# Draper City ACTIVE TRANSPORTATION PLAN



WASATCH FRONT REGIONAL COUNCIL

# ACKNOWLEDGEMENTS

The Draper Active Transportation Plan was produced by a team of local jurisdictions, agencies, and consultants. Thank you to all who participated in the process of creating this plan, including our steering committee, and those who took our survey and participated in an online public open house.

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# INTRODUCTION

The Draper Active Transportation Plan is a product of a joint effort between Draper City, Sandy City and the Wasatch Front Regional Council (WFRC). Additional support was provided by UDOT in the form of technical support through the Move Utah program. The plan, produced by a consultant team and guided by a steering committee, involved a robust public engagement process, in-depth existing conditions, findings/needs/gaps analyses, and a final implementation plan including a finalized prioritized project list.

# PLANNING PROCESS

The project initiated with a kick-off meeting on November 19, 2019. Attendees included the consultant team and project managers from Draper City, Sandy City and WFRC. The meeting set the expectations of the planning process and determined the members and format of the steering committee, which would provide direction for the plan throughout the process. In addition to the steering committee, a smaller group consisting of the project managers and the consultant team met as needed to coordinate on the project.

# STEERING COMMITTEE

The steering committee met jointly with members from both Sandy and Draper cities. The committee included city staff, community members, and representatives from WFRC and UDOT. Table 1 below shows all members of the steering committee. The committee met four times over the course of the project and were led by the consultant team with additional facilitation support provided by UDOT and the Move Utah program.

Table 1: Steering Committee								
First Name	Last Name	Organization	Title					
Brad	Jensen	Draper	Project Manager					
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# PUBLIC ENGAGEMENT

Throughout the project there was an extensive community involvement effort. These included a project website, booths at community events, community surveys, and an on-line public comment map. The team talked to

hundreds of people and got over 1,100 completed surveys and more than 180 from Draper residents. Information on these efforts and what we heard from these groups is summarized below.

#### **Project Website**

The project website can be found at http://www.activesandydraper.com/. The website contains 16 pages full of maps and information and has been updated regularly with new content throughout the project. There is presentation of the survey results, plus downloadable PDF files of the project lists and maps. More than 2,200 visitors have viewed the project website. The website will remain active until November 27, 2021.



Figure 1: Sandy Draper Active Transportation Plan Project Website.

#### **Community Events**

The first of several planned pop-up events was the Draper Tree Lighting Ceremony on December 2, 2019. These community events were selected because of their popularity and the opportunity to talk to many people about projects in their neighborhoods. The Tree Lighting Ceremony was well attended, and the team spoke to dozens of people and received comments on the active transportation network. Some of the most notable take-aways for Draper from the pop-up event were:

- Many people expressed that they moved to the community for the existing trails in Corner Canyon and Dimple Dell,
- People wanted more and better crossings of I-15,
- Several people identified new trail connections within Corner Canyon,
- Extending the 1300 East bike lanes through Draper, and
- Constructing more family friendly trails.



Figure 2: Pop-up event at the Draper Tree Lighting Ceremony.

#### **Community Survey**

In addition to the community pop-up events, the project team wanted input from community members that could not attend the in-person events. To capture input from these people an on-line survey was created and posted on the Draper City web page. The survey opened in January and was available through April 2020. A total of 1,101 respondents completed the survey, including 187 in Draper.

Overall, 83 percent of respondents from Draper stated that bicycle and pedestrian facilities were extremely important or very important while only 6 percent stated that they were not so important or not important. These responses are a strong indicator that Draper residents value bikeways, trails and sidewalks.



Figure 3: How important are bicycle and pedestrian facilities to you in Draper?

More than 85 percent of respondents indicate that they walk on sidewalks at least every week while only 2 percent never use sidewalks. Similarly, walking in the roadway shoulder was the second most common response with 52 percent of respondents indicating that they walk in the roadway shoulder at least weekly. While 33 percent of respondents indicated that they ride bikes on sidewalks at least weekly. This is a sign that additional pedestrian and bicycle facilities are needed so pedestrians are not required to walk in the roadway and cyclists

don't need to ride on sidewalks. For specific facilities, the most common response was Porter Rockwell trails for walking with 40 percent of Draper respondents walking on the trails each week. While Corner Canyon trails were the most popular for cyclists with 38 percent of respondents biking on the trails weekly.



Figure 4: How often do you use the following for walking or biking?

More than 60 percent of Draper respondents indicated that they have not walked or biked to a destination because comfortable facilities were not available. For these people, 61 percent thought connecting missing sidewalks would be helpful. This is consistent with a significant number of residents indicating that they had walked in the roadway shoulders weekly. Similarly, 48 percent thought an extended trail system would be helpful while 46 percent indicated bike lanes and 41 percent implied buffered bike lanes would be helpful.



*Figure 5: If you did NOT walk or bike to a destination because comfortable facilities were not available, which of the following would be helpful to you?* 

Finally, when asked what type of rider Draper should plan and design facilities, 37 percent said recreational or family riders. This indicates that respondents want to see facilities designed for all abilities. The response helped evaluate projects and to determine facility types for potential projects.



Figure 6: What type of rider should your community plan and design bike facilities for?

#### **Public Online Meeting**

To gather feedback on proposed projects an on-line public comment map was developed. This comment map replaced the planned open houses which were excluded due to public health guidelines limiting the size of the social gatherings. This comment map was introduced with a short video and allowed participants to provide comments on specific projects and up vote or down vote comments. Overall, 161 comments were received with 20 comments for projects within Draper. All the comments were dispersed between the proposed project in Draper as shown Figure 7. Overall, there were 10 comments that said "I like this" that help shape the final project list.



Figure 7: Public Comment Map.

#### Summary

Many comments were received throughout the study from Draper residents via pop-up events, surveys, or the public comment map. Each comment was used by the project team to develop projects, refine concepts, and ultimately determine projects. The team also used documented comments as a factor in ranking projects. Generally, if a project on a corridor received more comments, it is ranked higher on the prioritized list of projects.

# **EXISTING CONDITIONS**

Understanding the existing condition of active transportation is critical in effectively planning for the future. The following existing conditions analysis was performed for the city, which consisted of a thorough exploration of existing facilities, available activity data from Strava and Lime, as well as a safety analysis utilizing crash records from the five-year period of 2014-2018.

# **EXISTING FACILITIES**

Existing pedestrian and bicycle facilities within the city were inventoried using existing GIS data sources and ground truthing using Google Earth satellite imagery. To ensure usability of the data and consistency across municipal boundaries, the data was coded into GIS using methods consistent with those outlined in the WFRC's Active Transportation Plan Data Guidelines.

#### **Pedestrian Facilities**

Figure 8 shows the existing pedestrian facilities in Draper City. Only existing trails and facilities along major streets are shown. Most of the city is covered with at least a sidewalk on one side of the street (called "Half Sidewalk" here). Two predominant multi-use paths in this area include the Jordan River Parkway and the Porter Rockwell Trail (shown in purple). There is a notable gap in the Porter Rockwell Trail around the Draper Town Center TRAX Station.

The orange lines indicate major streets with no sidewalks present, thus highlighting the gaps in the network and areas for potential improvements. Significant barriers to pedestrian connectivity include I-15 and Bangerter Highway (shown in red). For obvious reasons, pedestrians are restricted from crossing these routes except at interchanges, which are spaced far apart.

A significant trail network connects the neighborhoods to the foothills (especially through the Corner Canyon Regional Park). Relatively few dirt trails are found in the more urbanized areas.

