+ Private Owners	0.41	\$530,261	

NOTE: highlighted rows constitute the City's top-priority projects

TABLE 11: PRIORITIZED CROSSINGS AND INTERSECTION IMPROVEMENTS

	Project ID	Name	Description	Scope	Estimated Cost
High Priority	AC-31	Porter Rockwell Blvd & 14600 S Crossing	Improved Crossing for Multiple Trails	Further Study Needed	--
	A-S-378	Perry Farms to Independence Overhead Crossing	Overhead Pedestrian / Bike Crossing	Grade-Separated Crossing	\$6,666,843
	R-S-264	14600 South Railroad Structure @ FrontRunner Railroad	Roadway Culvert	Grade-Separated Crossing	\$38,930,000
	AC-6	FrontRunner Station Bridge	Overhead Pedestrian / Bike Crossing	Grade-Separated Crossing	\$6,666,843
	AC-30	Jordan River to Welby-Jacobs Underpass	Underpass	Grade-Separated Crossing	\$3,793,610
Medium Priority	A-S-377	Jordan River Parkway Underground Crossing	Underpass	Grade-Separated Crossing	\$3,793,610
	AC-8	Independence Trail & Heritage Crest Way	Markings, RRFB, Bulbouts	Crossing Improvement	\$70,178
	AC-9	Independence Trail & Old Port Way	Markings, signage	Crossing Improvement	\$17,697
	AC-10	Independence Trail & McKenna Road	Markings, signage	Crossing Improvement	\$17,697
	AC-11	Independence Pickleball Courts Crossing	Daylight, Add Bulbouts, RRFB	Crossing Improvement	\$70,178
Low Priority	AC-12	Country Classic Dr & 2700 W Crossing Improvement	RRFB	Crossing Improvement	\$33,070
	AC-13	2700 West & 14400 South Intersection Improvements	Evaluate intersection control, possibly install roundabout	Intersection Improvements	\$1,200,000
	AC-14	South Jordan Canal Trail & Iron Horse Blvd	Markings, signage	Crossing Improvement	\$17,697
	A-S-379	East Jordan Canal Jordan River Overhead Crossing	Overhead Pedestrian / Bike Crossing	Grade-Separated Crossing	\$6,666,843
	AC-16	East Jordan Canal Trail & Noell Nelson Dr	Waterway Bridge	Crossing Improvement	\$105,000
	AC-17	Jordan River Parkway & Jordan Narrows Rd	Markings, RRFB, warnings on trail	Crossing Improvement	\$105,000
	AC-18	Jordan River Parkway & Sunrise Riding Stable St	Markings, RRFB, warnings on trail	Crossing Improvement	\$105,000
	AC-19	14400 S & Welby-Jacobs Canal Bridge	Waterway Bridge	Crossing Improvement	\$105,000
	AC-20	13800 S & Welby-Jacobs Canal Bridge	Waterway Bridge	Crossing Improvement	\$105,000
	AC-21	Redwood Road South Underpass	Underpass	Grade-Separated Crossing	\$3,793,610
Opportunistic	AC-22	2700 West & Bangerter Hwy	Accommodate bicyclist travel across Bangerter Highway	Crossing Improvement	\$210,756
	AC-23	4000 W & Welby-Jacobs Canal Bridge	Waterway Bridge	Crossing Improvement	\$105,000
	AC-24	15000 S & Welby-Jacobs Canal Bridge	Waterway Bridge	Crossing Improvement	\$105,000
	AC-25	Utah Lake Dist Canal Trail & Bangerter Hwy Underpass	Underpass	Grade-Separated Crossing	\$3,793,610
	AC-26	Bangerter Highway Interchange @ Redwood Road	Upgraded Interchange	Crossing Improvement	\$210,756
	AC-27	U&SL Canal Trail & Bangerter Hwy Underpass	Underpass	Grade-Separated Crossing	\$3,793,610
	AC-28	14600 South & I-15	Accommodate cyclists across I-15 to connect to Draper's bicycle network.	Crossing Improvement	\$210,756
	AC-29	16000 South Underpass with Ramps @ I-15	Underpass	Grade-Separated Crossing	\$3,793,610

Concept Reports

After completing the prioritization process with manual adjustments made by City staff, the City selected two top-priority trail projects to pursue. The projects are highlighted in [Table 10](#) and listed below:

- **#R2-20:** Welby-Jacobs Canal Trail South - Herriman/Bluffdale
- **#A-S-106:** Rose Creek Trail

These trails were selected because of their high implementability, high demand from the community, and the valuable connections and access they will provide to residents who are currently underserved by paved trails. The Welby-Jacobs Canal Trail is currently funded north of Bluffdale as part of UDOT's Utah Trail Network initiative, so funding for the section between Bluffdale and Herriman should be straightforward to acquire. Additionally, the City recently finished a feasibility study for the Rose Creek Trail alignment west of Vintage Park and would like to proceed to the next phase of implementing that project. It was decided that the City should attempt to add the link between the Jordan River Parkway and Loumis Parkway as part of this project, as the right-of-way should be more easily acquired for this segment and this would add an extremely valuable link across the City where connectivity is sparse.

As part of the deliverables for the Active Transportation Plan project, the Consultant prepared concept reports and funding applications for these projects with the hope that they can be funded, designed, and constructed within the next 5-6 years. The associated costs listed in [Table 10](#) reflect the concept-level cost estimates that were developed in this stage, and are thus expected to be more accurate than the estimates for the other shared use path projects.



Funding Sources

The timing and implementation of active transportation projects is directly tied to funding. For this reason, projects in the implementation plan that could be implemented in tandem with planned roadway projects were deemed to have the highest implementability; the funding, right-of-way acquisition, and construction costs can be shared with a larger project. In addition to the cost-savings associated with tying AT projects to roadway projects, AT-specific funding sources were identified during the development of this plan. Active transportation facilities often span multiple cities and connect to regionally significant destinations, so agencies with jurisdictions that extend beyond City boundaries like the Federal Government, UDOT, Salt Lake County, or metropolitan planning organizations (WFRC) may have funding available for active transportation projects. It is recommended that Bluffdale work closely with these agencies and neighboring municipalities to apply for active transportation funding. Funding for ATP improvements and/or new facilities is available from a variety of sources, including federal programs and state and regional revenue sources. This chapter provides an overview of these potential funding sources.

Federal Programs

There are several federal funding sources that have potential to be used for ATP improvement projects:

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program
- Transportation Infrastructure Finance and Innovation Act (TIFIA)
- Federal Transit Administration (FTA) Grant Programs
- Congestion Mitigation/Air Quality (CMAQ) Program
- Highway Safety Improvement Program (HSIP)
- National Highway Performance Program (NHPP)
- Surface Transportation Block Grant Program (STBG)
- Transportation Alternatives Set-Aside (TA Set-Aside)
- Recreational Trails Program (RTP)
- Safe Routes to School (SRTS)
- NHTSA Section 402: State and Community Highway Safety Grant Program
- NHTSA Section 405: National Priority Safety Programs (Nonmotorized Safety)

A brief overview of these programs is provided as follows.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program

The RAISE competitive grant program is the combination of the former BUILD and TIGER Grant programs. Projects for RAISE funding are evaluated based on merit criteria that include safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and partnership. Within these criteria, the DOT will prioritize projects that can demonstrate improvements to racial equity, reduce impacts to climate change, and create good-paying jobs.

<https://www.transportation.gov/RAISEgrants>

Transportation Infrastructure Finance and Innovation Act (TIFIA)

The TIFIA program provides credit assistance for qualified projects of regional and national significance. Many large-scale surface transportation projects – highway, transit, railroad, intermodal freight, and port access – are eligible for assistance. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities. The program’s fundamental goal is to leverage Federal funds by attracting substantial private and other non-Federal co-investment in critical improvements to the nation’s surface transportation system.

<https://www.transportation.gov/buildamerica/financing/tifia/map>

Federal Transit Administration (FTA) Grant Programs

The following FTA grant programs listed pedestrian improvements as eligible for funding to provide access to transit:

- FTA Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities – Information on this program cites examples of funding for pedestrian improvements to improve transit access such as building an accessible path to a bus stop or providing curb-cuts, sidewalks, accessible pedestrian signals, or other accessible features.
- FTA Section 5311: Rural Areas – Grants can support a joint development improvement, such as pedestrian and bicycle access to a public transportation facility

<https://www.transit.dot.gov/grants>

Surface Transportation Block Grant Program (STBG)

The STBG provides flexible funding that may be used by states and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway. Eligible projects related to pedestrian safety include pedestrian and bicycle projects, safety projects, recreational trails, safe routes to school projects, and projects within the pre-FAST Act Title 23 definition of “transportation alternatives” (see the Transportation Alternatives Set-Aside description below). Projects must be identified in the Statewide Transportation Improvement Program (STIP) and be consistent with the Long-Range Statewide Transportation Plan and the Metropolitan Transportation Plan.

