SOUTH JORDAN

Active Transportation Plan

2019

WASATCH FRONT REGIONAL COUNCIL

WEST JORDAN UTAH

SOUTH JORDAN UTAH

avenue CONSULTANTS

FEHR & PEERS

Acknowledgments - Study Team

Shane Greenwood South Jordan City

David Mann South Jordan City

Bill Baranowski West Jordan City

Larry Gardner West Jordan City

Dirk Burton West Jordan City

Alex Roy Wasatch Front Regional Council

Hugh Van Wagenen Wasatch Front Regional Council

Peter Tang UDOT

Grant Farnsworth UDOT

Heidi Goedhart UDOT

Travis Evans UDOT

Tim Baird Fehr and Peers

Stephanie Tomlin Fehr and Peers

Thomas McMurty Avenue Consultants

Rob Eldredge Avenue Consultants

Nicole Talbot Avenue Consultants

Shaunna Burbidge Avenue Consultants

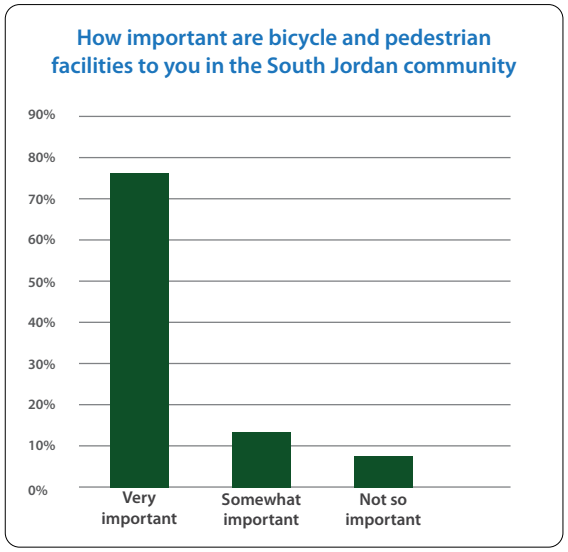
Matt Seipold Avenue Consultants

1 Executive Summary

The Active Transportation (AT) Plan allowed the City of South Jordan to take a detailed look at bicycle and pedestrian facilities in the city. The plan takes the base network provided in the Transportation Master Plan and identifies the specifics needed to plan for sidewalk, trail and bike lane projects. Residents in South Jordan have expressed a desire to see more trails and more and more Utahns are saying that active transportation facilities are important to their quality of life.

This plan provides the groundwork for enhancing active transportation in the community by presenting a vision for future AT projects and how to see them realized. This plan is organized into five sections that outline the journey from **Where We Are** (section 2), to **What We Heard** (section 3), **Where We're Going** (section 4), **Planned Projects** (section 5), and **How We Get There** (section 6). Throughout this study there were regular meetings and interaction with City staff and officials and well as a focus on collaborating with residents and key community stakeholders about what they would like to see in South Jordan.

Figure 1-1



Joint West Jordan and South Jordan Study

This study was conducted jointly between South Jordan and West Jordan. The two cities worked together at the same time to collaborate on projects and to help ensure that needed connections on corridors spanning both cities could be realized. Projects like buffered bike lanes on 2700 West are important to both West Jordan and South Jordan, and the cities wanted consistency and coordination across borders.

The collaborative planning process was instrumental throughout the study, specifically with the Steering Committee members from both cities and in the joint website for the project: www.jordanatp.com.

Figure 1-2: Community event

Many of the planned projects in the project prioritization map came from public input.

Summary

Hundreds of public comments about potential active transportation projects were collected and reviewed. These potential projects were evaluated against the projects already identified in past plans and alongside bicycle and pedestrian usage data to develop and refine a final list of projects. These projects include striped, buffered and separated bike lanes, trails, sidewalks, and byways.

The full list of projects for both South Jordan and West Jordan was ranked based on a number of criteria developed by the team including comfort, potential usage, regionality, public support, etc. The rankings were reviewed by the team, and while they generally indicate priority, they do not need to be completed in order. Figure 1-3 shows a map of the ranked projects in South Jordan and Table 1-1 provides the list of projects. Section 6 How We Get there discusses possible funding sources that South Jordan can take advantage of to see these projects transition from the plan to construction.

Figure 1-3: Active transportation project prioritization map

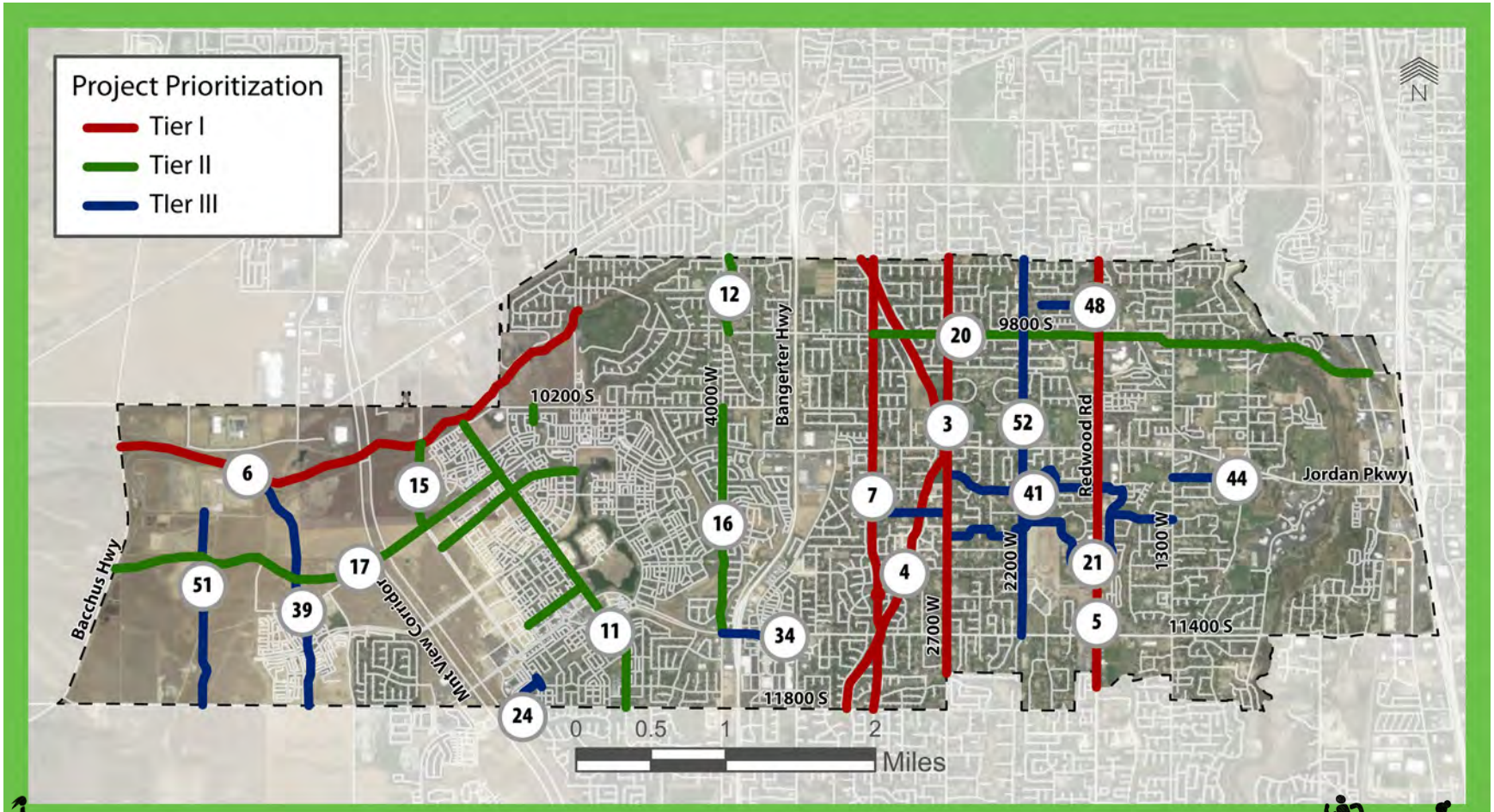


Table 1-1: Active transportation project prioritization

Combined Rank *	Location	Type	Miles	Cost	Funding
Tier I					
3	2700 West between South Jordan's northern city boundary and southern city boundary	Buffered Bike Lane	2.8	$101,000	TAP/Choice Fund
4	Along the Utah Distribution Canal between South Jordan's northern city boundary and southern city boundary	Paved Multi Use Path	3.3	$2,790,000	TAP/Choice Fund
5	Redwood Rd between South Jordan's northern city boundary to southern city boundary	Sidewalk (8'-10')	3.1	$1,310,000	TIFF
6	Bingham Creek Trail Between 4800 West and western city boundary	Paved Multi Use Path	3.6	$2,990,000	Development
7	3200 West between South Jordan's northern city boundary and southern city boundary	Buffered or protected bike lane	3.2	$109,000 - $2,509,000	TAP/Choice Fund
Tier II					
11	Otter Trail Dr between 10200 South and Vermillion Dr/Kestrel Rise Rd between Bingham Rim Rd and South Jordan's southern boundary/Dock St between Grandville Ave and Lake Ave/Duckhorn Dr between Lake Run Rd and Kestrel Rise Rd	Neighborhood Byway	3.8	$12,000	CATF
12	Welby-Jacobs Trail along Provo Reservoir Canal between South Jordan's north city boundary and 10200 South	Paved Multi Use Path	0.5	$436,000	TAP/Choice Fund
15	Grandville Ave between Bingham Creek Trail and South Jordan Parkway	Paved Multi Use Path	0.6	$485,000	TIFF
16	4000 West between 10200 South and Daybreak Parkway	Bike Lane	1.5	$41,000	CATF
17	Connecting South Jordan Parkway and Bacchus Highway	Buffered or protected bike lane	2.9	$98,000-$2,264,000	Development
20	Shields Ln between 3200 West and Jordan Gateway	Bike Lane	3.7	$99,000	CATF
Tier III					
21	10760 South between Beckstead Ln and Temple Dr/Rustic Roads Dr between 2700 West and 2200 West/ Around South Jordan Park/10755 South between dead end and 2700 West	Neighborhood Byway	4.4	$14,000	CATF
24	Currant Dr between South Jordan's southern city boundary and Grandville Ave/Grandville Ave between Blackbird Ln	Neighborhood Byway	0.3	$1,000	CATF
34	Daybreak Parkway between 4000 West and 3600 West	Buffered or protected bike lane	0.5	$17,000-$401,000	UDOT/City
39	Prosperity Road from 11800 South to Bingham Creek Trail	Neighborhood Byway	1.6	$5,000	Development
41	2200 West from Park Rd to South Jordan Pkwy	Sidewalk	0.5	$112,000	City
44	10550 South between Temple Dr and South Jordan Parkway	Neighborhood Byway	0.5	$2,000	CATF
48	9640 South	Sidewalk	0.4	$81,000	City
51	Connecting the Trans-Jordan Landfill and South Jordan's southern city boundary	Neighborhood Byway	1.3	$4,000	Development
52	2200 West from 11400 South to 9800 South	Bike Lane	2.5	$66,000	Choice Fund/City
		TOTAL COST		**$8,773,000 - $13,723,000**	

* The numbers in the **Combined Rank** column reflect the complete prioritization list among all South Jordan and West Jordan projects.

Table 1-2: Project prioritization total cost and miles by Tier

Tier I		Tier II		Tier III	
Total Miles	16	Total Miles	13	Total Miles	12
Total Cost	$7,300,000 - $9,700,000	Total Cost	$1,171,000 - $3,337,000	Total Cost	$302,000 - $686,000

Cost estimates were developed by active transportation engineers based on the most recent bid prices for construction items like striping paint and concrete curbs. The full construction costs estimates were based on facility types and linear feet of construction. Buffered or protected bike lane projects costs are based on recently completed buffered or protected bike lane projects. Variability in the cost of these projects is based upon design choices, restrictions, and existing conditions. A common occurrence that will effect cost is if a bike lane and buffer can be striped in the existing road, if right-of-way is required to add the buffered bike lane, or if it is a curb protected bike lane that requires new concrete and drainage accommodations, that is why they are shown as a range.

All the cost estimates include a contingency percentage and should be considered planning level cost estimates only. Better engineering based costs will need to be developed as projects near construction.

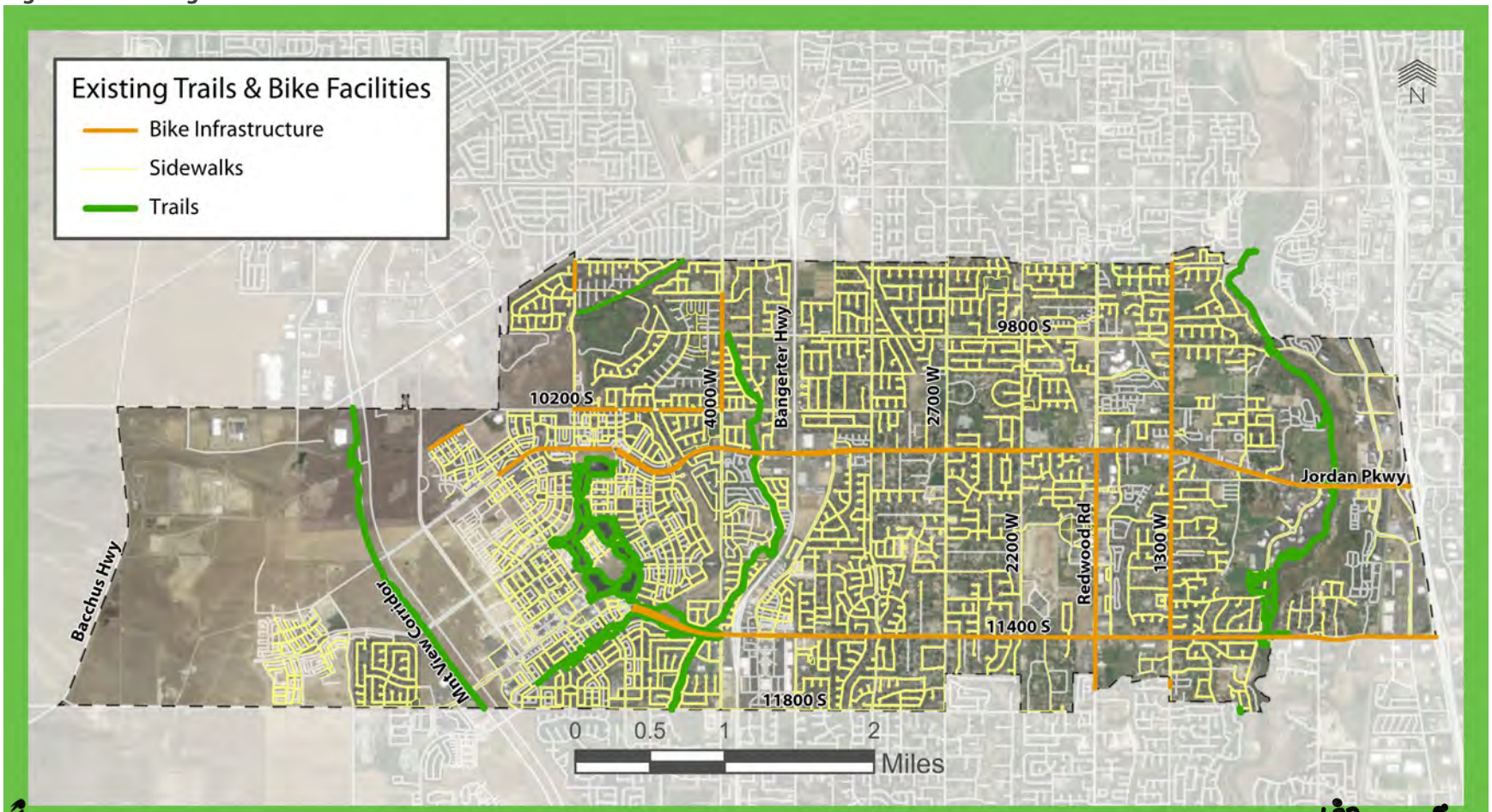
Figure 1-4: Pedestrian bridge along multi-use path in Daybreak

2 Where We Are

Existing Network

Active transportation in South Jordan City is a key component of the overall transportation system that enhances the livability, health, and safety for residents. The existing network consists of 18.7 miles of paved multi-use trails, 32 shoulder bike way or bike lane miles, and over 470 miles of sidewalks. Among the bike and pedestrian facilities, the Daybreak Trail system is the largest continuous trail system, extending for almost 9 miles through the City. The Jordan River Trail system is the second longest continuous facility covering 4.8 miles from Draper to West Jordan City. Figure 2-1 shows the existing active transportation network within the City.

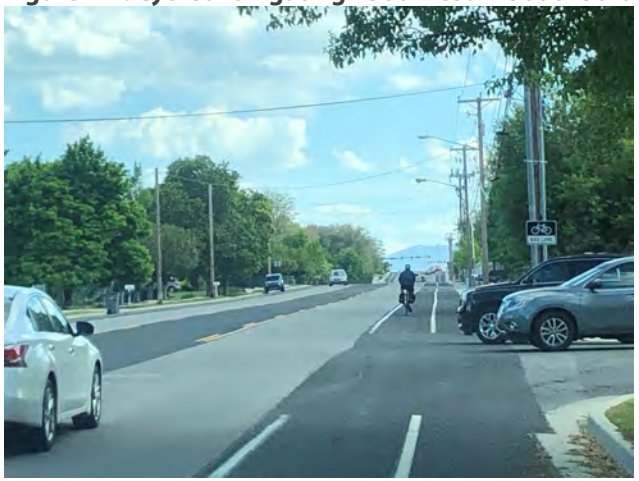
Figure 2-1: Existing AT facilities



Mobility versus Accessibility

The main purpose of the transportation system in any community is to provide mobility. Mobility focuses on efficiently moving people and goods from point A to point B, or the level of ease with which movement happens. Without basic mobility, store shelves would be empty, and people would not be able to get to necessary destinations like work and school. Even more important for communities, however, is accessibility. While mobility focuses on overall movement, accessibility encompasses the less tangible components of travel, like travel time, cost, options, comfort, and risk. The two concepts are tied together, and as accessibility increases mobility improves. Mobility is highest in places that accommodate pedestrians, transit users, and bicyclists as well as drivers. Improving accessibility revolves around making locations easy to approach and enter. Accessibility differs by mode and although a location may have high accessibility for automobile travelers, it may have little to no accessibility for transit riders, pedestrians and cyclists. The key to good transportation planning is identifying the overall needs of the users and improving accessibility for all.