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Figure 8: Map of existing pedestrian facilities.

#### Walkshed Analysis

Figure 9 shows walkable areas around city centers and transit stations in Draper. This analysis is performed by measuring one-quarter mile and one-half mile distances along the network of connected sidewalks and paths (including crosswalks). The areas that fall within these two distances are considered accessible to pedestrians (shown in purple). A perfect pedestrian grid network would result in diamond-shaped walksheds. The irregular shapes of these walksheds help us identify gaps in the pedestrian network and potential barriers to that restrict connectivity.

One observed barrier is the rail line around the Draper FrontRunner Station. With very few pedestrian crossings, the entire area east of the station is cut off. The other three TRAX stations each have moderate walkshed coverage overall.



Figure 9: Pedestrian walksheds of transit stations and activity centers.

The Table 2 delineates the total acreage for each walkshed for all stations and city centers studied in Draper City.

Table 2: Walkshed Coverage									
Location		1/4	Mile		1/2 Mile				
	Walkshed A	creage	% of Ideal Walkshed	Wal	kshed Acreage	% of Ideal Walkshed			
Crescent View		33.70	42.13%		179.1	56.35%			
Kimballs Lane	39.83		49.79%		159.72	50.26%			
Draper Town Center		39.61	49.51%		143.85	45.26%			
Draper FrontRunner	14.56		18.20%	89.13		28.04%			
<33% Poor			33%-66% Fair		>(	56% Good			

#### **Bicycle Facilities**

Existing bicycle facilities were inventoried throughout the city. Figure 10 illustrates the spectrum of active transportation facility types that may be found within the city.



Figure 10: Bicycle facility types

Figure 11 shows the existing bicycle facilities in Draper City. Most of the streets in the city have bike lanes or shoulders with enough width to accommodate cyclists. Notable bike corridors with bike lanes are 11400 South, 12300 South, 13200 South and Highland Drive. The two major multi-use paths (Jordan River Parkway and the Porter Rockwell Trail) are also accessible to cyclists. There is a gap in the Porter Rockwell Trail around the Draper Town Center TRAX Station.

Bicycles are restricted on I-15 and Bangerter Highway, and those roads create a barrier to the overall bicycle network (shown in red). Also, there is one small roadway section (13800 South) where sharrow lanes are present (shown in blue).

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Figure 11: Map of existing bicycle facilities.

#### **Trails and Recreation**

Draper plays host to a well-used recreational trail system, with a robust network of dirt trails in the southeast foothills and a multitude of trailheads for access. Activity on this system is notably high and is detailed further in the Activity Analysis. Additional recreational opportunities include the Porter Rockwell Trail and the Jordan River Parkway, as well as equestrian access on the Jordan River Parkway and at the Ballard Arena. Figure 12 shows paths, trails, trails, trails, and equestrian access in Draper.



Figure 12: Map of recreational trail facilities.

# ACTIVITY ANALYSIS

To better understand the current state of active transportation activities in Draper we performed an analysis using data provided by third parties. For the purposes of our analysis, "active transportation" refers to pedestrians, cyclists, as well as micro-mobility, such as dock-less electric scooters.

#### <u>Strava</u>

Strava is a service that enables cyclists and runners to track their activities using GPS data. It is worth noting that Strava is popular with competitive cyclists and runners. Thus, the activities summarized in the maps contained in this section reflect that segment of the population perhaps more seasoned than the full spectrum of individuals who walk or ride. However, this dataset is quite robust in detailing the total number of activities on a given street as well as origin/destination data.

To protect the privacy of its users, trip beginnings and endings are aggregated into a lattice of 350 meter (~1,150 feet) hexagons. The origin/destination data details where a trip begins and ends. In the case of a loop trip, the trip origin and destination will be the same hexagon. When a trip begins in one location and ends in another, a relationship is recorded between two hexagons on the map. For each hexagon in the study area, the total number of trip beginnings and endings were summarized. The maps summarize the ratio of trip origins to the total number of trip activities. For example, if a given hexagon has a smaller ratio of trip origins, it is a trip generator. The maps in this section summarize if a location is a popular origin, destination, or some mix of the two. The saturation of the hexagons refers to the total number of activities at that location, with popular locations appearing more visible on the maps. This analysis is based on the total recorded activities in 2018.

#### Lime

Any electric scooter within the Lime system can be rented using the company's app available for download on smartphones. The user is charged based on the amount of time the scooter is checked out. A scooter can be parked anywhere and later collected for recharging, repair, or repositioning by Lime staff.

In July 2019, micro-mobility platform Lime began placing electric scooters in Sandy and Draper as a part of a pilot program. The operating agreement with the municipalities establishes areas where the company can stage scooters for checkout. Since the service is GPS-based, these boundaries are enforced with a "geofence." When a user of this system ends a trip outside of the geofenced area, a notification appears on the user's device informing them that they may be ticketed for parking in that location. According to conversations within Lime, this is an unenforced deterrent designed to keep the scooters within the pilot project area. Also, within the geofenced locations, the maximum speed of the scooters is limited to nine miles-per-hour. The designated area within Draper is primarily designed to connect the FrontRunner station to the nearby offices. Meanwhile, the operating area within Sandy is much larger surrounding the TRAX stations and includes a greater diversity of land uses.

For the sake of consistency and to protect the privacy of Lime users, the origins and destinations were aggregated using the same hexagons as the Strava trip data. These results were then analyzed and mapped using the same techniques as described in the previous section. Thus, the map details both the ratio of Lime trip origins to total activities as well as the frequency of those activities.

This analysis is based on the trip origin and destination locations—provided by Lime—from July through November 2019.

#### **Pedestrian Activity**

Strava pedestrian data indicates that the most popular routes include the Bonneville Shoreline Trail, the Jordan River Parkway, the Orson Smith Trail, the Potato Trail, the Porter Rockwell Trail, and the Willow Creek Trail. Figure 13 details the total Strava pedestrian trips in 2018.



Figure 13: Map of total Strava Pedestrian Trips (2018).

#### Pedestrian Origins and Destinations

Figure 14 shows total pedestrian trips by origin-destination ratio. Most pedestrian trips start and end at the same location, indicating out and back or loop trips. Significant pedestrian activity is related to the area near Corner Canyon High School. The streets nearby also include significant pedestrian activity as well. Other concentrations coincide with trailheads along the foothills, including the Hidden Valley, Orson Smith, and Coyote Hollow, and Potato Hill trailheads.

#### **Pedestrian Signal Actuations**

Figure 15 shows the average weekly pedestrian actuations at signaled intersections for both north-south and east-west movements. Most actuations occurred in the northwestern portion of the city. Few north-south pedestrian routes can be identified from this analysis. The east-west routes with the most actuations include 11400 South and 12300 South. The intersection with the highest overall actuations is located at 12300 South and 300 East, with an average of 563 (north-south) and 377 (east-west) weekly actuations. Based on this data, there doesn't appear to be a predominant north-south pedestrian route, and 12300 South appears to be the predominant east-west pedestrian route.

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Figure 14: Map of total pedestrian trips by Origin/Destination ratio (2018).



Figure 15: Map of Draper pedestrian signal actuations.

#### Lime Scooter Activity

Lime began operations in Draper in July 2019 as a part of a pilot program. The purpose of this initial step was to improve accessibility between the Draper FrontRunner Station and the nearby office buildings. Thus, the pilot program boundaries—indicated by the "Lime Geofence" on the map—are geographically constrained and limit the use of this mode elsewhere in the city. Thus, almost all scooter activity of significance is limited to the study area.

