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Mayor



**DEPARTMENT of COMMUNITY
and NEIGHBORHOODS**
Blake Thomas
Director

April 11, 2022

Local Link Study

The 2020 Circulation Study (2020 Study) was prepared for the Local Link Project to better understand how people travel in and around the Sugar House Business District. With the projected growth and increasing development pressures in Salt Lake City, South Salt Lake, Millcreek and Holladay, it was critical to plan for multimodal transportation choices including transit, bicycle, and pedestrian options, and improvements to existing roads.

The purpose of the 2020 Study was to evaluate and accommodate transportation options and identifying gaps and barriers that create challenges for efficiently traveling through and around the study area. To assess multimodal opportunities, challenges, and needs to the Sugar House Business District, the following topics were analyzed: key destinations, land use density, planned construction projects, bicycle and pedestrian networks, safety, transit network, and freight networks.

In 2013, the Salt Lake City Redevelopment Agency (RDA) developed the Circulation and Streetscape Amenities Plan for the Sugar House Business District (2013 Study). The 2020 Study is not intended to supersede the 2013 Study. The goals of the 2013 Study were to provide recommendations that could improve local and regional mobility and access while retaining the special character of the Sugar House community. The 2020 Study provides a deeper dive for interim opportunities within the core Sugar House Business District. By providing diverse transportation options, the partner communities can increase the resiliency, flexibility, and sustainability of the transportation network.

Sincerely,

Lynn Jacobs, PE
Transportation Engineer

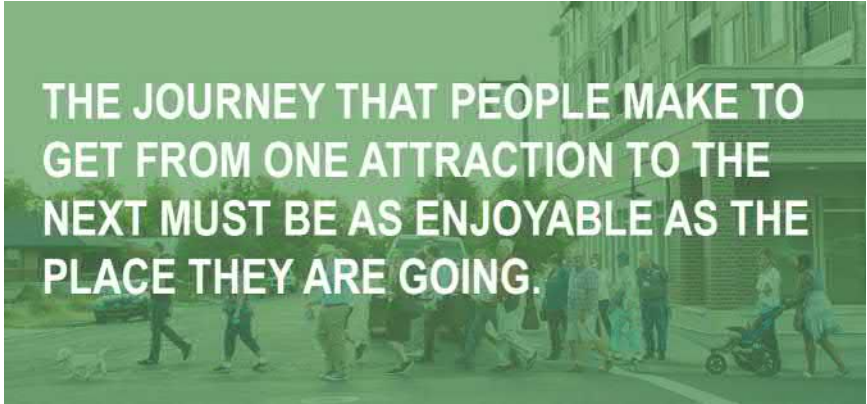


LOCAL LINK CIRCULATION STUDY 2020

November 30, 2020

Executive Summary

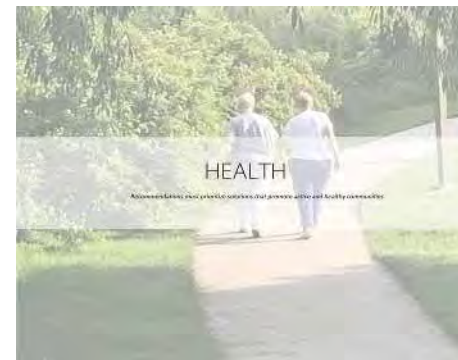
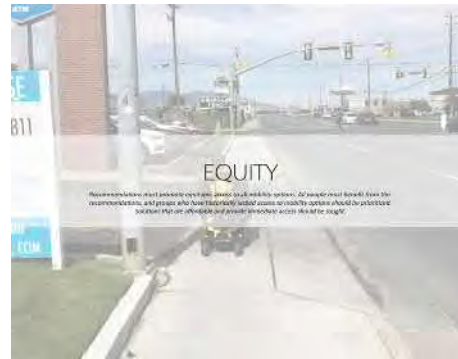
Salt Lake City, South Salt Lake, Millcreek and Holladay collaborated on the Local Link Circulation Study to better understand how people travel in and around the Sugar House Business District. With each partner community facing increasing development pressures and growth, it is critical to plan for multimodal transportation choices including transit, bicycle and pedestrian options, and improvements to existing roads. By providing diverse transportation options, the partner communities can increase the resiliency, flexibility, and sustainability of the transportation network. The purpose of the Local Link Circulation Study is to evaluate and accommodate transportation options (walking, bicycling, transit, automobile) and identify gaps and barriers that make it difficult for people to efficiently travel through and around the study area.



THE JOURNEY THAT PEOPLE MAKE TO GET FROM ONE ATTRACTION TO THE NEXT MUST BE AS ENJOYABLE AS THE PLACE THEY ARE GOING.

Guiding Principles

There are several guiding principles for improving multimodal connections in the study area, including:



The Vision

These guiding principles were developed collaboratively by the partner communities and support the following vision for transportation in and around the Sugar House Business District:

The transportation network that connects to the Sugar House Business District will be safe, inviting, sustainable, and provide comfortable travel choices for everyone. It promotes a connected network between local neighborhoods and regional centers in South Salt Lake, Millcreek, and Holladay to the Sugar House Business District. Active and Public transportation connections to schools, neighborhood centers, parks, and other public attractions are prioritized.

Existing Conditions

To assess multimodal opportunities, challenges, and needs to the Sugar House Business District, the planning team analyzed a variety of topics, including:

- **Key Destinations** such as the Sugar House Business District, Millcreek City Center, Brickyard, or South Salt Lake Downtown
- **Land Use Density** indicating high demand areas for trips
- **Planned construction projects**, such as road reconstructions, utility projects, or other capital projects that may offer opportunities to reprogram streets or corridors to provide more diverse transportation options
- **Bicycle and pedestrian networks** identifying where active transportation infrastructure investment may be missing or inadequate
- **Safety** including bicycle and pedestrian crash history throughout the study area
- **Transit network** illustrating potential first-last mile priority locations
- **Freight networks** illustrating corridors that may have special operational considerations for freight traffic

Public Engagement

Public outreach efforts were divided into two phases: 1) Existing Conditions and 2) Recommendations. The Existing Conditions phase was focused on learning from locals about opportunities and barriers to walking and biking in and around the study area, while the Recommendations phase was geared towards getting feedback on recommended projects, policies, and programs. In both phases, methods for public input included online surveys and online interactive maps.

Key Needs and Priorities

Based on the existing conditions analysis and public engagement, several key needs and priorities emerged. These included site and corridor-specific needs at intersections or roadways, but also global needs throughout the study area.

Location-specific needs include:

- Global Address gaps in Parley's Trail through the Sugar House Business District and South Salt Lake Downtown
- Address east-west connectivity into Sugar House for active transportation users on 2100 S, 2700 S, and 3300 S
- Address connectivity between the Sugar House Business District and Brickyard/Millcreek City Center
- Improve pedestrian conditions at various intersections throughout the study area

Global needs include:

- Improved first-last mile improvements
- More convenient and secure bike parking
- Comprehensive wayfinding signage
- Comprehensive traffic calming on local streets
- Improved pedestrian realm elements including street trees, site furnishings, and public art, and other placemaking features

PROJECTS

The Local Link Circulation Study analysis revealed several corridors and spots in need of capital improvements. These range from trail alignments with supporting infrastructure to the addition of bicycle lanes in gap areas to improved intersections for pedestrians and cyclists to the creation of complete streets.

Five priority projects are highlighted.



Corridor Improvement



Spot Improvement



1 Parley's Trail alignment through the Sugar House Business District should provide riders an enjoyable and intuitive experience.



2 Complete street improvements along 2700 South will fill a gap along a major east-west active transportation corridor.



3 Complete street improvements between Sugar House BD and Millcreek City Center for seamless AT connection between centers.



4 Improved active transportation along 3300 South can address a gap in infrastructure and improve safety in a dangerous environment.



5 Parley's Trail alignment through South Salt Lake Downtown can create a more direct and intuitive connection to Central Pointe TRAX station.



6 Complete street improvements along 2100 South may be considered to add additional connectivity along a major SH corridor.



7 Two-way bike lanes around Sugarhouse Park would allow easier navigation to and around SHBD across the Park.



8 Improved intersections at various complete street intersections.



PROGRAMS & POLICIES

Improving circulation and connectivity in the study area will require a variety of improvements. In addition to project or capital improvements, there must be programs and policies that support the new big ideas proposed.

Programs should be overarching, coordinated and span multiple jurisdictions. They will likely require dedicated staff and budgets for startup and maintenance.

Policies will require city ordinances to change or be created to enable the implementation of new ideas.

The eight program and policy recommendations highlighted on the right will help enhance the pedestrian and cycling environment and improve overall circulation in the study area.



1 Creative placemaking in Sugar House Business District, especially along Highland Drive, will improve walkability and vibrancy.



2 Green conflict markings on regionally significant bikeways can help highlight conflict zones and raise awareness of people on bicycles.



3 Comprehensive wayfinding and signage eases navigation, enriches our experience, enhances branding, and reinforces key destinations.



4 Additional bike parking throughout the study area will make it more accessible and inviting to cyclists.



5 Trail Oriented Development Guidelines that detail ways trails can activate and enrich urban environments.



6 Traffic calming policies can reintroduce City measures to help encourage slower speeds on roadways.



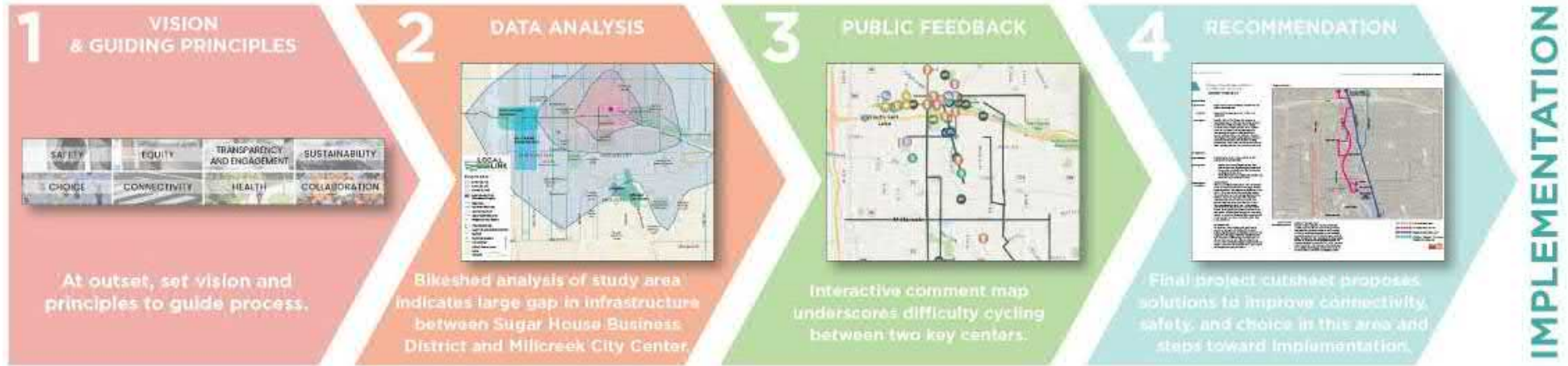
7 Develop mobility hubs at key locations where Frequent Transit Network (FTN) interfaces with major destinations or where FTN routes intersect.



1. **Creative Placemaking**
2. **Green Conflict Markings on Regionally-Significant Bikeways**
3. **Wayfinding & Signage**
4. **Bicycle Parking**
5. **Trail Oriented Development**
6. **Coordinated Traffic Calming Strategy**
7. **Micromobility Infrastructure and Mobility Hubs**

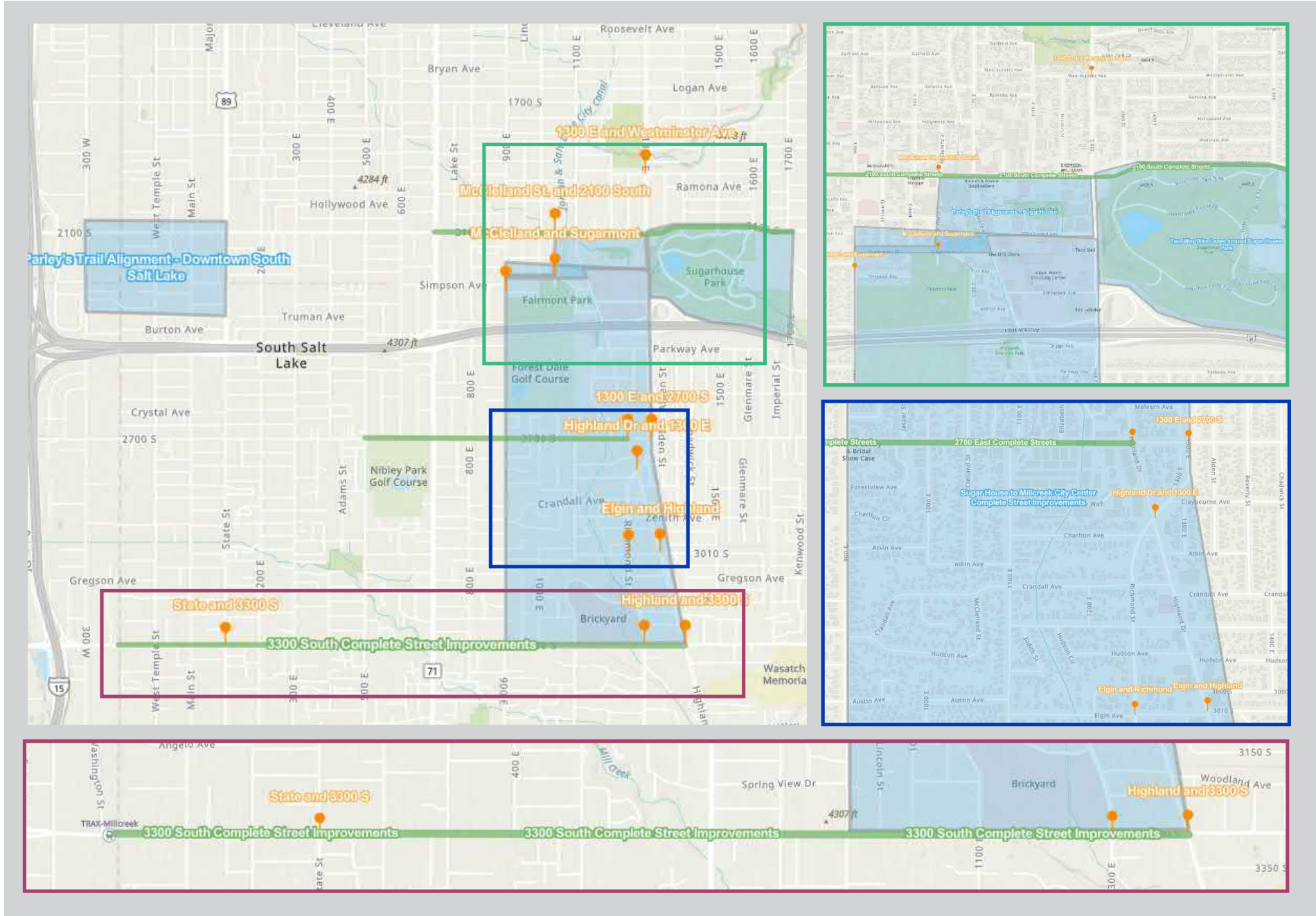
**More information about each recommendation can be found in the appendix*

Process Overview



The maps below illustrate final recommendations for improving circulation in the Study Area.