Figure 2-2: Cyclist navigating 1300 West in South Jordan



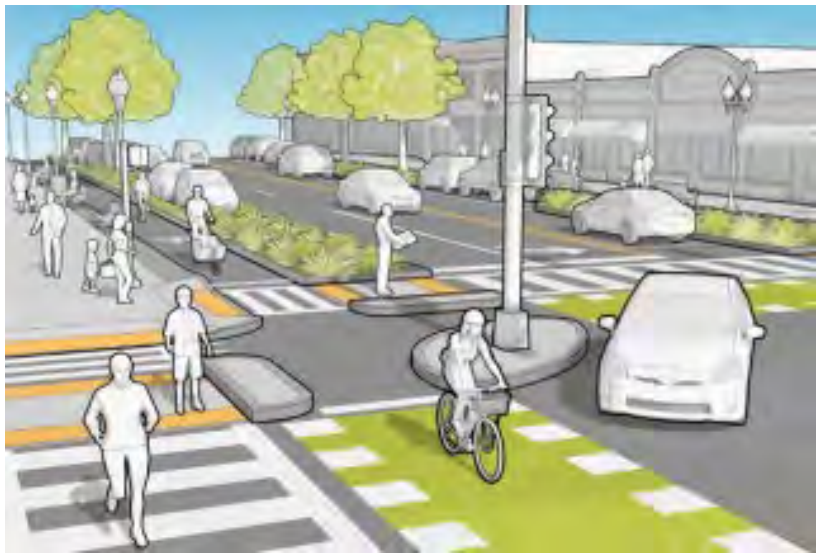
Land-Use and Transportation

Land-use and transportation are inseparably linked. Different land uses will create different transportation impacts and require different types of transportation access. The transportation facilities provided will often dictate how people travel. For example, a newly constructed office building may include a large parking lot to accommodate commuters driving alone or carpooling, or it may be built near a light rail station with minimal parking to incentivize using transit. It is important to consider what types of trips are connected with various locations, particularly for locations that may incorporate active transportation modes. **Locations like neighborhoods, schools, parks, and shopping areas are prime locations for active connections.** Improving connections and providing opportunities for citizens to walk and bike not only improves accessibility and mobility, but also improves the health and wellbeing of the local community. Accessibility improvements to sidewalks and trails can also enrich the livability of a community. Sidewalks and trails with pedestrian-friendly elements, such as curb ramps and benches, create inviting strolling and shopping areas while providing access to people with limited transportation options. While all pedestrians will have different needs, the goal should be to make all sidewalk and trail environments accessible to the largest possible number of potential users.

Pedestrian facilities should be developed that are safe, attractive, convenient, and easy to use. Sidewalk and trail projects should be selected carefully to maximize their usefulness to the community. Although worthwhile, it can be difficult to retrofit existing built-out areas to incorporate trails and sidewalks. Because of this, high priority should be given to incorporating sidewalks and trails during long-range planning and site development. It is always easier to incorporate infrastructure during the development process rather than trying to retrofit after the fact.

One way to ensure that the system provides for all transportation modes is through the development of complete streets. For the majority of the twentieth century roadways were designed primarily for motor vehicles. While this is still a dominant approach to roadway design, a personal vehicle-centric approach can pose significant barriers to use by pedestrians, bicyclists and public transit users, thus limiting active transportation opportunities, hindering access and connectivity, and resulting in negative health consequences.

Figure 2-3: Complete streets rendering



Complete Streets

Complete streets are corridors that are designed and operated to enable safe use and support mobility for all users. Those include people of all ages and abilities, regardless of whether they are traveling as drivers, pedestrians, bicyclists, or public transportation riders. Using a complete streets approach, the focus of road design is no longer about auto-mobility but creating an overall network that serves all users. Complete Streets strategies include retrofitting existing arterials to accommodate multi-modal users or building new facilities that support multi-modal transportation and complementary roadside uses. Complete Streets elements can include pedestrian and bicyclist accommodations, public transit access, accommodations for persons with disabilities, landscape elements, and traffic calming. When implementing a complete street strategy, transit should not be overlooked. Transit and non-motorized modes go hand in hand. Nearly 80% of transit trips involve an active transportation link on one or both ends. Bicycle and pedestrian accessibility to Trax stations is crucial as it makes riding public transportation easier and more convenient, improves riders' health through active transport, and reduces congestion on the roads.

Figure 2-4: Complete Street 1300 West

The 3-lane collector has a center turn lane for vehicles, and also a 6-foot bike lane for cyclists. The bike lane provides needed separation on this 30 mph road. The sidewalks are separated from the road by a parkstrip to create a more comfortable experience for pedestrians by creating space between them and roadway traffic.

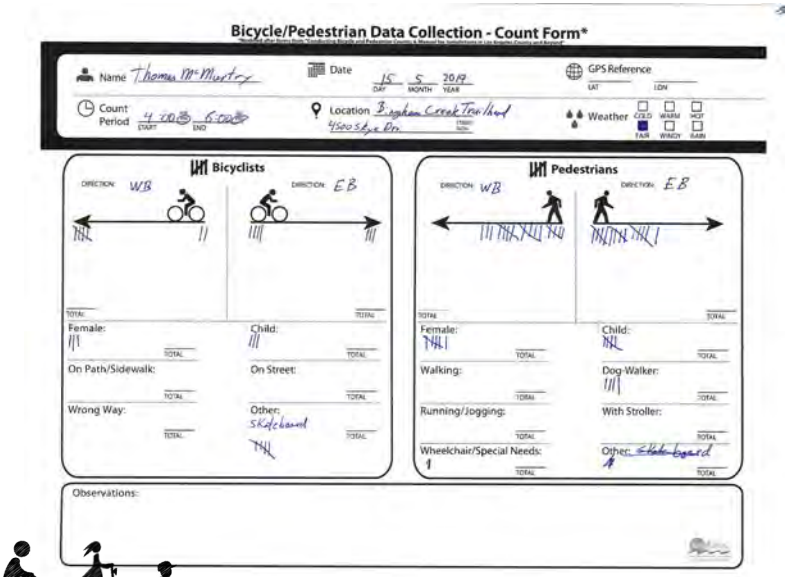
Bicycle and Pedestrian Counts

To measure existing levels of walking and biking within South Jordan, six locations were counted for two hours each between May 12 and May 24, 2019. These locations are shown in Figure 2-4 and included:

- Bingham Creek Trail Head (4500 Skye Dr.)
- Jordan River Trail & 9500 West/Shields Ln.
- 1300 West & 9900 South
- 2000 West & 10400 South
- Mountain View Trail & 11700 South
- Mountain View Corridor Bike Lanes & 11700 South

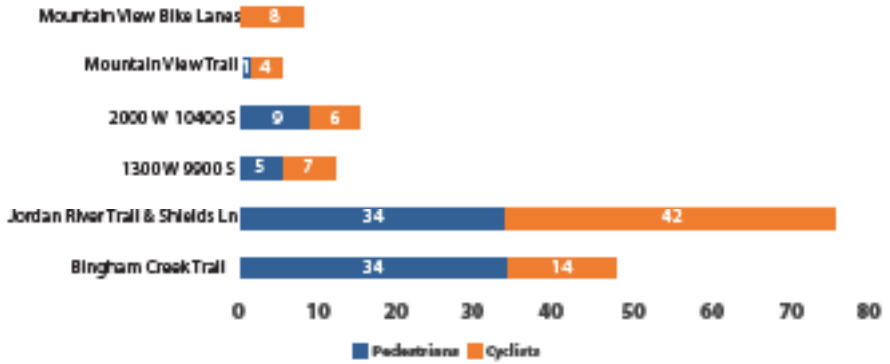
The counts were conducted over several days and on various days of the week, but all counts were conducted for at least two hours between 4:00 – 6:00 PM. Bicyclists and pedestrians were recorded separately and additional information about users was collected during these counts. This included gender, children, whether the user was on the path or sidewalk, and if cyclists were observed riding the wrong way.

Figure 2-5: Data collection form



Overall, 81 bicyclists were observed, 83 pedestrians and a small number of skateboarders were documented at the count locations within South Jordan. The busiest location was 9000 South & 2600 West with 34 pedestrians and 42 bicyclists. However, the Bingham Creek Trail had 34 cyclists and was the second busiest count location (see Figure 2-6).

Figure 2-6: Counts of pedestrians and cyclists



The overall comfort level of the bicycle and pedestrian networks can be indicated by the demographic characteristics of users. A minority of AT users who are highly experienced cyclists will ride on most roadways because they have the confidence to utilize vehicle travel lanes when necessary, while the majority of the public is more likely to prefer bikeways with either greater separation, grade separation, or physical barriers from vehicular traffic. Generally, communities that have more protected bikeways show a more equal distribution of men and women riding bicycles.

The counts indicated, 88% of the bicyclists and pedestrians were male, while only 12% were female. Similarly, only 4% of users were children and 96% adults. These demographic indicators show that the existing bicycle network may be appropriate for confident cyclists but is not supportive of community members, like moms with kids, who prefer more comfortable paths or trails with greater separation from vehicles.

Table 2-1: Percentage of people walking or biking

Female	**20**	**12%**
Male	**144**	**88%**
Adult	**158**	**96%**
Child	**6**	**4%**

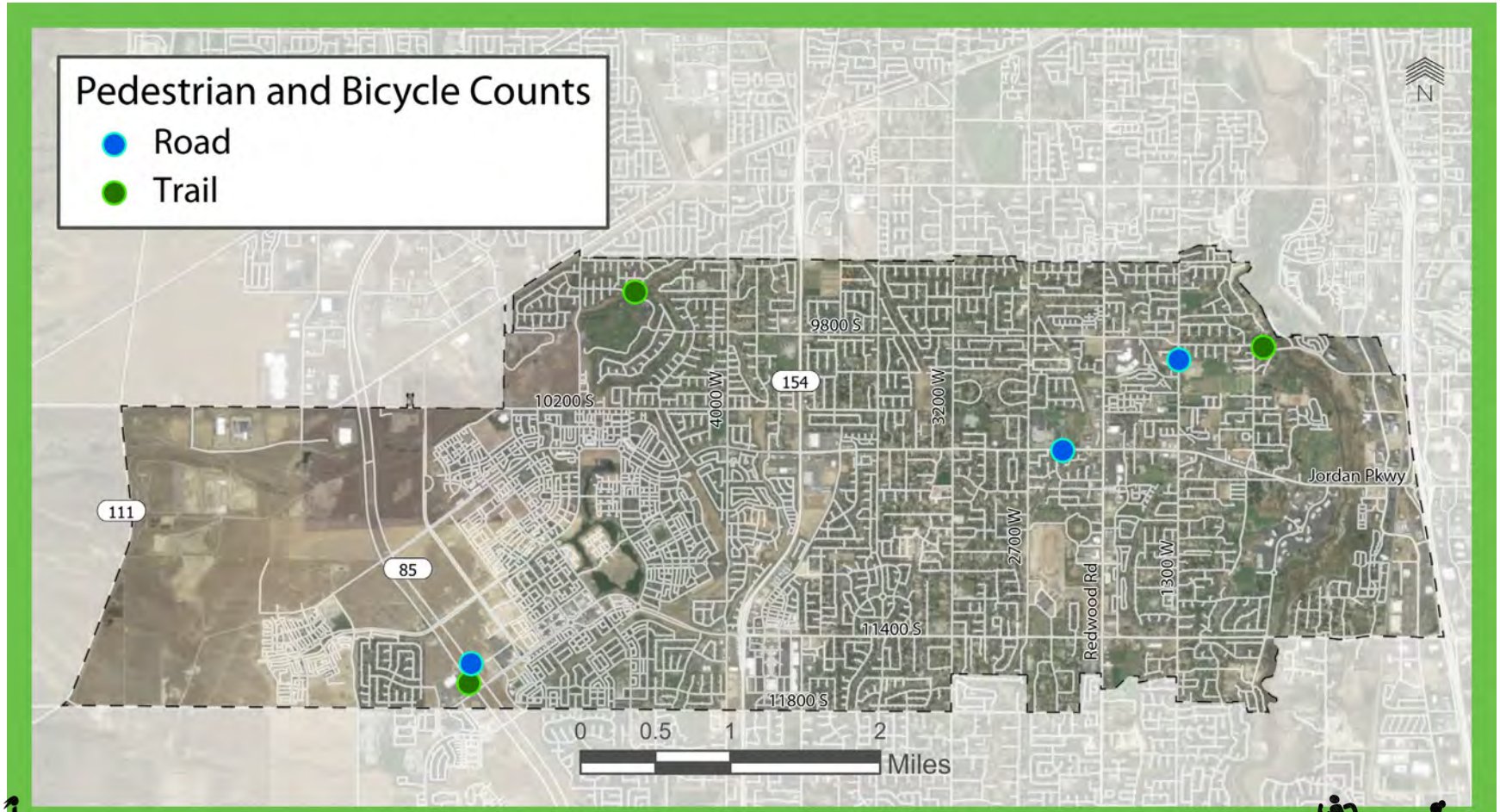
Counts Map

Figure 2-7 is a map of the count locations in South Jordan; additional counts were taken in West Jordan. The bicycle and pedestrian counts followed best practice techniques, however they were limited by scope. Both trails and roadways were counted. The roadway counts were on corridors that had bike lanes. Pedestrian counts at those locations included the sidewalks and the bicycle counts included both the bike lanes and sidewalks. The bicycle/pedestrian counts were used mostly as supplemental data to pedestrian actuation and Strava user data described in the following section.

Signal Actuations

In addition to the collected pedestrian count data, pedestrian signal actuations were evaluated for 58 existing traffic signals within South Jordan. The pedestrian actuations summarize the number of times the crosswalk button has been pushed and the crosswalk signal was triggered.

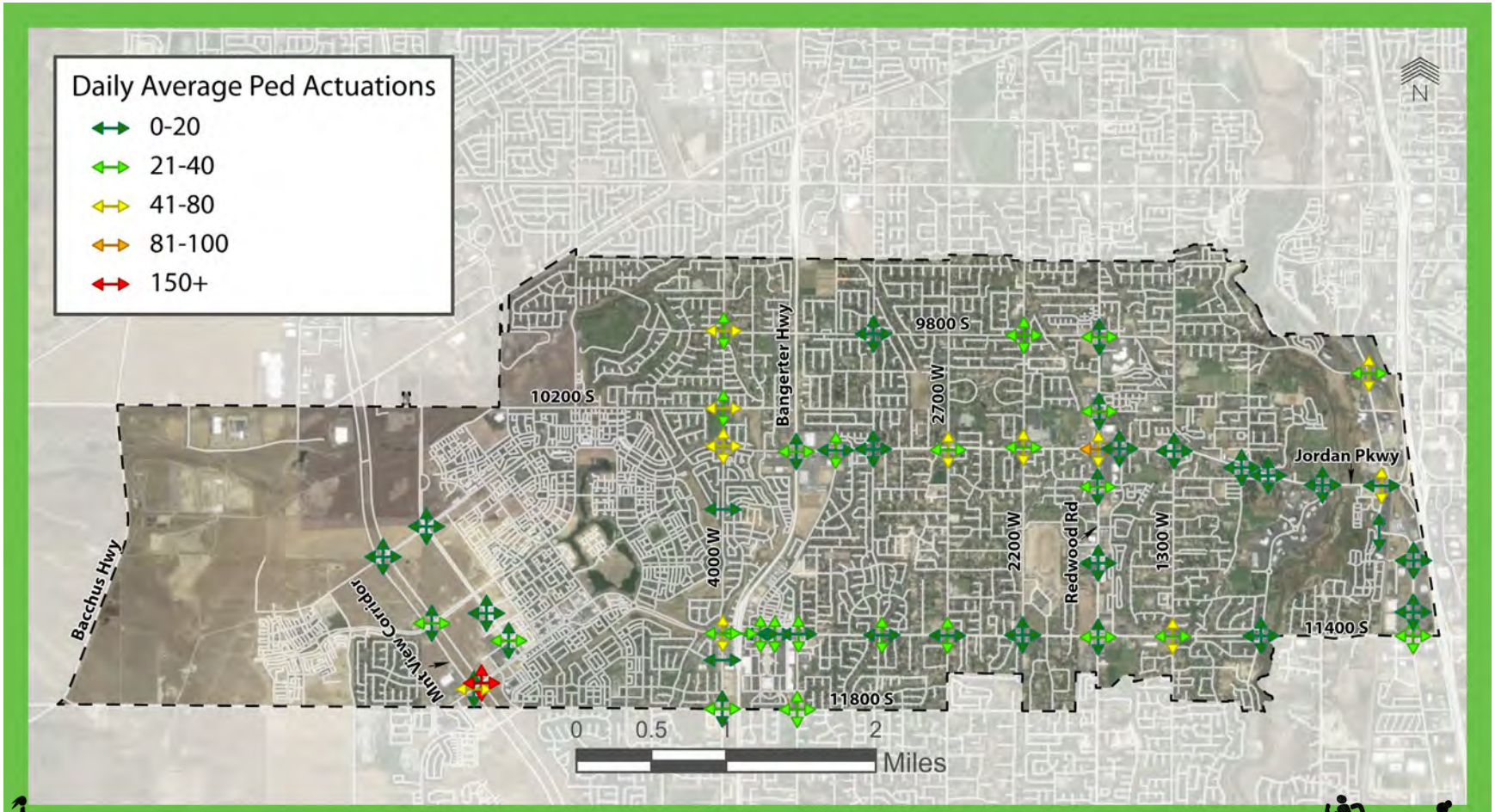
Figure 2-7: Locations of pedestrian and bicycle counts



The pedestrian actuations represent the number of times pedestrians may have crossed the street at the signal and not the total number of pedestrians, since each actuation can allow for one or more pedestrians to cross. The pedestrian actuation data is available from UDOT's Automated Signal Performance Measures (ATSPM) website http://udottraffic.utah.gov/atspm and was used to calculate the average number of daily pedestrian actuations across all days in 2018.