The origin/destination data displayed in Figure 16 encompasses 21 weeks of Lime scooter trips. Hence, the minimum threshold for an area hexagon to be displayed on the map is 21 trip origins or destinations, an average of one trip per week.

Given the purpose of the pilot program, the Draper FrontRunner Station vicinity was the busiest overall location with over 1,100 trips and a fairly even split between origins and destinations. Areas with many scooter trip beginnings include: the station parking lot; the office building complex south of Galena Park Boulevard and west of Ikea Way, and the office building complex west of Frontrunner Boulevard and north of eBay Way. For the most part, the areas with many scooter trip destinations are the same with the addition of the apartment complex southwest of the Vista Station Boulevard/13490 South intersection.



Figure 16: Map of total Lime Scooter trips (July-November 2019).

#### **Bicycle Activity**

Figure 17 below displays the total number of bicycle trips made in Draper in 2018 as recorded by Strava. To better visualize the data, routes with fewer than 52 trips in a year—an average of one trip per week—are not displayed on this map. The mountain biking trail network in Draper is extremely popular, particularly on the trails in the Corner Canyon Regional Park vicinity. As previously mentioned, the Strava userbase tends to be more comfortable riding with vehicle traffic. Supporting this claim is the fact that Highland Drive and 1300 East have more recorded bicycle trips than popular shared use paths such as the Porter Rockwell Trail or the Jordan River Parkway. The most popular bicycle trails in Draper are those of the Corner Canyon trails system. Hog Hollow Road is also a popular route that connects to Utah County.



Figure 17: Map of total Strava bicycle trips (2018).

#### **Bicycle Origins and Destinations**

Figure 18 details where Strava bicycle trips began and ended in Draper. Andy Ballard Arena and Coyote Hollow Trailheads had the most total activities and had a fairly even split of trip origins and destinations. Both the trails near the Coyote Hollow Trailhead and the Eagle Crest Trailhead were the most popular trip origins in Draper. Draper Cycle Park was the most popular destination in Draper. Other significant destinations include: the Maple Hollow, Potato Hill, and Little Valley Trailheads.

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Figure 18: Bicycle origins and destinations.

# SAFETY ANALYSIS

For this section, a safety analysis was performed using five-year crash data (2014-2018) provided by the UDOT Traffic and Safety Division. This crash data was analyzed using GIS mapping software and Excel to extract geographic trends and patterns, as well as trends in crash factors. Crash heatmap data shown in Figure 19 includes data within a one-quarter mile buffer around Draper to show context, and crash data detailed in Table 2 includes all crash points within a 150-foot buffer to capture data on streets on the edge of the city. Note: the crash data in this document is confidential and may be protected under 23 USC 409.

#### All Bicycle and Pedestrian Involved Crashes in Draper

Figure 19 shows a heatmap of all bicycle and pedestrian involved crashes, totaling 107, in Draper from 2014-2018. Crashes are mostly concentrated along major roads, with concentrations along 700 East, 1300 East, 11400 South, and 12300 South.

Several intersections in Draper have hotspots of bicycle and pedestrian involved crashes including: 11400 South at 700 East, 300 East, and Lone Peak Parkway; 12300 South at 700 East, 300 East, I-15, and Lone Peak Parkway; 1300 East at Pioneer Road, 13200 South, and 13800 South; and Highland Drive at I-15. Table 3 details number and severity of crashes by mode.



Figure 19: Heat map of all bicycle and pedestrian involved crashes in Draper, 2014-2018.

Table 3. Bicycle and Pedestrian Involved Crash Severity in Draper, 2014-2018										
Crash Severity	Bicycle	Bicycle %	Pedestrian	Pedestrian %	Combined	Combined %				
Fatal	1	2%	1	2%	2	2%				
No injury	11	23%	8	17%	19	18%				
Possible Injury	8	17%	19	40%	27	25%				
Suspected Minor Injury	37	79%	15	32%	53	50%				
Suspected Serious Injury	2	4%	4	9%	6	6%				
Total Crashes	59		47		107					

#### **Bicycle and Pedestrian Crash Severity**

From 2014-2018 (Table 3), 107 total bicycle and pedestrian involved crashes occurred in Draper, with 50 percent of crashes resulting in a suspected minor injury, 25 percent of crashes resulting in a possible injury, and six percent of crashes resulting in a suspected serious injury. Pedestrian involved crashes resulted in four suspected serious injuries, compared to two for bicycle involved crashes, but pedestrian involved crashes resulted in fewer suspected minor injuries with 15 compared to 37 for bicycle involved crashes. Two fatal crashes occurred during the analysis period, one bicycle-involved crash and one pedestrian-involved crash.

Eight crashes resulting in serious injuries and fatalities to cyclists and pedestrians occurred in Draper from 2014-2018. Figure 20 shows the location of all serious and fatal crashes in Draper by mode. Serious injuries occurred on the following roads: one cycling fatality at 12300 South and Lone Peak Parkway, one pedestrian death on 700 West, one cycling serious injury on Traverse Ridge Drive, one cycling serious injury on Suncrest Drive, one

pedestrian serious injury on I-15, one pedestrian serious injury on Minuteman Drive, and three pedestrian serious injuries on 11400 South.

It should be noted that bicycle and pedestrian crash severity depends on several factors, one of which being luck. One foot in one direction or one second earlier or later can be the difference between a minor injury and a major injury or fatality. This point underlines the vulnerability of these users, and the importance of planning for active transportation modes in larger transportation networks.



Figure 20: A map showing bicycle and pedestrian involved crashes resulting in serious injuries.

#### **Bicycle and Pedestrian Crash Factors**

To gain more understanding of the bicycle and pedestrian crashes in Draper, various factors in the crashes were analyzed. Significant findings from this analysis are outlined in Figure 21. Please note the sample size for each crash type is found in the chart legend.

Intersections – 64 percent of all crashes and 38 percent of serious and fatal crashes occurred at intersections.

**Dark Lighting** – Dark lighting, or conditions after sundown, contributed to 24 percent of all crashes, and 50 percent of serious/fatal crashes.

Wet/Snowy Road Conditions – Wet/snowy roads were present in eight percent of all crashes and 38 percent of serious/fatal crashes.

Older Drivers – Older drivers were involved in 11 percent of all crashes with no serious/fatal crashes.

**Distracted Drivers** – Distracted drivers were involved in six percent of all crashes with no serious/fatal crashes.



Figure 21: Chart highlighting significant factors in Draper bike-ped crashes.

# **EXISTING PLANS**

#### Wasatch Choice: 2019-2050 Regional Transportation Plan

WFRC has recently adopted its Regional Transportation Plan (RTP), which is a fiscally constrained plan for roadway, transit and other transportation facility improvements over the next 30 years. The plan includes phased bicycle and pedestrian improvements, for roads, pathways, and grade separated projects. Figure 22 below shows the RTP projects within Draper. Notable projects include bike lanes on Highland Drive, 700 East, and Lone Peak Parkway, buffered bikes lanes on Pioneer Road and FrontRunner Boulevard, and a new East Jordan Canal shared use path. Another important project is a new shared use path along 970 East, from Pioneer Road to Draper Parkway. This short path, in conjunction with the planned buffered bike lanes on Pioneer Road, would fill a critical gap in the Porter Rockwell Trail, through the Draper Town Center. There are also four planned overhead crossings in Draper. Two over I-15, one at 13800 South and the other at the new East Jordan Canal Path. There are another two over Bangerter Parkway north of the prison site.