<https://www.fhwa.dot.gov/specialfunding/stp/160307.cfm#d>

Highway Safety Improvement Program (HSIP)

The FAST Act continued the HSIP. The purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-state-owned roads and roads on Tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

<https://safety.fhwa.dot.gov/hsip/hsip.cfm>

<https://www.udot.utah.gov/connect/about-us/operations/traffic-safety/>

<https://www.fhwa.dot.gov/specialfunding/nhsp/160309.cfm>

Recreational Trails Program (RTP)

The RTP provides funds to the states to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. It is funded by the Federal Highway Administration and locally administered by the Division of Natural Resources (DNR).

https://www.fhwa.dot.gov/environment/recreational_trails/

<https://recreation.utah.gov/grants/recreational-trails-program/>

Safe Routes to School (SRTS)

SRTS funds are available until expended (they are not subject to the usual Federal-aid highway four-year rule of availability). SRTS is now funded within the TA Set-Aside. This is administered locally by UDOT.

https://www.fhwa.dot.gov/environment/safe_routes_to_school/guidance/#toc123542199

https://www.fhwa.dot.gov/environment/transportation_alternatives/

NHTSA Section 402: State and Community Highway Safety Grant Program

To receive Section 402 grant funds, a state must have an approved HSP and provide assurances that it will implement activities in support of national goals that also reflect the primary data-related factors within the state, as identified by the state highway safety planning process. States can distribute highway safety grant funds to a wide network of sub-grantees, including local law enforcement agencies, municipalities, universities, health care organizations, and other local institutions. States may spend 402 funds in accordance with an approved HSP that complies with the uniform national guidelines for highway safety programs. One of the eligible programs is to improve pedestrian and bicycle safety.

<https://safety.fhwa.dot.gov/legislationandpolicy/policy/section402/>

NHTSA Section 405: National Priority Safety Programs (Nonmotorized Safety)

Under the FAST Act, Section 405 is the National Priority Safety Program, which provides grant funding to address selected national priorities for reducing highway deaths and injuries. The FAST Act added two new grants under this program, one of which is for nonmotorized safety. States are eligible if the annual combined pedestrian and bicyclist fatalities in the state exceed 15 percent of the total annual crash fatalities in the state using the most recently available final data from NHTSA's Fatality Analysis Reporting System (FARS). Eligible states may use Section 405 grant funds only for training law enforcement on state laws applicable to pedestrian and bicycle safety; enforcement mobilizations and campaigns designed to enforce those state laws; or public education and awareness programs designed to inform motorists, pedestrians, and bicyclists of those state laws.

<https://www.law.cornell.edu/uscode/text/23/405> (See section H)



Local Funding Sources

Utah Trail Network

During the 2023 Utah legislative session the legislature passed SB 185. In that bill there is a provision that allocates \$45 million in on-going funding and \$45 million one-time funding to UDOT to build, operate and maintain a paved regional trail network.

The vision is for UDOT to build and maintain a network of paved trails throughout the state that connect Utahns of all ages and abilities to their destinations and communities. The Utah Trail Network is an ongoing effort wherein UDOT selects projects to fund and construct from local and regional plans that will accomplish the aims of the initiative.

<https://utahtrailnetwork.udot.utah.gov/home>

Salt Lake County Intermittent Funds

Each year Salt Lake County apportions transportation money to Cities, which can be used for active transportation projects. Additionally, the County may at times have extra funds that can be applied for as they come available. The City should keep in contact with the Office of Regional Development to be aware of any opportunities for additional funding that may arise.

<https://www.saltlakecounty.gov/regional-development/planning-transportation/transportation/active-transportation-info/>

Transportation and Land-Use Connection (TLC)

The Transportation and Land Use Connection (TLC) program is a partnership between the Wasatch Front Regional Council (WFRC), Salt Lake County, Utah Department of Transportation (UDOT), Utah Transit Authority (UTA), and Governor's Office of Planning and Budget (GOPB).

The TLC program provides technical assistance to local communities to help them achieve their goals and plan for growth. The program helps communities implement changes to the built environment that reduce traffic on roads and enable more people to easily walk, bike, and use transit. This approach is consistent with the Wasatch Choice Vision and helps residents living throughout the region enjoy a high quality of life through enhanced mobility, better air quality, and improved economic opportunities.

<https://wfrc.utah.gov/programs/transportation-land-use-connection/>

Surface Transportation Program (STP)

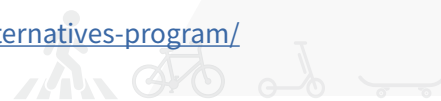
The Surface Transportation Program provides funding that may be used for projects on Federal-aid eligible roadways, transit capital improvements, and active transportation projects. Funds can be used for active transportation projects which reduce traffic demand. By population, approximately \$22,000,000 in funds is apportioned for projects in the Salt Lake Urban Area, to be programmed for fiscal years 6 years in the future.

<https://wfrc.org/programs/transportation-improvement-program/surface-transportation-program/>

Transportation Alternatives Program (TAP)

The Transportation Alternatives Program provides funds for the planning and construction of bicycle and pedestrian facilities. Funds may be used for planning, design, and construction of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure that will provide safe routes for non-drivers, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990. Funding eligibility includes Safe Routes to School infrastructure projects. Approximately \$2,000,000 in TAP funds is apportioned to the Salt Lake Urban Area each year.

<https://wfrc.org/programs/transportation-improvement-program/transportation-alternatives-program/>



Carbon Reduction Program (CRP)

The CRP directs funds toward projects that reduce on-road carbon dioxide (CO₂) emissions, which may include projects and strategies for safe, reliable, and cost-effective options to reduce traffic congestion by facilitating the use of alternatives to single-occupant vehicle trips, including public transportation facilities, pedestrian facilities, bicycle facilities, and shared or pooled vehicle trips within the Urban Area. The program apportions approximately \$2,600,000 in funds to the Salt Lake Urban Area, to be programmed for fiscal years 6 years in the future.

<https://wfr.org/programs/transportation-improvement-program/carbon-reduction-program/>

Transportation Improvement Program (TIP)

The Transportation Improvement Program is a 6-year funded construction program. WFR and its regional transportation partners - UDOT and UTA - fund projects, programs, and studies to improve and expand the regional transportation network. The TIP is the implementation program of the Regional Transportation Plan.

<https://wfr.utah.gov/programs/transportation-improvement-program/>

Land and Water Conservation Fund (LWCF)

LWCF is a competitive grant program for the acquisition and/or development of public outdoor recreation areas. Federal oversight to this program is provided by the National Park Service and is administered locally by State of Utah through the Utah State Parks and Receptions. Any site or facility that is developed, improved, or purchased with funding from this grant program is protected in perpetuity as a public outdoor recreation area. All applications are reviewed and ranked through the evaluation process developed by the state and National Parks Service. Potential projects are evaluated on their alignment with needs identified in the 2019 Utah State Comprehensive Outdoor Recreation Plan (2019 SCORP), application completeness, technical merits, previous recreation program performance, project readiness, availability of local funding, and a site visit/inspection.

<https://recreation.utah.gov/grants/land-water-conservation-fund/>

The National Parks Services – River, Trails and Conservation Assistance Program (NPS-RTCA)

NPS-RTCA is a federal program that supports community-led projects by helping them leverage resources through diverse partnerships. This is not a funding program but tries to align experts in the field of planning, design, and technical knowledge. The goal of NPS-RTCA is to provide the guidance needed to make community-led projects a success.

<https://www.nps.gov/orgs/rtca/index.htm>

Federal Lands Access Program (FLAP)

The Federal Lands Access Program (FLAP) was established to improve transportation facilities that provide access to, are adjacent to, or are located within Federal Lands. FLAP supplements local and state resources for public roads, transit systems, and other transportation facilities. There is an emphasis placed on high-use recreation sites and economic generators.

<https://highways.dot.gov/federal-lands/programs-access>



Utah Office of Outdoor Recreation Grant Programs – Utah Outdoor Recreation Grant (UORG) and Mini-Grant

The Utah Outdoor Recreation Grant (UORG) program is to help construct new outdoor recreation infrastructure projects that helps communities build recreation amenities that support local economic development. There are several tiers of grants that can be applied for based on the total project cost.

The general eligibility requirements include being an eligible applicant, the project must be open for public use, the project increases visitation to the area, and offers economic opportunities to the community to help attract or retain residents.

<https://business.utah.gov/outdoor/grants/>

Active Transportation Investment Fund (ATIF)

This is administered by UDOT annually for active transportation projects. Municipalities need to contact their local UDOT Region Planner for assistance in applying for these funds. Project applications are evaluated and selected by UDOT. There is not a maximum funding amount limit for projects in this fund.