Figure 1. Recommendations



Background Data

The following maps depict the existing conditions within the study area.

Key Points in the Study Area

The study area includes three existing or developing central business districts or downtowns in the Salt Lake Valley.

Sugar House Business District

Since the 2013 Circulation Study in this area, the Sugar House Business District has seen tremendous transformation and continues to. The area south of 2100 South, north of I-80, east of 900 East, and west of 1300 East, has had significant redevelopment of new shopping, housing, hospitality, and office space. The new development is denser, more compact, and has an overall urban feel.

South Salt Lake Downtown

South Salt Lake is building a downtown city center across 235 acres at the northeast corner of where I-80 and I-15 meet. Over the course of its development, the City expects more than 2,500 new multi-family housing units, 1.5 million square feet of retail and 3 million square feet of office/commercial space, plus parks, a greenway, Parley's Trail, and cultural and social attractions.

Millcreek City Center

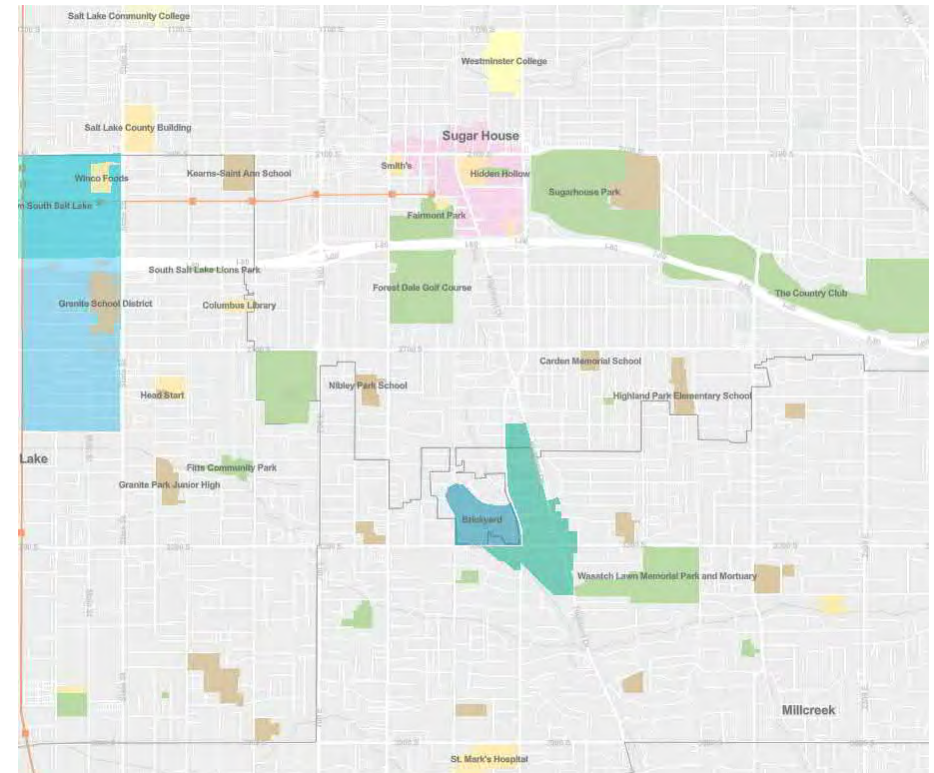
The newly incorporated City of Millcreek is also building a city center. Its city center will be located north of 3300 South, between Highland Drive and 1300 East. It will feature a prominent and vibrant multi-use open space at its center with mixed uses including office, residential, retail, and civic buildings surrounding it. It will include over 100,000 square feet of office, over 40,000 square feet of retail, and over 450 multifamily units over the next decade.

The land uses in and between these three centers includes a broad mix of commercial, office, residential, and industrial (in South Salt Lake). In addition to the general land uses described above, there are a number of other destinations in the study area:

- 2 Colleges (Salt Lake Community College, Westminster College)

- 17 K-12 Schools (3 High Schools, 2 Junior High Schools, 11 Pre-K & Elementary Schools, 1 School for the Deaf and Blind)
- 10 Parks
- 2 Libraries (Sprague Branch Public Library, Millcreek Community Library)
- 3 Hospitals or Health Clinics (University of Utah Health Clinic - Sugar House, St. Mark's Hospital, South Main Public Health Center)
- 3 Community or Recreation Centers (Fairmont Aquatic Center, Columbus Center, Central Park Community Center)
- Salt Lake County Government Center
- South Salt Lake Creative Industries Zone
- Entertainment and Shopping Areas (Brickyard Shopping Center, Sugar House Shopping Center, Century 16 Theater, Cinemark Theatre)

Figure 2. Key Study Area Locations



Parley's Trail and S-Line Corridor

In addition to the point and district destinations and features of the study area, Parley's Trail and the S-Line Corridor currently define a prominent transit and active transportation corridor running east-west between the Sugar House Business District and South Salt Lake's Downtown.

Ongoing and Planned Construction

Salt Lake City, South Salt Lake, and Millcreek have a number of upcoming and ongoing road construction projects. The map shows six classifications of construction projects: bus stop improvements, road reconstruction projects, trail projects, road restriping projects, road resurfacing projects, and water storm and sewer projects. This study can take advantage of this future construction work to make recommendations that may inform some of the final designs selected for each of these roads. Specific improvements are listed below by construction year:

2020

- Reconstructing Elizabeth Street - Stratford Avenue to Whitlock Avenue
- Reconstructing Zenith Avenue - 800 East to 900 East
- Reconstructing Parkway Avenue - Elizabeth Street to Highland Drive
- Canal Replacement & Green Infrastructure Improvements - Wilmington Avenue to Ashton Avenue
- Route 21 Bus Stop Enhancements

2021

- Reconstructing 900 East - Hollywood Avenue to 2700 South
- Resurfacing Highland - Warnock to Salt Lake City line

2023

- Reconstructing 1100 East / Highland Drive - Ramona Avenue to Warnock Avenue
- Reconstructing Ashton Avenue - 1100 East to Highland Drive
- Reconstructing 1000 East - Atkin Avenue to 2700 South
- Reconstructing Lincoln Street - Elm Avenue to 2100 South
- Reconstructing Meadow Lane - Green Street to 700 East

- Reconstructing Gregson Avenue - 900 East to Lincoln Street
- Reconstructing Simpson Avenue - 1100 East to Highland Drive

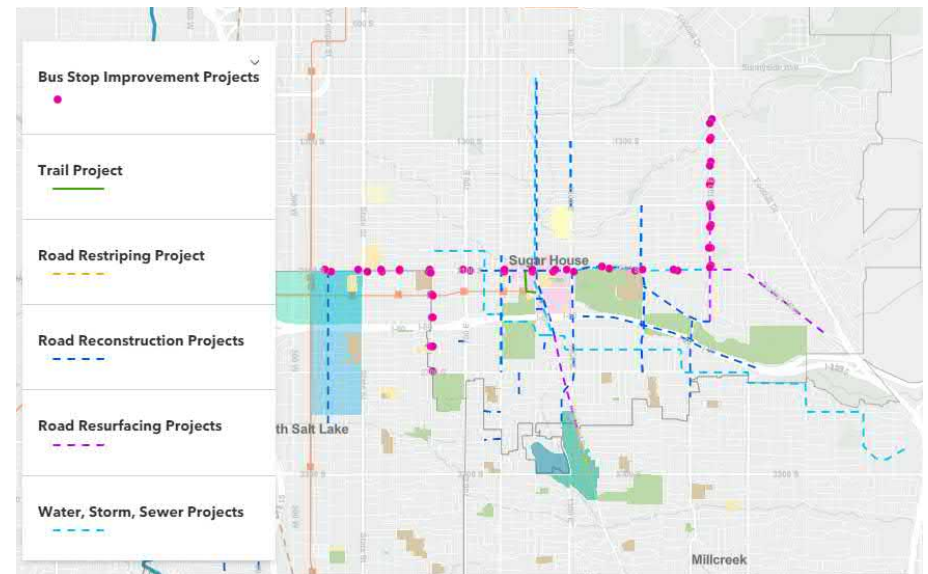
2024

- Reconstructing 1300 East - 2100 South the Salt Lake City Boundary

2025

- Reconstructing 2100 South - 700 East to 1700 East

Figure 3. Ongoing and Planned Construction



Land-Use Density

The following four maps illustrate existing and future land use density in the study area. Together, they illustrate areas of higher building density located in and around the Sugar House Business District, much of the South Salt Lake Area adjacent to I-80, and property in and around the Brickyard Shopping Center and the Millcreek City Center.

This first map illustrates parcel-building density which is the total building square feet divided by the parcel size. It shows the intensity of development on each parcel. The darker the red, the more intense the parcel-building density. Parcels that are not red are likely single family homes with large lots, open spaces and parks, or other parcels with small buildings.