The daily average pedestrian actuations are shown **by direction** below in Figure 2-8. The intersection of Daybreak Parkway / Mountain View Corridor had the highest number of pedestrian actuations with an average of 343 per day. Of these actuations, 173 were for pedestrian calls to cross east/west across Mountain View Corridor and 166 were to cross north/south across Daybreak Parkway. The signals with the next highest pedestrian actuations were on 10400 South at Redwood Road, and 4000 West; with an average of 148 daily and 123 daily actuations, respectively. These pedestrian crossing actuations are an important indicator of existing pedestrian demand and locations that could benefit from improved pedestrian and bicycle facilities.

Figure 2-8: Number of pedestrian actuations by intersection



Strava Data

Strava is a fitness app and social network for athletes that provides aggregated public activities for pedestrians, runners and cyclists. The data illustrates where pedestrians, runners, and bicyclists voluntarily provided their activity in 2018. This information is very illustrative when mapped, because it clearly shows where active transportation use is concentrated, but only among heavy users.

In 2017, UDOT purchased a statewide Strava data set to help identify key active transportation routes. As a stand alone data set this information is limited, because its is only recording trips of those who voluntarily submit the information. But when this information is combined with the public outreach process, traditional pedestrian and bicyclist counts and other forms of evaluation and analysis involved in the planning process, Strava can prove to be a useful tool for better understanding how and where to invest in infrastructure and improvements for active transportation projects.

Another benefit of Strava data is that it can display the information in various ways. One option is to see the number of "rides" or trips that are taken along a route. Whether someone walks a route everyday or only once a year the total number of specific trips will be shown. Another way to understand the data is through a commute estimation that looks at specific point to point trips that are identified as commuting behavior.

The Strava data is only a snapshot of the totality of bicycle riders and pedestrians, however, it may be the best tool currently available to review AT data because of the flexibility offered in reviewing the data sets.

Figure 2-9: Strava app being used during a bike ride

Figure 2-10 shows the total pedestrian trips recorded with the Strava app in 2018. This map shows that Strava can be used as a strong visual aid in identifying popular active transportation routes. Most of the roads in and near the Daybreak area show pedestrian trips. While the majority of neighborhood streets in this area do not exceed 250 trips annually, Strava users are just a fraction of the total pedestrians. This data indicates that there is a large variety of walkable routes, rather than one specific road or path that receives the majority of trips. The trails in Daybreak are all heavily used with over 2,000 recorded trips in 2018.

The Jordan River Trail is the most heavily used walking route in the city with 3,385 recorded trips. 11800 South has a high level of pedestrian trips, as well across the stretch south of The District in South Jordan. This high density area is clearly accessed by many pedestrians.

Figure 2-10: Total pedestrian trips collected through Strava in 2018

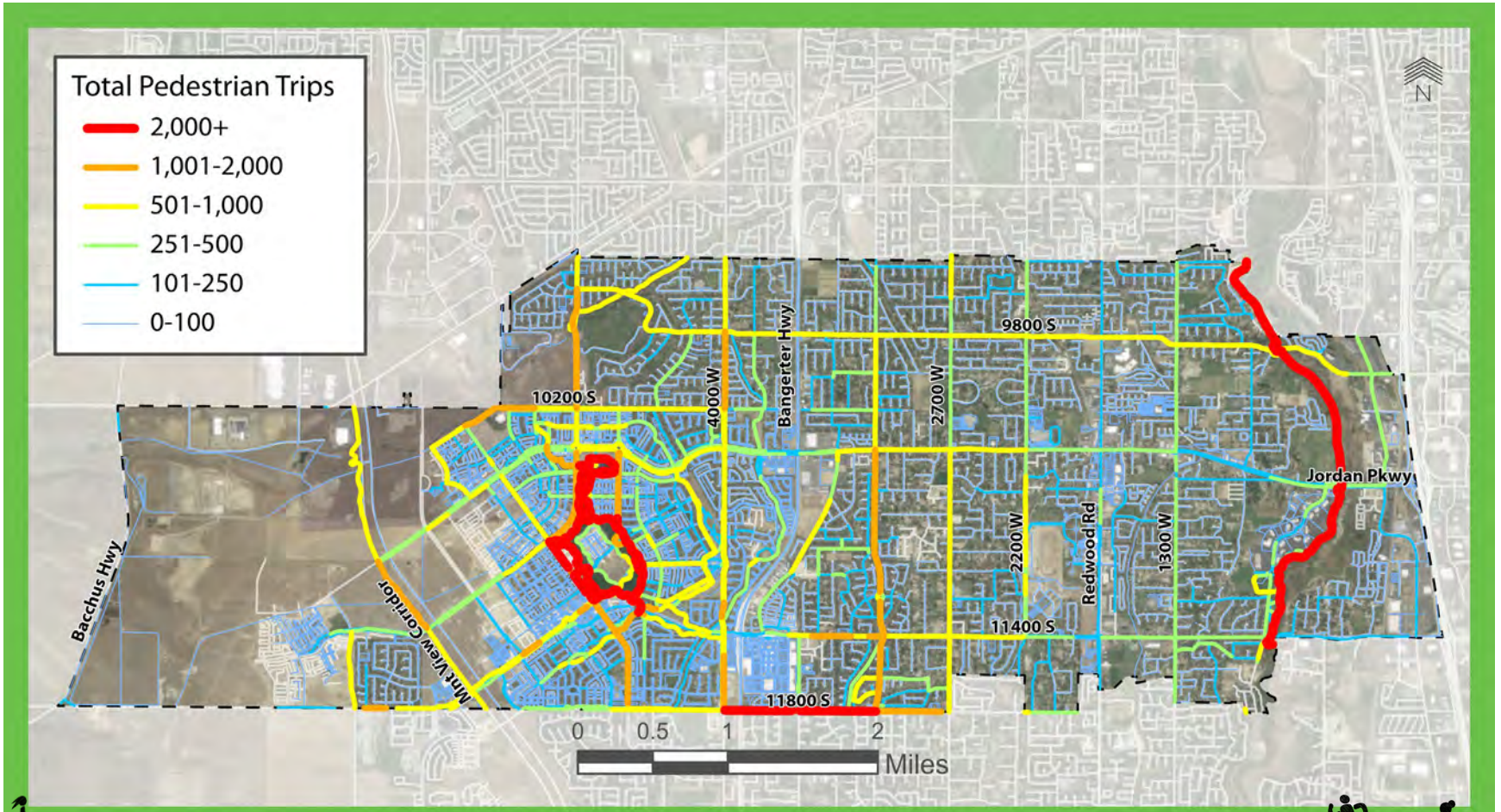
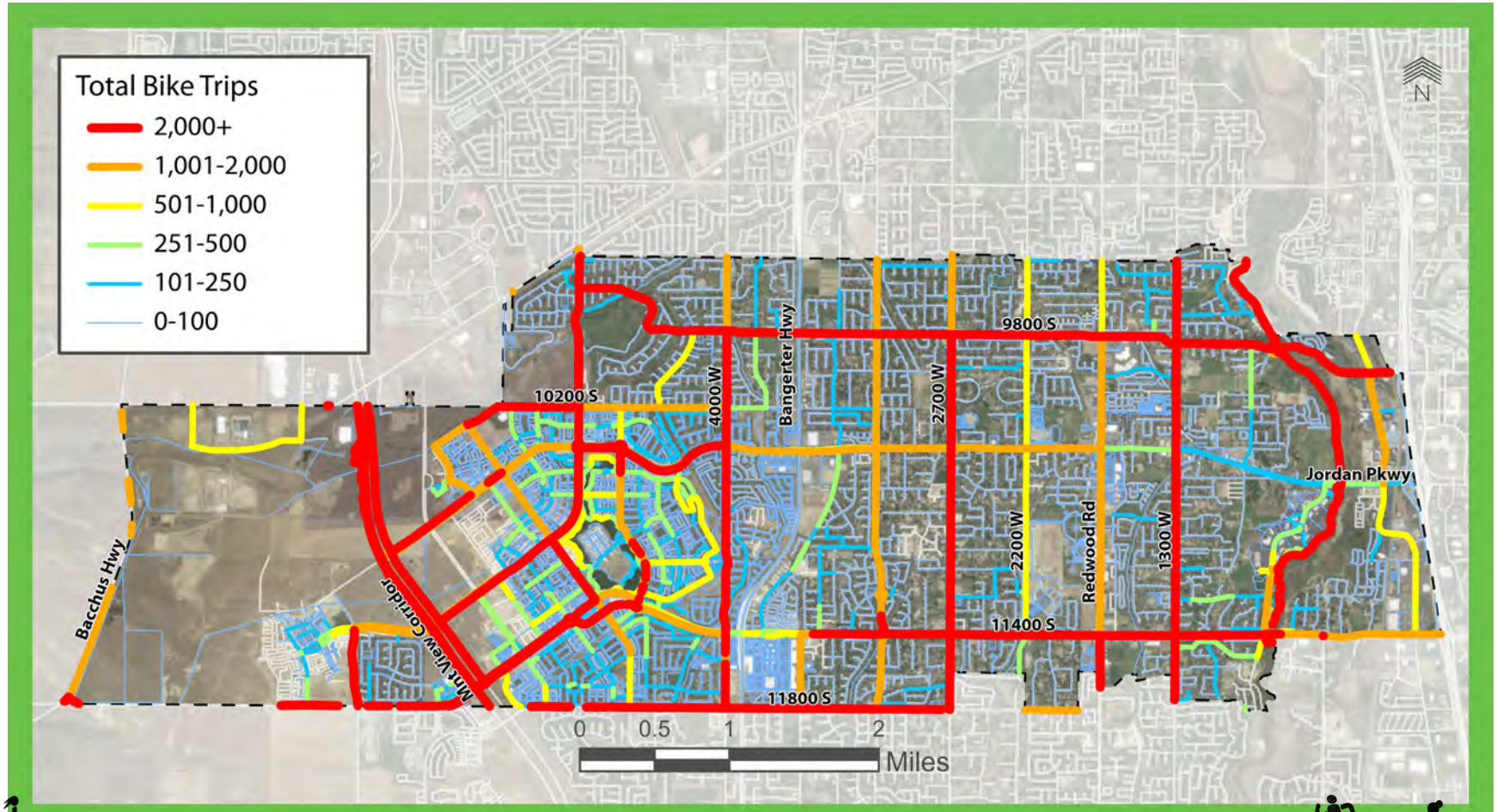


Figure 2-11: shows the total bicycle trips recorded with the Strava app in 2018. Again, Strava users represent only a small portion of the population. The map shows that cyclists are riding on all the major trails and routes in South Jordan.

Routes that offer direct north to south connections like The Jordan River Trail, 1300 West, 2700 West, 4000 West, Mountain View Corridor all show high use. The highest number of bike trips for east to west travel are along 9800 South and 11400 South.

This combined data shows a demand for larger regional active transportation connections that provide a variety of levels of comfort for users. Just as with the Strava pedestrian map, Daybreak shows various levels of usage on practically all of its roads and paths. This suggests a desire for bicycle facilities that provide comfortable local connections. The Strava data reflects the need for a combination of local and regional projects when creating a robust active transportation network.

Figure 2-11: Total bicycle trips collected through Strava in 2018



Safety

Safety is principal factor when identifying opportunities to improve walking and biking. Pedestrians and bicyclists are the most vulnerable road users with speeds, poor visibility and distracted driving leading to pedestrian/vehicular conflicts. Analysis of bicycle and pedestrian related crash data provides a basis to develop recommendations that can improve safety.

Figure 2-12: shows the number of bike and pedestrian related vehicle crashes in South Jordan from 2012 through 2018. Over the seven-year period there were a total of 138 crashes with 82 bike crashes and 56 pedestrian crashes. Although annual crash totals can vary considerably year to year, during 2018 there were only 12 bicycle and pedestrian crashes which is the lowest annual number. The downward trend in crashes may be due to improved and new bicycle or pedestrian over the analysis period.

By reviewing where bicycle and pedestrian crashes occurred, potential locations for safety related projects can be identified. Table 2-2 lists the roadways with the most crashes and Figure 2-13 shows the location of the bicycle and pedestrian crashes in South Jordan City. 11400 South had the greatest number of bike and pedestrian crashes with 14 and was followed by both 4000 West, as well as South Jordan Parkway, with 13 crashes. 11400 South already has bike infrastructure but it varies from a bike lane to a should bikeway along the corridor. Still, it is signed and striped for cyclists safety. South Jordan Parkway was widened from Redwood Road to I-15 in 2019 and this road reconstruction included added bicycle infrastructure similar to 11400 South with a bike way that varies from the shoulder to a dedicated lane at the intersections. The other roads with the most crashes all have planned projects to improve safety.

Figure 2-12: Number of bike and pedestrian related vehicle crashes : 2012 -2018

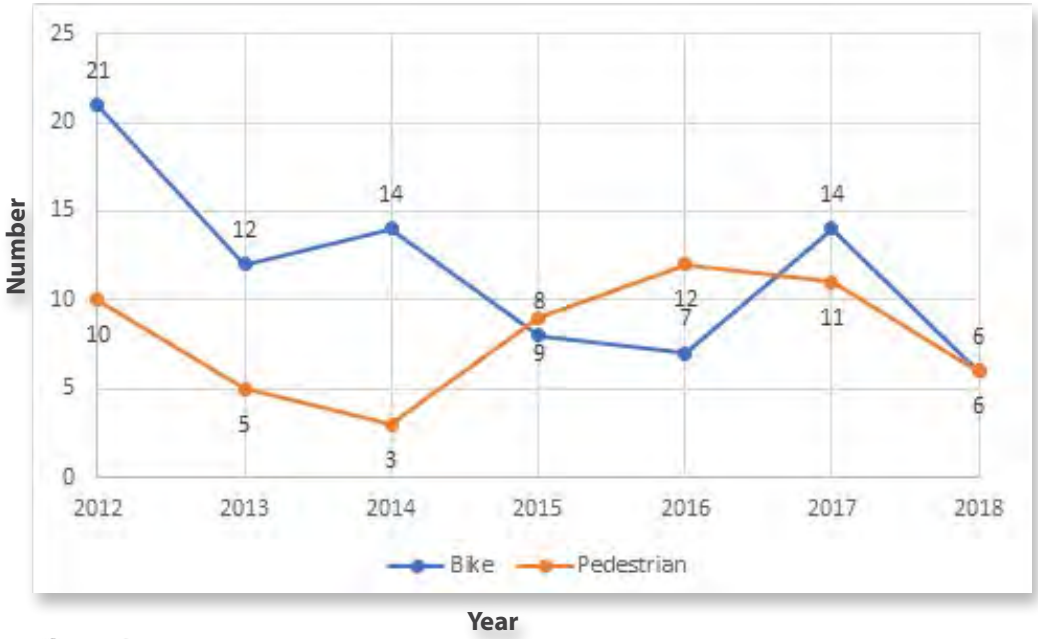
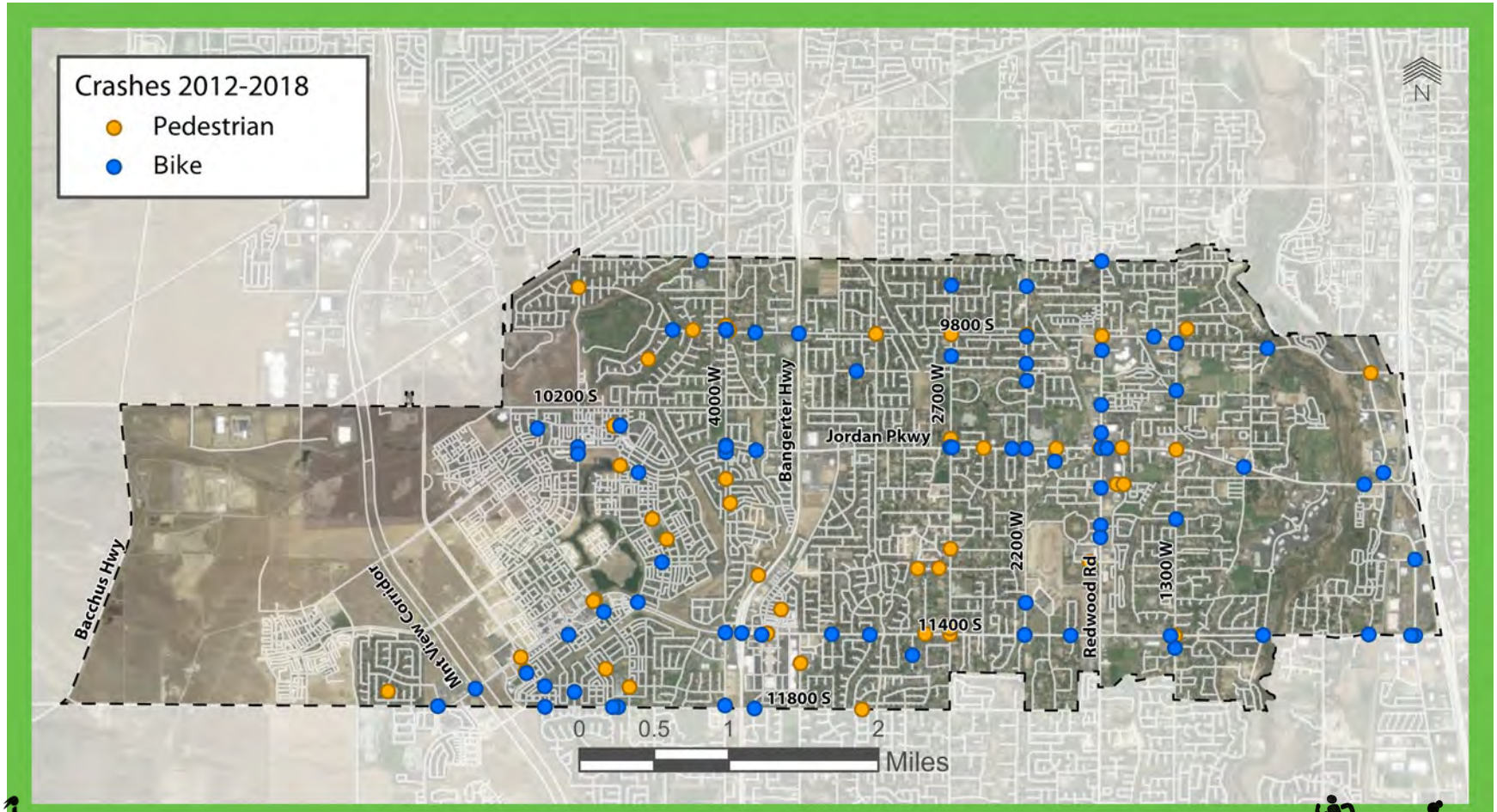


Table 2-2: Bike and pedestrian related vehicle crashes by roadway; 2012-2018

	Bike	Pedestrian	Total
11400 South	11	3	14
4000 West	8	5	13
South Jordan Parkway	8	5	13
Redwood Road	8	2	10
2700 West	3	5	8
2200 West	7	0	7

Figure 2-10 shows the location of the crashes involving a bicycle or pedestrian over the seven years from 2012-2018. It is notable that the 138 crashes shown in this map is a small number when compared to other communities in Salt Lake County. West Jordan, for example, had 344 crashes involving non-motorists over the same period.