<https://projectprioritization.udot.utah.gov/nominations>

New Development

One way to add active transportation infrastructure and improvements is through new development. This active transportation plan includes planned trails and connections in areas of the city that are undeveloped. Many of these planned trails come from plans for these areas that the city has adopted previously. This allows the city to negotiate with developers to provide the planned active transportation infrastructure within their development boundaries in exchange for other considerations, such as density. In this way, new sections of the active transportation network can be added as new development occurs at lower cost to the taxpayers, and the active transportation network can be kept coherent and consistent throughout the city.

Leveraging Multiple Funding Sources

When seeking funding for projects, it can be helpful to diversify the grants and other funding sources that the City applies for in order to minimize local costs and maximize project benefits. For example, many grants require a certain percentage of funds to be matched with local funds, but if projects are coordinated with UDOT and WFRC, funding that those agencies apply to their jurisdiction may be eligible to be counted as local funding for the City's portion of the project.

Interagency Coordination

Bluffdale has an opportunity to partner with UDOT and other agencies when implementing this active transportation plan. Many projects are located on or will connect to facilities owned by other agencies; examples include the projects that provide access to the future FrontRunner station, or Welby-Jacobs Canal Trail, which will run along the border with Herriman and will be designed and constructed by UDOT as part of the UTN. Relevant agencies for each project are included in **Table 9** through **Table 11** in the implementation plan.

VIII. NEXT STEPS

Performance Measures

Active Transportation Crash Data and Causes

Because of Bluffdale’s small size and the relative infrequency of active transportation crashes at only a few per year, the active transportation crash rate can be a difficult measure to rely on. 2 crashes in one year where there were 4 the previous year constitutes a 50% reduction, but could really be the result of chance and human decisions rather than a meaningful change in infrastructure design and policy.

Although this is the case, a goal of no severe crashes and fewer total crashes is important to have. Monitoring crashes on an ongoing basis will help the City understand where the next-most pressing issues lie and can be an opportunity to see measurable results from improvements made. However, it should be understood that increasing the number of active transportation users on the roadway through infrastructure improvements that invite use may also result in an increase in crashes. If this is the case, it is especially important to be flexible and rectify deficiencies in design, while also leaving room for human error. Ongoing count data collected on trails and pathways can be useful for correlating increases or decreases in crashes with changes in the number of users on the network.

Count Data

As discussed earlier, collecting data on the number of people using trails is valuable for directing further investment. While it can be difficult to find room in a City’s general budget to acquire automated counters, a counter or two represents a small fraction of the cost to construct a trail, so **an easy way to build up the City’s inventory is to add counter acquisition to each trail project as it enters the design phase.**

Salt Lake County and other agencies in the state currently use trail counters from [Eco-Counter](#). These can be made inconspicuous — just a simple metal post with a small hole for an infrared sensor (see [Figure 56](#)) — and using them will allow the City to easily share their data with neighboring jurisdictions and vice-versa. The counters are relatively portable, so the City can make a few counters go a long way by rotating their location throughout the peak season. They also have the option to connect to in-trail sensors that detect wheels passing over, allowing bikes and pedestrians to be counted separately. This requires some saw cuts to isolate a small piece of pavement to attach to the sensor, which can concentrate stresses on the edges and accelerate deterioration, so these locations will likely need patching and crack sealing more often.



FIGURE 56: Trail Counter Example

Public Surveys and Walking Audits

Public surveys are an excellent way to assess how well the City is addressing residents’ needs as they carry out plans. A survey like the one conducted for the PTROS Plan can be performed every 3-5 years or to avoid survey fatigue and conserve City resources.

A more frequent opportunity to engage with the community will be found in enlisting the Healthy Bluffdale Coalition to conduct yearly walking audits of the trail network. The walking audit worksheet will be made available on the City’s website together with the existing and future active transportation maps. Coalition members will be able to freely download the worksheet and coordinate walks of the whole trail network in the spring, allowing a high-level look at how well the maintenance schedule is addressing concerns and removing some of the burden for inspection from City staff.

Summary of Recommendations

In summary, the Bluffdale Active Transportation Plan makes the following recommendations for immediate action by the City:

- Institute a proactive safety policy, including implementing the changes recommended in the Active Transportation Safety Analysis.
 - Continue monitoring crash data as changes are put in place and adjust approach if necessary.
- Adopt minimum standards for new active transportation crossings as defined in [Tables 4](#) and [5](#). The standards should include a recommendation to consider treatments beyond the minimum to maximize comfort where feasible.
- Adopt a set of bike parking requirements for development in order to facilitate a complete and accessible bicycle network.
 - Encourage existing developments to add bike racks where needed. A program modelled after the Salt Lake City “Request a Bike Rack” scheme could help the City select locations and engage with the public.
- Develop wayfinding guidelines for City-owned trails and on-street bike routes that match the Jordan River Trail standards in style and functionality.
- As discussed in the [Equestrian Trails](#) section, design parallel equestrian tracks next to trails where feasible and appropriate. Use signage and education to inform users of proper etiquette when passing horses on the trail.
- As discussed in the section on E-Bikes and Motorized Mobility Devices, implement safety measures on paved trails to manage user speeds and help users share the space respectfully.
- Establish a minimum frequency to place restrooms and other amenities along trails.
- Work with the Healthy Bluffdale Coalition to conduct yearly walking audits of the trail network and other locations of concern.
- Design street lighting at crosswalks using the principles discussed in the Lighting section of this plan.
- Integrate the cost of trail counter acquisition into trail construction projects to build up an inventory of automated counters.
- Adopt the maintenance schedule defined in [Table 3](#) together with the other recommendations made in the Maintenance section of this plan.
- Develop a Complete Streets policy as part of the upcoming transportation master plan.
- From the Implementation Plan:
 - Ensure that appropriate active transportation facilities are installed together with all new roadway projects, including the “High Opportunity” trail projects and other active transportation projects recommended in this ATP.
 - Use the concept reports prepared as part of this ATP’s development to apply for funding for the two highest-priority projects identified in the Implementation plan:
 - **#R2-20:** Welby-Jacobs Canal Trail South - Her-ri-man/Bluffdale
 - **#A-S-106:** Rose Creek Trail
 - Plan to set aside funding each year for the implementation of the recommended projects in this plan, including safety improvements, sidewalk improvements, on-street bicycle facilities, shared use paths, and new active transportation crossings.
 - Establish regular interdepartmental meetings to coordinate on trail maintenance and construction, parks and trailhead amenities, on-street facility and crossing construction, and other areas discussed in this plan.
 - Capitalize on roadway maintenance projects to improve on-street bicycle facilities and crossings

APPENDICES

Appendix A — WFRC CSAP Projects

Appendix B — Count Data

Appendix C — Walking Audits

Appendix D — Stakeholder Meeting Feedback

Appendix E — Online Survey Feedback

Appendix F — Project Cost Assumptions

Appendix G — Priority Scoring Breakdown

APPENDIX A

— WFRC CSAP Projects

Project Description/How is safety improved?

While this segment extends from Camp Williams Road/SR 68 to I-15, City of Bluffdale is already improving a large portion of this segment from the Jordan River Parkway to the 1000 W roundabout. The underway construction will remove the S-curve under the railroad and construct a new bridge under the railroad. It is proposed that other segments be improved with wider shoulders to allow for the installation of a buffered bicycle lane. It is also recommended that sidewalk infill be included in this project. The Jordan River Parkway Crossing should be upgraded to a high visibility crossing.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Proposed Proven Safety Countermeasures



Bicycle Lanes



Crosswalk
Visibility
Enhancements



Walkways



Wider Edge
Lines

Opinion of Probable Construction Cost

Segment Improvements

Item Description	CMF	Applicable Crashes	Quantity	Unit	Unit Price	Item Cost
Install Sidewalk or Walkways	NA	Pedestrian	1.31	MILE	\$ 634,000	\$ 830,540
Shoulder Widening on Rural Roads	0.771	All Crashes	0.90	MILE	\$ 32,000	\$ 28,800
Traffic Calming - Lane Narrowing	0.68	All Crashes	1.47	MILE	\$ 39,000	\$ 57,330
Install Buffered Bicycle Lane	NA	Bicycle	1.47	MILE	\$ 26,000	\$ 38,220
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

Intersection Improvements

Item Description	CMF	Applicable Crashes	Quantity	Unit	Unit Price	Item Cost
Upgrade Existing Crosswalk to High-Visibility Crosswalk	0.6 - 0.75	Pedestrian	1.00	XING	\$ 37,000	\$ 37,000
Perform an Intersection Control Evaluation and Implement	NA	All Crashes	1.00	INT	\$ 225,000	\$ 225,000
Install Pedestrian Hybrid Beacons (PHB) or HAWK	0.453	Pedestrian	1.00	EACH	\$ 200,000	\$ 200,000
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

Improvements Subtotal:	\$	1,416,890
Mobilization: (% +/-)*	10%	\$ 75,000
Traffic Control: (% +/-)	5%	\$ 70,845
Items Not Estimated / Contingency: (% +/-)	40%	\$ 566,756
Estimated Construction Cost:	\$	2,129,491

Local Match[†]: 20% \$ 541,000

[†] Toward SS4A Implementation Grants

Preconstruction Engineering/Design	12%	\$ 255,539
Utilities**		\$ -
ROW**		\$ -
Construction Engineering/Management	15%	\$ 319,424
Estimated Project Total:		\$ 2,705,000

*Mobilization is 10% +/- of the subtotal with a minimum of \$2,500 and a maximum of \$75,000

**To be evaluated during feasibility study/design

Additional Potential Improvements

Additional safety improvements could be considered that were not included due to availability of data, need for site-specific information, and/or agency/jurisdiction input. Potential additional countermeasures are listed below. Refer to the **Countermeasure Toolbox** for a complete list of safety countermeasures.