Figure 4. Parcel Building Density

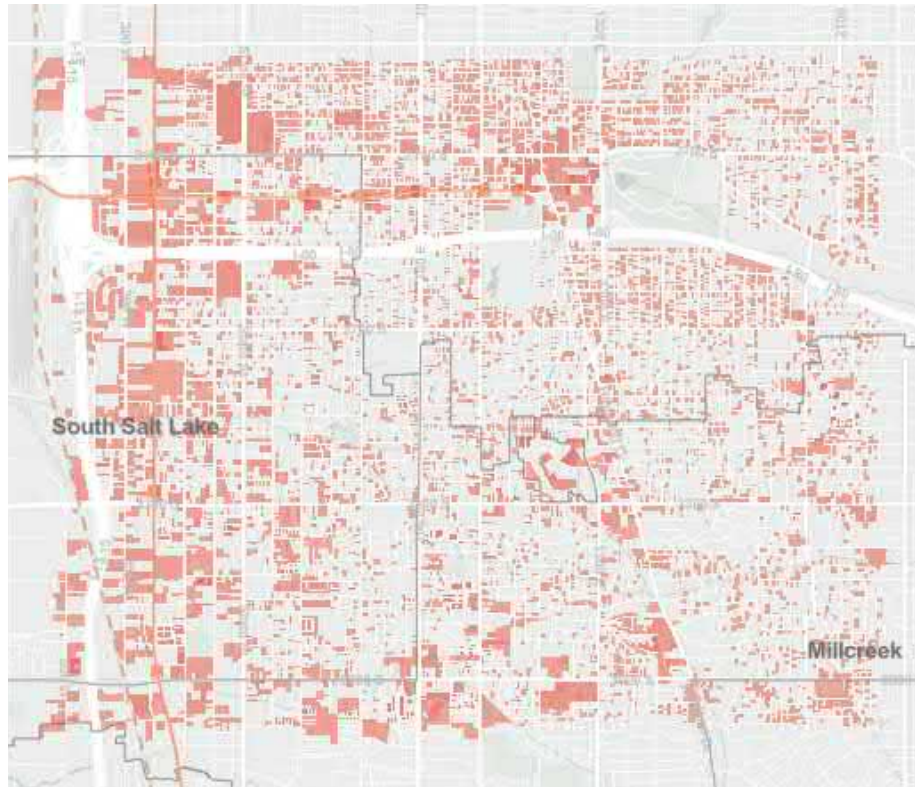


Figure 5. Parcels with Multiple Building Stories

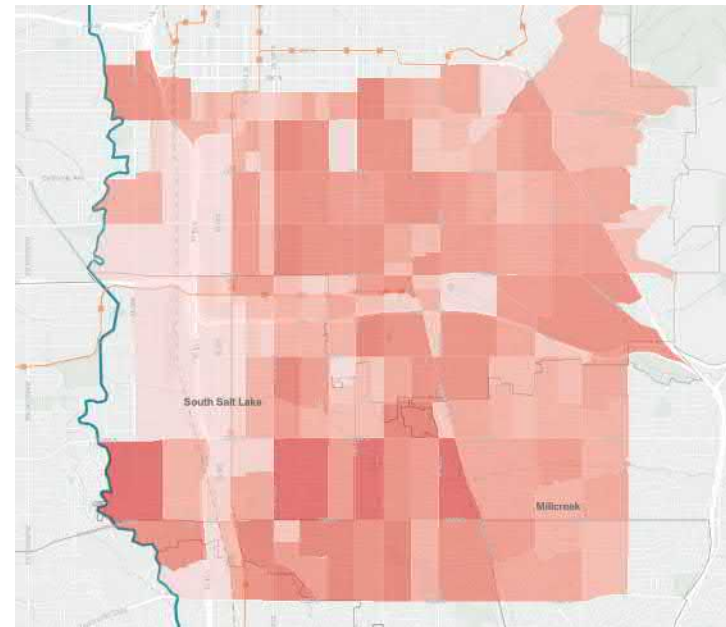
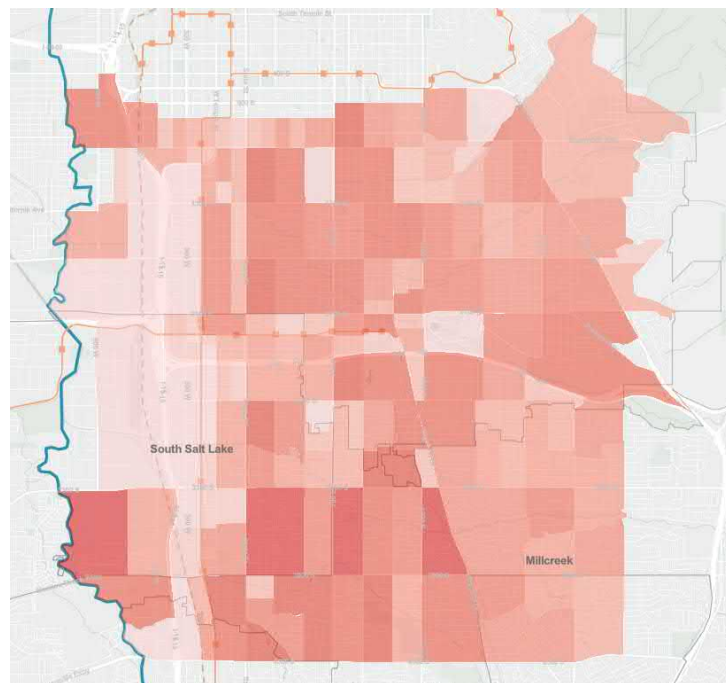


Figure 5 shows parcels with multiple building stories. The darker the red, the more building stories. There is a concentration in the Sugar House Business District, the parcel of the Salt Lake County Building, the area near South Salt Lake’s Creative Industries Zone, and along 3900 South near St. Mark’s Hospital.

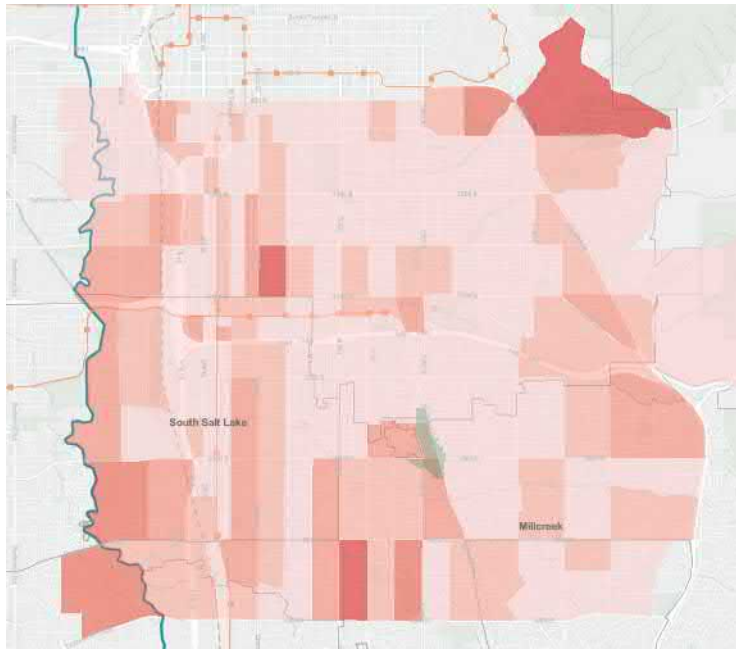
Figure 6. Household Projections



Figures 6 and 7 show Household and Office Job estimates according to the Wasatch Front Regional Council’s 2030 projections by transportation analysis zone (TAZ). While households are spread throughout the study area, there appear to be clusters south of 3300 South and north of 2100 South.

The 2030 office projection map shown in Figure 7 shows concentrations in the southeast corner of the Sugar House Business District and the TAZ encompassing the Salt Lake County Building.

Figure 7. Office Projections



Bicycle Facilities

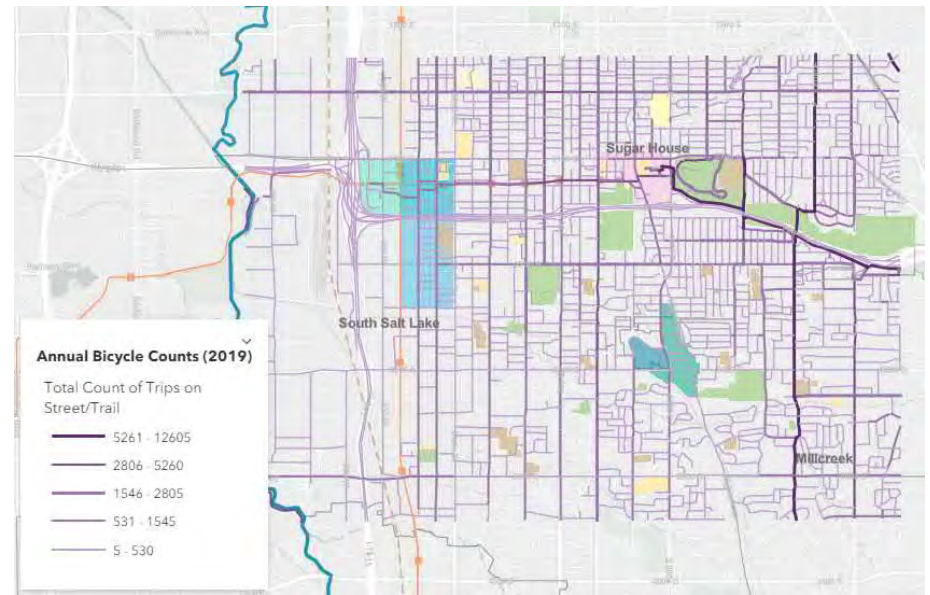
The Sugar House Business District possesses a number of important bikeway connections, shown in Figure 9, offering adjacent neighborhoods convenient access to numerous shopping and entertainment destinations. This includes east-west connections like Parley's Trail and bicycle facilities on 2700 S. The McClelland Trail provides a good north-south route linking Sugar House to the 9th & 9th District. Bicycle facilities are generally deficient in linking the Sugar House Business District to points south including Millcreek City Center and Brickyard. Parley's Trail also possess a vital gap between the Sugarmont TRAX station and "The Draw" where Parley's Trail crosses under 1300 East into Sugar House Park.

Annual Strava Data Bicycle Counts (2019)

The most heavily used corridors by Strava users include Parley's Trail, 1700 South, and 2700 South going east-west. This is likely attributed to the bicycle infrastructure on those roads and trails. Going north-south, there are more corridors used by riders, but the most heavily used are 900 East, 2100 East, and 2300 East south of I-80. Additional routes

that seem to see higher volumes include Main Street, 300 East, 500 East, and 1300 East south of 3300 South.

Figure 8. Strava Bicycle Counts



Bicycle Travelshed Analysis

The planning team analyzed existing bikeways and low-volume roadways suitable for bicycling to understand how accessible the Sugar House Business District is via surrounding neighborhoods based on typical trip durations of 5-, 10-, and 20-minutes. Sugar House Plaza was used as the origin for determining these "travelsheds". Given a gridded street network and ample streets suitable for bicycling, travelsheds would appear diamond-shaped. In Sugar House, east-west connectivity is strong thanks to the existence of Parley's Trail. Connections north towards Westminster and the East Liberty Park neighborhood are also good thanks to the McClelland Trail and several low-volume local streets. Bicycle connectivity begins to breakdown traveling south out of Sugar House. A lack of suitable bicycle facilities on 1300 E or Highland prevents access to Brickyard and Millcreek City Center within the 10- and 20-minute travel sheds. With improved bikeways, it could be possible to easily bike between the Sugar House Business District and Brickyard / Millcreek City Center in as little as 10-minutes.

Figure 9. Bicycle Facilities

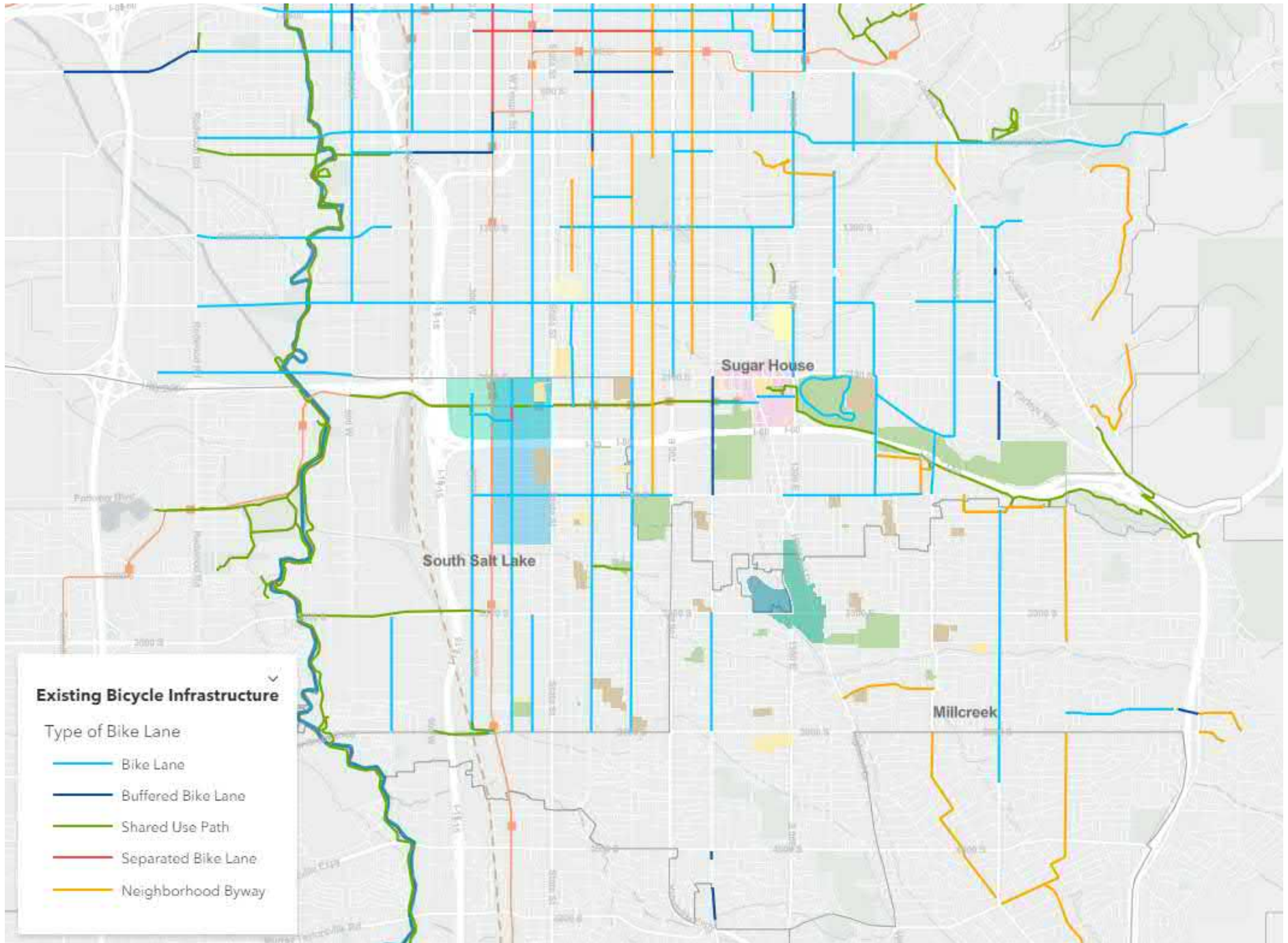
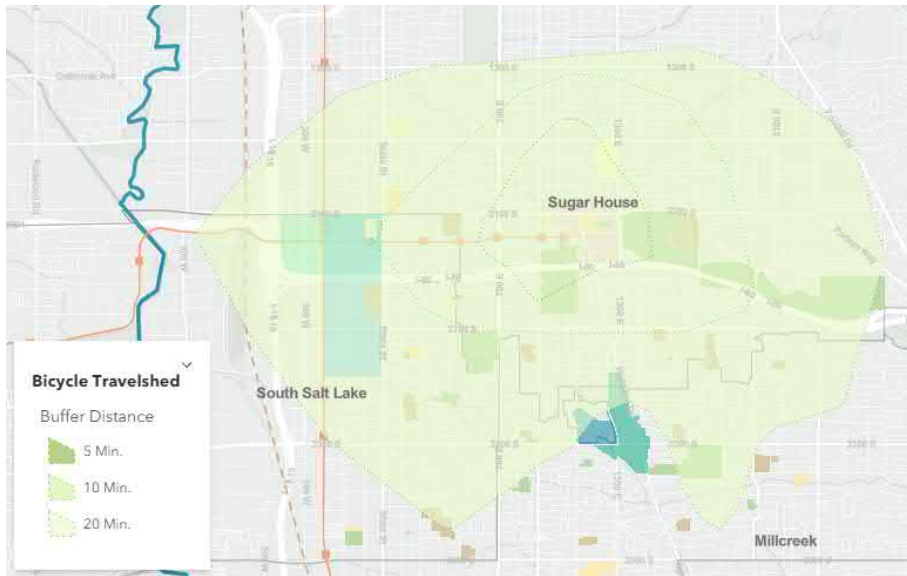
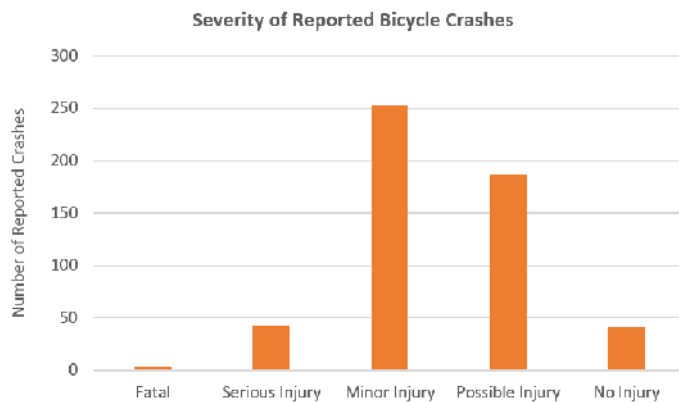