Figure 2-13: Pedestrian and bike related crashes by location; 2012-2018



Severity

Pedestrians and bicyclists are both susceptible to serious or fatal injuries in collisions, as illustrated in Figure 2-14 and Figure 2-15. Fatal or serious injuries involving pedestrians make up 22%, compared to 12% of bicycle-involved collisions. The location of these crashes are shown in Figure 2-13. Overall, 4000 West had the most serious and fatal crashes with two fatal pedestrian crashes and two serious injury bicycle crashes.

Figure 2-14: Pedestrian related crashes by severity; 2012-2018

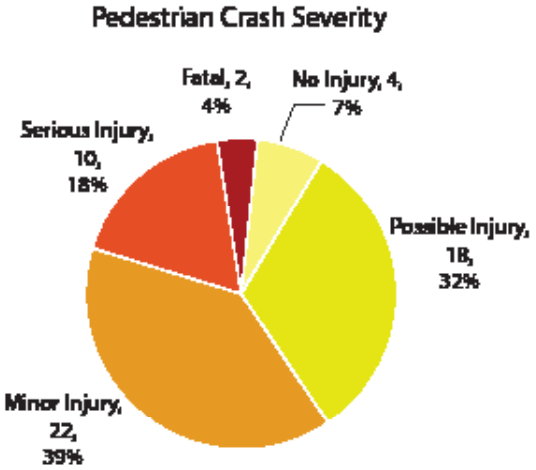
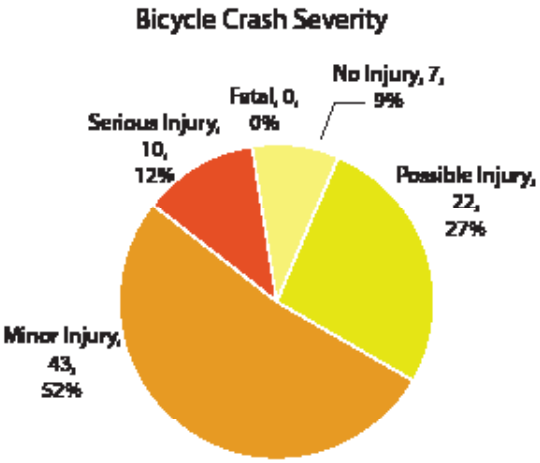


Figure 2-15: Bicycle related crashes by severity; 2012-2018



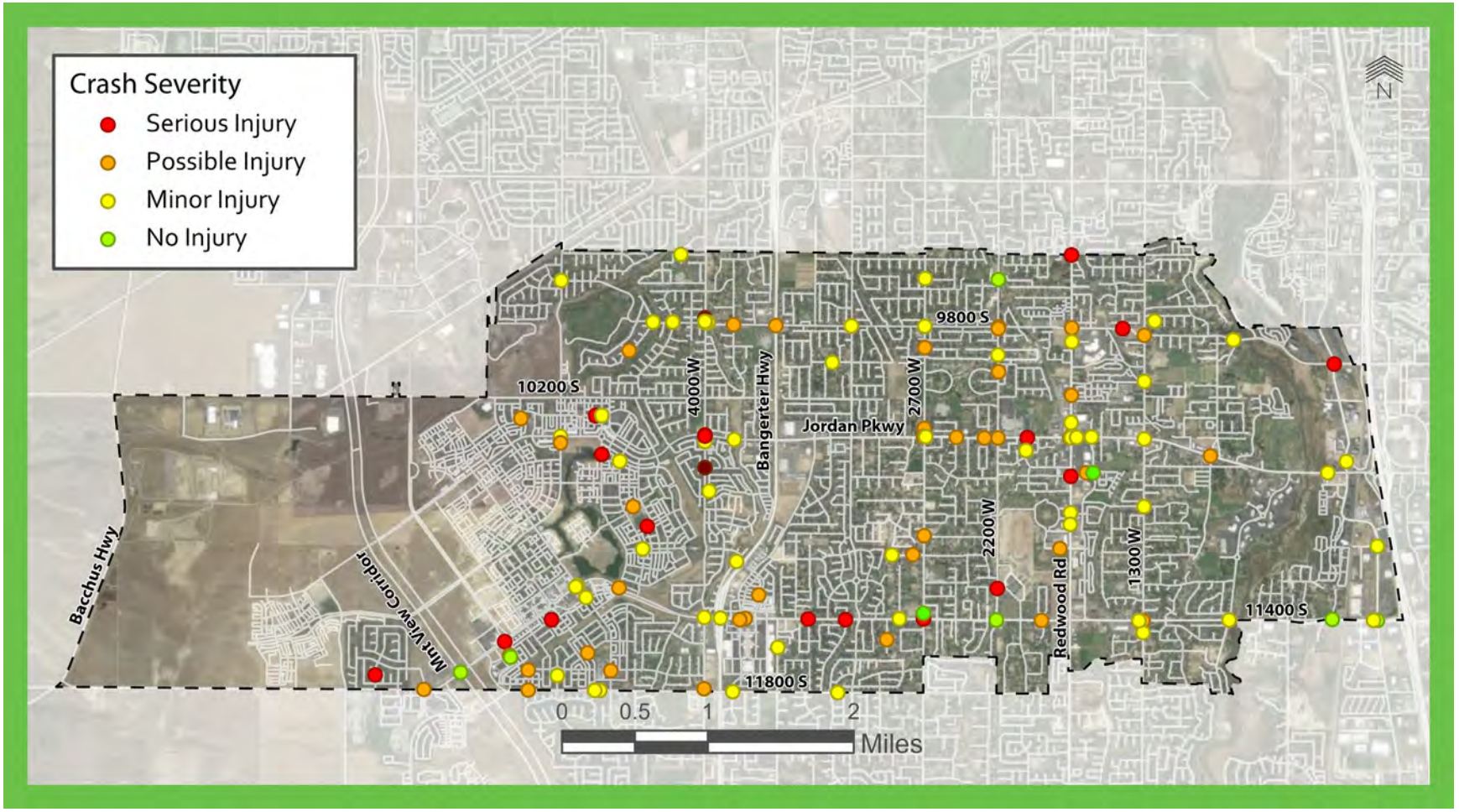
Active transportation facilities are an important component when creating a safe environment for both pedestrians and bicyclists. While there is a growing trend towards the creation of new facilities that provide improved safety, like buffered bike lanes, there is still the risk of crashes, partially because of an increase in the number of active transportation users combined with problems like distracted driving.

The National Highway Traffic Safety Administration (NHTSA) reported that in 2018 pedestrian traffic deaths increased 3.4% and bicycle traffic deaths increased 6.3%. Designs that address the safety issues specific to each project's location and environment can help decrease AT related crashes.

The safety and comfort level of a roadway, sidewalk or trail can change throughout the course of a day or week. Morning traffic may be lighter than afternoon traffic. Perhaps, cyclists being visible to automobiles is not an issue during the day, but at night it is of serious concern. One issue clearly identified among fatalities is lighting. In 2018, 76% of pedestrians fatalities and 50% of cyclists fatalities happened at night.

Locating crossings at appropriate places is also an important factor. Over half of pedestrian and cyclist fatalities occurred somewhere outside of an intersection. People may take unreasonable risks to cross mid-block because it provides the shortest route between them and their destination.

Figure 2-16: Pedestrian and bicycle crashes by severity and location; 2012-2018



Safety Conclusion

Over the last three years the total number of bicycle and pedestrian crashes in South Jordan has gone down. This is a good trend, however, there were still two pedestrian fatalities in South Jordan and there is always an opportunity for improvement. The growing population and increasing number of bicyclists and pedestrians will likely create more conflicts that could lead to crashes. The projects in this plan are designed to specifically address many of the safety issues. Wider sidewalks on Redwood Rd, new buffered bike lanes on 2700 West and 3200 West, plus new trails will all contribute to improving safety for the walking and riding public. These projects and others increase the separation between drivers and cyclists/pedestrians to help reduce conflicts and therefore crashes.

3 What We Heard

Throughout the project there was an extensive community involvement effort. This effort included building a project website, creating community surveys, meeting with bike shops and stakeholders, and hosting booths at three community events. The team talked to dozens of people and received over 200 completed surveys. The comments, observations, criticisms, opinions, discussions etc. provided the team with invaluable information that contributed greatly to the planning process. The variety of outreach methods created a high level of confidence that quality feedback was received from a broad spectrum of the community. Information on these efforts and what we heard from these groups is provided in this chapter.

Figure 3-1: Community event in 2019

Project Website

The project website can be accessed at: www.jordanatp.com

The website contains project maps and information, and has been updated regularly with new content throughout the process. There are videos of the community events and a presentation of the survey results, and downloadable pdf files of the project lists and maps. Over 2,400 visitors have viewed the project website.

Figure 3-2: Landing page for the project website

Community Events

The project team hosted booths at three community "pop-up" events: The ***Salt Lake County Safe Kids Fair*** held in West Jordan City Park on May 18th, 2019, the ***SoJo Summerfest*** held in South Jordan City Park on May 31st and June 1st, 2019, and the ***West Jordan Western Stampede*** held in West Jordan City Park on July 4th, 2019. Two in West Jordan and one in South Jordan. At all three events we had visitors from both cities and others (Taylorsville, Riverton, Sandy, etc.).

Complete event videos from the screenshots shown here can be found on the project website [www.jordanatp.com.](http://www.jordanatp.com)

Figure 3-4: SoJo Summerfest, June 2019

Figure 3-3: Safe Kids Fair, May 2019

Figure 3-5: Western Stampede, July 2019

Events were chosen because of their popularity and the opportunity to talk to the largest cross-section of people about the project in their communities. All events were well attended, and the team spoke to a great variety of people at each event and got lots of comments on the active transportation network. Some of the most notable take-aways from the pop-up events were:

- Safety concerns on arterials like Redwood Road, South Jordan Parkway, and Bangerter Highway. Concerns include both pedestrian and bicycle crossings.
- A desire for more east/west trails crossing West Jordan and South Jordan.
- Requests for an extended Bingham Creek Trail in South Jordan.
- Potential for placing new trails along existing canals.
- Looking at slower speed roads for new bike lanes instead of placing them on arterials.

Many location specific comments were gathered at events as stickers on a map. Each one was then geocoded and is now available on the project website.

The community pop-up events were fun and well attended and the team likely got more project comments from attending theses existing events in the community than if there were traditional open houses.

Figure 3-6: Public comments from community event

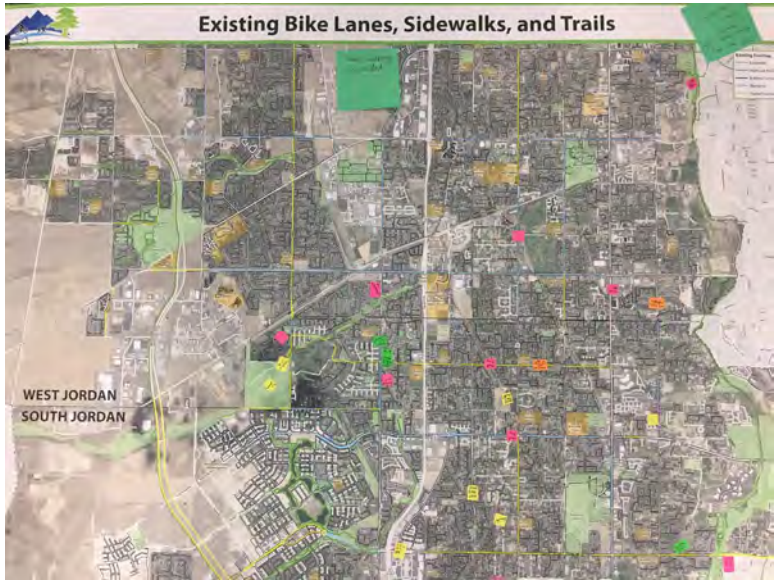
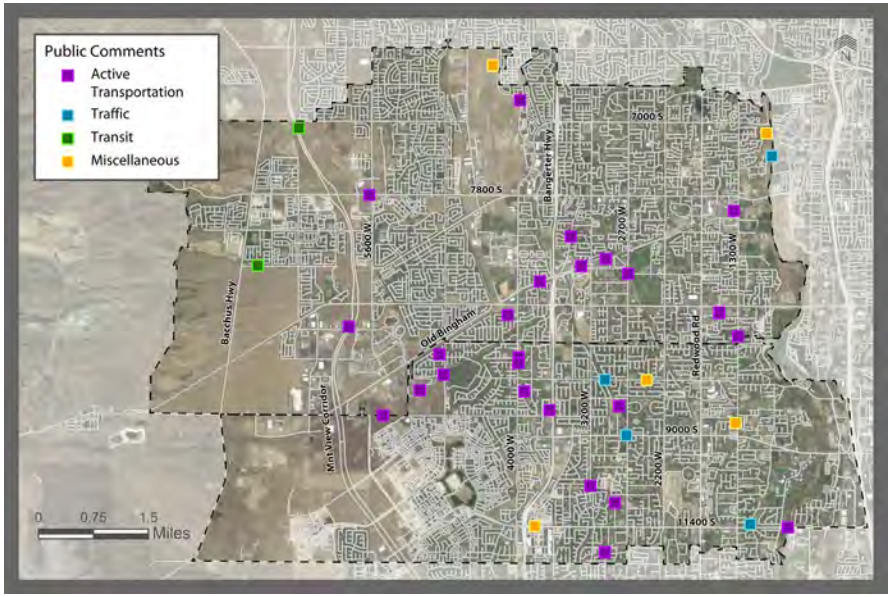


Figure 3-7: Public comments converted and displayed in GIS



Community Survey

The team sought to reach all members of the community, including those that may not have attended one of the events, so a community survey was created and posted on each city's web page. The survey was available beginning in May and available through July, 2019. Over 200 respondents completed the survey, including 114 in West Jordan and 99 in South Jordan. The following highlights results from the South Jordan portion of the survey.

Approximately one third of respondents stated that they never bike anywhere in the community, while 19% stated that they bike everyday. 69% of respondents ride along the road at least once per year and 66% use the Jordan River Trail at least once a year.

Figure 3-8

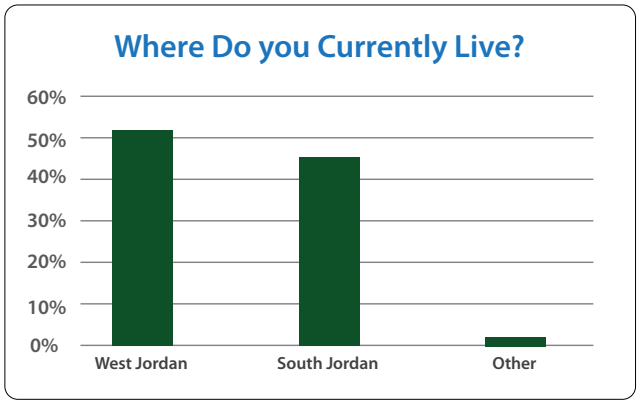
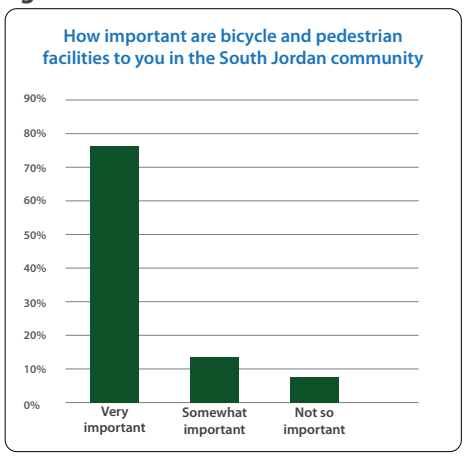
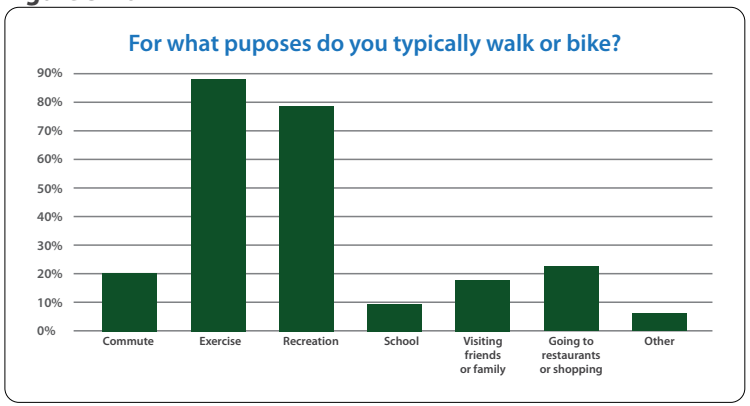


Figure 3-9



A large majority (79%) of respondents stated that bicycle and pedestrian facilities were extremely important or very important while only 7% stated that they were not important.

Figure 3-10



Most respondents (88%) indicated that the reason they walk and bike is for exercise followed closely by 'recreation' (79%). One fifth (20%) stated that they walk or bike to commute.