- Additional Improvements #1: _____
- Additional Improvements #2: _____
- Additional Improvements #3: _____
- Additional Improvements #4: _____
- Additional Improvements #5: _____

Disclaimer:

Disclaimer: The cost estimates provided in this document are for comparison purposes only. Actual project costs will vary. The recommended safety improvement strategies were based on available data and reasonable engineering judgment and a more detailed assessment may suggest additional safety strategies that could be considered.

APPENDIX B

— Count Data

TABLE B-1: TRAIL UTILIZATION DATA FROM TRAILS IN SOUTHWESTERN SALT LAKE COUNTY

Site	Jordan River Trail - 10600 South	Jordan River Trail - 7800 South	Mountain View Corridor Trail - Daybreak
2024 Total Users	425,044	454,123	40,487
Daily Average	1,436	1,534	137
Weekday Average	1,378	1,470	133
Weekend-day Average	1,581	1,697	148
Daily Median	806	1,155	110
Peak Daily Traffic	9,743	8,017	1,008
Peak Day	Wed July 17, 2024	Mon July 29, 2024	Fri August 30, 2024
Overall Peak Day of the Week	Saturday	Saturday	Saturday



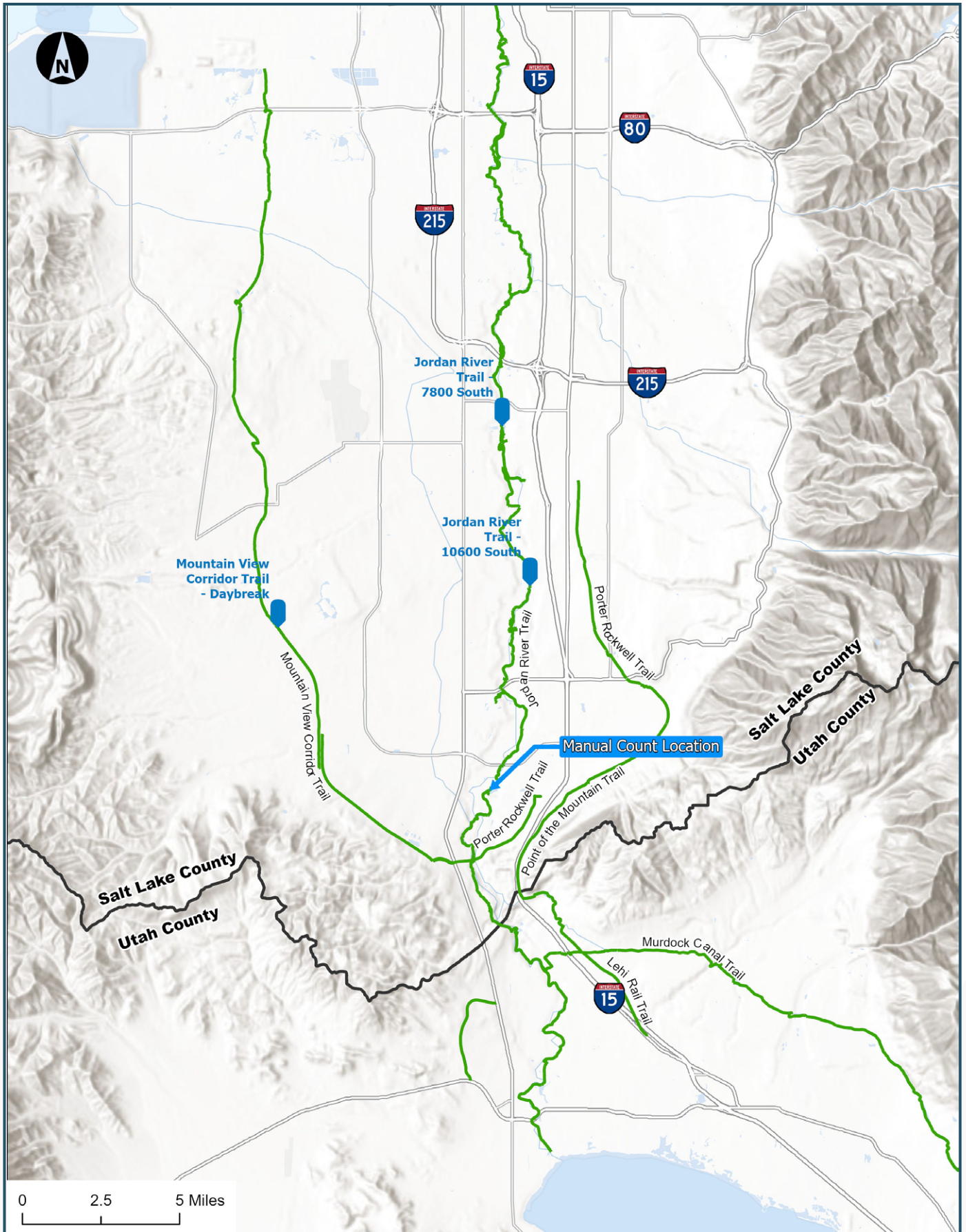
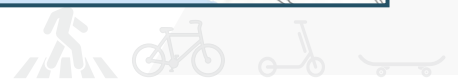


FIGURE B-1: Paved Trail Count Locations



Paved Trail Count Data

Jordan River Parkway Trail; 410 feet north of Spring View Farms Trailhead

Collected: WCG - Saturday, April 26

Time	Ped		Bike		Total
	NB	SB	NB	SB	
00:00-08:45	24	11	5	3	43
08:45	1	3	2	0	6
09:00	3	2	2	0	7
09:15	1	1	0	0	2
09:30	2	4	1	2	9
09:45	3	0	0	2	5
10:00	3	0	4	0	7
10:15	0	1	0	0	1
10:15	8	3	0	0	11
10:30	0	1	1	4	6
10:45	1	1	4	3	9
11:00	1	2	1	0	4
11:15	4	4	5	2	15
11:30	6	2	4	5	17
11:45	2	4	0	4	10
12:00	1	0	6	4	11
12:15	0	0	0	8	8
12:30	0	0	1	1	2
12:45	2	0	2	0	4
13:00	1	0	1	1	3
13:15	2	0	0	2	4
13:30	2	1	0	0	3
13:45	0	2	0	1	3
14:00	0	2	0	2	4
14:15	2	2	2	0	6
14:30	3	2	1	0	6
14:45	3	1	2	0	6
15:00	3	1	1	0	5
15:15	1	0	0	0	1
15:30	3	0	0	0	3
15:45	2	0	0	1	3
16:00	3	2	0	1	6
16:15	2	2	0	0	4
16:30	3	2	3	1	9
16:45	2	2	0	1	5
17:00	2	3	0	1	6
17:15	2	0	3	0	5
17:30	7	2	2	0	11
17:45	3	1	0	1	5
18:00	1	0	1	3	5

18:15	0	1	0	5	6
18:30	2	2	2	2	8
18:45	0	1	3	4	8
19:00	3	4	3	2	12
19:15	1	2	0	0	3
19:30	5	2	2	0	9
19:45	0	0	3	0	3
20:00	3	0	0	0	3
20:15	2	0	0	0	2
20:30	0	0	0	0	0
20:45	0	0	0	0	0
21:00	0	0	0	0	0
21:15	0	0	0	1	1
21:30	0	0	1	2	3
21:45	0	0	0	0	0
22:00	0	0	0	0	0
22:15	0	0	1	1	2
Total	125	76	69	70	NB SB
					194 146

APPENDIX C

— Walking Audits

Route start location: _____

Audit date: _____ Start time: _____ End time: _____

The route has:

- | | | |
|---|--|--|
| <input type="checkbox"/> Wayfinding signage | <input type="checkbox"/> On-street bicycle lanes | <input type="checkbox"/> A paved surface |
| <input type="checkbox"/> Lane markings on any paved paths | <input type="checkbox"/> A walkway on both sides of the street | <input type="checkbox"/> A natural surface |
| <input type="checkbox"/> Signage defining who yields to who | <input type="checkbox"/> Clear access points where needed | <input type="checkbox"/> All street crossings are clearly marked |

Please answer the questions below by circling “Yes” or “No”. Please offer additional explanation as needed (i.e. if an answer to any question is “No”) in the provided space on the back of the page.