Figure 22: Map of Wasatch Choice: 2019-2050 RTP active transportation projects.

#### Parks, Recreation, and Trails Master Plan

Completed in 2008, this plan is now over ten-year-old and needs updated. The context of the city has changed since the adoption of this plan, most notably with the TRAX Blue Line extension completed in 2013. In January of 2020 Draper City solicited for consultant services to complete a new Parks, Trails, and Recreation Master Plan, with anticipated completion late 2020.

The following document outlines the findings, needs, and gaps identified in the initial development of the active transportation plan, exploring sidewalks, activity centers, trails and recreation, bicycle facilities, and safety. This high-level information will be critical in identifying specific projects for later scenario development and prioritization.

# FINDINGS, NEEDS, GAPS

The following section outlines the findings, needs, and gaps identified in the initial development of the active transportation plan, exploring sidewalks, activity centers, trails and recreation, bicycle facilities, and safety. This high-level information will be critical in identifying specific projects for later project identification and prioritization.

# SIDEWALK NETWORK

Figure 23 represents an analysis of all gaps in Draper City's existing pedestrian facilities along major streets, including sidewalks, trails, and multi-use paths. Draper has good pedestrian connectivity overall, especially along existing streets. The green lines in the figure show several continuous corridors with a sidewalk on at least one side of the street, which has a fairly even spread throughout the city. The Porter Rockwell Trail and Jordan River Parkway are two multi-use pathways that are found in the city and offer north-south connections to neighboring jurisdictions, though connections exist, there are opportunities to enhance connectivity to both multi-use systems. The Corner Canyon Regional Park also has a robust network of trails that provide access to the canyon and other surrounding natural areas.

Despite Draper's existing pedestrian network, there are some gaps where existing roads are found and such facilities would be warranted. These gaps are highlighted on Figure 23 in red. The largest sections of gaps were identified in the areas surrounding the Draper Town Center TRAX Station, and also along Lone Peak Parkway (West of I-15, around 12300 South) and Traverse Ridge Road in the southern portion of the city leading up the ridge. Filling in these gaps will significantly improve the city's overall pedestrian connectivity.

In addition to observing existing infrastructure and obvious gaps, other previous plans were studied (such as WFRC's RTP and Salt Lake County's Active Transportation Improvement Plan (ATIP)). These plans show the long-term vision and recommended off-street pedestrian facilities. These additional network gaps are shown on Figure 23 in blue. This larger network is an important key to improving connections between neighborhoods safely and efficiently. It also provides some vital east-west connections that are currently lacking. A few projects for new or improved crossings and connections (represented as "'Point Projects" in Figure 23) were also identified in the RTP and are shown below.

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Figure 23: Draper City Pedestrian Facility Gaps

# ACTIVITY CENTER CONNECTIVITY

The existing conditions analysis established the current walksheds for several activity centers throughout the city. The activity centers were identified by their proximity to transit stops and major commercial hubs. Each activity center walkshed was examined in detail and compared to "ideal" one-quarter mile and one-half mile walkshed coverages. Some activity centers had better coverage than others, which is shown in Table 4 below.

Table 4: Draper City Activity Centers Walkshed Comparisons										
Location		1/4	Mile							
	Walkshed A	creage	% of Ideal Walkshed	kshed Acreage	% of Ideal Walkshed					
Crescent View	33.70		42.13%		179.13	56.36%				
Kimballs Lane	37.03		46.29%	157.59		49.59%				
Draper Town Center	37.90		47.38%	143.19		45.05%				
Draper FrontRunner	15.82		19.77%	89		28.14%				
<33% Poor			33%-66% Fair		>	66% Good				

Most activity centers had "fair" walkshed coverage when compared to perfect one-quarter mile and one-half mile walksheds. The exception is Draper FrontRunner Station, which had very poor one-quarter mile and one-half mile walkshed coverage (due to the rail lines creating a barrier without any pedestrian bridges present). Detailed

analyses for each activity center and potential connection improvements are shown in Figure 24 and Figure 25 below.



Figure 24: Walkshed Analysis – Draper Crescent View TRAX Station and Draper Kimballs Lane TRAX Station.



Figure 25: Walkshed Analysis – Draper Town Center TRAX Station and Draper FrontRunner Station.

# TRAILS AND RECREATION

Gaps in multi-use pathways and unpaved trails are obstacles to forming a cohesive network of active transportation routes. Due to their grade separation from automobile traffic, wide pavement widths, and enhanced crosswalks, paved multi-use pathways are the most comfortable and therefore appealing to the largest cross section of users. When adequately interconnected, these routes form the backbone of a robust active transportation infrastructure network. Unpaved trails can provide sources of recreation and connection, supporting the quality of life in communities. Depending on local regulations, unpaved trails may provide access for equestrian users as well.

Identifying gaps in these networks was based on observation as well as consulting established plans for Sandy/Draper at the local, county, and region levels. Given the diversity of these sources, inevitable inconsistencies emerge among route nomenclature and configuration of multi-use trails. Figure 26 displays the identified gaps in multi-use pathways or major unpaved trails. Current gaps in Draper connecting into Sandy on the east side, connecting the Porter Rockwell Trail to the Jordan River Parkway, and most importantly in the Porter Rockwell Trail itself in the Draper Town Center.



Figure 26: Trails and Recreation Facility Gaps.

Figure 27 highlights horse properties and potential horse properties in Draper with the unpaved trails they can access. While many private property lots meet the minimum sizing requirement to have a horse on site (one-half acre), we identified properties that had horses by looking at Google aerial photos for horses, corals, barns or trailers. We identified over 1,000 properties that met the requirements and could be home to horses and over 200 individual properties with active horses on them.



Figure 27: Horse Properties.

# **BICYCLE NETWORK**

The project team created a Level of Traffic Stress (LTS) for roadways within the Draper study area. The purpose of the LTS is to identify roadway segments where improved bicycle accommodations and/or separate facilities may be useful to create a robust bicycle and trail network. Creating a lower stress bicycle network by minimizing or eliminating stress factors can make bicycling more appealing to a broader population. The LTS network was developed using GIS analysis of the existing roads, bikeways and trails.

#### Inventory

The LTS requires data on the bikeway type, adjacent land use, roadway width and speed. This data was compiled from multiple data sources including the completed bikeway inventory, existing zoning, as well as data from UDOT. The roadway network forms the backbone for the development of LTS. The LTS analysis utilized road centerlines for Sandy and Draper from Utah's Automated Geographic Reference Center (AGRC) as of February 28, 2020. This data was supplemented with data from the bikeway inventory illustrated in Figure 28.



Figure 28: Bicycle Facility Inventory

In addition to bikeway, land use information was obtained from Sandy and Draper zoning. Roadway speeds and number of travel lanes are from UDOT and include data for both state highways and federal aid roads. These roadways are generally larger and higher speed roadways within cities. For roadways where UDOT data was not available, the posted speed limits and number of travel lanes were visually verified from Google aerials and street view.