Figure 3-11: Pedestrian on Jordan River Trail

Every respondent indicated that they walk on sidewalks at least sometimes and 70% indicated that they walk on the Jordan River Trail at least sometimes.

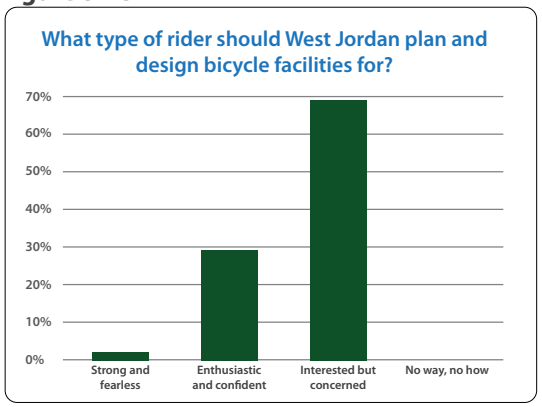
72% of respondents stated that there have been times when they did NOT walk or bike to their destination in South Jordan because comfortable facilities were not available.

Figure 3-12

Respondents indicated that their top priority would be to extend the trail system in South Jordan (46%). Adding buffered bike lanes was another priority for respondents (19%).

Finally, when asked, what type of rider should South Jordan plan and design for, 29% said enthusiastic and confident and 69% said interested but concerned. This indicates that respondents want facilities to be family friendly and designed for all abilities.

Figure 3-13



The survey was helpful not only for evaluating potential projects, but also for determining facility types and priority given to the ranking on the projects.

Stakeholders

UDOT is likely the largest stakeholder outside of South Jordan City. Many of the arterial corridors in South Jordan are UDOT roads, therefore it was extremely important to work closely with them while planning active transportation along theses routes. Creating an environment for inclusive and open dialogue is a top objective throughout any planning process so rather than meeting with UDOT Region 2 planners and engineers separately they were invited to participate in the regular team meetings held throughout the process.

The team met with the owners at the Hangar 15 Bicycles in South Jordan to talk about what things they've heard from their customers and what improvements they would like to see. They mentioned 2700 West as a route where they would like to see bike infrastructure added, specifically a bike lane from Riverton to Taylorsville.

Conclusions

Many comments were received through the process and each comment was read and considered by the team. These comments contributed to the development of the final list of projects.

Documented comments were also used to rank the projects. Generally, if a project on a corridor received more comments it is ranked higher on the prioritized list.

The public comments and the full survey results were shared with the project team and are available on the project website for all to review.

4 Where We're Going

Existing Plans

Quality active transportation planning has already occurred in South Jordan. UDOT has drafted and adopted a State Bicycle Plan and UDOT Region 2 has a detailed map that displays projects and gaps for bicycle facilities in South Jordan. This was a starting point for identifying potential projects.

The Wasatch Front Regional Council has developed a Regional Transportation Plan, Wasatch Choice 2050, that includes a detailed active transportation component. In developing this plan, WFRC worked closely with all the cities in the region. The plan identifies bike/ped projects in South Jordan including: buffered bikes lanes on 2700 West, a 10 foot sidewalk/shared use path on Redwood Road, and a shared use path along Bacchus Highway among others.

Figure 4-1: Online map of WFRC's Regional Transportation Plan

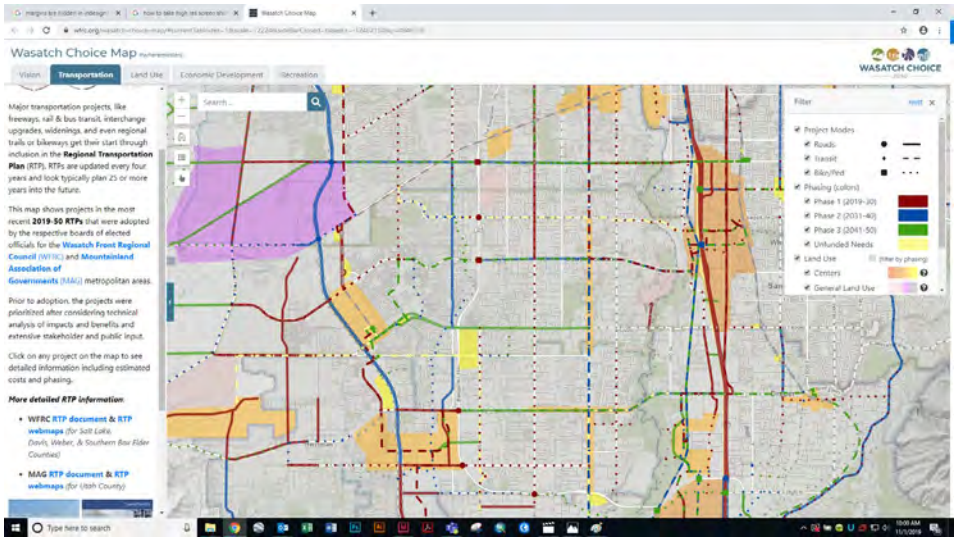
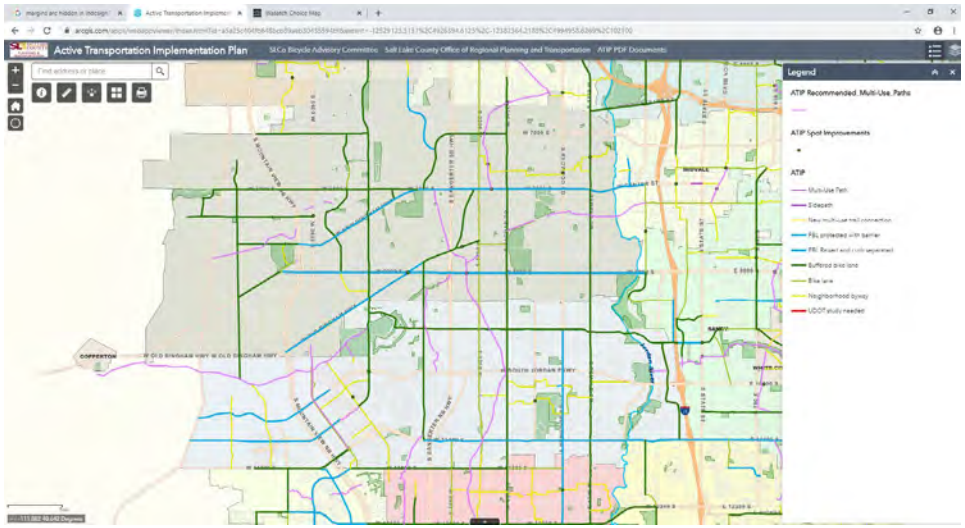


Figure 4-2: Online map of Salt Lake County's Active Transportation Implementation Plan



Salt Lake County also has developed an Active Transportation Implementation Plan (ATIP). The County considers this an evolving document. This allows recommendations like those produced from this report and its corollary planning process to influence the content of ATIP. The plan is focused on creating a high-comfort bicycle network intended to attract a broad spectrum of cyclists. It tends to stay away from adding new facilities to arterials where vehicle speeds are high, instead, the ATIP provides planned buffered and non-buffered bike lanes on collectors. Some identifies projects in South Jordan are buffered bike lanes on 2700 West, bike lanes on 3200 West, and buffered bike lanes on 1300 West.

1,000 Mile Goal

In 2017 Governor Herbert initiated the 1,000 Miles Campaign to build 1,000 new miles of family-friendly bike lanes, paths, and trails by 2027. Bike Utah is designated to helping carry out the implementation of the 1,000 Miles Campaign. This statewide goal is an indicator that Utah is heading toward even more active transportation.

What are family-friendly bike lanes, paths, and trails?

- On-street bike lanes that provide a high level of comfort for all users
- Multi-use pathways that serve as transportation and recreation routes for people of all ages and abilities
- Mountain bike trails for a range of skill levels
- Neighborhood bicycle routes so individuals, families, and children can get to local destinations, including work, school, parks, church, and businesses

As the projects in this plan are built, South Jordan will be contributing to this 1,000 mile goal.

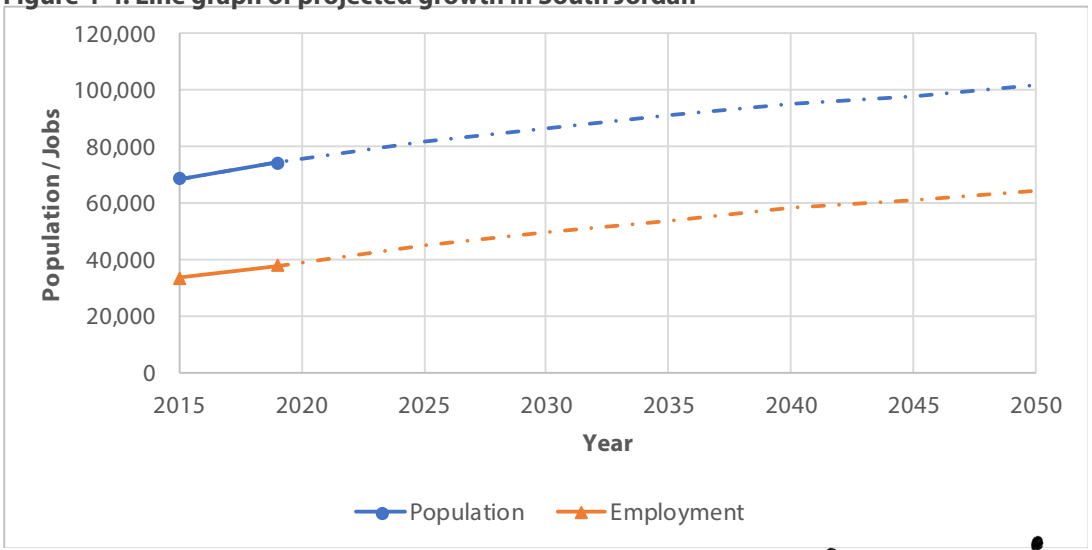
Planned Growth and Active Transportation

Most of the developable land in South Jordan is located west of Daybreak. This includes the area west of the Mountain View Corridor which is planned to be developed as residential or mixed use. As this growth occurs, there is an opportunity to install the backbone infrastructure of the active transportation network. This proactive approach offers an advantage to the alternative of retroactively incorporating active transportation infrastructure after development has occurred.

South Jordan's updated General Plan calls for mixed-use development areas across the city. This type of zoning can be highly complementary to active transportation because of the variety in origins and destinations on a relatively small footprint of land allowing for short and frequent trips. The general plan also identifies community goals that align with many of the outcomes and benefits of a robust active transportation network such as "expand on multi-modal trail systems, expand and enhance the existing bike path network" and the improvement of air quality as growth occurs.

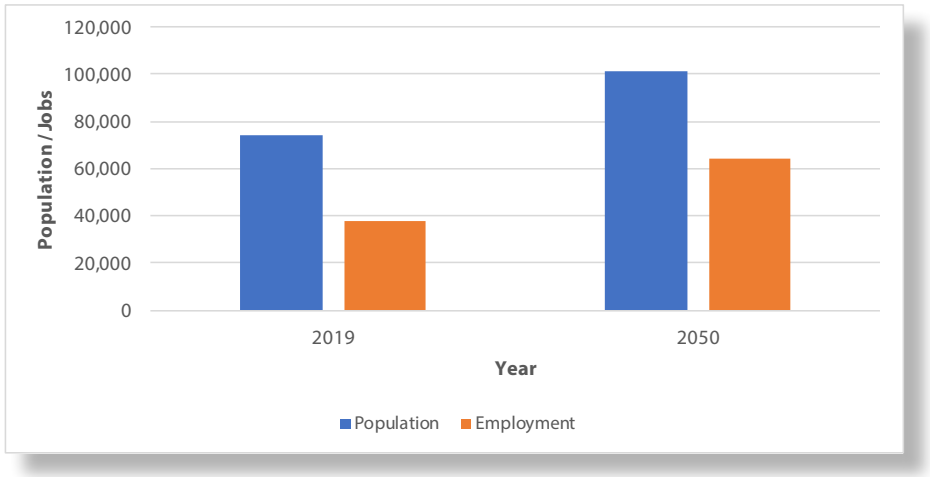
Figure 4-3: Cyclists along the Jordan River Trail

Figure 4-4: Line graph of projected growth in South Jordan



South Jordan is projected to grow from today's population of 74,000 to over 100,000 by 2050. Along with the continued population growth, the number of jobs or employment is expected to increase as well. This growth trend means that there will be even more cars traveling the roadways and more pedestrians and cyclists using the trails and bike lanes. The current number of miles of trail, bike lanes, and sidewalks in South Jordan will need to increase to keep up with the growing population. Figure 4-5 is a graph showing an anticipated 36% increase in South Jordan City's population.

Figure 4-5: Bar graph of projected growth in South Jordan



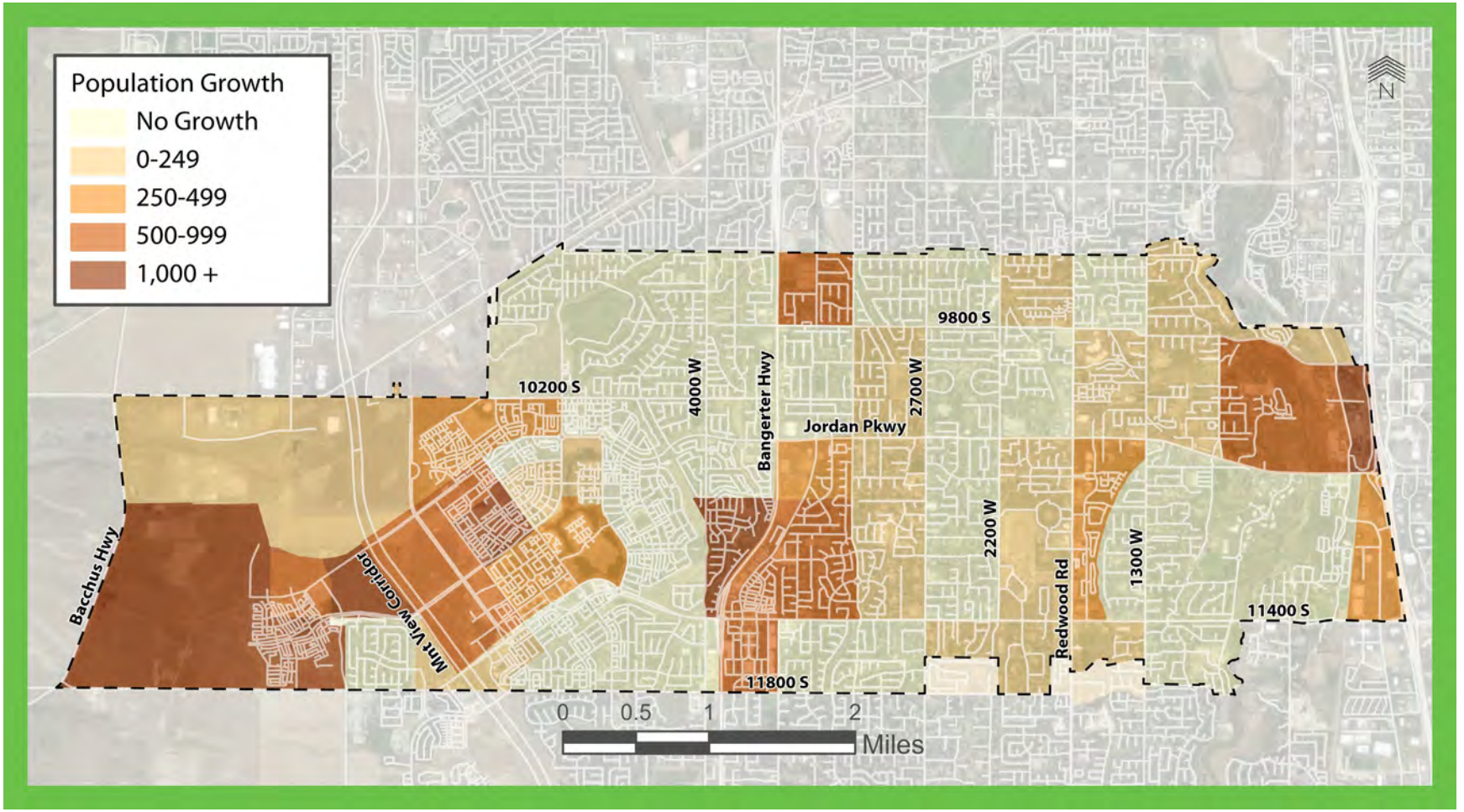
As the City of South Jordan grows, its number of cyclists and pedestrians will also grow. Many Utah communities are integrating active transportation designs into new development. As the western part of South Jordan becomes developed, it is critical that the city requires developers to incorporate measures and design components that benefit pedestrians and cyclists, such as shared-use paths, bicycle parking and landscape beautification that offers shading and/or improved lighting at newly developed areas.

Figure 4-6: Daybreak aerial showing trails and bike lanes

Daybreak is an example of a master planned community that incorporates active transportation into their neighborhoods.

Figure 4-7 shows general locations of the anticipated population growth. The planned population growth represent an increase of approximately 27,000 new South Jordan residents over the next 30 years. The map below highlights specific zones that are anticipated to be where home is to these new residents. Generally, the undeveloped parts of South Jordan, are where many new homes are planned. This is most notable west of Mountain View Corridor.