1. If the path is located adjacent to a roadway, does the buffer (e.g. landscaping, a fence, a barrier, or just a curb) provide an adequate feeling of separation from traffic? **(Yes / No)**
2. Is the path in good condition, without cracks or raised sections (e.g., tree roots, potholes)? **(Yes / No)**
3. Is the path free of obstacles (hydrants, utility poles, overgrown landscaping, trash receptacles)? **(Yes / No)**
4. Are all links and access points open and accessible? If not, what is the location of any that are blocked off or gated? **(Yes / No)**
5. Is it easy to access or leave the path where you **want** to? Are there locations where you wish there were more access points or connections? **(Yes / No)**
6. Is the path free of interruptions from driveways (such as to/from homes, parking, etc.)? If not, how frequent are they? Do you feel comfortable crossing them? What could be done to improve comfort at these conflict points? **(Yes / No)**
7. Is the path continuous (no segments are missing) and complete (it doesn't randomly end)? **(Yes / No)**
8. Is the path wide enough (at least 10 feet) for two people to walk side by side and for oncoming path users to pass? **(Yes / No)**
9. In general, does the path feel easily accessible for people with vision impairments, people in wheelchairs, or those with other accessibility needs? What could be improved? **(Yes / No)**
10. Do you feel that wayfinding signage is adequate and easy to understand? If not, what could be done to improve it? **(Yes / No)**
11. Does the path have a visible and/or protected crossing (e.g., tunnel or bridge) wherever it is interrupted by a street? Please comment below on how

Route 1



Fat Cats Bluffdale

154

S 1300 W

Charmed Life Sewing

Redwood Rd

14000 S

14000 S

Mommy and Me Pups

154

Mountain Point Equine Hospital

Loumis Pkwy

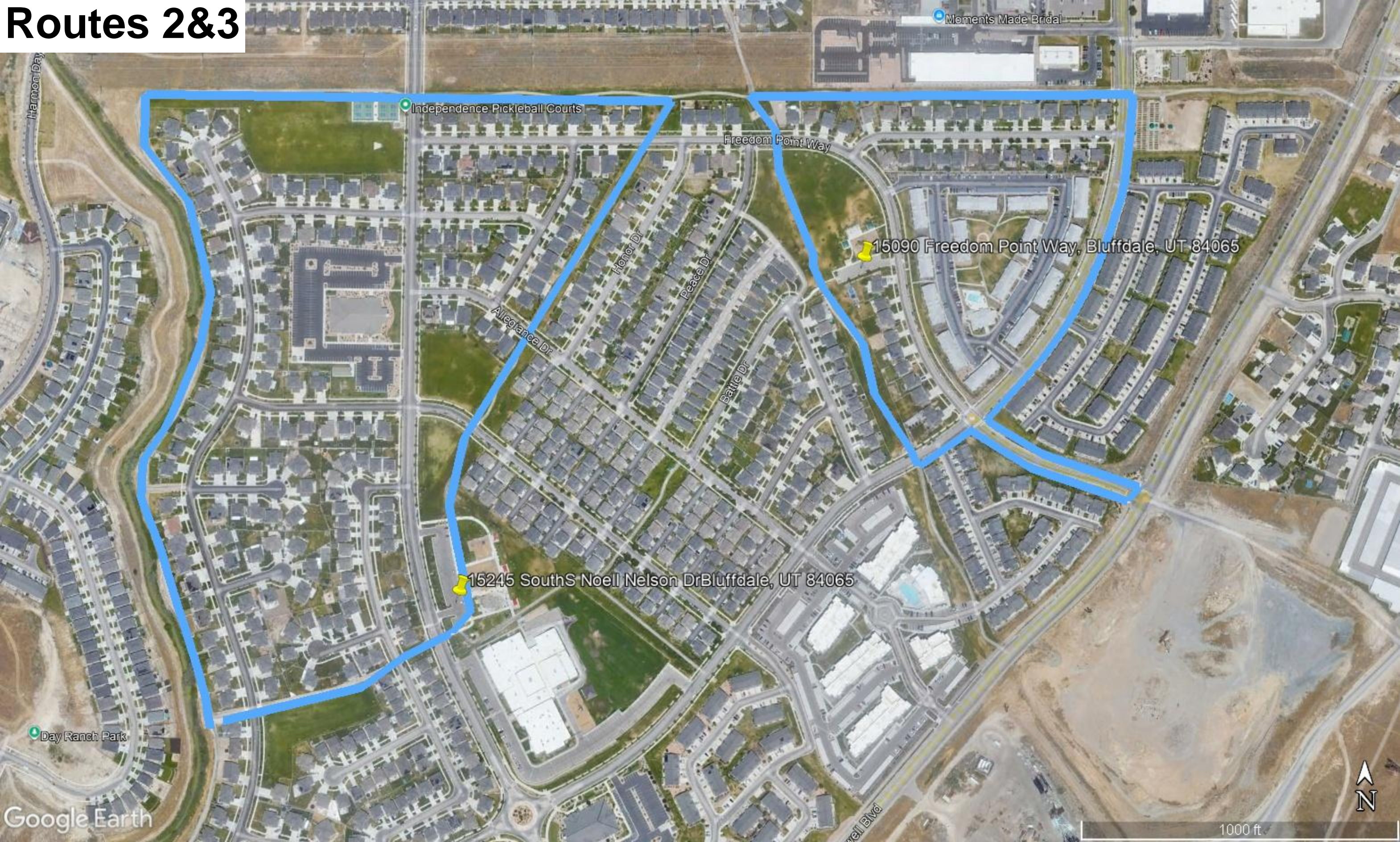
14160 Loumis Pkwy Bluffdale, UT 84065

Randy's Tire and Muffler



1000 ft

Routes 2&3



Moments Made Bridal

Independence Pickleball Courts

Freedom Point Way

15090 Freedom Point Way, Bluffdale, UT 84065

15245 South Noel Nelson Dr, Bluffdale, UT 84065

Day Ranch Park

Google Earth

1000 ft



Route start location: Vintage Park

Audit date: _____ Start time: _____ End time: _____

The route has:

- | | | |
|---|--|--|
| <input type="checkbox"/> Wayfinding signage | <input type="checkbox"/> On-street bicycle lanes | <input type="checkbox"/> A paved surface |
| <input type="checkbox"/> Lane markings on any paved paths | <input type="checkbox"/> A walkway on both sides of the street | <input type="checkbox"/> A natural surface |
| <input type="checkbox"/> Signage defining who yields to who | <input type="checkbox"/> Clear access points where needed | <input type="checkbox"/> All street crossings are clearly marked |

Please answer the questions below by circling "Yes" or "No". Please offer additional explanation as needed (i.e. if an answer to any question is "No") in the provided space on the back of the page.

1. If the path is located adjacent to a roadway, does the buffer (e.g. landscaping, a fence, a barrier, or just a curb) provide an adequate feeling of separation from traffic? (Yes / No)
2. Is the path in good condition, without cracks or raised sections (e.g., tree roots, potholes)? (Yes / No) Dirty
3. Is the path free of obstacles (hydrants, utility poles, overgrown landscaping, trash receptacles)? (Yes / No)
4. Are all links and access points open and accessible? If not, what is the location of any that are blocked off or gated? (Yes / No)
5. Is it easy to access or leave the path where you want to? Are there locations where you wish there were more access points or connections? (Yes / No)
6. Is the path free of interruptions from driveways (such as to/from homes, parking, etc.)? If not, how frequent are they? Do you feel comfortable crossing them? What could be done to improve comfort at these conflict points? (Yes / No)
7. Is the path continuous (no segments are missing) and complete (it doesn't randomly end)? (Yes / No)
8. Is the path wide enough (at least 10 feet) for two people to walk side by side and for oncoming path users to pass? (Yes / No)
9. In general, does the path feel easily accessible for people with vision impairments, people in wheelchairs, or those with other accessibility needs? What could be improved? (Yes / No)
10. Do you feel that wayfinding signage is adequate and easy to understand? If not, what could be done to improve it? (Yes / No)
11. Does the path have a visible and/or protected crossing (e.g., tunnel or bridge) wherever it is interrupted by a street? Please comment below on how

Dirty trail

crossing: beacon around corner for sight distance
SideWalk on all sides

comfortable you feel when using these crossings. What could improve the experience? (Yes / No)

12. If there are sheer edges or drop-offs (other than curbs, i.e. river banks), do you feel that they have adequate guard rails or barriers? (Yes / No)

13. Does the path provide adequate space and visibility so that walkers can comfortably share the path with runners, bicyclists and other faster users? Do you have specific concerns? (Yes / No)

Please provide notes and observations below, along with any other suggestions you have:

Connect side walk to road at apartments

Nice that path dips down

connecting between two paths
garbage cans

Choice points at Salmon caddis dr.