#### Level of Traffic Stress

LTS allows for the assessment of the comfort and connectivity of bicycle networks. The classification of roadway segments are based upon the comfort of bicyclist depending on traffic characteristics and whether cyclists are cycling in mixed traffic, bike lanes, or on separated paths. LTS classifies road segments from one to four levels of traffic stress that correspond to the four types of cyclists which range from "no way no how" to "strong and fearless." The characteristics of each LTS include:

- LTS 1 Suitable for children
- LTS 2 Little traffic stress and suitable to most adults
- LTS 3 Moderate traffic stress and comfortable to many people currently riding bikes
- LTS 4 High traffic stress from high traffic speeds and multi-lane roads

Table 5 summarizes the LTS classification system used for each roadway segment within the study area based upon land use, posted speed limits, number of traffic lanes, and bicycle accommodations.

Table 5: Level of Traffic Stress Classification System											
				Stress Reduction from Bicycle Accommodations							
Roadway Nun Lanes	nber of	Speed Limit	Roadway Stres w/out Bicycle Accommodatio	s n	Bike Route	Sharrows	Bike Lane	Buffered Bike Lane	Protected Bike Lane		
2 lanes (reside	ential)	Up to 30 mph	10	%	10%	9%	5%	7%	3%		
2 lanes (reside	ential)	30 mph	15	%	14%	14%	8%	5%	4%		
2-3 lanes		Up to 25 mph	20	%	19%	18%	10%	7%	5%		
4-5 lanes		Up to 25 mph	35	%	33%	32%	18%	12%	9%		
2-3 lanes		30 mph	40	%	38%	36%	20%	14%	10%		
6+ lanes		Up to 25 mph	67	%	64%	60%	34%	23%	17%		
4-5 lanes		30 mph	70	%	67%	63%	35%	25%	18%		
6+ lanes		30 mph	80	%	76%	72%	40%	28%	20%		
2-3 lanes		35+ mph	100	%	95%	90%	50%	35%	25%		
4-5 lanes		35+ mph	120	%	114%	108%	60%	42%	30%		
6+ plans		35+ mph	140	%	133%	126%	70%	49%	35%		
Level of Traffic Stress Limits											
LTS 1 Limit	10%	LTS 2 Limit	30%	LT	S 3 Limit	60%	LTS 4 Limi	t No M	RS Limit		

Source: Lowry, M., Furth, P., and Hadden-Loh, T. 'Prioritizing new bicycle facilities to improve low-stress network connectivity."

The LTS was developed based upon roadway and bikeway scores as summarized above. Additionally, all paved multi-use trails were included in the analysis with an LTS score 1 as being suitable for children. Figure 29 summarizes the LTS for the Draper area.

Overall, many roadways within Draper have low traffic stress. These are generally residential streets with low speeds and traffic volumes. Most riders feel confident to ride in conditions like these. However, due to limited street connectivity of these low stress roads from cul-de-sacs and unbuilt connections it can be difficult to travel between destinations on these roads. As a result, riders need to use roads with higher speeds, traffic volumes and traffic stress. These roads have posted speed limits of 35 mph or higher and more traffic. These roadways are the most stressful where there are no bikeways to accommodate cyclists such as segments of Pioneer Road and 13800 South. Roads with higher traffic volumes and speeds like 12300 South and Highland Drive have lower traffic stress than roads with no bikeways since there are dedicated bicycle lanes on these roads. These high stress segments can be a prioritized for future improvements to help develop a robust bicycle network.


Figure 29: Level of Traffic Stress.

#### SAFETY

As part of the existing conditions documentation, a safety analysis was performed using five-year crash data (2014-2018) provided by the UDOT Traffic and Safety Division. This crash data was analyzed using GIS mapping software and Excel to extract geographic trends and patterns, as well as trends in crash factors. The methodology and findings of that analysis can be found in the Safety Analysis for the Existing Conditions Memorandum.

The purpose of this section is to build on the existing conditions analysis to determine where safety needs and gaps exist in Draper. In order to determine where these needs and gaps exist, 2014-2018 safety data was analyzed to determine where all bicycle and pedestrian involved crashes occurred around the city. The bicycle involved crash data was analyzed in conjunction with bicycle trip data and pedestrian involved crash data was analyzed with pedestrian actuation data (which intersections had the most pedestrian crossings per week). *Note: the crash data in this document is confidential and may be protected under 23 USC 409.* 

#### Bicycle Needs and Gaps in Draper

Figure 30 shows all bicycle involved crashes in Draper from 2014-2018 and annual bike trips on Draper routes in 2018. Routes with less than 500 annual trips have been excluded to show the most heavily used routes by cyclists. The most popular routes in Draper include trails and roads along Corner Canyon Road, trails around Suncrest and Traverse Ridge Road, Highland Drive, 1300 East, 13200 South, 14600 South, and the Jordan River Parkway Trail with many other routes around Draper showing 500 to 1,500 annual bike trips.



Figure 30: Bike trips and bicycle involved crashes in Draper.

To determine bicycle network gaps and needs, all bicycle involved crashes from 2014-2018 were analyzed. Bike trip data shown on Figure 30 includes all routes with annual rides greater than 500 to show the most heavily used routes. Most bicycle involved crashes in Draper occurred along roads providing major north-south and east-west connections. 11400 South and 12300 South all provide an east-west connection to the Jordan River Parkway, and all three streets had bicycle involved crashes in the study years. This suggests the need for more east-west bike connections and more improved bike facilities on existing east-west connection. Similarly, 1300 East and 700 East had bicycle involved crashes which suggests the need for improved north-south bike connections.

#### Pedestrian Needs and Gaps in Draper

Figure 31 shows all pedestrian involved crashes in Draper from 2014-2018 and average weekly pedestrian signal actuations. Signal actuation data does not include some major intersections in Draper, but streets in Draper with the most pedestrian signal actuations at intersections include 700 East, 12300 South, and 11400 South.

Many pedestrian involved crashes in Draper occurred at intersections on busy streets such as 11400 South, 700 East, and 1300 East, which suggests the possible need for improved pedestrian crossing facilities in these areas. A

cluster of crashes occurred on local streets in the central part of the city between Fort Street and I-15, suggesting the need for improved pedestrian connectivity or trails in these neighborhoods.



Figure 31: Pedestrian involved crashes and pedestrian signal actuation in Draper.

### IMPLEMENTATION

There is a broad spectrum of potential facility type recommendations, from sidewalks and pathways to bike lanes and cycle tracks. Each has their own role to play in a complete active transportation network. Figure 32 below illustrates a series of bicycle facility types from least to most protection from vehicular traffic.



Figure 32: Bicycle Facility Types

Facilities recommended in this plan include:

#### Sidewalks

Curb-separated and typically adjacent to roadways, sidewalks are narrower than multi-use pathways and are typically reserved for pedestrian usage only.

#### Signed Shared Roadways

Shared roadways are roadways shared by both bicycles and motor vehicles. In a shared roadway, the cyclist may use the entire travel lane. Shared roadways may only be used on roads with low traffic volumes and where the posted speed limit is 35 mph or less.

#### Shoulder Bikeways

Shoulder bikeways are roads with shoulders wide enough to accommodate cyclists, typically greater that three feet. Shoulder bikeways are typically signed routes and should not allow on-street parking.

#### Bike Lanes

A conventional bike lane is one that is separated from the main roadway by a painted line. They are typically adjacent to the vehicle travel lane and are four to five feet wide. Bike lanes are often accompanied by bike lane signs and painted bike symbols at strategic intervals.

#### Buffered Bike Lanes

Buffered bike lanes are similar to conventional bike lanes but instead of being adjacent to a vehicle travel lane, a buffer space is provided between the roadway and bikeway. These types of bikeways are typically the most expensive (similar to trails) because they require a larger amount of roadway and maintenance.