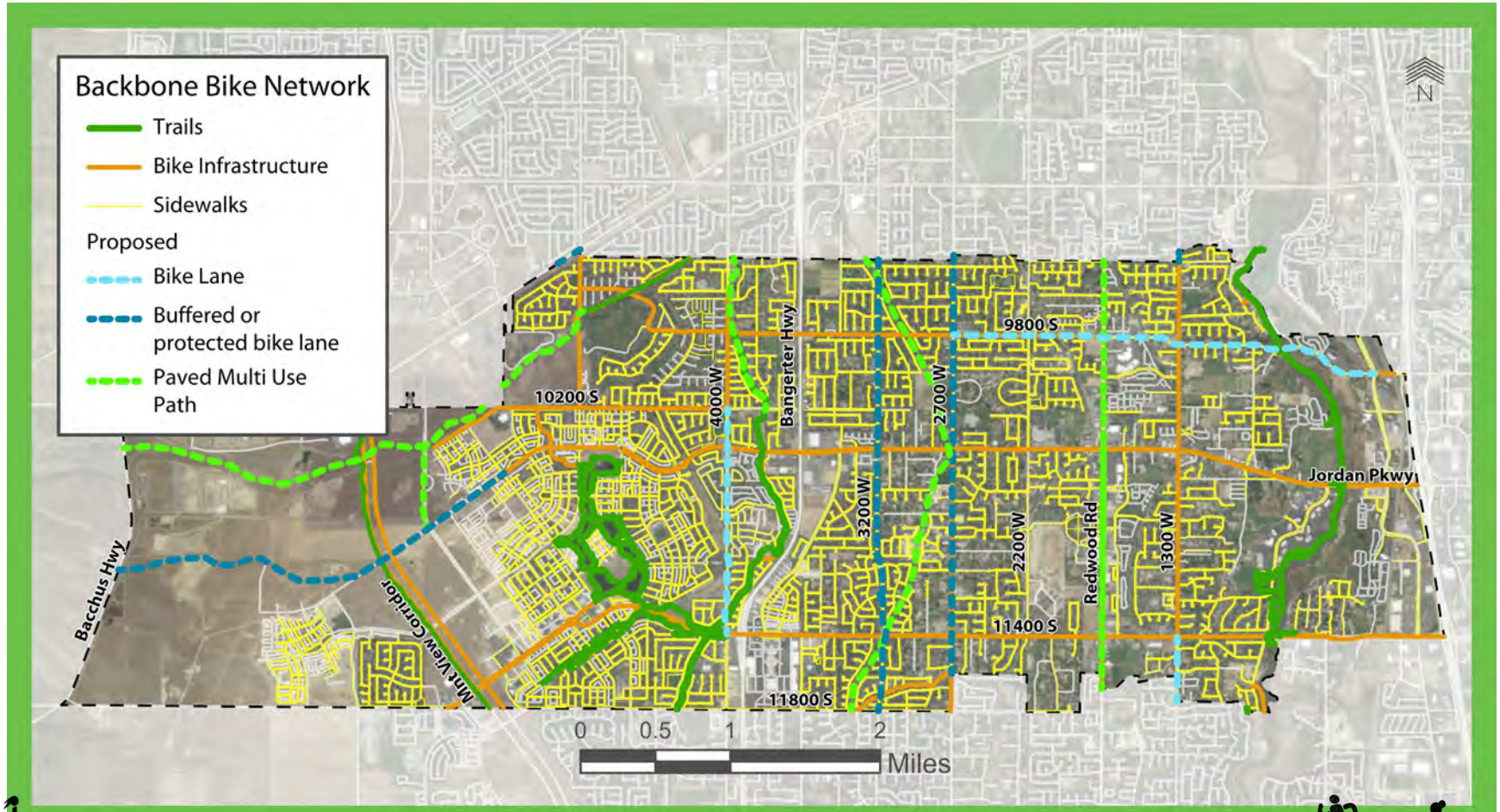
Figure 4-7: Map of population growth in South Jordan projected into 2050



Backbone Network

The information collected from existing active transportation plans combined with the data on projected growth trends led to the development of a single unified active transportation backbone network. This backbone network is similar to a vehicle road network, in that it offers connectivity to destinations within the City as well as regional connections to the neighboring municipalities. The regional connections are important to users because they want to travel without facility changes at city boundaries. This backbone network map represents the complete future of trails, bike lanes, buffered bike lanes, byways and sidewalks. The map includes the planned projects highlighted in Section 5.

Figure 4-8: Map of the Backbone Bike Network in South Jordan

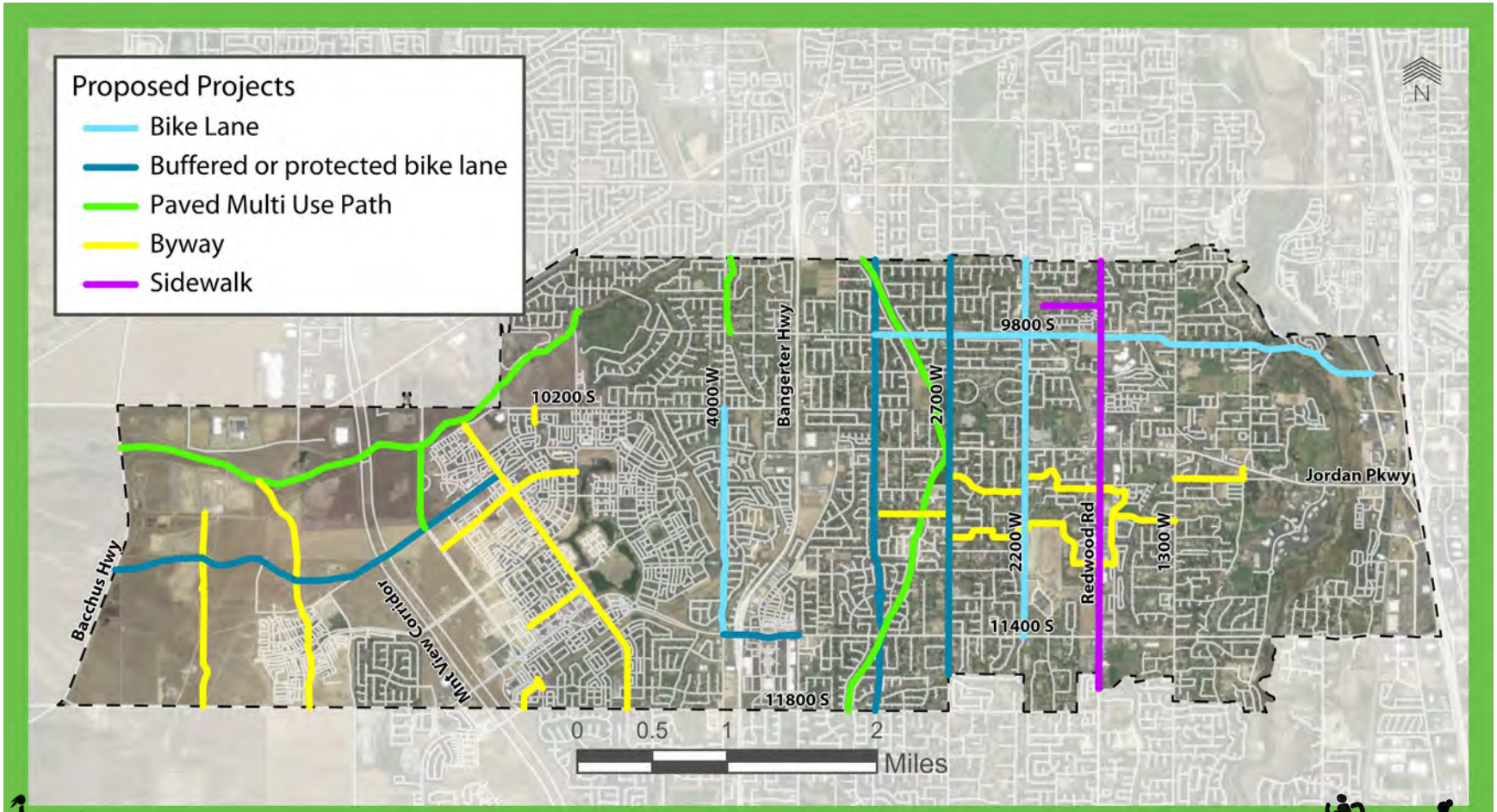


5 Planned Projects

Potential Projects

The enumerated list of recommended projects is based on the completed planning efforts discussed in the prior chapters. These projects include new trails, bike lanes, sidewalks and neighborhood byways. Projects that have been completed while the team was gathering information, determining measurement for prioritization, soliciting public feedback, etc. were removed from the potential project list. This current project list was screened and

Figure 5-1: Proposed active transportation projects



vetted throughout the planning process as more information was gathered. This preliminary screening effort reduced the number of potential projects to a list comprised of approximately 50 projects in West Jordan and South Jordan. These projects were then further evaluated and cost estimates were prepared.

All new projects that were identified during public outreach efforts, such as the multi-use trail around the airport, were carried forward for future evaluation and ranking. Projects were developed and ranked jointly between South Jordan and West Jordan. Each individual city ranking maintains the same numbering that was assigned to the joint city list to ensure that the collective planning efforts do not become fragmented.

Active Transportation Cross-sections

The following graphics are from Salt Lake County's Bikeway Design guidance manual and show the types of bicycle infrastructure recommended in this document. The full Bikeway Design guidance manual can be found at https://slco.org/globalassets/1-site-files/planning--transportation/files/slcobikewaydesign.pdf.

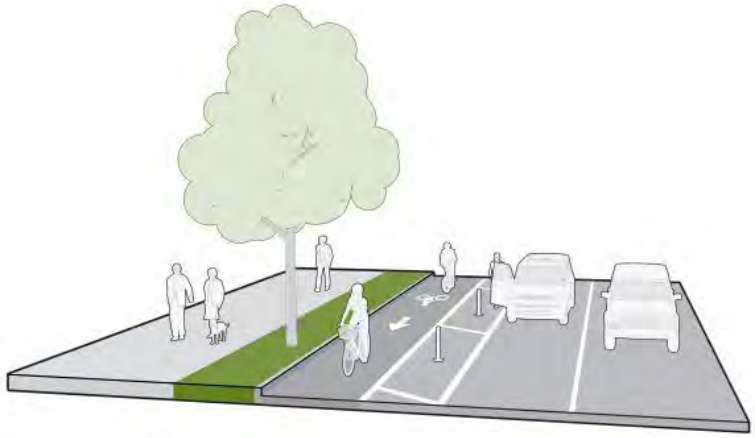
Figure 5-2: Striped bike lane

Bike lanes use signs and pavement markings to delineate street space that is exclusive for bicycling. Bike lanes can encourage predictable traffic flow from both cyclists and motorists.

Figure 5-3: Buffered bike lane

Buffered bike lanes use painted buffers which improve bicyclist level of comfort by increasing the distance between traffic and cyclists. As with bike lanes, signs and pavement markings are to designate on-street space exclusive to bicycling.

Figure 5-4: Protected bike lane



Protected bike lanes, also known as **separated bike lanes**, are on-street or street-adjacent bikeways. They can be one-way or bidirectional facilities that are separated from traffic and walkways with vertical separation or physical elements such as parking, planters, or curbing. They are intended to provide the same level of comfort as shared-use paths and are similar to side paths but are exclusively for bicycle travel.

Figure 5-5: Multi-use path

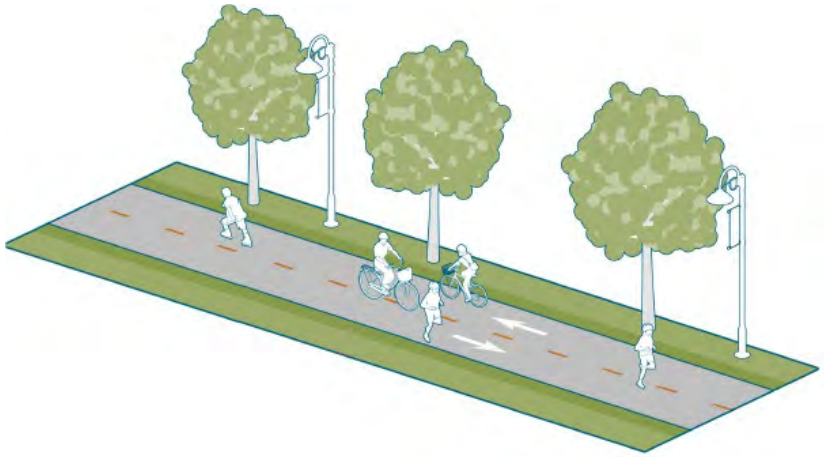


Figure 5-6: Neighborhood byway

Multi-use paths, also known as **shared-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 are preferred by less experienced cyclists, but more experienced cyclists may avoid them due to out of direction travel and slower users.

Neighborhood byways also known as bicycle boulevards or greenways, are shared streets optimized for bicycle travel. Signs and pavement markings are used to create a high comfort environment while traffic calming features manage motor vehicle speeds and volumes.

While these designs are shown independently, they can, and should be integrated together along roadway(s) when it is necessary to do so. **The choice of design treatment is dependent on both the comfort level and context of a specific area**. For example, on a hilly road a striped bike lane may be needed alongside the lane that traffic ascends the hill due to the slower speed of the cyclist while they are climbing the hill. However, a shared use facility design, where cars and bikes are not physically separated, may be sufficient for the opposite, descending travel lane because the speed of the cyclist will be greater on the descent.

Prioritization Goals

Once projects were identified based on public and stakeholder outreach, prior plans, safety issues, and an analysis of gaps in the current network, the next step in the planning process was to determine which potential projects best meet the plan's goals. The end result of this prioritization process was a ranked list of projects, with the highest-ranked projects best meeting a set of criteria that reflects what South Jordan residents and stakeholders expressed they value in active transportation facilities.

Evaluation Criteria

Evaluation criteria were prepared based on collaborative discussion with the project team and stakeholder committee. Six major "themes" were identified, each of which correspond to an aspect of each project that had been raised in prior conversations as important. An overview of each theme, its measurable criteria, and the metrics that determine how each criterion was valued and integrated into the project's overall score is provided in table 5-1.

- **Feasibility** reflects the ease with which a project can be implemented, and is weighted to favor projects that are lower in cost and overlap with planned roadway projects that may provide cost savings and reduced construction impacts.
- **Connectivity** reflects the degree to which projects provide a strong and complete network throughout South Jordan and West Jordan, including connecting to existing facilities and key destinations.
- **Equity** reflects a concern for providing access to all neighborhoods in the communities of South Jordan and West Jordan, especially areas that have not been well-served to date by active transportation facilities.
- **Community Demand** accounts for projects that address needs, desires, and safety issues raised by members of the public through outreach events and online surveys.
- **Comfort** prioritizes those projects that provide more protected and separated facilities, such as shared-use paths and protected bike lanes. This reflects a greater emphasis on providing facilities that are attractive to "interested but concerned" users who may be more sensitive to their proximity to motor vehicles.
- **"Wow" Factor** provides additional weight to projects that the Steering Committee has indicated will provide exceptional value to active transportation users in South Jordan and West Jordan. This is intended to provide greater prioritization to projects that can serve as a showcase for great infrastructure, provide an excellent experience for users, and help distinguish the communities as leaders in encouraging active transportation along the Wasatch Front.

Figure 5-7: Project team meeting reviewing ranked projects

Prioritization Exercise

After developing the evaluation criteria and associated metrics, each project was measured against these criteria and given a score between 0 and 100. Spatial metrics, such as the number of connected or adjacent facilities, the number of nearby destinations, and shared alignments with other projects, were calculated based on buffer analyses conducted in ArcGIS. These metrics, along with estimated project costs and the number of public comments, were rescaled to be between 0 and 100, such that the highest-ranked project received a score of 100. Other metrics, such as facility types, received a predetermined point values based on how well they aligned with the plan's goals.

Table 5-1: Project evaluation criteria

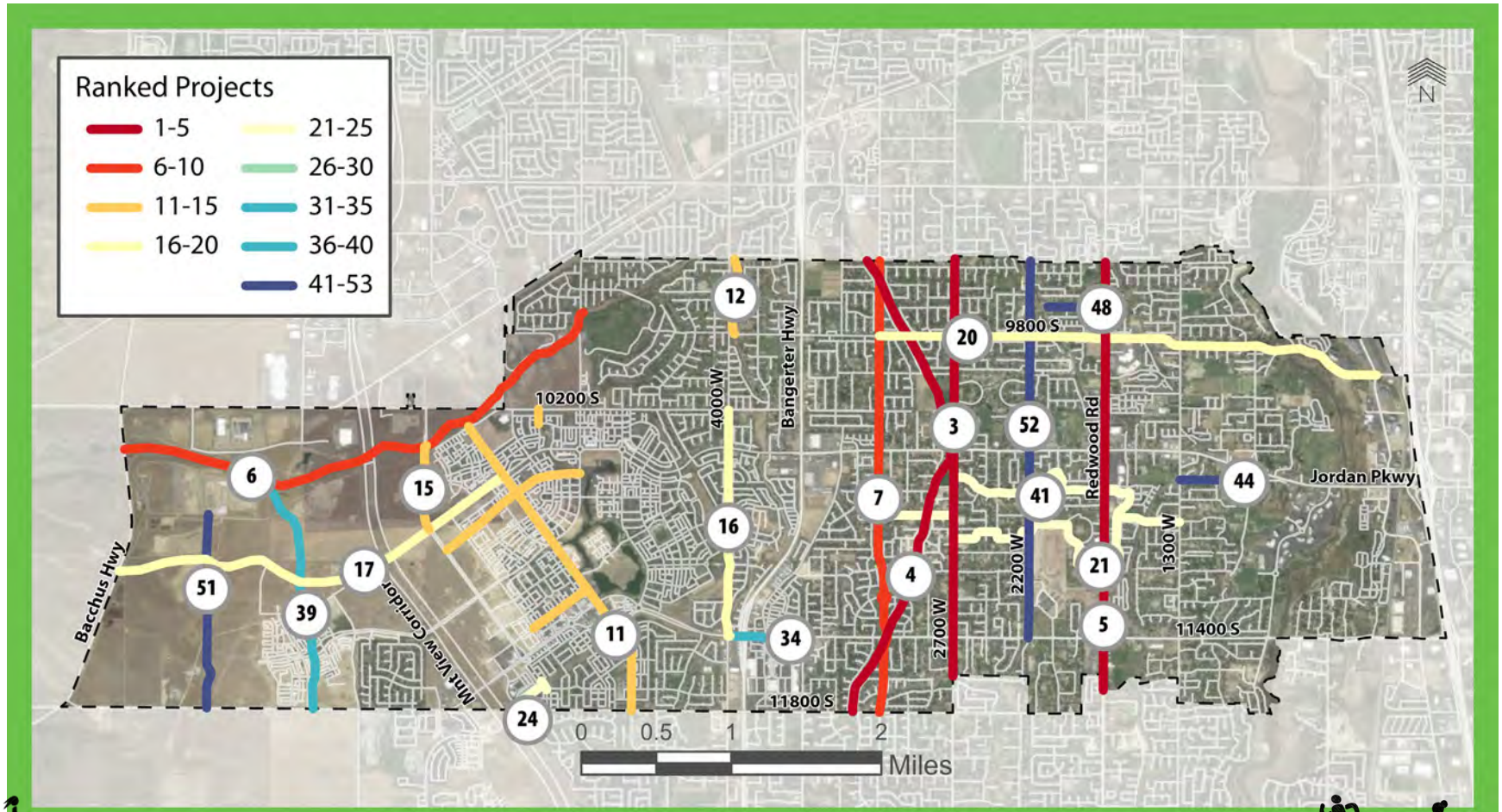
Proposed Project Evaluation Criteria - South Jordan West Jordan Active Transportation Plan			
Theme	Description	Criteria	Metric / Scoring
Feasibility	Can the project be implemented?	Estimated project cost	100 to 0 based on scaled estimated facility cost
		Does the project share alignment with planned roadway project(s)?	100 points for fully shared alignment, 75 to 25 points for partially shared alignment
Connectivity	Does the project provide connections within and beyond South Jordan/West Jordan?	Does the project connect to one or more external AT facilities or ATIP/WFRC proposed projects?	100 points if directly connected, 50 points if within 1/8 mile
		Is the improvement within 1/2 mile of key destinations (parks, schools, TRAX stations)?	number of destinations within 1/2 mile
		Does the improvement close a gap between or extend existing facilities?	number of existing facilities directly connected
Equity	Does the project provide connections to underserved areas in the communities?	Is the project in an area of either community with below-average access to existing or proposed active transportation infrastructure?	*number of existing facilities within 1/2 mile buffer**
Community Demand	Does the project address needs voiced in stakeholder and public outreach?	Does the project address an area highlighted in survey results or public outreach events?	100 to 0 based on count of survey/outreach comments highlighting issues on alignment
Comfort	Does the project provide a facility that enhances comfort for "interested but concerned" users?	Does the project provide a buffered or off-street facility?	100 points for off-street facility, 50 points for buffered/protected facility
"Wow" Factor	Does the project provide a big win for active transportation in SJ/WJ?	Steering Committee indication	100 points if yes, 0 if no

** indicates metrics that are scored in reverse e.a. a higher score on that metric yields a lower overall prioritization score*

Project Ranking

Each project was ranked based upon the composite score from the process evaluation criteria. The project ranking reflects the relative importance of each project for the active transportation network. However, the ranking does not reflect the order in which the projects should be completed. Additional local criteria and values should be considered prior to advancing each project. The map below shows the ranked projects within South Jordan. The overall ranking is for the entire study area which included both South Jordan and West Jordan.