APPENDIX D

— Stakeholder Meeting Feedback

Legend

- City Boundary
- Shared Use Paths
- Existing
- Existing Bike Facilities
- New Surface Bike Lane
- Bike Lane
- Greater Bikeway

0 0.5 1 Miles



County Canal Trail

City

City

APPENDIX E

— Online Survey Feedback

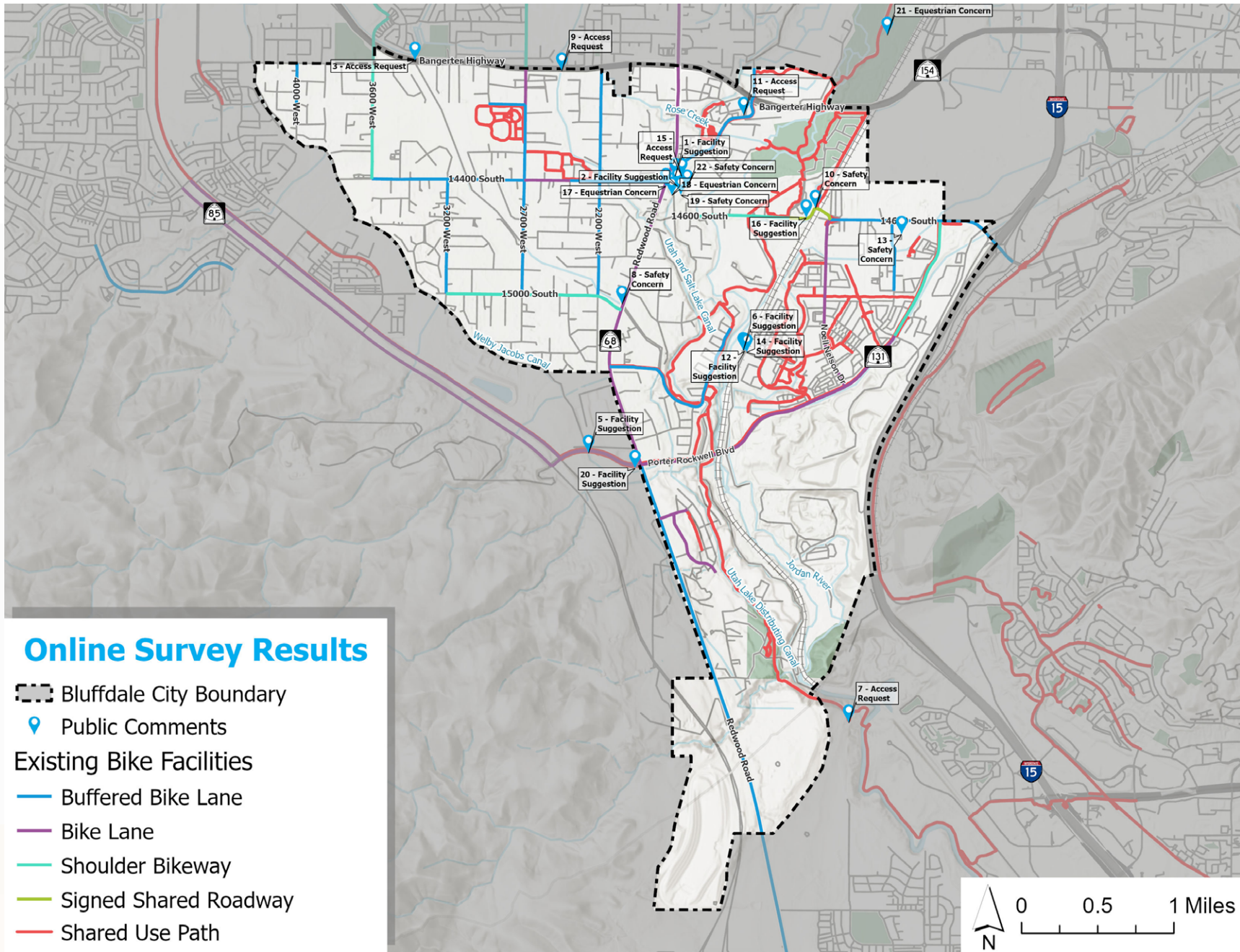


FIGURE E-1: Community Feedback



TABLE E-1: PUBLIC SURVEY RESPONSES

Comment ID	Comment	Response
1	Expand/replace sidewalk to match paved trail along this roadway.	Addressed in planned projects .
2	Something connecting the independence neighborhood to Jordan River more directly	Addressed in planned projects .
3	These canal trails are the best for active transportation and recreation for walkers, runners and bikers. It would be amazing to have a tunnel here to get under bangerter and continue on the canal trail north.	Addressed in planned projects .
4	Make this great canal trail accessible from here at 12800 S all the way to where 1300 W intersects with Lovers Lane. It would be a great way to connect people from the jordan river trail into the canal network going north.	Addressed in planned projects .
5	Develop this canal trail from porter rockwell to as far south as you can go within the city boundaries.	Addressed in planned projects .
6	Make an accessible trail connection here from these neighborhoods to 1300 W and the jordan river trail network. So little is required to make this another place to jump on or off the trail network.	Addressed in planned projects .
7	Open access to this trail southward to 2700 N in Lehi.	Addressed in planned projects .
8	I love commuting on this canal trail, but it would be super nice to have an easier way to cross redwood. Why not simply add a cross walk here?	Addressed in planned projects .
9	Prioritize active transportation routes, here is another great canal trail that can be used for active transport and recreation, but it has been dead ended again. Make a tunnel to give access to have this trail connected and continued.	Addressed in planned projects .
10	It's too narrow to safely bike. A car not paying attention will squash you into a concrete barrier. We need a way to bike from the north side of Independence to the Jordan River Trail.	Addressed in planned projects .
11	Bike access through here is needed. The apartment complex has a barrier to prevent through traffic, and it also blocks bikes. I want to ride my bike to patronize these businesses (costa Vida, send my teens to fatcats, etc), but you can't get there from the Jordan River Trail without biking on Redwood Road, which I'm not comfortable doing.	Addressed in planned projects - Rose Creek Trail and South Jordan Canal Trail.
12	These neighborhoods need an safe and accessible way to access the trail system. The lower neighborhoods have two large hills that make it hard to bike, walk, or skate out of. People with disability's would have even a harder time. To access the parkway via the road we would have to travel up to a mile and a half and walk under the one lane bridge.	Addressed in planned projects .
13	146th South needs a buffered bike way and sidewalks. There is not enough room on the road for cars and bikes and I see people trying to walk or bike right on the edge so close to traffic. 146th South needs to be completely redone.	Addressed in planned projects .
14	I want a way to connect the Day Ranch neighborhood to the Jordan River Trail.	Addressed in planned projects .
15	I live off 27th West near Wardle Fields. I love to walk the canal roads near me. I see wildlife and it is like being out in nature rather than the city. However, I see no trespassing signs on the canal roads. Is it ok to walk there?	Until public easements are negotiated along canal roads with safety measures installed along canal channels, members of the public should exercise caution around the channels and recreate at their own risk.
16	Keep one way bridge after construction of canal and improved rail crossing for bike, pedestrian traffic, and publics works access and connect with Phillip gates memorial park.	This suggestion has been noted for consideration as planning for this crossing progresses.
17	We moved to Bluffdale about 5 years ago. When I saw your logo with a horse head on it I thought this would be a horse friendly city with trails. I soon found that this city has no trails for horses that are safe. With all the bike trails I have found that most bike riders have no understanding of horses and how to be around horses. I have found that most automobiles and bikes don't understand that you can't right up behind a horse or they go speeding by them. I have had my horses freak out when riding which could have been very dangerous. Is there anyway, since you tout horses on your logo that you could put safe trails where bikers are not aloud or at least you have signs they teach how to be polite around horses. I hate to always have to trailer out of the city to ride but that is the only safe place I can ride. I know there are a lot of horse people still in the city and they would appreciate a trail that would be safe. We moved here for more property and to have our horses.	See the section of this report on Equestrian Trails for plans and best practices the City plans to adopt relating to equestrian facilities.
18	This is XXX on Rock Hollow Rd. I would be happy to help or speak to someone about safe horse trails in Bluffdale. With the horse head on your logo I thought this town would be more horse friendly. Bike riders are extremely rude and cars have no idea out to safely pass on the street. I would love some safe riding trails around the city or up to an area where we can ride. Thank you. Please contact me.	See the section of this report on Equestrian Trails .
19	"I frequent the JRT, riding my human powered bike to the N and S. This is an incredible and safe alternative to riding on roads that are life-threatening. The JRT needs maintenance - patching cracks across the trail and keeping weeds down along the trailsides to keep thorns away from the paved surface. Also, there are nasty ""steps"" as the trail transitions from asphalt to concrete at the bridges over canals and the Jordan River. These are dangerous and annoying!Something that's missing is way to get from one side of I-15 to the other in Bluffdale, without having to ride a road even one with a marked bike lane which is the only option now. 14600 S is rideable but has a lot of traffic and will become more crowded in the future and will be under construction as well. The underpass at I15 is laden with gravel, debris, heavy trucks and other vehicles, making is treacherous on a good day. A bike lane off the road would work. Redwood and Mtn View also need off-road bike lanes to be safe."	Addressed in planned projects and in the maintenance plan .
20	Need walkable space from Redwood to King Courts going up Porter Rockwell	Addressed in planned projects .
21	"More non-paved sections of the trail. There are sort of small horse trails and parts of the trail that have a dirt or wood chip shoulder. It would be great to have a dirt option right next to the paved option. This option helps to reduce impact to the knees while running. "	See the section of this report on Equestrian Trails .
22	We need more crosswalks on Porter Rockwell and Redwood, it's dangerous to walk with all the construction debris. Also toward the end of Redwood on the boarder of Utah County it feels dangerous because the road is so neglected compared to the shopping district by the highway.	Addressed in planned projects .