Figure 10. Office Bicycle Travelshed

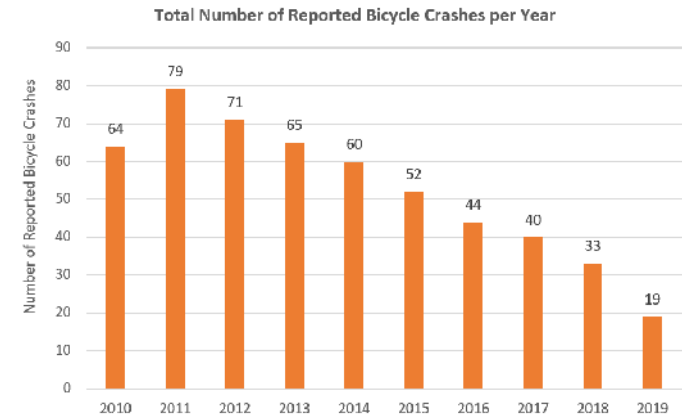


Bicycle Crashes

The planning team analyzed bicycle crashes between 2010 to 2019 by severity, location, year of occurrence, and daylight characteristics. Between 2010 and 2019, there were a total of 527 reported crashes involving bicycles. As shown in Figure 1, 3 of these crashes were fatal; 43 were reported as causing “serious injury;” 253 were reported as causing “minor injury;” 187 were reported as causing “possible injury;” and 41 were reported as causing “no injury.” The three fatal injuries occurred at the intersection of 2100 South and 1200 East, 3300 South and 1570 East, and 900 West and 3100 South.

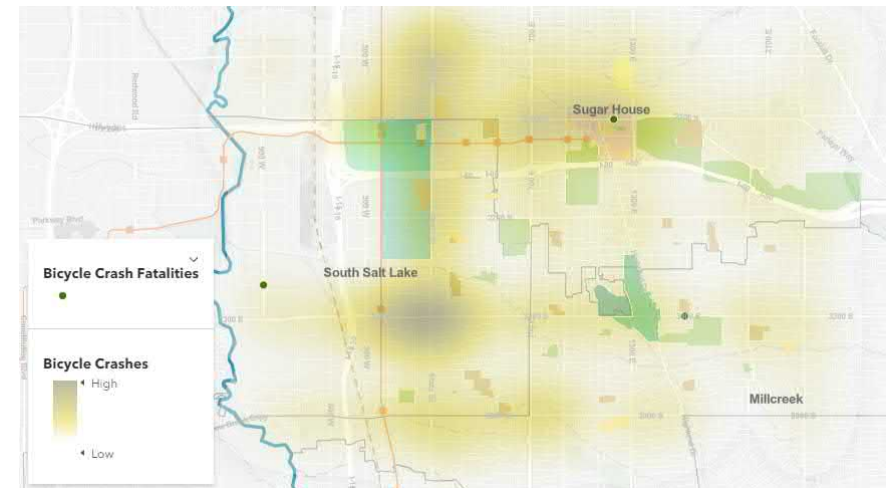


70% (366) bicycle crashes occurred at intersections, while 30% (161) occurred at non-intersections. Only two percent of crashes occurred at a bicycle or pedestrian path intersection. 30% (160) of bicycle crashes occurred on roadways with designated bicycle infrastructure, whereas 70% (367) occurred on roadways without designated bicycle infrastructure, pointing to the importance of developing safe and comfortable bicycle facilities. The majority of crashes occurred on the largest arterial roads such as State Street, 2100 South, and Highland Drive.



Reported bicycle crashes have decreased over time, with earlier years showing higher number of crashes than later years as shown in Figure 2. In 2011, 79 crashes were recorded. In 2019, only 19 crashes were recorded. Note that this could be due to incomplete crash reporting.

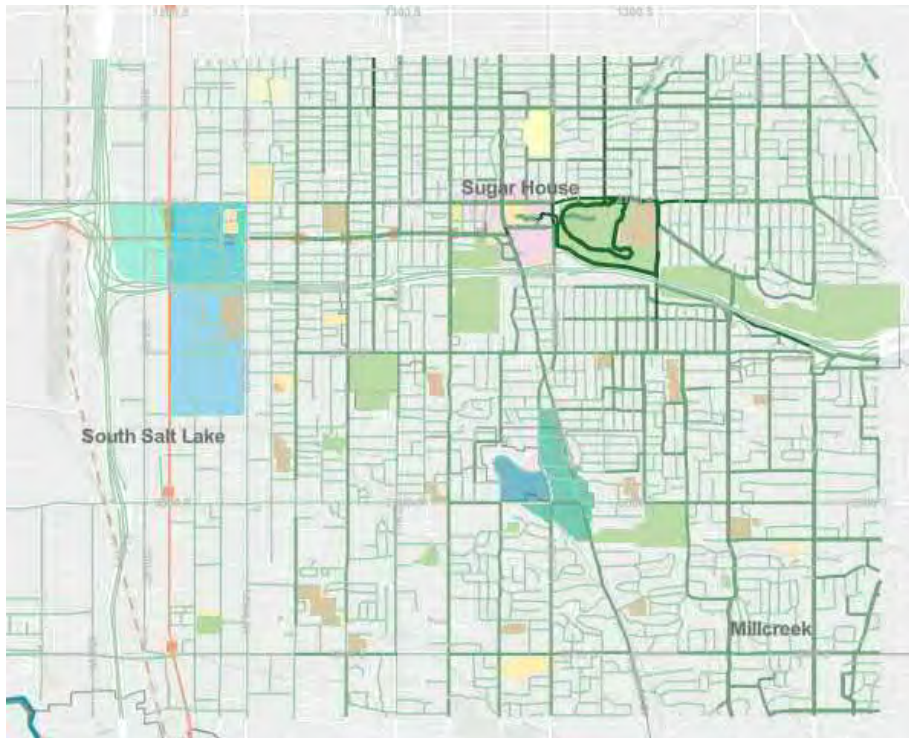
Figure 11. Bicycle Crashes



Annual Strava Data Pedestrian Counts (2019)

The pedestrian count data indicates the heaviest activity in and leading to Sugar House Park, which makes sense given its recreational nature. 1100 East, 2100 South, and the S-Line and Parley's trail also see a fair number of pedestrian counts. More pedestrian activity seems to occur in the northeast quadrant of the study area.

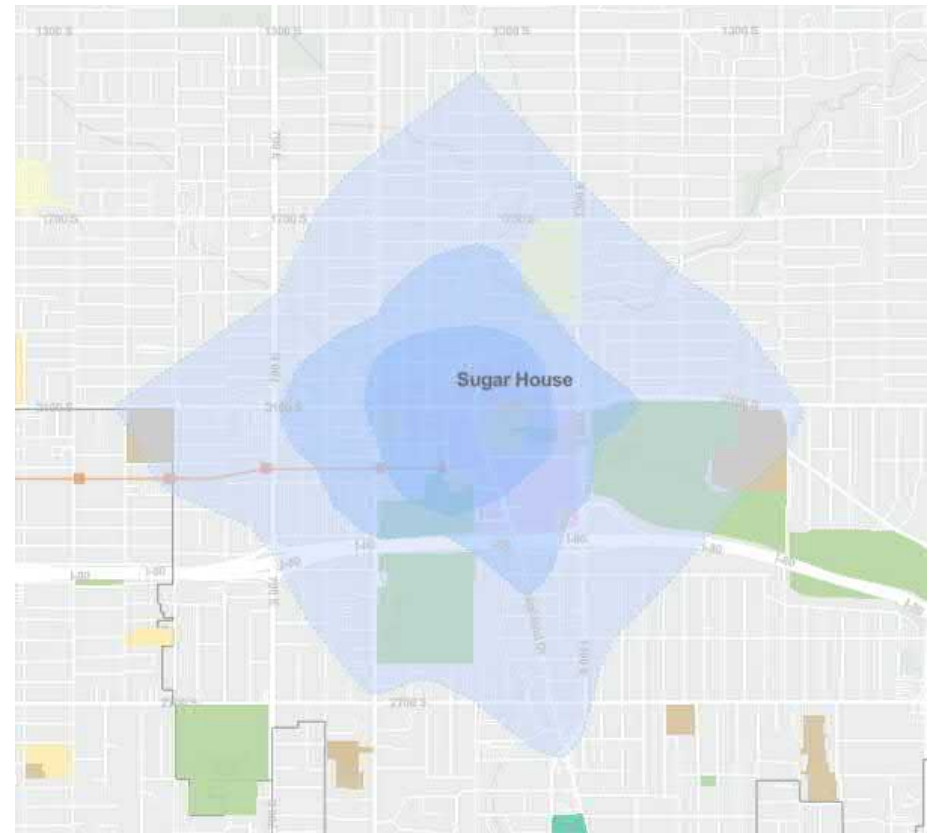
Figure 12. Strava Pedestrian Counts



Pedestrian Travelshed Analysis

The planning team analyzed existing sidewalks suitable for walking to understand how accessible the Sugar House Business District is via surrounding neighborhoods based on typical trip durations of 5-, 10-, and 20-minutes. Sugar House Plaza was used as the origin for determining these “travelsheds.” Given the area's gridded street network that's outfitted with sidewalks on most streets, the pedestrian travel shed is roughly diamond shaped similarly to the bicycle travel shed. Connectivity to the north, west, and east is strong thanks to the existence of sidewalks on nearly every street in these neighborhoods. Con-

Figure 13. Pedestrian Travelshed

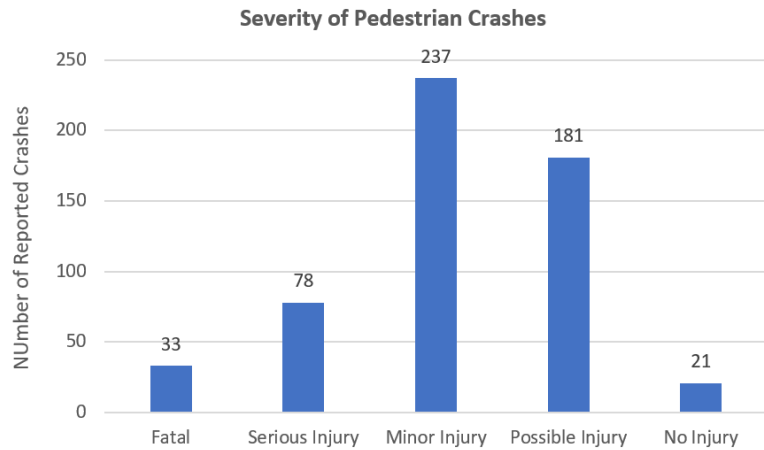


nectivity to the south is weaker due to the lack of sidewalks on some local roads, dead-end cul-de-sacs, and the division of some neighborhoods by Interstate 80. Many roads either dead-end at the Interstate or do not provide adequate walking facilities, presenting a challenge for those walking to the south of the Sugar House Business District. With focused investment on implementing missing sidewalk links and connecting cul-de-sacs, the 20-minute pedestrian travel shed could be expanded to include the Highland Park Elementary School neighborhoods and other nearby areas.

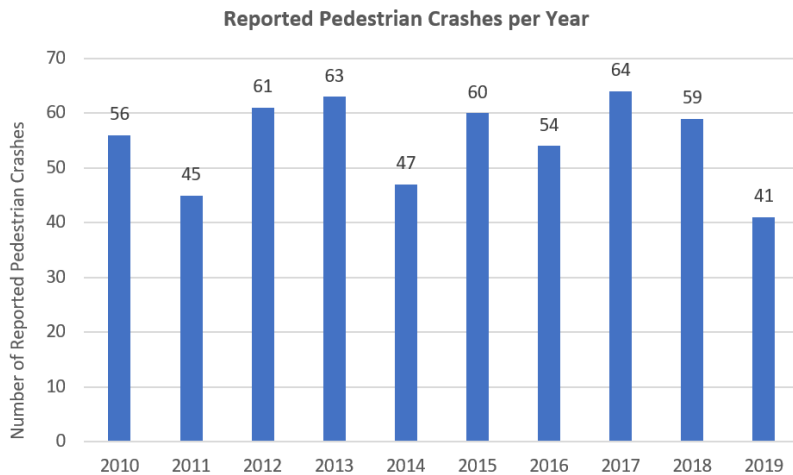
Pedestrian Crashes

The planning team analyzed pedestrian crashes between 2010 to 2019 by severity, location, year of occurrence, and daylight characteristics. Between 2010 and 2019, there were a total of 550 reported crashes involving pedestrians. As shown in Figure 4, 33 of these crashes were

fatal; 78 were reported as causing “serious injury;” 237 were reported as causing “minor injury;” 181 were reported as causing “possible injury;” and 21 were reported as causing “no injury.”