Figure 5-8: Ranked projects from list in South Jordan



Key Projects

The top ranked project was 2700 West through West Jordan. Similarly, 2700 West scored well through South Jordan and was ranked third overall. Due to the relatively high ranking, resident input, and city priorities, the 2700 West buffered bike lanes were carried forward for conceptual design, making it a key project for both communities. Other key projects for both communities include the completion of bike lanes on 1300 West through West Jordan, which would extend the existing bike lanes in South Jordan, the addition of buffered or protected bike lanes on Old Bingham Highway to improve east/west bicycle network connectivity, and lastly, widening the sidewalk on Redwood Road to 8'-10' would improve the pedestrian network. Ranked projects were divided into tiers to show general priority. Tier I are the projects ranked 1-10, Tier II are projects 11-20, and Tier III are the remainder.

Figure 5-9: Project prioritization tiers and project ranking

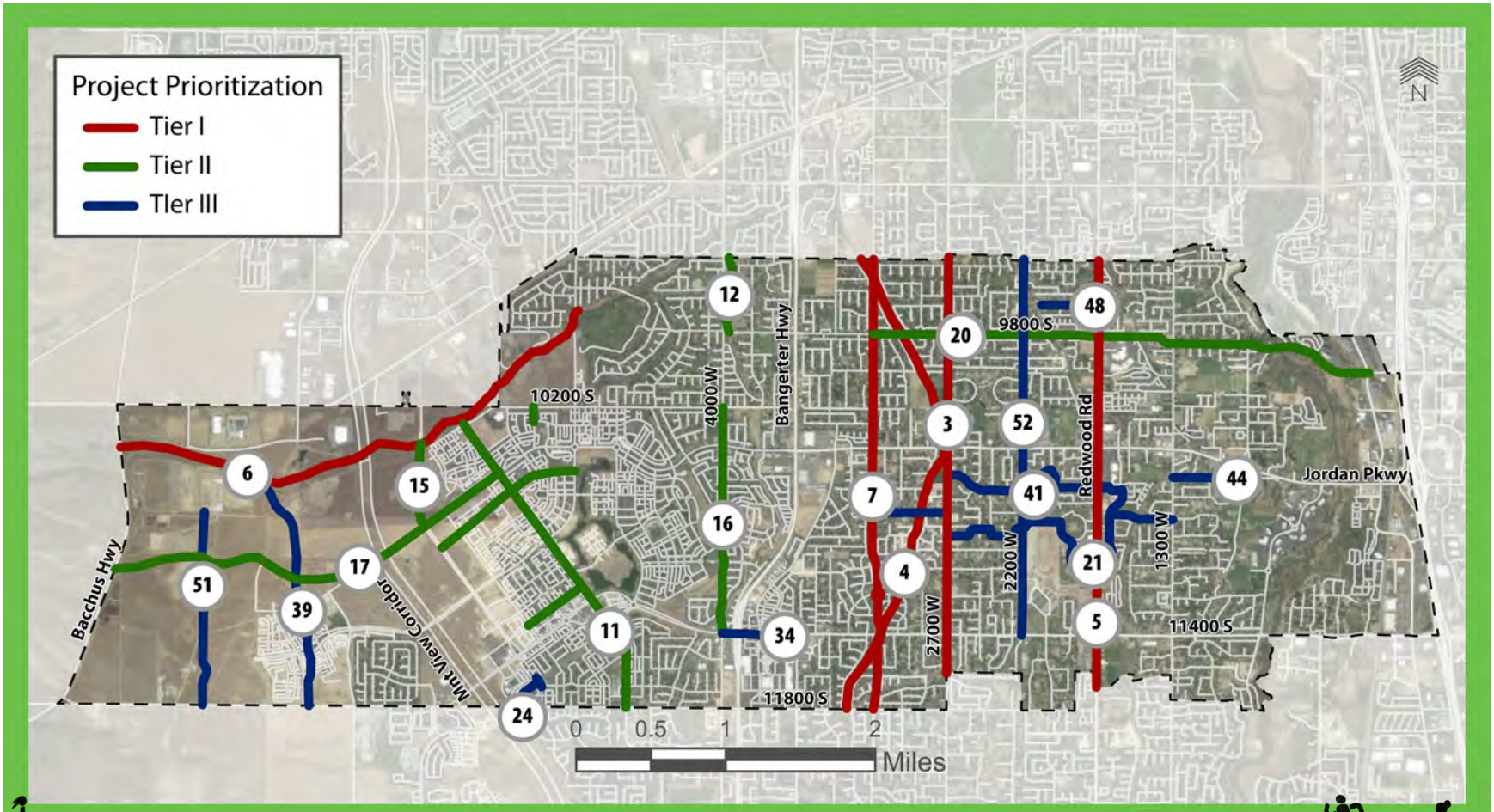


Table 5-2: Project prioritization and ranking

Combined Rank *	Location	Type	Miles	Cost	Funding
Tier I					
3	2700 West between South Jordan's northern city boundary and southern city boundary	Buffered Bike Lane	2.8	$101,000	TAP/Choice Fund
4	Along the Utah Distribution Canal between South Jordan's northern city boundary and southern city boundary	Paved Multi Use Path	3.3	$2,790,000	TAP/Choice Fund
5	Redwood Rd between South Jordan's northern city boundary to southern city boundary	Sidewalk (8'-10')	3.1	$1,310,000	TIFF
6	Bingham Creek Trail Between 4800 West and western city boundary	Paved Multi Use Path	3.6	$2,990,000	Development
7	3200 West between South Jordan's northern city boundary and southern city boundary	Buffered or protected bike lane	3.2	$109,000 - $2,509,000	TAP/Choice Fund
Tier II					
11	Otter Trail Dr between 10200 South and Vermillion Dr/Kestrel Rise Rd between Bingham Rim Rd and South Jordan's southern boundary/Dock St between Grandville Ave and Lake Ave/Duckhorn Dr between Lake Run Rd and Kestrel Rise Rd	Neighborhood Byway	3.8	$12,000	CATF
12	Welby-Jacobs Trail along Provo Reservoir Canal between South Jordan's north city boundary and 10200 South	Paved Multi Use Path	0.5	$436,000	TAP/Choice Fund
15	Grandville Ave between Bingham Creek Trail and South Jordan Parkway	Paved Multi Use Path	0.6	$485,000	TIFF
16	4000 West between 10200 South and Daybreak Parkway	Bike Lane	1.5	$41,000	CATF
17	Connecting South Jordan Parkway and Bacchus Highway	Buffered or protected bike lane	2.9	$98,000-$2,264,000	Development
20	Shields Ln between 3200 West and Jordan Gateway	Bike Lane	3.7	$99,000	CATF
Tier III					
21	10760 South between Beckstead Ln and Temple Dr/Rustic Roads Dr between 2700 West and 2200 West/ Around South Jordan Park/10755 South between dead end and 2700 West	Neighborhood Byway	4.4	$14,000	CATF
24	Currant Dr between South Jordan's southern city boundary and Grandville Ave/Grandville Ave between Blackbird Ln	Neighborhood Byway	0.3	$1,000	CATF
34	Daybreak Parkway between 4000 West and 3600 West	Buffered or protected bike lane	0.5	$17,000-$401,000	UDOT/City
39	Prosperity Road from 11800 South to Bingham Creek Trail	Neighborhood Byway	1.6	$5,000	Development
41	2200 West from Park Rd to South Jordan Pkwy	Sidewalk	0.5	$112,000	City
44	10550 South between Temple Dr and South Jordan Parkway	Neighborhood Byway	0.5	$2,000	CATF
48	9640 South	Sidewalk	0.4	$81,000	City
51	Connecting the Trans-Jordan Landfill and South Jordan's southern city boundary	Neighborhood Byway	1.3	$4,000	Development
52	2200 West from 11400 South to 9800 South	Bike Lane	2.5	$66,000	Choice Fund/City
		TOTAL COST		**$8,773,000 - $13,723,000**	

* The numbers in the **Combined Rank** column reflect the complete prioritization list among all South Jordan and West Jordan projects.

Table 1-2: Project prioritization total cost and miles by Tier

Tier I		Tier II		Tier III	
Total Miles	16	Total Miles	13	Total Miles	12
Total Cost	$7,300,000 - $9,700,000	Total Cost	$1,171,000 - $3,337,000	Total Cost	$302,000 - $686,000

Cost estimates were developed by active transportation engineers based on the most recent bid prices for construction items like striping paint and concrete curbs. The full construction costs estimates were based on facility types and linear feet of construction. Buffered or protected bike lane projects costs are based on recently completed buffered or protected bike lane projects. Variability in the cost of these projects is based upon design choices, restrictions, and existing conditions. A common occurrence that will effect cost is if a bike lane and buffer can be striped in the existing road, if right-of-way is required to add the buffered bike lane, or if it is a curb protected bike lane that requires new concrete and drainage accommodations, that is why they are shown as a range.

All the cost estimates include a contingency percentage and should be considered planning level cost estimates only. Better engineering based costs will need to be developed as projects near construction.

Figure 5-10: Striped bike lane and multi-use path in Daybreak

2700 West Buffered Bike Lanes Concept Design

To help advance active transportation in the community and to focus on implementation by moving from planning into design the study produced a concept design for one key cross-jurisdictional corridor.

Based on the ranking of projects in South Jordan and team discussions with officials from both West Jordan and South Jordan, the project that was selected for conceptual design was 2700 West buffered bike lanes. Buffered bike lanes are different from basic striped bike lanes because they include a physical space "buffering" or separating bike travel from cars moving in the same direction on the street. Buffered lanes vary in width, and the determined amount of necessary separation for cyclists for this concept design as two feet. This space is critical for the comfort of both the cyclists and the drivers.

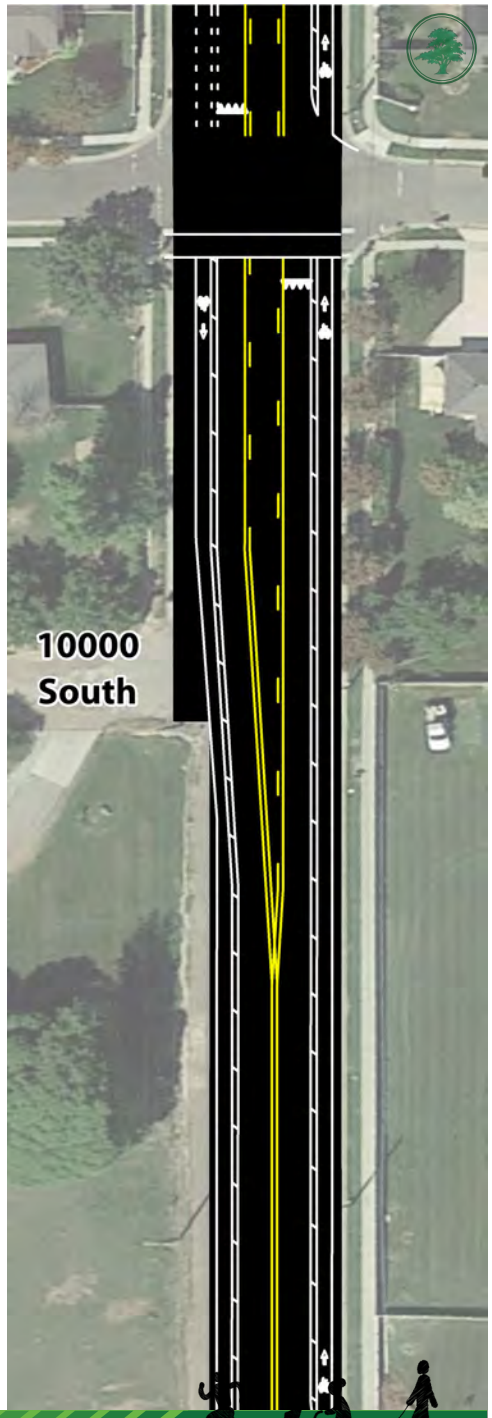
The concept design layout fits entirely within the existing right-of-way. This was done so that the layout would not impact any existing landowners along the corridor. Designing within the right-of-way did present some challenges and the street concept design varies throughout the corridor to maintain those constrains. For example, the center turn lane is removed along the section between 10000 South and 10250 South.

Figures 5-11 to 5-13 show selected segments of the recommended layout for 2700 West. These highlight key features of the concept design in South Jordan.

The 7.7 mile long full concept design can be viewed on the project website at www.jordanatp.com

The following three segments were chosen to illustrate specific challenges along the corridor.

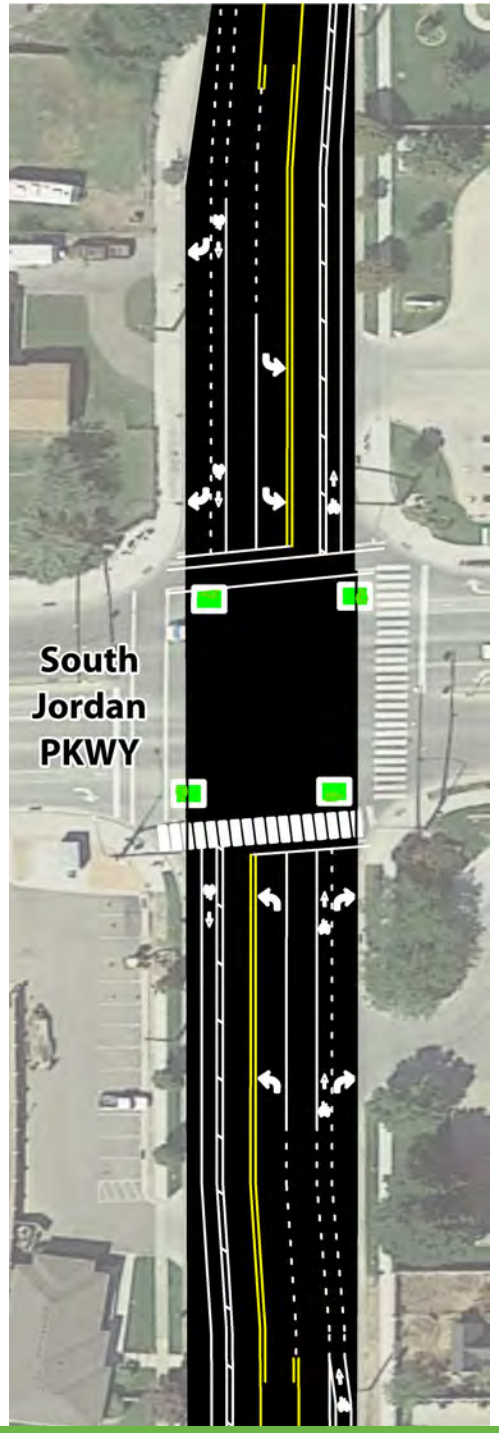
Figure 5-11: 2700 West buffered bike lane concept design layout near 10000 South



The 2700 West concept design was always kept within the existing right-of-way. At 10000 South the right-of-way shrinks from 60 feet north of 10000 South to 50 feet south of 10000 South. To design for this without sacrificing the safety of the two foot buffer required the removal of the center turn lane.

The top priority of the concept design is to consistently maintain the level of bicycle comfort created by the buffer as well as the other safety features. This specific area on 2700 West easily allows for the buffered bike lanes to continue through the reduced road width, because there are no driveways on the west side of the road and only two driveways on the east side. The impact of removing the center turn lane is minimal to automotive traffic.