APPENDIX F

— Project Cost Assumptions

Type	Code	2023 Cost/Mile or Unit	Notes	2025 Cost
Shoulder Bikeway	3A	\$63,266		\$66,668
Bike Lane	2B	\$126,532	Simple; restripe	\$133,337
Neighborhood Byway	3C	\$63,266	Matched with bike boulevard	\$66,668
Buffered Bike Lane	2A	\$189,798		\$200,005
Protected Bike Lane	1	\$1,265,319		\$1,333,369
Shared Use Path	PP	\$1,222,907		\$1,288,676
Trail	PU	\$259,770		\$273,741
Crossing At-Grade	CA	\$200,000	For pedestrian hybrid beacon or related treatments only.	\$210,756
Crossing Overhead	CS	\$6,326,595		\$6,666,843
Crossing Underpass	CS	\$3,600,000		\$3,793,610
Crossing Unknown	CS	\$4,963,298	Average of Under and Over	\$5,230,227
Future Study Needed	UN	\$100,000	Random cost as placeholder	\$105,378
Bike Boulevard	3	\$63,266	Matched with neighborhood byway	\$66,668
Shared Lane	3B	\$22,776		\$24,001
Sidepath	PP	\$1,222,907	Same as multi-use pathway	\$1,288,676
Phased Implementation	UN	\$126,532		\$133,337
Bike Lane - complex	-	\$500,000	Complex; pavement widening or c/g change	\$526,890
Waterway Bridge (Prefabricated)*	-	-	Conservatively high per-foot cost of \$3,000 based on vendor websites. Assume 35-foot span over a canal or river. Total cost in line with recent bridges ordered by the City.	\$105,000
Marked Crosswalk with Signage	-	\$16,794	Including markings, overhead lighting, and post-mounted signage.	\$17,697
Rectangular Rapid Flashing Beacon	-	\$31,382	Including markings, overhead lighting, and post-mounted signage and beacon.	\$33,070
Bulbouts	-	\$35,214	Assuming two curb extensions per crossing.	\$37,108
*Excluding this treatment, all other costs were sourced from the 2023 WFRC RTP or other WFRC resources and inflated to the current year (2025)				

APPENDIX G

— Priority Scoring Breakdown

On-Street Facilities																	
Project ID	Project Name	Facility Type	Length (MI)	Public Feedback	Safety	Local Network	Regional Network	Parks and Rec	Schools	Transit	Key Destinations	Latent Demand	LTS Score	Priority	Cost	Jurisdiction	Regional/Local
OS-2	14600 S Cycle Tracks	SB Bike Lane	0.06	2	8	2	6	8	0	4	4	6	6	43	\$2,853,409	UDOT	Regional
OS-1	Heritage Crest Way Bike Lanes	SB Bike Lane	0.64	1	8	4	0	8	8	0	0	6	6	41	\$88,462	Buffalo	Local
OS-26	North Nelson Dr Buffered Bike Lanes	SB Buffered bike lane	1.14	1	8	4	0	8	8	0	0	6	6	39	\$227,089	Buffalo	Local
OS-9	Pine Hollow Rd Bike Lanes	SB Bike Lane	0.54	1	8	4	0	8	0	0	0	6	6	28	\$69,078	Buffalo	Local
OS-8	15800 S Bike Lanes	SB Bike Lane	0.75	1	8	0	6	0	0	2	2	6	6	26	\$29,569	Buffalo	Local
OS-8a	15800 S Protected Bike Lanes	SB Curb-protected bike lane	0.75	1	8	0	6	0	0	2	2	6	6	26	\$3,718,110	Buffalo, Inverton	Regional
OS-7	Iron Horse Blvd Bike Lanes	SB Bike Lane	0.87	1	8	4	0	8	0	0	0	6	6	26	\$103,742	Buffalo	Regional
OS-3	Freedom Point Way Bike Lane	SB Bike Lane	0.23	1	0	4	0	8	0	0	0	6	6	25	\$78,391	Buffalo	Local
OS-6	2100 W Bike Lanes	SB Bike Lane	0.53	1	0	4	0	4	0	2	2	6	6	23	\$31,290	Buffalo	Local
OS-29	3201 S Bike Lanes	SB Bike Lane	0.63	0	0	0	0	4	0	4	0	6	6	23	\$61,316	Buffalo, Draper	Regional
OS-5	Porter Rockwell Blvd Buffered Bike Lanes	SB Buffered bike lane	0.15	1	8	0	6	0	0	0	2	6	0	23	\$555,799	UDOT	Regional
OS-4	Redwood Road Buffered Bike Lane	SB Buffered bike lane	2.73	1	8	0	0	0	0	0	0	6	6	21	\$469,877	Buffalo	Local
OS-11	14610 S Extension and Bike Lanes	SB Bike Lane	0.76	1	0	4	0	4	0	2	2	6	6	20	\$103,477	Buffalo	Local
OS-12	4600 W Buffered Bike Lanes	SB Buffered bike lane	0.09	1	0	2	0	0	0	2	0	6	6	19	\$11,657	Buffalo	Regional
OS-10	3200 W Bike Lanes	SB Bike Lane	1.05	1	0	0	6	0	0	0	2	6	6	18	\$146,362	Buffalo, Draper	Regional
OS-14	3200 W Bike Lanes	SB Bike Lane	1.05	1	0	4	0	4	0	0	2	6	6	17	\$71,844	Buffalo	Regional
OS-15	17000 S Bike Lanes	SB Bike Lane	0.24	1	0	4	0	0	0	2	2	6	6	16	\$32,962	Buffalo	Local
OS-10	Brughart Blvd Bike Lanes	SB Bike Lane	0.35	1	0	2	0	4	0	0	0	6	6	16	\$196,114	Buffalo	Local
OS-16	15000 S Bike Lanes	SB Bike Lane	1.18	1	0	4	0	0	0	0	3	6	6	11	\$156,963	Buffalo	Local
OS-17	Beach Blvd Bike Lanes	SB Bike Lane	0.40	1	0	4	0	0	0	0	0	6	6	11	\$59,851	Buffalo	Local
OS-18	17000 S Bike Lanes	SB Buffered bike lane	1.52	1	0	2	0	4	0	0	0	6	6	10	\$304,155	Buffalo	Local
OS-22	Street PR Roads - Bike Lanes	SB Bike Lane	0.16	1	0	2	0	0	0	0	0	6	6	9	\$21,363	Buffalo	Local
OS-21	Heritage Crest Way Bike Lanes	SB Bike Lane	0.45	1	0	0	6	0	0	2	0	6	6	9	\$55,007	Buffalo, Draper	Regional
OS-20	North Nelson Dr Bike Lanes	SB Bike Lane	0.44	1	0	2	0	0	0	0	0	6	6	9	\$59,225	Buffalo	Local
OS-23	Porter Express Dr Bike Lanes	SB Bike Lane	0.20	1	0	2	0	0	0	0	0	6	6	9	\$49,560	Buffalo	Local
OS-24	Street PR Roads - Bike Lanes	SB Bike Lane	1.13	1	0	2	0	0	0	0	0	6	6	6	\$174,792	Buffalo	Local