#### Multi-use Pathways

At a minimum of 10 feet wide, the multi-use pathway is physically separated from motor vehicle traffic, and can be either within the highway right-of-way or within an independent right-of-way. Multi-use pathways include bicycle paths, rail-trails or other facilities built for bicycle and pedestrian traffic.

Cost estimates were developed based on the most recent bid prices for construction items like striping paint and concrete curbs. These estimates for buffered or protected bike lane projects were further refined based on recently completed projects. These construction cost estimates reflect the recommended facility types and linear feet of construction required for each project. Variability in the cost of these projects is based upon design choices, restrictions, and existing conditions. As design progresses a common occurrence is bike lanes, buffered bike lane, or a curb protected bike lane may require additional right-of-way, or new concrete and drainage that is not anticipated in the planning stage. To account for these variabilities, all cost estimates include contingency and are planning level estimates only. Engineering level costs will need to be developed as projects near construction.

An exhaustive project list was produced based upon the Existing Conditions analysis, previous plans, the Findings, Needs, and Gaps analysis, public engagement, and coordination with the city. This comprehensive project listing was then subjected to a prioritization process. Projects were scored based on five different criteria, each aiming to capture a different facet of the project's potential value to the community. Projects received zero, one, and sometimes two points depending upon the criterion, with a maximum potential score of seven. The ranking criteria are described below:

**Regional Support** – Regional projects are beneficial to the city and broader community, and those projects with regional support are more easily funded and implemented. To prioritize these types of projects, 1 point was given if a project is also featured in a regional plan, such as the Salt Lake County ATIP or WFRC LRP.

**Local Support** – Public engagement was an important component of this plan, and from engagement efforts local community priorities were revealed. Projects which received positive comment from engagement efforts were awarded points. One point for a project receiving up to 10 comments, two points for greater than 10 comments.

**Impact** – Projects which have a greater impact on the larger transportation system received points. Projects greater than one mile in length received one point and projects greater than two miles receive two points.

**Safety** – Safety was identified as a key priority by the steering committee and the project management team. Projects offering protection or separation from vehicular traffic, such as sidewalks, pathways, and buffer bike lanes, received one point.

**Cost** – Smaller low-cost may not compete as well with larger more substantial ones, but often provide a great return on investment. Recognizing this, low-cost projects of less than \$50,000 receiving one point.

The composite scores were then used to rank the projects. Full scoring and ranking can be found in Appendix A. The ranking easily enabled the projects to be separated into a three-tiered implementation plan. The first tier includes the top-ranking projects with three or more points, the second tier includes projects with two points, and the third tier includes projects with one or zero points. The three tiers are not tied to a specific implementation year, like typical project phasing, offering more flexibility in implementation. Tier I projects should receive implementation priority, but the city can draw from tiers II and III, if the desire or opportunity presents itself. Figure 33 and Table 6, Table 7, and Table 8 show the projects by tier



Figure 33: Draper AT Projects by Tier

Table 6: Tier I Projects								
ID	Description	Туре	Length (ft.)	Cost				
D1	East Jordan Canal Trail: West boundary to Willow Springs Ln	Multi-use path, Paved	17,553	\$5,491,000				
D2	Pioneer Rd: 300 E to Highland Dr.	Buffered Bike Lane	13,622	\$1,880,000				
D3	Corner Creek Trail: 150 E to Jordan River Parkway	Multi-use path, Paved	8,226	\$4,298,000				
D4	Trail Approximately 300 West: 13490 South to Pony Express Road	Multi-use path, Paved	7,937	\$5,312,000				
D5	Vista Station Blvd/FontRunner Blvd: 12300 S to Vista Station	Buffered Bike Lane	6,442	\$889,000				
D6	Highland Dr: Approx. Oxford Hills Dr to Approx. Minuteman Dr	Bike Lane	28,266	\$226,000				
D7	Lone Peak Pkwy/200 W: 11400 S to 13775 S	Bike Lane	16,315	\$131,000				
D8	700 E/Charger Way: 11400 S to Carlquist Dr	Bike Lane	11,543	\$92,000				
D9	13800 S: 300 E to Southfork Dr	Bike Lane	5,511	\$44,000				
D10	Traverse Ridge Rd: Mike Weir Dr to Traversepoint Dr	Sidewalk	4,933	\$37,000				
D11	Pioneer Rd: 1400 E to 1840 E	Sidewalk	3,267	\$25,000				
D12	12000 S: 300 E to 630 E	Sidewalk	2,218	\$17,000				
D13	Pioneer Rd: 1300 E to Cypress Point Way	Sidewalk	2,050	\$15,000				
D14	Pioneer Rd: Approx. New Fork Cv to Approx. Raleigh Ct	Sidewalk	1,391	\$10,000				
D15	Relation St: Pioneer Rd to end of Relation St	General Shared Roadway	1,174	\$1,000				

Table 7: Tier II Projects								
ID	Description	Туре	Length (ft.)	Cost				
D16	Bonneville Shoreline/Traverse Ridge Trail: Marion Vista Dr to Traverse-Traverse Trail	Multi-use path, unpaved	45,085	\$7,169,000				
D17	East Jordan Canal Trail: 11400 S to Porter Rockwell Trail	Multi-use path, Paved	6,521	\$1,037,000				
D18	Corner Creek Trail: Stokes to 1300 E	Multi-use path, Paved	5,734	\$912,000				
D19	Draper Canal Trail: Draper Parkway to Relation St	Multi-use path, Paved	4,641	\$738,000				
D20	Sunrise Trail: Approx. Bubbling Brook Ln to Lone Peak Pkwy.	Multi-use path, Paved	4,350	\$692,000				
D21	12300 S: Boundary to Galena Park Blvd	Buffered Bike Lane	4,584	\$633,000				
D22	Kimballs Ln: 300 E to 700 E	Buffered Bike Lane	3,416	\$471,000				
D23	Porter Rockwell Trail Connection: 12300 S to Draper City Park	Multi-use path, Paved	2,161	\$344,000				
D24	Draper Station Connection: Green Clover Rd to Frontrunner Blvd	Multi-use path, Paved	869	\$138,000				
D25	970 E: Pioneer Rd to Draper Pkwy	Multi-use path, Paved	810	\$129,000				
D26	13775 S/13800 S: I-15 to West boundary	Bike Lane	8,979	\$72 <i>,</i> 000				
D27	700 W/Galena Park Blvd: 11400 S to 12300 S	Bike Lane	6,864	\$55 <i>,</i> 000				
D28	600 W: Vista Station Blvd to South Boundary	Bike Lane	6,842	\$55 <i>,</i> 000				
D29	Vista Station Blvd/13490 S: FrontRunner Blvd to 200 W	Bike Lane	3,654	\$29 <i>,</i> 000				
D30	Stokes Ave: 300 E to Fort St	Bike Lane	3,133	\$25 <i>,</i> 000				
D31	300 E: 11400 S to Kimballs Ln	Bike Lane	2,706	\$22,000				
D32	1700 E/Moose Hollow Dr/Moose Hollow Cit/Mountain Crest Dr: Pioneer Rd to Highland Dr	General Shared Roadway	4,491	\$5,000				
D33	Osborne Ln: 13800 S to end of Osborne Ln	General Shared Roadway	2,062	\$2,000				