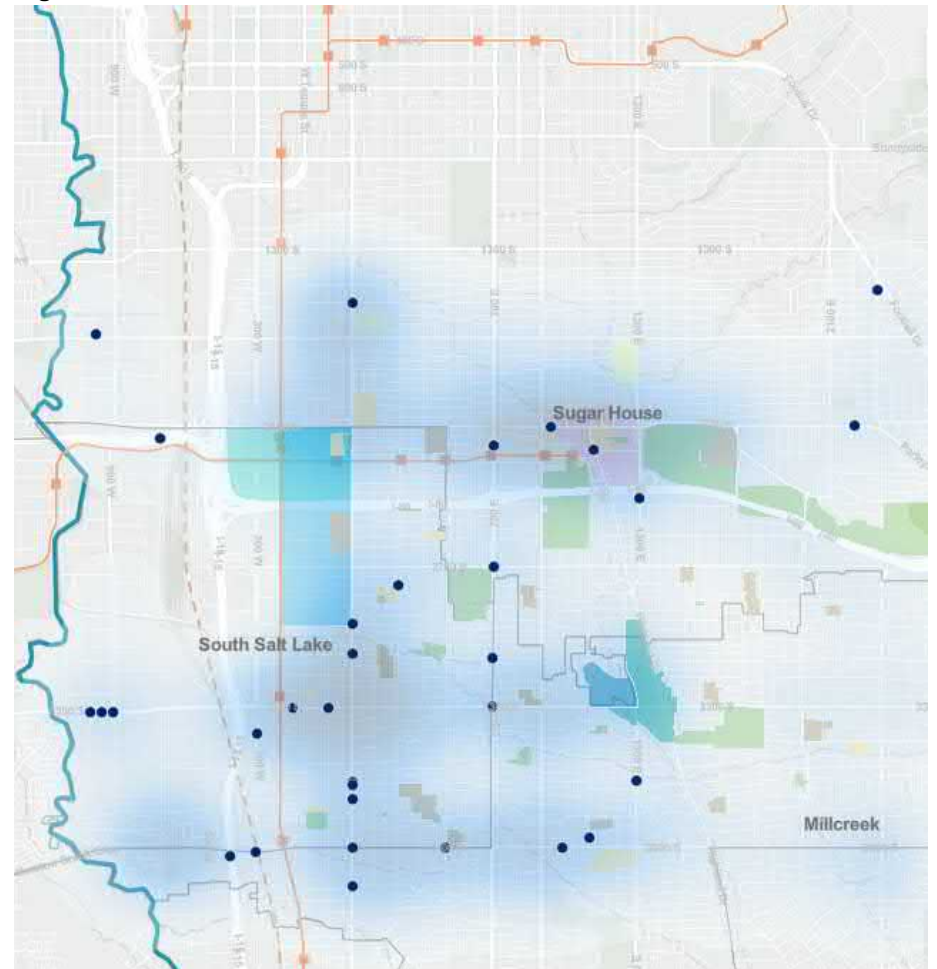


69% (378) of pedestrian crashes occurred at intersections, while 31% (172) occurred at non-intersections. Crashes appear to be centered around commercial areas with high to moderate pedestrian activity, such as the Sugar House Business District, 3300 South, State Street, 2100 South, and State Street.



The number of reported crashes has varied over time, with the majority of crashes occurring in 2017 (64), 2013 (63), and 2015 (60). 2019 showed the lowest number of reported crashes, with only 41 crashes reported. Note that this number could be due to incomplete crash reporting.

Figure 14. Pedestrian Crashes



Transit Connections

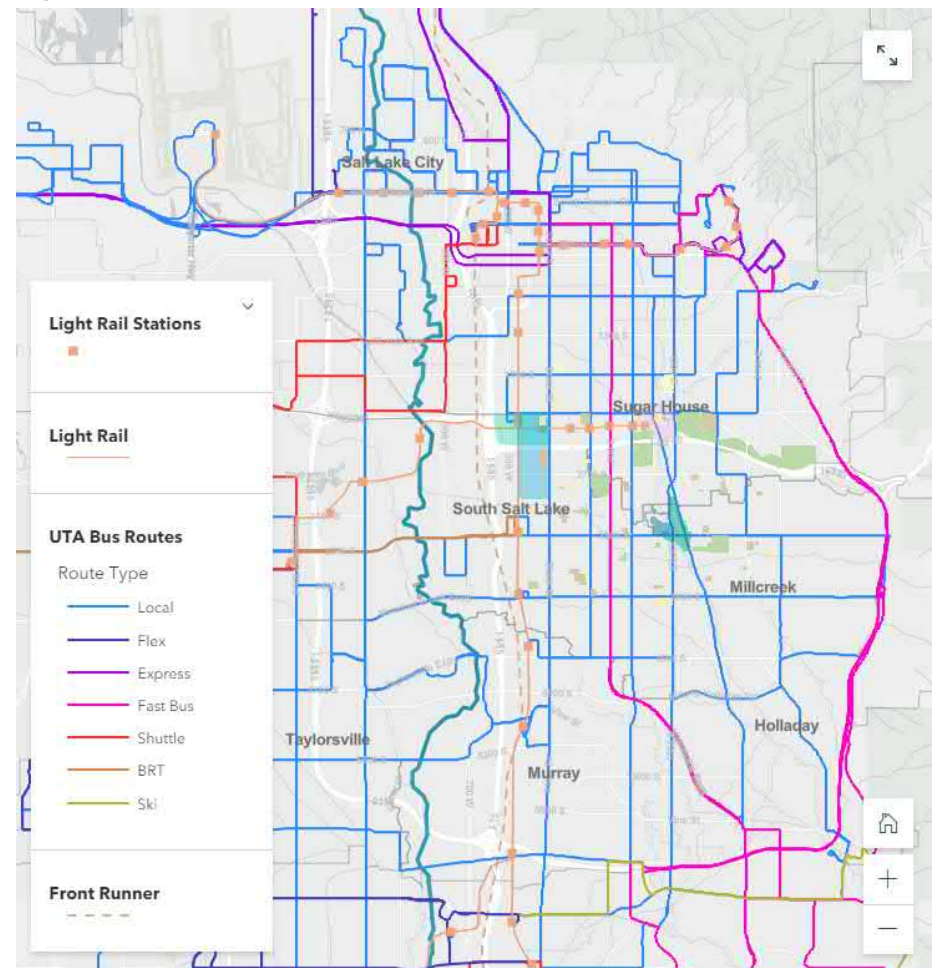
The study area is well served by bus transit with routes running along major north-south and east-west corridors. A summary of the bus routes and their peak period headways in the study area is shown in the table below.

Route	Name	Mode	Peak Frequency
4	400 South	Local Bus	30
17	1700 South	Local Bus	30
21	2100 South	Local Bus	15
33	3300 South	Local Bus	15
35M	MAX - 3500 South	Bus Rapid Transit	15
200	3900 South	Local Bus	15
205	State Street North	Local Bus	15
209	500 East	Local Bus	15
213	900 East	Local Bus	15
220	1300 East / 1100 East	Local Bus	30
223	Highland Drive / 1300 East	Local Bus	15
307	2300 East / Holladay Blvd	Fast Bus	6 Trips
313	Cottonwood Heights Fast Bus	Fast Bus	6 Trips
320	Highland Drive Fast Bus	Fast Bus	4 Trips
354	Sandy / U of U Fast Bus	Fast Bus	6 Trips

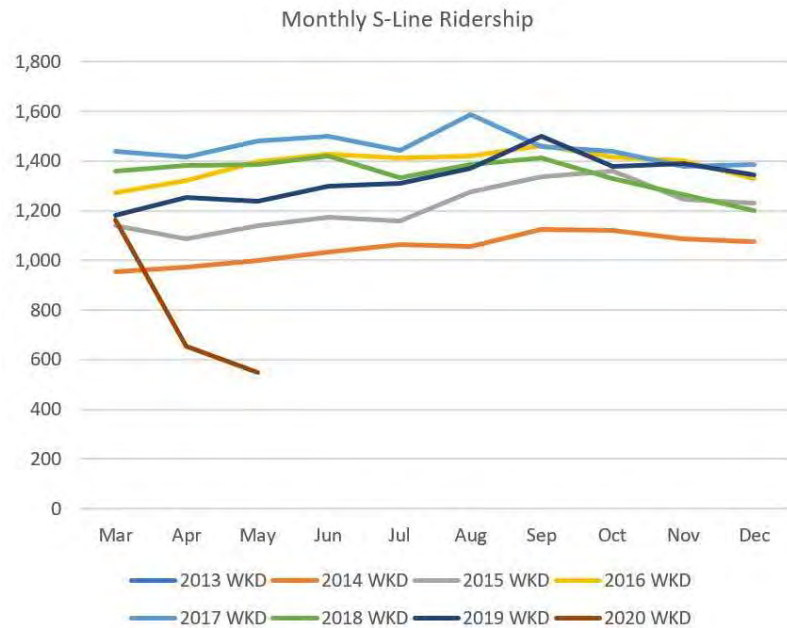
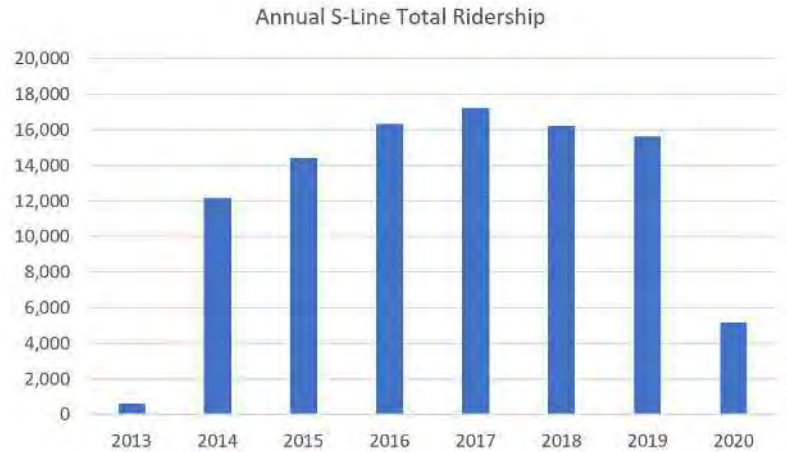
The study area is also served by light rail service including three TRAX lines on the west side and a streetcar (the S-Line) which runs from Central Pointe Station in South Salt Lake to its terminus at Fairmont Station in the Sugar House Business District. At Central Pointe Station, riders can transfer from the S-Line to the Green, Blue, and Red TRAX light rail lines. These lines reach West Valley and the Salt Lake City International Airport, Draper and Salt Lake Central Station, and Daybreak and the University of Utah, respectively. The table on the top right provides a summary of light rail service.

Route	Name	Mode	Peak Frequency
701	Blue Line	Light Rail	15
703	Red Line	Light Rail	15
704	Green Line	Light Rail	15
720	S-Line	Streetcar	15

Figure 15. Transit Network



The two charts below show more detailed information on S-Line ridership. The first shows a steady increase in ridership from 2014 to 2017 and then a slight drop in years 2018 and 2019. The second chart shows that ridership remains steady throughout the months, with slight peaks in August and September.



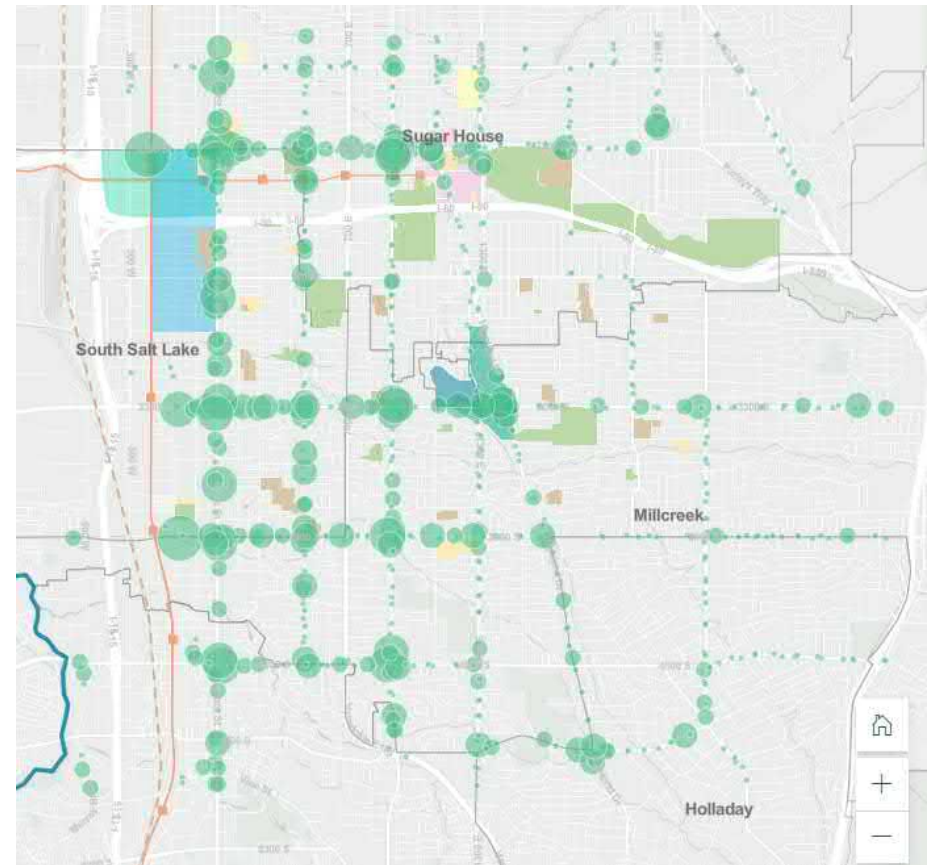
An Alternatives Analysis (AA) study will be conducted following this study to explore extending the S-Line south of its current terminus at Fairmont Station to Millcreek and Holladay, either down Highland Drive or 1300 East or a combination of north-south streets.