Shared Use Path Projects																	
Project ID	Project Name	Source Plan	Length (MI)	Public Feedback	Safety	Local Network	Regional Network	Parks and Rec	Schools	Transit	Key Destinations	Latent Demand	LTS Score	Value Score	Ease of Row Score	Compliance Score	Estimated Cost
SP-10	Jordan and Salt Lake City Canal Trail	NRFC	0	1,23	0	8	0	8	0	0	0	0	0	0	0	0	\$1,554,263
A-5-186	Point of the Mountain Transit East Path	Buffalo PFRS	1.63	1	0	0	6	8	0	4	4	6	6	35	50	85	\$2,076,717
SP-11	The Point: Intermodal Connection	Buffalo PFRS	0.80	1	0	0	6	8	0	4	4	6	6	35	50	85	\$2,076,717
SP-12	The Point Trail	The Point Plan	0.55	1	0	0	6	8	0	4	4	6	6	35	50	85	\$706,438
SP-17	14600 S to Intermodal Station Connection	Buffalo PFRS	0.08	2	0	4	6	4	0	4	2	6	6	31	50	81	\$101,940
SP-12	Porter Rockwell Trail - The Point	The Point Plan	0.35	0	0	0	6	8	0	0	0	6	6	30	50	80	\$443,131
SP-16	14610 S Sidewalk	NRFC	0.98	1	0	2	3	4	8	0	2	6	6	29	50	79	\$1,266,348
SP-18	Jordan Narrows Road Trail	Buffalo PFRS	0.62	1	8	0	6	8	0	0	0	6	6	29	40	69	\$296,948
SP-2	4600 W Sidewalk	Buffalo PFRS	0.76	1	0	6	0	8	0	0	0	6	6	29	40	69	\$627,970
SP-2	South Jordan Canal Trail - Louisa's Pkwy	Parks and Trails Plan	0.76	1	0	4	3	8	8	0	4	6	6	40	20	60	\$416,979
SP-6	East Jordan Canal Shared Use Connection	NRFC	0.24	1	0	4	6	8	0	0	0	6	6	34	20	64	\$307,288
A-5-109	East Jordan Canal Shared Use Path	NRFC	2.38	2	0	4	6	8	8	0	0	6	6	37	20	57	\$649,423
SP-49-38	Utah Salt Lake Canal Path	WaterView	2.94	2	0	2	6	8	0	0	2	6	6	32	20	52	\$403,088
SP-19	Utah Lake Distributing Canal Path	NRFC ATP	0.22	2	0	2	6	8	0	0	0	6	6	27	20	47	\$2,107,111
SP-1	14600 S Sidewalk	Buffalo PFRS	2.17	2	8	2	3	8	8	0	2	6	6	45	0	45	\$2,200,938
SP-3	15800 S Sidewalk	Buffalo PFRS	1.04	2	8	0	6	8	0	0	0	6	6	40	0	40	\$1,360,071
SP-5	1590 W Sidewalk	Buffalo PFRS	0.23	2	8	4	3	4	0	4	0	6	6	40	0	40	\$190,002
A-5-105	River Creek Trail	NRFC	2.44	1	8	0	6	8	0	4	4	6	6	40	0	40	\$4,725,000
SP-26	Jordan River Parkway Trail Connection at 1300 West	Buffalo PFRS	1.80	4	2	0	176	8	0	0	0	6	6	38	0	38	\$16,848,648
SP-26	West Side Powerline Corridor Path	Buffalo ATP	1.48	1	0	0	6	0	0	0	0	6	6	16	20	36	\$1,810,170
SP-9	1300 W Sidewalk - Condo Way to East Jordan Canal	Buffalo PFRS	0.25	2	0	4	3	8	8	0	0	6	6	34	0	34	\$122,680
SP-8	Iron Horse Blvd to 1300 W Connection	Buffalo PFRS	0.38	2	0	4	6	8	8	0	0	6	6	34	0	34	\$489,294
SP-11	Jordan River to Whibly Jacobs Connection	Buffalo PFRS	0.63	2	0	6	0	8	0	0	0	6	6	14	20	34	\$811,860
SP-10	Whibly Jacobs Canal Trail South - Hermitas/Bufuffal	NRFC	0.80	1	0	6	0	8	0	0	0	6	6	13	20	33	\$5,357,100
SP-27	Wood Hollow Path	Hermitas ATP	0.54	1	0	0	6	0	0	0	0	6	6	13	20	33	\$184,700
SP-30	Luh Connection	Luh Bike Plan	1.56	1	0	0	3	0	0	0	0	0	6	10	20	30	\$2,008,454
A-5-263	Point of the Mountain Connection	Buffalo PFRS	0.07	1	0	0	3	0	0	0	0	6	6	10	20	30	\$6,763,811
SP-14	Rock Hollow Dr Sidewalk	Buffalo PFRS	0.65	1	8	2	6	4	0	0	0	6	6	30	0	30	\$841,204
SP-15	3600 W Sidewalk	NRFC	0.94	1	0	2	6	4	0	0	2	6	6	30	0	30	\$1,179,988
A-5-305	Jordan Narrows	NRFC ATP	8	1	8	0	6	8	0	0	0	6	6	29	0	29	\$18,448,448
SP-20	3200 W Sidewalk	Buffalo PFRS	1.25	1	0	4	6	4	0	0	0	6	6	24	0	24	\$1,006,860
SP-21	14200 S Sidewalk	Buffalo PFRS	1.01	1	0	1	1	0	0	0	1	6	6	23	0	23	\$1,266,348
SP-22	Redwood Rd to Whibly Jacobs Connection	Buffalo PFRS	0.47	1	8	2	6	0	0	0	0	6	6	21	0	21	\$604,000
SP-24	3200 W Sidewalk	Buffalo PFRS	0.74	1	8	0	3	0	0	0	0	6	6	21	0	21	\$955,637
SP-25	15000 S Sidewalk	Buffalo PFRS	1.90	2	0	0	3	0	0	0	0	6	6	16	0	16	\$1,286,006
SP-23	15000 S Sidewalk	Buffalo PFRS	0.11	2	0	0	3	0	0	0	2	6	6	13	0	13	\$144,138
SP-28	Whibly Jacobs to Jordan River Parkway Connection	Buffalo PFRS	0.42	1	0	6	6	0	0	0	0	6	6	13	0	13	\$530,063

Crossing and Intersection Projects																	
Project ID	Project Name	Description	Scope	Source	Public Feedback	Safety	Local Network	Regional Network	Parks and Rec	Schools	Transit	Key Destinations	Latent Demand	LTS Score	Priority	Cost	
AC-11	14600 S and Porter Rockwell Blvd Crossing	Improved Crossing for Multiple Train	NRFC ATP	Buffalo ATP	2	8	0	6	8	0	0	4	6	6	44		
A-5-264	14600 South Railroad Structure @ Front/Lanner Railroad	Roadway Culvert	Grade Separated Crossing	NRFC ATP	2	8	0	6	8	0	0	4	6	6	44	\$18,930,000	
A-5-378	Perry Farms to Independence Overhead Crossing	Overhead Pedestrian / Bike Crossing	Grade Separated Crossing	NRFC ATP	2	8	0	3	4	0	0	6	6	6	35	\$666,843	
AC-4	Front/Lanner Station Bridge	Grade Separated Crossing / Bike Crossing	Grade Separated Crossing	Parks and Trails MP	1	0	0	6	8	4	0	6	6	31	0	\$6,666,844	
AC-30	Jordan River to Whibly Jacobs Underpass	Underpass	Grade Separated Crossing	Buffalo ATP	2	8	0	6	4	0	0	6	6	6	29	\$758,610	
A-5-377	Jordan River Parkway Underground Crossing	Underpass	Grade Separated Crossing	NRFC RTP	2	8	0	3	8	0	0	6	6	27	\$3,793,610		
AC-11	Independence Trail/Independence Courts Crossing	Bangor, Add Bulbouts, RFB	Crossing Improvement	Buffalo ATP	2	8	2	0	4	0	0	6	6	3	25	\$919,188	
AC-8	Independence Trail & Heritage Crest Way	Markings, RFB, Bulbouts	Crossing Improvement	Buffalo ATP	2	8	2	0	4	0	0	6	6	3	25	\$70,178	
AC-9	Independence Trail & Minors Road	Markings, signage	Crossing Improvement	Buffalo ATP	2	8	2	0	4	0	0	6	6	3	25	\$199	
AC-10	Independence Trail & Old Point Way	Markings, signage	Crossing Improvement	Buffalo ATP	2	8	2	0	4	0	0	6	6	3	25	\$11,697	
AC-13	2700 West & 14400 South Intersection Improvements	Evaluate intersection control, possibly install roundabout	Intersection Improvements	NRFC CSAP	1	8	2	0	4	0	0	6	6	0	21	\$200,000	
AC-12	Centers Classic Dr & 2700 W Crossing Improvement	RFB	Crossing Improvement	NRFC CSAP	1	0	2	0	8	4	0	6	6	0	21	\$33	