Table 8: Tier III Projects									
ID	Description	Туре	Length (ft.)	Cost					
D34	Galena Loop Trail: Willow Creek Trail to Cephus Cir	Multi-use path, Paved	4,660	\$741,000					
D35	Crescent Willow Creek Trail: 11400 S to 11500 South	Multi-use path, Paved	4,621	\$735,000					
D36	Galena Loop: Alan Point Dr to Approx. Windmill Gate Cv	Multi-use path, Paved	3,455	\$549,000					
D37	Sunrise Link Trail: 12300 S to Canal	Multi-use path, unpaved	2,251	\$358,000					
D38	Wheadon Trail: Draper Canal Trail to East Jordan Canal Trail	Multi-use path, Paved	2,087	\$332,000					
D39	Sunrise Trail: Opportunity Way to Approx. Beverlee Ann Dr	Multi-use path, Paved	1,431	\$228,000					
D40	South Pointe Trail: Highland Dr to Approx. Chamonoix Ct	Multi-use path, unpaved	1,256	\$200,000					
D41	Osborne Trail Connection: Osborne Ln to Highland Dr	Multi-use path, Paved	974	\$1,125,000					
D42	Mehraban Wetland Connector Trail: 800 E to Porter Rockwell Trail	Multi-use path, Paved	815	\$130,000					

#### CONCLUSION

Figure 34 below shows all projects by type with existing infrastructure. When completed this plan will provide a comprehensive network of facilities suitable for a wide range of user types. Multi-use pathways, and buffered bike lanes provide a low-stress network for cyclists of many abilities, sidewalks and pathways provide for pedestrians, bike lanes, shared lanes and signed routes accommodate fitness cyclists and commuters, and finally, unpaved pathways provide recreational opportunities for pedestrians, cyclists, and even equestrian users. Altogether, this network provides a low-stress network to destinations city-wide, provides new and complement existing recreational opportunities, and benefits transportation within the city overall.

This plan is a product of a combined and coordinated effort with Sandy City. The two cities together comprise of the southeast corner of the Salt Lake Valley; unique in geography and host to a wealth of exciting opportunities. To best leverage these opportunities and capture the needs of the community, the project was led by a joint steering committee, with key stakeholders from both communities as well as regional interests from UDOT and WFRC. The joint effort prevented siloed attempts at infrastructure improvements, providing continuity across jurisdictional boundaries and a final network which benefits both local and region users. Figure 35 on the following page shows the combined Sandy and Draper project map by facility type.



Figure 34: All projects by type with existing infrastructure



Figure 35: Combined Sandy Draper Project Map by Facility Type

### APPENDIX A

### **PRIORITIZATION SCORING**

ID	DESCRIPTION	ТҮРЕ	LENGTH (FT.)	COST	REGIONAL SUPPORT	LOCAL SUPPORT	LENGTH	SAFETY	LOW COST	SCORE
D1	East Jordan Canal Trail: West boundary to Willow Springs Ln	Parallel Bike Path, Paved	17,553	\$5,491,000	1	1	2	1	0	5
D2	Pioneer Rd: 300 E to Highland Dr.	Buffered Bike Lane	13,622	\$1,880,000	1	1	2	1	0	5
D3	Corner Creek Trail: 150 E to Jordan River Parkway	Parallel Bike	8,226	\$4,298,000	1	1	1	1	0	4
D4	Trail Approximately 300 West: 13490 South to Pony Express Road	Parallel Bike Path, Paved	7,937	\$5,312,000	1	0	1	1	0	3
D5	Vista Station Blvd/FontRunner Blvd: 12300 S to Vista Station	Buffered Bike Lane	6,442	\$889,000	1	0	1	1	0	3
D6	Highland Dr: Approx. Oxford Hills Dr to Approx. Minuteman Dr	Bike Lane	28,266	\$226,000	1	1	2	0	0	4
D7	Lone Peak Pkwy/200 W: 11400 S to 13775 S	Bike Lane	16,315	\$131,000	1	0	2	0	0	3
D8	700 E/Charger Way: 11400 S to Carlquist Dr	Bike Lane	11,543	\$92,000	1	1	2	0	0	4
D9	13800 S: 300 E to Southfork Dr	Bike Lane	5,511	\$44,000	1	1	1	0	1	4
D10	Traverse Ridge Rd: Mike Weir Dr to Traversepoint Dr	Sidewalk	4,933	\$37,000		1	0	1	1	3
D11	Pioneer Rd: 1400 E to 1840 E	Sidewalk	3,267	\$25,000		1	0	1	1	3
D12	12000 S: 300 E to 630 E	Sidewalk	2,218	\$17,000		1	0	1	1	3
D13	Pioneer Rd: 1300 E to Cypress Point Way	Sidewalk	2,050	\$15,000		1	0	1	1	3
D14	Pioneer Rd: Approx. New Fork Cv to Approx. Raleigh Ct	Sidewalk	1,391	\$10,000		1	0	1	1	3
D15	Relation St: Pioneer Rd to end of Relation St	General Shared Roadway	1,174	\$1,000	1	1	0	0	1	3
D16	Bonneville Shoreline/Traverse Ridge Trail: Marion Vista Dr to Traverse-Traverse Trail	Parallel Bike Path,	45,085	\$7,169,000		0	2	0	0	2
D17	East Jordan Canal Trail: 11400 S to Porter Rockwell Trail	Parallel Bike	6,521	\$1,037,000		0	1	1	0	2
D18	Corner Creek Trail: Stokes to 1300 E	Parallel Bike Path, Payed	5,734	\$912,000		0	1	1	0	2
D19	– Draper Canal Trail: Draper Parkway to Relation St	Parallel Bike Path, Paved	4,641	\$738,000		1	0	1	0	2
D20	Sunrise Trail: Approx. Bubbling Brook Ln to Lone Peak Pkwy	Parallel Bike Path, Paved	4,350	\$692,000		1	0	1	0	2
D21	12300 S: Boundary to Galena Park Blvd	Buffered Bike Lane	4,584	\$633,000	1	0	0	1	0	2
D22	Kimballs Ln: 300 E to 700 E	Buffered Bike Lane	3,416	\$471,000	1	0	0	1	0	2
D23	Porter Rockwell Trail Connection: 12300 S to Draper City Park	Parallel Bike Path, Paved	2,161	\$344,000		1	0	1	0	2
D24	Draper Station Connection: Green	Parallel Bike	869	\$138,000	0	1	0	1	0	2
D25	970 E: Pioneer Rd to Draper Pkwy	Path, Paved Parallel Bike	810	\$129,000	1	0	0	1	0	2
D26	13775 S/13800 S: I-15 to West	Bike Lane	8,979	\$72,000	1	0	1	0	0	2
D27	700 W/Galena Park Blvd: 11400 S to 12300 S	Bike Lane	6,864	\$55,000	1	0	1	0	0	2
D28	600 W: Vista Station Blvd to South Boundary	Bike Lane	6,842	\$55,000	1	0	1	0	0	2
D29	Vista Station Blvd/13490 S: FrontRunner Blvd to 200 W	Bike Lane	3,654	\$29,000	1	0	0	0	1	2
D30	Stokes Ave: 300 E to Fort St	Bike Lane	3,133	\$25,000	1	0	0	0	1	2