The region's heavy rail commuter line, Front Runner, also appears on the map, but is considered out of the study area.

Transit Boardings

The map shows average daily boardings at bus stops and S-Line stations. It shows that the majority of boardings occur along the S-Line, 2100 South, 3300 South, and at major road intersections such as 900 East and 3900 South.

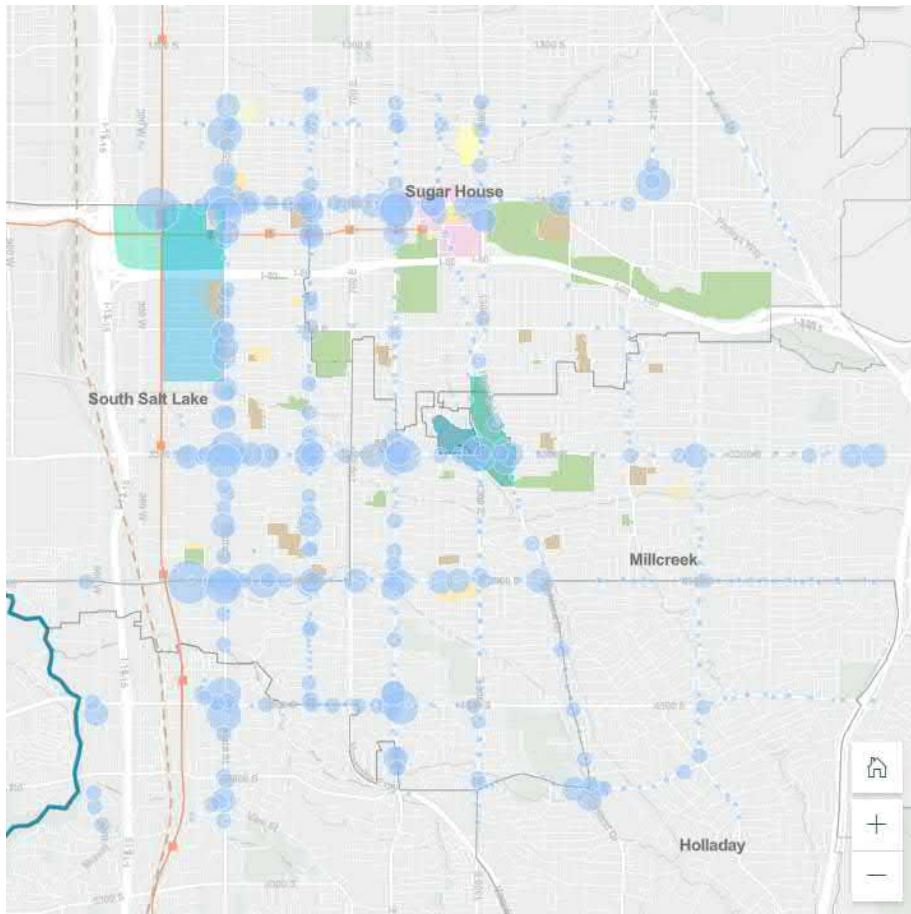
Figure 16. Transit Boardings



Transit Alightings

The transit alightings (when passengers get off the bus) map show that while the same bus stop locations tend to show more activity, 2100 South, 3300 South, and intersections such as Highland Drive and 3300 South, there is overall less activity. This may or may not accurately reflect actual alightings since fewer people “tap off” when getting off the bus.

Figure 17. Transit Alightings

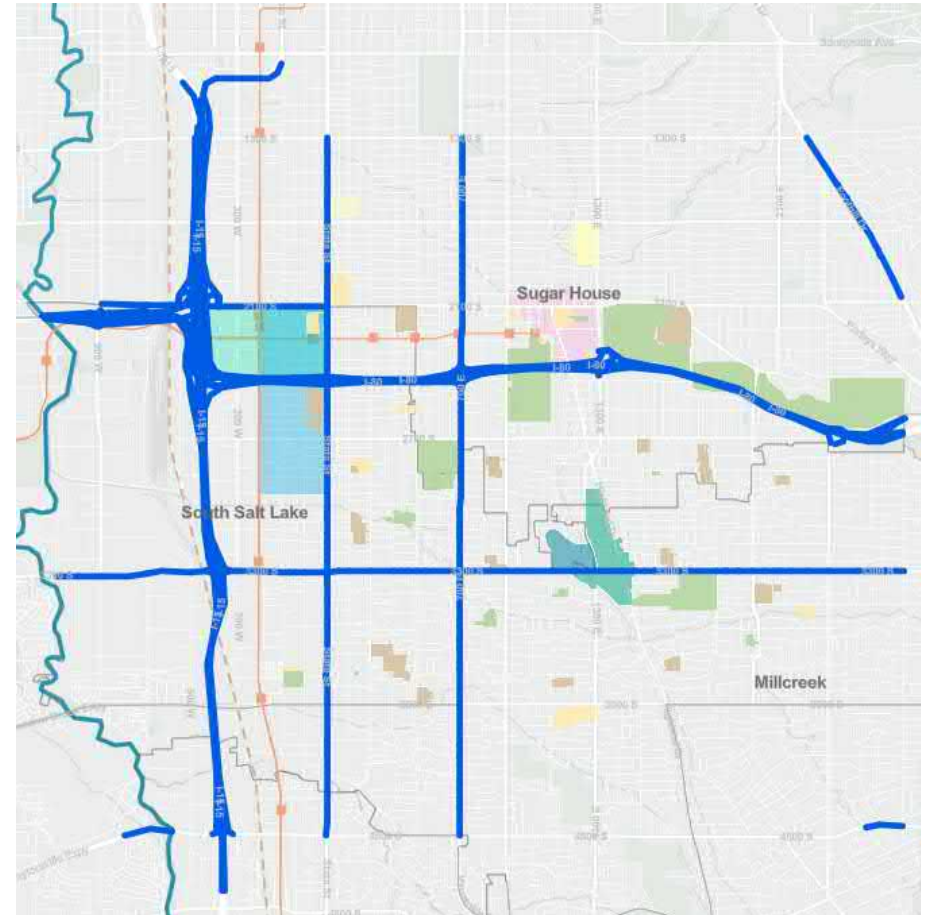


Freight Network

The freight network through the study area consists of freeways, arterials, and major collectors. These routes include I-80, I-15, State Street, 700 East, 3300 South, and 2100 South west of State Street. These

roads tend to be auto-priority and should likely be avoided as routes for active transportation.

Figure 18. Freight Network

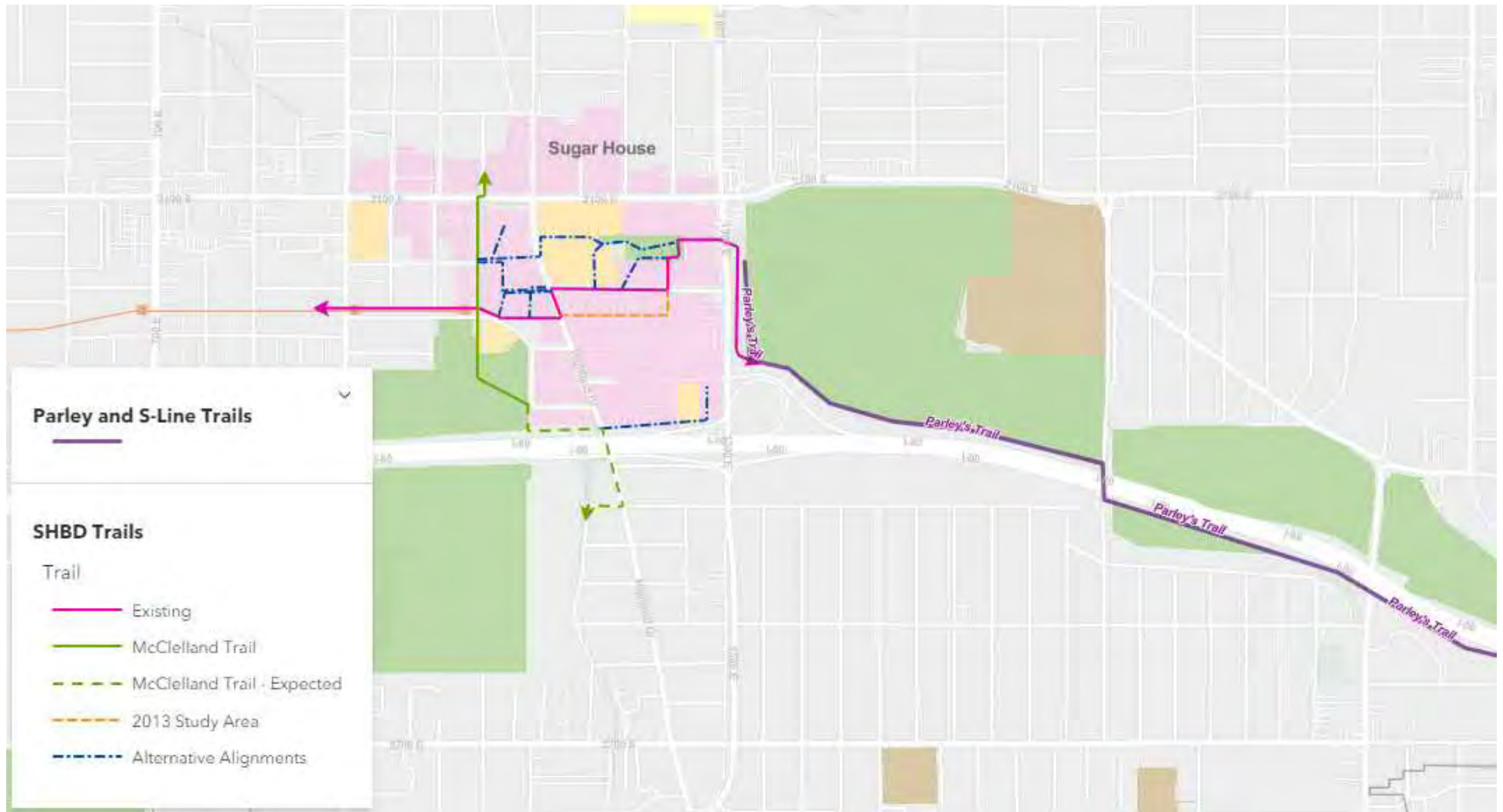


Sugar House Parley's Trail

The next map shows how Parley's Trail currently connects through the Sugar House Business District. It passes north of the S-Line tracks east along Sugarmont Drive. It picks up at Wilmington Avenue and continues east, where it cuts north and goes through an alley behind Wilmington Flats, through the southeast corner of Hidden Hollow and then east through The Draw tunnel into Sugar House Park. The connection between Sugarmont Drive and Wilmington Avenue along Highland Drive is unofficial and informal. The map conveys several routing

alternatives through the Sugar House Business District, which include a route for pedestrians through the new Sugarmont Apartments. The McClelland Trail is also depicted in green and green dashed lines for existing and expected routes, respectively.

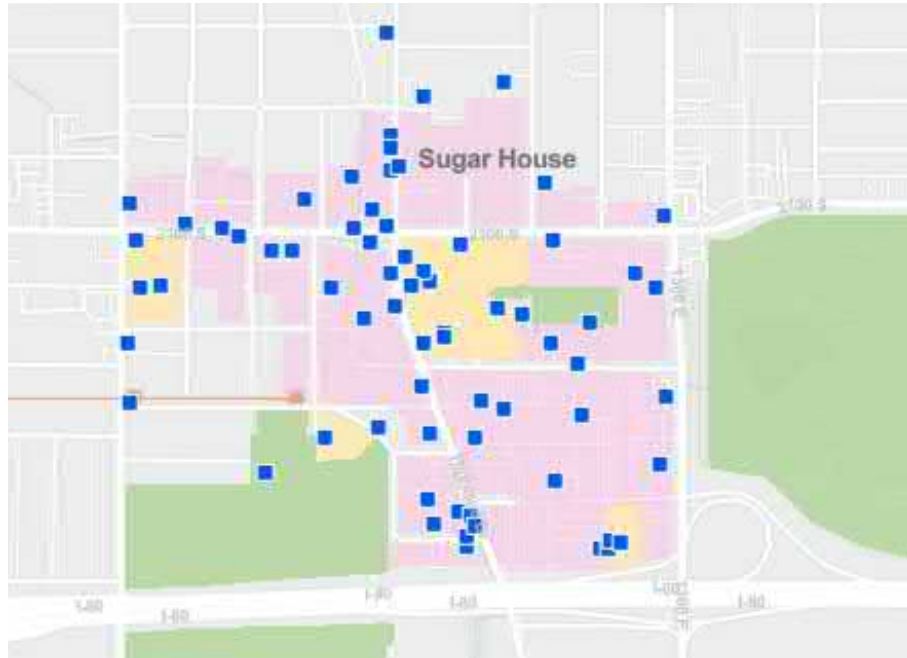
Figure 19. Sugar House



Bike Parking in Sugar House Business District

This map illustrates the extent of bicycle parking in the Sugar House Business District as of July 2020. Many of the facilities are still in place that existed when the 2013 study was completed. As new development has happened, bicycle racks have been added next to several new buildings indicating more acceptance and support of cycling in the study area.