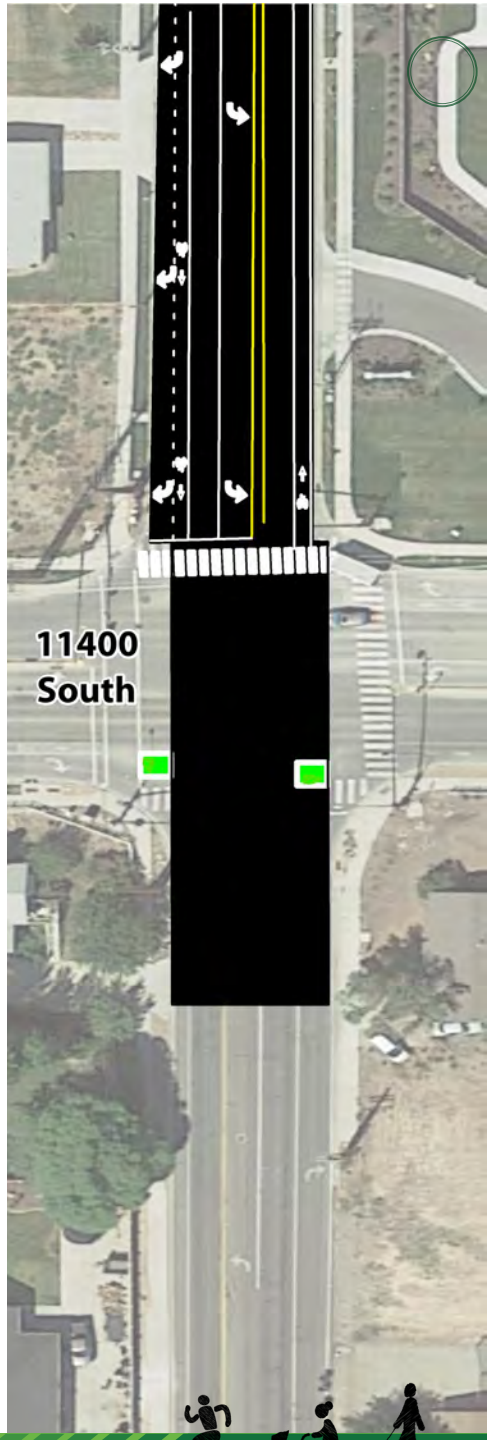
Figure 5-12: 2700 West buffered bike lane concept design layout crossing South Jordan Parkway



The 2700 West concept design transitions at key intersections to allow for vehicle right-turn pockets. The bike lane buffer is dropped but the 5 foot bike lane spacing is maintained to provide cyclist some dedicated space. The buffer is continue on the other side of the intersection.

This intersection and all other intersections that include bike lanes or bike ways on the cross street have two-stage left turn boxes for cyclists. These left turn boxes allow for cyclists to more easily navigate left turns while staying outside of the vehicle travel lanes in any direction. These two-stage left turn bike boxes are becoming more common and UDOT has accepted them as standard. At this location our concept design includes four such boxes to accommodate every direction, even cyclists traveling on South Jordan Parkway.

Figure 5-13: 2700 West buffered bike lane concept design layout crossing 11400 South



The 2700 West concept design needs a logical terminus other than the city boundary. Ideally the buffered bike lanes would continue south into Riverton and Bluffdale.

For South Jordan a logical endpoint is 11400 South, as there are bike lanes on that corridor that cyclists could access.

At this point the concept design includes two-stage left turn boxes for riders accessing onto northbound 2700 West and eastbound 11400 South.

Cost estimates were developed by the design engineers that completed the concept design of 2700 West. The cost includes individual elements to construct this project in South Jordan like, striping paint, thermoplastic green paint, and needed signs. The cost estimate does NOT include any widening, pavement rehab, curb or gutter. The concept was designed to avoid these larger costs and impacts.

Table 5-3: South Jordan Active Transportation Plan-2700 West

BID ITEMS					
No.	**Description**	**Quantity**	**Unit**	**Unit Price**	**Amount**
ROADWAY					
1	**Thermoplastic Pavement Message**	**104**	**EACH**	**$ 200**	**$ 20,800**
2	Thermoplastic Pavement Message (Bike and Bike Arrow)	188	EACH	$150	$28,200
3	**Thermoplastic Pavement Message (Bike Box)**	**6**	**EACH**	**$250**	**$1,500**
4	Thermoplastic Pavement Message (Green Paint)	-	SQ FT	$10	-
5	**Thermoplastic Pavement Message - Crosswalks and Stop Lines**	**1,097**	**FT**	**$8**	**$8,776**
6	Pavement Marking Paint	1,290	GALLON	$25	32,250
			Subtotal		**$91,526**
SIGNING					
6	SIgning (Estimate)	1	LUMP	$9,000	$9,000
			Subtotal		**$9,000**
			Bid Items Subtotal		**$100,526**
			GRAND TOTAL		**$100,526**

6 How We Get There

How projects get constructed often comes down to them getting funded. This section identifies available funding resources to pay for active transportation projects in South Jordan.

Funding

Active transportation routes often span multiple jurisdictions and provide regional significance to the transportation network. As a result, other government jurisdictions or agencies often help pay for such regional benefits and projects. Those jurisdictions and agencies could include the Federal Government, the State or (UDOT), the County, and the local metropolitan planning organization (WFRC). South Jordan will need to continue to partner and work with these other jurisdictions to ensure adequate funds are available for these projects. South Jordan will also need to partner with West Jordan and other adjacent communities to ensure corridor continuity across jurisdictional boundaries.

Federal Funding

Federal funds are available to cities and counties through the federal-aid program. UDOT administers the funds. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP). The Surface Transportation Program (STP) funds can be used for transportation enhancements in twelve categories including bicycle and pedestrian facilities. The Joint Highway Committee programs a portion of the STP funds for projects around the state in urban areas. This is a 5-year funding tool and the STIP projects are updated regularly to maintain a 5-year list of projects. Adding AT projects and other projects in South Jordan to UDOT Region 2's transportation plan is an important early step.

State Funding

The distribution of State Class B and C Program funds is established by State Legislation and is administered by UDOT. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. 75% of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities. Some of the roads with active transportation facilities in South Jordan fall under UDOT jurisdiction. It is in the interest of the city that staff are aware of the procedures used by UDOT to allocate those funds and to be active in requesting the funds be made available for UDOT owned roadways in the City. Class B and C funds are allocated to each city and county by a formula based on population, centerline miles, and land area. Class B funds are given to counties, and Class C funds are given to cities and towns.

Class B and C funds can be used for maintenance and construction projects including active transportation; however, thirty percent of those funds must be used for construction or maintenance projects that exceed $40,000. The remainder of these funds can be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

UDOT also administers Safe Routes to School funding. This is a $1.2 Million annual fund to pay for active transportation safety improvements near schools across the state. Cities apply for this funding which is a reimbursement fund with no matching dollars required. This money can be used for improvements such as new trails or sidewalks, signals, crosswalks, etc.

Senate Bill 136 recently created a new "Transit Transportation Investment Fund" (**TTIF**). This new fund, beginning July 1, 2019, allocates state funding from the fuel tax specifically for public

capital transit projects. However, Senate Bill 72 opened this fund up to non-motorized projects as well. These dollars can also be used for active transportation projects around transit facilities, but the new infrastructure provide access to transit stops. This UDOT fund has not been distributed for the first time yet, and UDOT has stated that cities will need to apply for their projects to get access to this fund. It also requires 40% matching funds from local governments. Cities like South Jordan can use federal (but not state) dollars for the match. More information on this fund will be developing in the coming years.

MPO Funding

The Wasatch Front Regional Council administers several funding programs of both federal and state dollars for the region. The Transportation Alternatives Program (**TAP**) funds the construction and planning of bicycle and pedestrian facilities. South Jordan and all cities in Salt Lake, Davis, and Weber Counties are eligible. Funds may be used for construction, planning, and design 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- motorists.

Salt Lake County cities receive $800,000 -$900,000 every year. WFRC asks cities to submit letters of intent in the fall, with full applications due December 12th this year for funding in July of the following year.

County Funding

Salt Lake County maintains an active transportation fund used to pay for a portion of active transportation projects within the County. It is called County Active Transportation Fund (**CATF**) and is currently $1 Million annually that cities, including South Jordan can apply for to fund their projects. This fund typically requires a match and is often used to pay for smaller projects since it is limited. Applications are due in July.

Senate Bill 136 also allocated a quarter of one percent sales tax to the Regional Transportation **Choice Fund**. Salt Lake County now has an on-going transportation fund that can be spent on a variety of transportation projects including active transportation. In fact, one quarter of this fund is earmarked for active transportation projects. This fund held $40 Million in 2019 its first year, but subsequent years the fund is expected to be less. Salt Lake County has administered these funds and required cities to submit applications. Every project was scored based on several criteria including if the project is multi-jurisdictional. The administration of this fund is changing and the cities within Salt Lake County will be receiving individual portions of this fund, the details of which are still being determined. For more information contact Salt Lake County Regional Planning & Transportation.

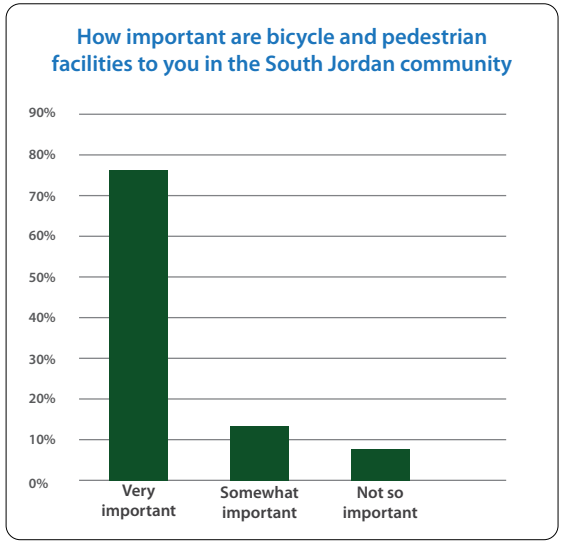
City Funding

South Jordan utilizes general fund revenues for active transportation programs. General fund revenues are typically reserved for operation and maintenance purposes as they relate to transportation. However, general funds could be used if available to fund the expansion of active transportation facilities. Providing a line item in the city budgeted general funds to address improvements, which are not impact fee eligible, is a recommended practice to fund active transportation projects, should other funding options fall short of the needed amount. Revenue bonding can also be used for projects intended to benefit the entire community.

Private interests may also provide resources for transportation improvements including active transportation. **Developers** can construct the local streets with bike lanes within subdivisions and may often dedicate right-of-way for trails and parks, as well. The trails and bike lanes in Daybreak were constructed this way. Many of the new growth areas include new active transportation facilities provided by the developers.

Community Priorities

South Jordan is a community that values active transportation and is ready to invest in improving facilities to provide safer, more comfortable routes for walking and bicycling. Nearly 75% of survey respondents said that active transportation is very important to them in South Jordan, and many community members indicated areas where current infrastructure is absent or could be improved. Community members also told us that new bike infrastructure should be designed with the 'interested but concerned' cyclist in mind, and provide connections to destinations like parks, schools, trails, jobs, and transit. Finally, we were told that the 2700 West corridor was a high priority location for implementing a continuous and high-comfort north-south connection between South Jordan and West Jordan.



Project Identification and Prioritization

Based on the community values and priorities that we heard through public outreach and discussions with City officials, the planning process sought out key opportunities for new and improved active transportation facilities. We drew on community comments and suggestions, prior active transportation plans prepared by WFRC and Salt Lake County, and potential right-of-way opportunities along underutilized corridors and undeveloped lands. This process yielded 20 potential projects across South Jordan, which were scored and evaluated against evaluation criteria including Feasibility, Connectivity, Equity, Community Demand, and Comfort.

High-Priority Projects

The highest-priority projects for South Jordan include:

- Installing a buffered bike lane on 2700 West from the northern to southern boundary of the City; this project has been identified as the highest-priority project for the city and a conceptual design has been prepared for the corridor (see pages 35-36)
- Installing a paved multi-use path along the Utah Distribution Canal from the northern to southern boundary of the City
- Widening the existing sidewalks on Redwood Road to eight to ten feet from the northern to southern boundary of the City to accommodate cyclists and pedestrians
- Extending the Bingham Creek Trail by Installing a paved multi-use path along the creek from 4800 West to the western boundary of the City
- Installing a buffered or protected bike lane on 3200 West from the northern to southern boundary of the City

These projects represent potential opportunities to provide multiple high-comfort options for families, recreational riders, and bicycle commuters to travel north/south through and beyond South Jordan, as well as implementing a key east-west corridor across South Jordan from central neighborhoods to western trails, job centers, and future development sites.

Obtaining funding to design and build these high-priority projects is critical to the successful implementation of the Plan's vision and goals.

Potential funding opportunities that may be appropriate for implementing these projects include:

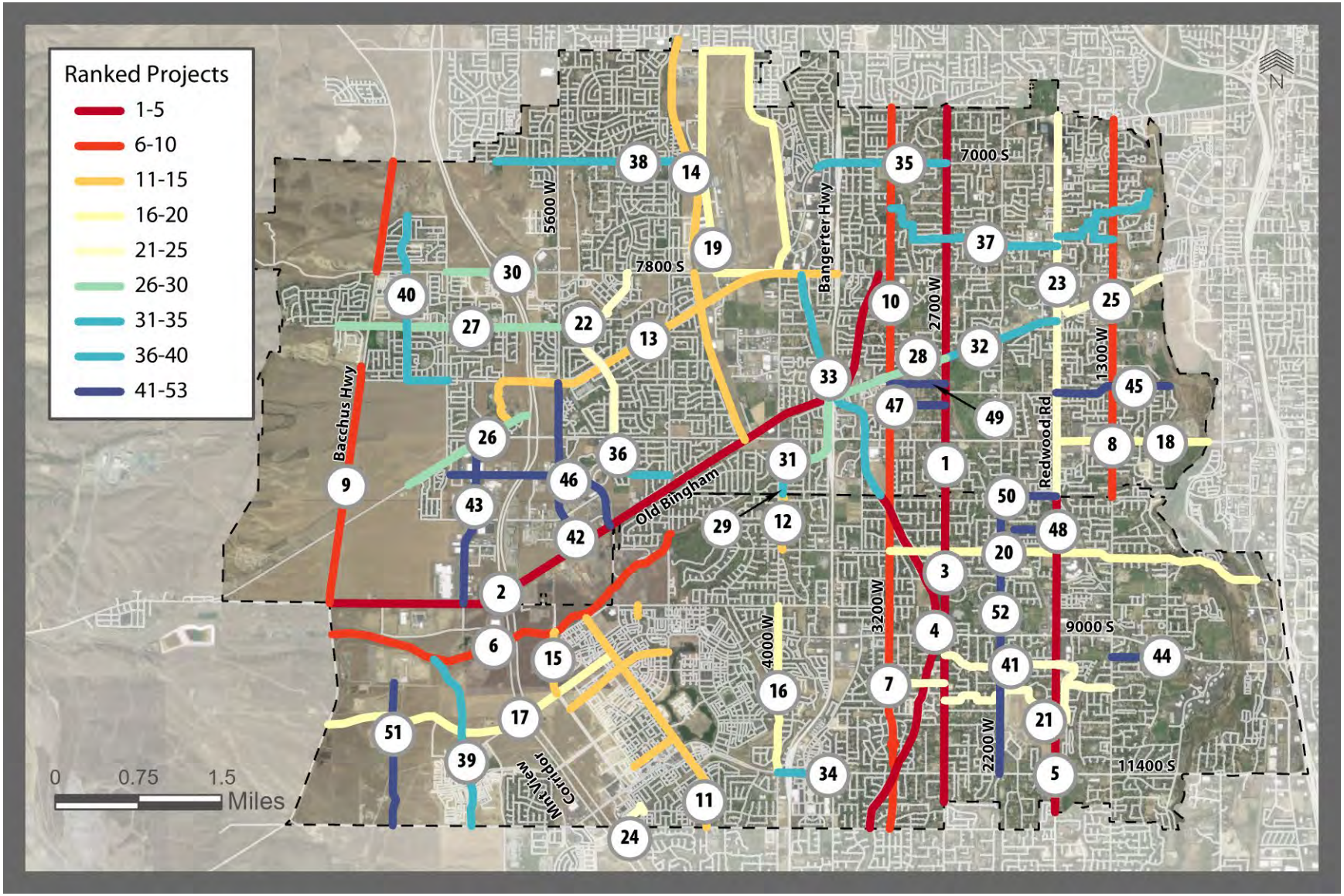
- The 2700 West buffered/protected bike lane may be a strong candidate for receiving county Transportation Choice funding, as a regionally significant corridor providing a potential connection not only through South Jordan and West Jordan, but also to Taylorsville to the north and Riverton to the south. The 3200 West corridor could likewise be funded in this way as a multi-jurisdictional project.
- South Jordan should consider applying for WFRC Transportation Alternatives Program funding to further advance planning and design of the paved multi-use path along the Utah Distribution Canal
- South Jordan should work with UDOT to look into using TIFF funding for improved sidewalks on Redwood Road along the UTA Route 218. South Jordan Should work with developers on the west side of the city to ensure that the Bingham Creek Trail extension is preserved and constructed and the should consider applying for WFRC Transportation Alternatives Program funding to further advance planning and design of these high priority facilities

A key consideration for successfully implementing the 2700 West and 3200 West projects is coordination with adjacent municipalities. West Jordan has also prioritized the construction of buffered bike lane and bike lane facilities on these corridors, and the municipalities should continue to coordinate with each other in order to ensure that these facilities are planned and designed in a coherent and coordinated way, as well as to maximize opportunities for securing funding for the project from funds that are dedicated to implementing regionally-significant corridors. Additional coordination with adjacent municipalities (e.g. Riverton and Taylorsville) may further enhance the value and funding eligibility of these projects.

This project was completed as a joint effort between West Jordan and South Jordan in collaboration with UDOT and others. The project celebrated cooperation between neighboring cities. All analysis, brainstorming, project selection, prioritization, and design was performed together and complete collaboratively. Figure 6-3 on the following page, is a joint map showing all the combined project within the two cities.

Figure 6-2: 3200 West is one of the planned projects

Figure 6-3: Map of combined projects for South and West Jordan



More information including the full detailed design of 2700 West in West Jordan and South Jordan can be found at: www.jordanatp.com