ID	Description	Туре	Length (ft.)	Cost	Regional Support	Local support	length	Safety	Low Cost	Score
D31	300 E: 11400 S to Kimballs Ln	Bike Lane	2,706	\$22,000	1	0	0	0	1	2
D32	1700 E/Moose Hollow Dr/Moose Hollow Cit/Mountain Crest Dr: Pioneer Rd to Highland Dr	General Shared Roadway	4,491	\$5,000	1	0	0	0	1	2
D33	Osborne Ln: 13800 S to end of Osborne Ln	General Shared Roadway	2,062	\$2,000	1	0	0	0	1	2
D34	Galena Loop Trail: Willow Creek Trail to Cephus Cir	Parallel Bike Path, Paved	4,660	\$741,000		0	0	1	0	1
D35	Crescent Willow Creek Trail: 11400 S to 11500 South	Parallel Bike Path, Paved	4,621	\$735,000		0	0	1	0	1
D36	Galena Loop: Alan Point Dr to Approx. Windmill Gate Cv	Parallel Bike Path, Paved	3,455	\$549,000		0	0	1	0	1
D37	Sunrise Link Trail: 12300 S to Canal	Parallel Bike Path, Unpaved	2,251	\$358,000		0	0	0	0	0
D38	Wheadon Trail: Draper Canal Trail to East Jordan Canal Trail	Parallel Bike Path, Paved	2,087	\$332,000		0	0	1	0	1
D39	Sunrise Trail: Opportunity Way to Approx. Beverlee Ann Dr	Parallel Bike Path, Paved	1,431	\$228,000		0	0	1	0	1
D40	South Pointe Trail: Highland Dr to Approx. Chamonoix Ct	Parallel Bike Path, Unpaved	1,256	\$200,000		0	0	0	0	0
D41	Osborne Trail Connection: Osborne Ln to Highland Dr	Parallel Bike Path, Paved	974	\$1,125,000		0	0	1	0	1
D42	Mehraban Wetland Connector Trail: 800 E to Porter Rockwell Trail	Parallel Bike Path, Paved	815	\$130,000		0	0	1	0	1

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### APPENDIX B

PUBLIC ENGAGEMENT SUMMARY



# Active

## ACTIVE sandy ACTIVE draper Transportation Survey Results





## Where do you currently live or work?



# What Sandy Council District do you live in?





## What District in Draper do you live in?



## What is your age? *(optional)*



# What best describes your employment status? *(optional)*



# How important are bicycle and pedestrian facilities to you in your community?



## For what purpose do you typically walk or bike?



## How often do you use the following for walking?

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Sidewalks Roadway Corner Bonneville Porter Other trails shoulders Canyon trails Shoreline trail Rockwell trail

Sandy



### Draper



Every Few Weeks

Once a Year



## How often do you use the following for bicycling?



#### 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Sidewalks Bike Lanes Roadway Bonneville Porter Other trails Corner shoulders Canyon Shoreline Rockwell trails trail trail

Draper

Weekly

Monthly

Every Few Weeks

Once a Year



Have there been times when you did **NOT** walk or bike to a destination because comfortable facilities were not available?



If you answered "YES" to the previous question, which of the following would be helpful to you?



# If your ideal walking and/or biking facilities were available, how often would you use them?



# What type of rider should your community plan & design bike facilities for?



## How should your community prioritize their limited AT funds?



### How often do you visit Sandy or/& Draper? (Nonresidents of Sandy & Draper)



How important are bicycling and pedestrian facilities to you in the Sandy and Draper communities? (Nonresidents of Sandy & Draper)



## For what purposes do you typically walk or bike? (Nonresidents of Sandy & Draper)



## How often do you use the following for walking the Sandy and Draper communities? (Nonresidents of Sandy & Draper)



## How often do you use the following for biking the Sandy and Draper communities? (Nonresidents of Sandy & Draper)



Have there been times when you did **NOT** walk or bike to a destination in the Sandy or Draper communities because comfortable facilities were not available? *(Nonresidents of Sandy & Draper)* 

60% 50% 40% 30% 20% 10% 0% Yes No Unsure If you answered "YES" to the previous question, which of the following would be helpful to you? (Nonresidents of Sandy & Draper)



If your ideal walking and/or biking facilities were available in the Sandy and Draper communities, how often would you use them?

(Nonresidents of Sandy & Draper)


What type of rider the Sandy and Draper communities plan & design bike facilities for?

(Nonresidents of Sandy & Draper)





# Sandy and Draper ATP Social Pinpoint Survey Results



Stakeholder Engagement Summary



C





- Respondents Up Voted others comments **281 times**
- Respondents Down Voted others comments **70 times**

## The two most popular comments:





- 141 Total comments within Sandy City
- 32 I like this
- 87 I don't like this
- 22 Other feedback





- 20 -Total comments within Draper City
- 10 I like this
- 3 I don't like this
- 6 Other feedback





"More bike lanes!! Would be great it there could be a partition to keep the bikers extra safe"

"This extension of the Porter Rockwell Trail will be appreciated"

"Dimple Dell does not need paved trails! Do not disrupt the beauty of this park! There are plenty of paved walkways. This would be a huge mistake!!!"



### ...........



Option	# of Comments	Location III
56	48	Dimple Dell Trail: Approx 10000 S to 1300 E
37	33	2000 E/Dimple Dell Rd: 1700 E to Bell Canyon
45	17	Highland Dr: 9400 S to Oxford Hills Dr
76	4	Highland Dr: Approx Oxford Hills Dr to Bangerter Pkwy
73	3	700 E: North Boundary to Sego Lily Dr
16	2	Little Cottonwood Rd: 9400 S to Little Cottonwood Canyon
31	2	1700 E/1670 E/1590 E: Dimple Dell Rd. to Approx. Hidden Valley Club Dr
38	2	2000 E/Dimple Dell Rd: 1700 E to Bell Canyon
41	2	11400 S/11370 S/11270 S: 1300 E to 2125 E
42	2	Petunia Way/9800 S/Granite View Dr/Mt Jordan Rd/Bell Canyon: Sego Lily Dr to Wasatch Blvd
54	2	Sandy Irrigation Canal/840 E/9400 Stl azon Dr to 10600 S
2	1	9400 S: Riverside Dr to 9375 S
7	1	450 E/8000 S/Cedar Terrace Dr/Old Dairy Rd/Lodgepole Dr: 7800 S to High Point Pkwy
9	1	1700 E/Michael Way/Sterling Dr: 8600 S to 9400 S
14	1	Quail Hollow Dr: Willow Hills to Little Cottonwood Rd
25	1	11000 S: Auto Mall Dr to 1300 E
27	1	1300 E: Longdale Dr to Draper Pkwy
36	1	10980 S: 1700 E to 2000 E
44	1	Wasatch Blvd: Little Cottonwood Rd to Blg Rock Ln
51	1	Cys Rd/Water Ln: 700 E to Sterling Dr
52	1	7800 S: Approx 415 E to Creek Rd
53	1	East Jordan Canal: 7800 S to 190 E
74	1	Porter Rockwell Trail Extension: Approx Julie Anna Dr to Center St
77	1	Pioneer Rd: 300 E to Highland Dr.
80	1	11400 S: State St to Camden Park Ln
87	1	East Jordan Canal Trail: West boundary to Willow Srprings Ln
90	1	Trail Connection: 10200 S to East Jordan Canal Trail
91	1	Sego Lily Dr: Porter Rockwell Trail to 1300 E
93	1	Relation St: Pioneer Rd to end of Relation St
108	1	Lower Corner Canyon Trail: Highland Dr. to Silica Pit Loop Trail
123	1	Corner Creek Trail: 300 E to Trail
128	1	Sunrise Trail: Approx Bubbling Brook Ln to Lone Peak Pwy

ACTIVE sandy draper





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