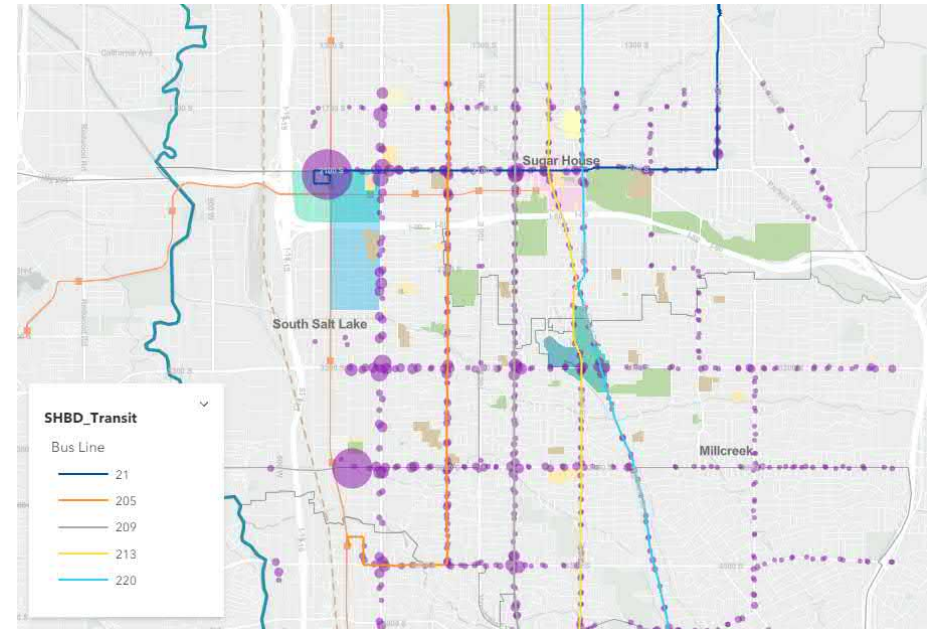
Figure 20. Bike Parking in Sugar House Business District



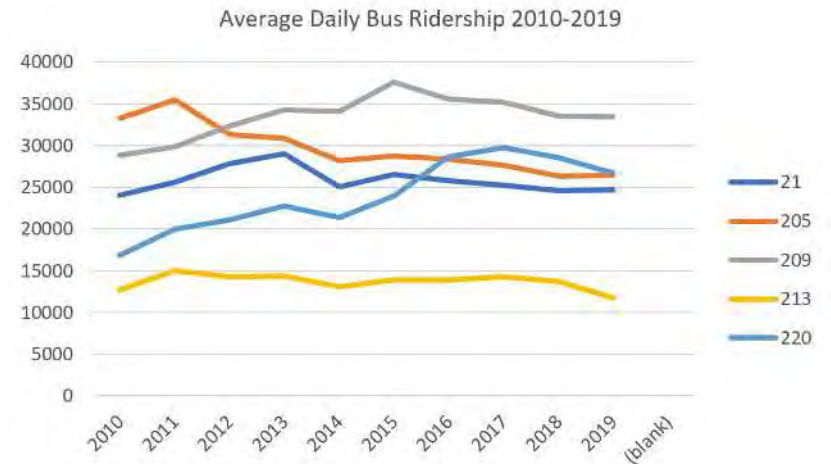
Sugar House Transit Service

The Sugar House Transit Service map shows four bus lines (209, 21, 213, 220) and the S-Line streetcar route as well as 2019 total average daily boardings and alightings for stops in the study area. The map illustrates a concentration of activity at the Fairmont Station (corner of McClelland and Sugarmont), and at 900 East and 2100 South. Some of the new office development in Sugar House such as the University of Utah Health Clinic likely has not been around long enough to impact bus stop use on Highland Drive between Ashton and Stringham, but it is likely that location will begin to see more activity.

Figure 21. Sugar House Transit



The line chart below shows average daily ridership on bus lines that run through the Sugar House Business District from 2010 to 2019. Ridership has remained mostly flat or has risen for most lines except route 205, which has seen a slow decline that has flattened since 2011. All lines saw a small dip in service in 2014, which may be related to the launch of the S-Line.



Public Comment Summary

The study engaged the public over several months in the summer and early fall of 2020. The first format was through an interactive public comment map in which members of the community could leave general or specific comments on circulation in the study area. Specific comments were tied to either points or lines that they drew on a map.

The majority of comments pertained to safety and biking (see pie chart). Beyond those overarching comment tags, the three most common big ideas revolved around:

1. Improved signage & wayfinding
2. Need for addition bicycle facilities to improve ridership and safety
3. Improved street crossing environments for pedestrians

Improved Signage and Wayfinding

Several comments addresses the lack of or limited signage for the trails that connect in the study area including Parley's, the McClelland, and the Millcreek Trails.

Additional Bicycle Facilities

In general, several corridors were identified as lacking bicycle lanes which made riders feel unsafe traveling along them, especially where cars may be traveling at high speeds.

Improved Street Crossings

Many intersections or mid-block crossings were identified as places for improved pedestrian infrastructure. Respondents indicated they felt unsafe and did not walk because it was too difficult to connect in some of these areas without better pedestrian facilities.

Gaps and Barriers

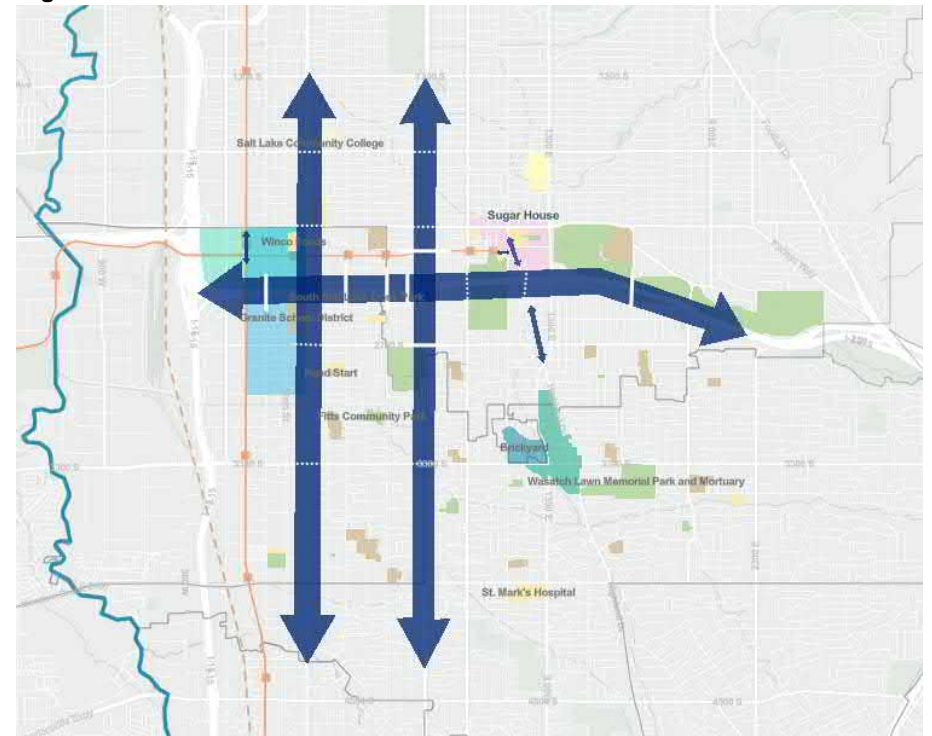
A gaps and barriers analysis was done by assessing information gathered in existing conditions and in the public comments about the study area. The following three maps indicate major barriers and gaps and targeted pain points for active transportation circulation.

Barriers

The study area is dissected by three large linear barriers: I-80 dividing areas north and south, and State Street and 700 East dividing areas east and west. These auto-priority thoroughfares can be challenging and create undesirable conditions for traveling for cyclists and pedestrians. The thick blue lines on the map indicate these barriers' locations. White lines across them indicate safer or more welcoming crossing conditions. Dashed white lines indicate locations where it is physically possible to cross, but the environment may not be ideal and will likely deter all but the most determined of people.

Smaller barriers are also indicated to show smaller corridors that are difficult to cross. They are at the intersection of the S-Line and TRAX lines near Central Pointe Station, between the Sugar House Business District and Millcreek City Center along Highland Drive, and a small point along Sugarmont Drive between McClelland Street and Highland Drive.

Figure 22. Barriers



Gaps

The gaps on the map depict areas and corridors of missing connections or infrastructure for active transportation in the study area. There are six primary gaps listed below. Additional gaps in connectivity are illustrated with dashed lines. Those include connections from the northeast neighborhoods into the Sugar House Business District, connections east-west through the City of Millcreek, and a possible connection south of I-80 that could function as an alternate route to cycling infrastructure that exists on 2700 South and Parley's Trail.

- Gap 1: Parley's Trail through Sugar House Business District
- Gap 2: 2700 South - 700 East to 1300 East- gap in bikeway infrastructure
- Gap 3: Sugar House Business District to Millcreek City Center/Brickyard; gaps in bikeway and pedestrian infrastructure
- Gap 4: 3300 South: Gaps in bikeway and pedestrian infrastructure; future study planned
- Gap 5: 2100 South: lacking bikeways, inconsistent pedestrian facilities outside of Sugar House Business District
- Gap 6: 900 East - 2700 South to 3300 South- Gap in regional bikeway network; connects to Millcreek City and planned Salt Lake City bikeway

Figure 23. Gaps

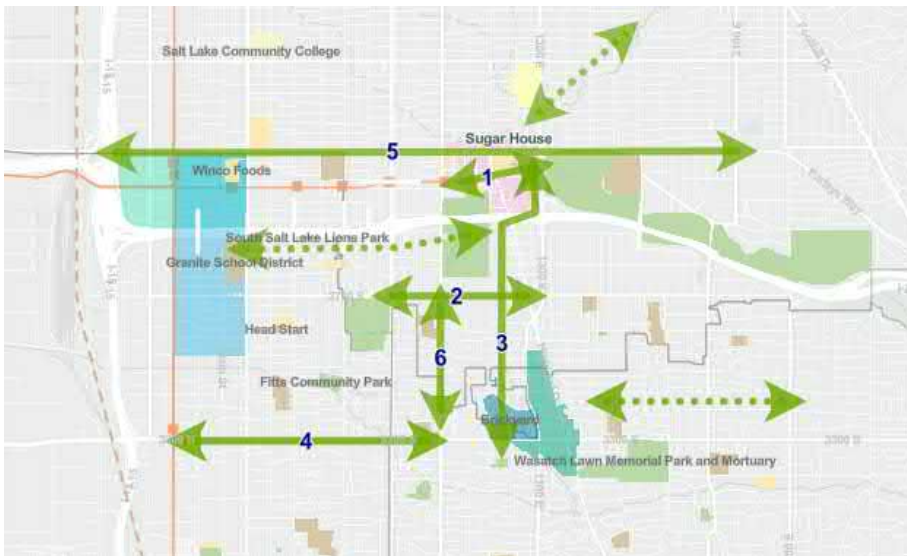
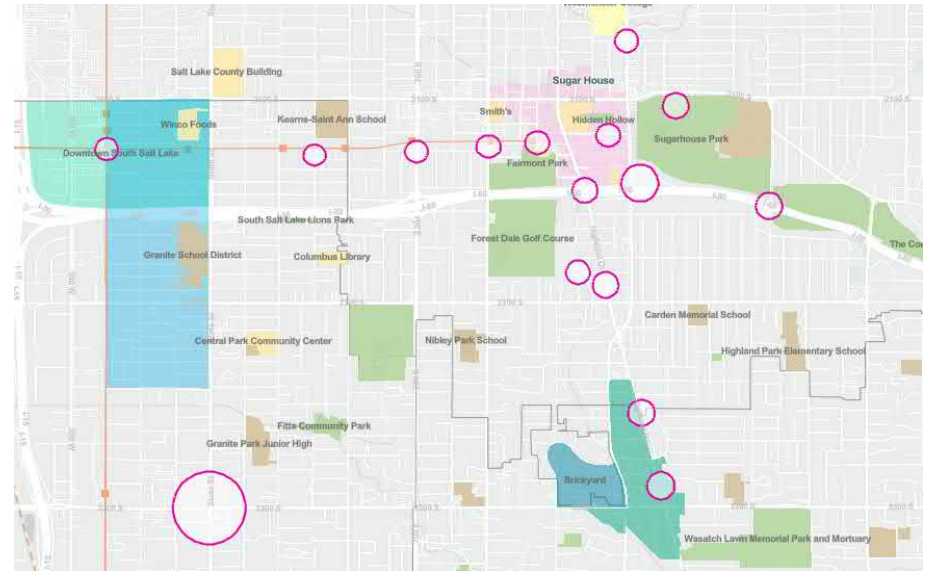


Figure 24. Pain Points



Pain Points

The third map in this series illustrates specific pain points across the study area. These are comprised of trail areas that are confusing, dangerous or difficult intersections to cross, missing active transportation infrastructure such as sidewalk, and other similar issues that make connectivity in the area challenging.

1. Parley's Trail route confusing
2. Lack of sidewalk on 400 East creates difficulty accessing the S-Line
3. Signal to cross is slow and de-incentivizes biking
4. Dangerous crossing conditions for pedestrians/cyclists via multi-use path
5. Confusing and dangerous intersection
6. Parley's Trail signage and location confusing - often blocked by vehicles
7. Difficulty crossing 1300 East via Westminster Ave even though it is a common route to SHBD from northeast
8. Tunnel not inviting to AT, but wide enough for additional facilities
9. This intersection is extremely difficult/ unfriendly to cyclists/ pedestrians

10. Difficulty crossing 2100 South into park, signs about directionality not clear, lack of bike racks
11. Difficult crossing at 1700 East - debris and snow accumulate in protected northbound bike lane
12. McClelland Trail not clear
13. Parking on Highland Drive not used - bike lane opportunity?
14. Difficult intersection to cross
15. Sidewalks in poor condition - but wide enough to install shared use path
16. Dangerous crossing conditions

Appendix A

Program and Policy Recommendations Attachments



Creative Placemaking

Sugar House BD, Highland Drive

Existing Conditions:

Program Extent: Sugar House Business District, Highland Drive

Commercial District

Land Use:

Shopping centers, S-Line, Parley's Trail, U of U Health Clinic, Sugarhouse and Fairmont Parks

Program Destinations:

Project Alignment: Safety, Sustainability, Choice, Connectivity, Health, Collaboration

Guiding Principles:

This recommendation supports the safety, choice, health, and collaboration guiding principles.

Planning Integration:

A creative placemaking program in the Sugar House Business District would formalize activities and small improvements that encourage people to spend time outside on the streets of the commercial areas. It would include staff time and funding to encourage public art installations, street furnishings, and activities and events that boost social and economic vibrancy.

Program Description:

Potential Impacts: Conflicts with vehicles created by temporary or permanent placemaking elements would need to be mitigated.

Collaborations and Partnerships:

Salt Lake City Arts Council, Sugar House Chamber of Commerce, Utah Arts Alliance, Salt Lake County Arts & Culture

Implementation Phasing:

Short- to mid-term





Green Conflict Markings on Regionally-Significant Bikeways

Existing Conditions:

Program Extent: Neighborhood centers within the study area including the Sugar House Business District, South Salt Lake Downtown, Brickyard, and Millcreek's City Center

Description: Green conflict markings on bikeways increase the visibility of the facility, highlight potential areas of conflict, and reinforces priority to bicyclists in conflict areas. Historically, Salt Lake City has used green conflict markings near Downtown bikeways where bikeway use is highest. As the neighborhood centers within the study area, such as the Sugar House Business District, continue to grow and attract more trips, green conflict markings should be implemented on new and existing bikeways. Color should always be applied consistently to facilitate clear understanding for all roadway users.

Project Alignment: Guiding Principles:

Safety, Choice, Connectivity, Collaboration

Planning Integration:

Supports multimodal goals inherent in plans including the Salt Lake City Pedestrian and Bicycle Plan Update, the Millcreek City Center Master Plan, and the South Salt Lake Downtown Master Plan.

Collaborations and Partnerships:

Salt Lake City, South Salt Lake, Millcreek, Holladay

Implementation Phasing:

Short- to mid-term

Potential Recommended Corridors:

- Highland Drive
- Parley's Trail through the Sugar House Business District
- 900 East
- 2700 South

Benefits of Green Conflict Markings

- Promotes the multi-modal nature of a corridor
- Increases the visibility of bicyclists
- Discourages illegal parking in the bike lane
- When used in conflict areas, raises motorist and bicyclist awareness to potential areas of conflict
- Increases bicycle comfort through clearly delineated space
- Increases motorist yielding behavior
- Helps reduce bicycle conflicts with turning motorizes

TYPICAL APPLICATION

Green conflict markings are typically used within bikeways, especially at turning conflict areas, intersections, and driveways. These locations present areas where typical vehicle movements frequently encroach into bicycle space, but where the prevailing speed of turning traffic is low enough that motorist yielding behavior can be expected.



Photos (top to bottom): Typical application of green conflict markings (NACTO, 2019). Example of green conflict markings on 200 W in Salt Lake City.

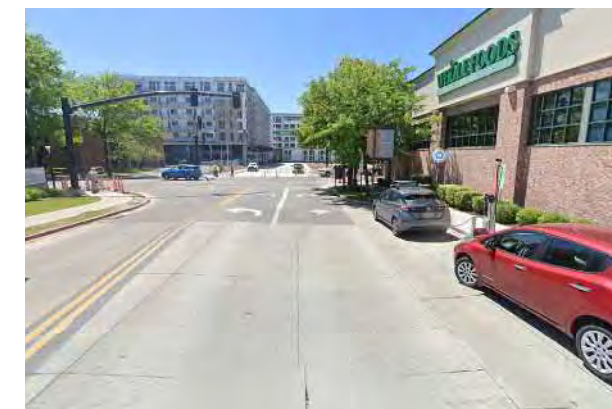
Dashed Color in Conflict Area

- Color should be applied in a dashed pattern within a dashed bicycle lane to indicate conflict area/merging area.
- Dashed application of color pavement mimics typical traffic striping layouts, where dashed markings indicate areas where merging is permitted.
- Colored surface should be skid resistant and retro-reflective.
- Normal white bike lane lines should be provided along the edges of the colored lane to provide consistency with other facilities and to enhance nighttime visibility.
- A "Yield to Bikes" sign should be used at intersections or driveway crossings to reinforce that bicyclists have the right-of-way at colored bike lane areas.

Maintenance costs vary depending on paint and material used.



The intersection of **Highland Drive and 2100 South** is an area that could benefit from green conflict markings.



The intersection of **Highland Drive and Wilmington Ave (Parley's Trail)** is an area that sees large volumes of bicycle traffic traveling along the Parley's Trail.



900 East is a regionally-significant bikeway and could benefit from green conflict markings, especially near high-conflict areas such as Nibley Park Elementary.



Wayfinding & Signage Local Link Study Area

Existing Conditions:

Program Extent: Sugar House Business District, Downtown South Salt Lake, Millcreek City Center, along major trails and bicycle corridors

Project Alignment: Choice, Connectivity, Collaboration, Transparency & Engagement
Guiding Principles:

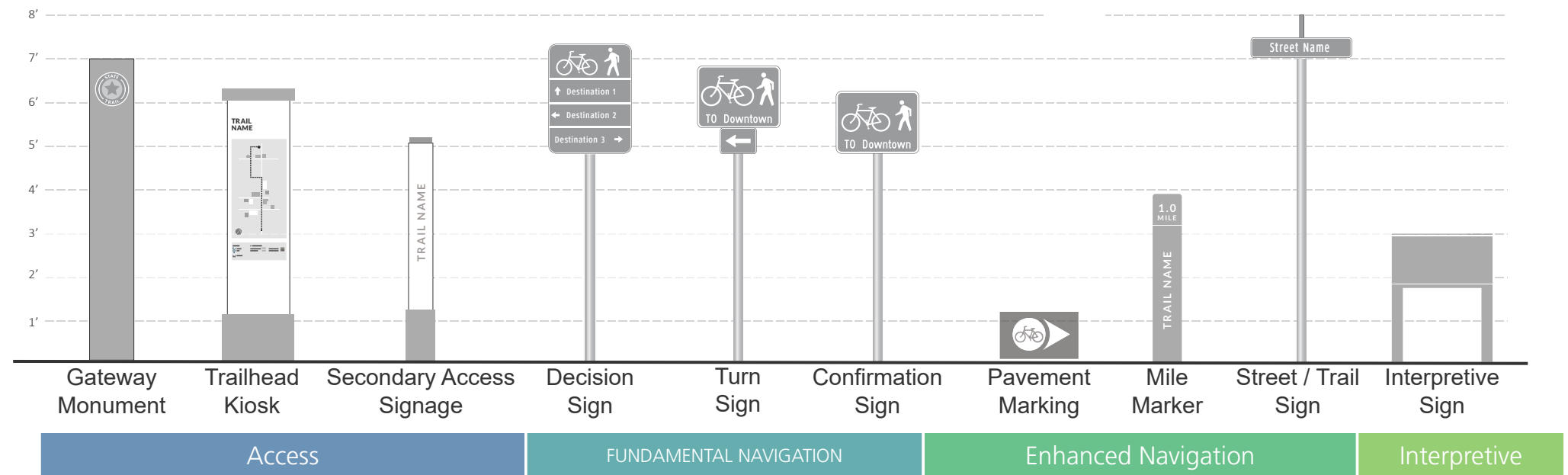
Planning Integration: Good wayfinding and signage is part of the Millcreek City Center and South Salt Lake Strategic Mobility master plans.

Program Description: Successful signage and wayfinding projects include a comprehensive network that develops a variety of sign types for different users. The signage is legible, consistent, and demonstrates a hierarchy of information and sign types. Identity and placemaking should be supported by signage and information in the signage should be inclusive using symbols, icons, or multilingual text.

Wayfinding throughout the Local Link study area should create a consistent visual language with a clear hierarchy of signage types including access signs indicating primary gateways, fundamental and enhanced navigation, and educational interpretive signage.

Collaborations and Partnerships: South Salt Lake, Salt Lake City, Millcreek, Salt Lake County, and WFRC

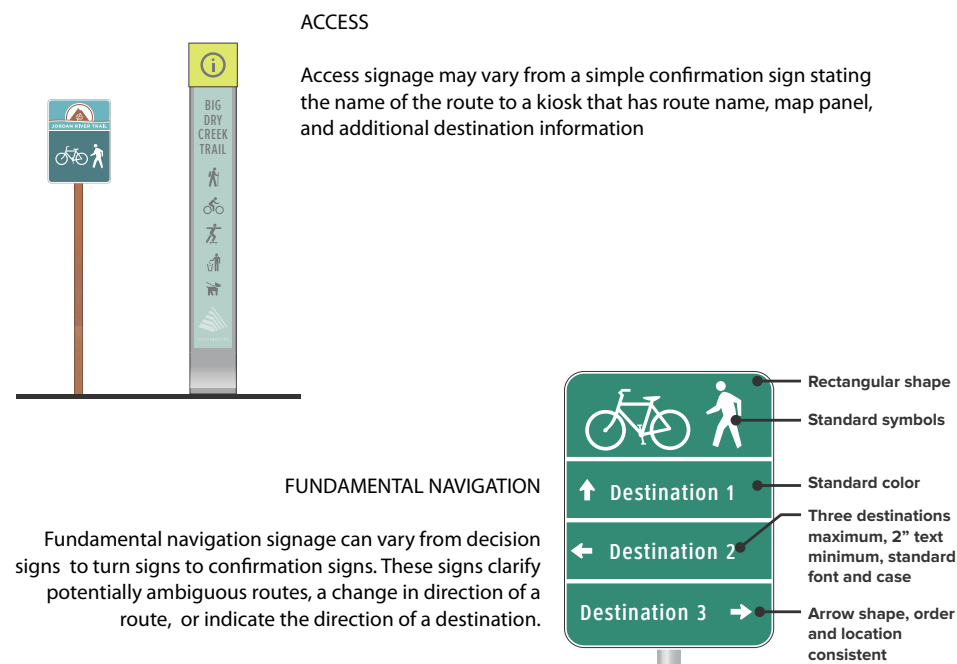
Implementation Phasing: Short- to mid-term



Trail wayfinding and signage elements



The Indianapolis Cultural Trail is very well defined and marked in a variety of ways that include pavement paint, art, and consistent application of the trail logo.



ENHANCED NAVIGATION

Enhanced navigational elements provide additional wayfinding information to trail users. They tend to vary in content and formatting. They include pavement markings such as trail logos or shared lane markings. Mile markers and street/trail signs are also considered under enhanced navigation.

INTERPRETIVE

Interpretive signs illuminate the power of place with content that informs, educates, and entertains the public. More than just dates and fact, interpretive panels inspire a feeling of stewardship in site visitors, strengthening awareness of cultural and natural resources.





Wayfinding & Signage

WAYFINDING PRINCIPLES

- Understand where they are with respect to other key locations
- Orient themselves in an appropriate direction with little misunderstanding or stress
- Discover new places and services

CONNECT PLACES

Wayfinding enables both residents and visitors to travel between destinations and to discover new ones. Wayfinding connects neighborhoods and provides navigational assistance to both local and regional destinations. Effective wayfinding is an extension to the bicycling and walking network and provides a seamless travel experience for non-motorized users.

PROMOTE ACTIVE TRAVEL

A wayfinding network should encourage increased rates of active transportation by creating a clear and attractive system that is easy to understand. The presence of wayfinding signs should help to communicate that walking and bicycling to many destinations is possible. Wayfinding helps overcome physical barriers that discourage the use of active transportation modes of travel.

MAINTAIN MOTION

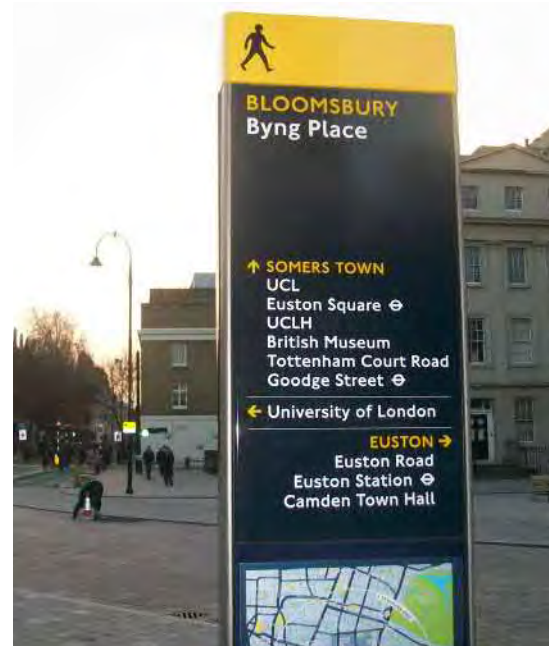
Bicycling and walking require physical effort. Frequent stopping and starting to check for directions may lead to frustration and discourage use. Consistent, clear, and visible wayfinding elements allow people walking and bicycling to navigate while maintaining their state of motion. The wayfinding information needs to be presented in a manner that is quick to read and easy to comprehend.

BE PREDICTABLE

Effective wayfinding networks are predictable. When information is predictable, patterns emerge and users rely on the network. Predictability also helps user to understand new situations quickly, whether it be navigating a new intersection or traveling to a destination for the first time. Predictability should relate to all aspects of wayfinding placement and design.

KEEP IT SIMPLE

For a wayfinding network to be effective, information needs to be presented clearly and logically. The presentation of information needs to be balanced; too much information can be difficult to understand; too little and decision-making becomes impossible. To be successful, wayfinding information must be provided in advance of major changes in the path of travel and confirmed when the maneuver is complete.



CASE STUDIES

WalkYourCity.org - helps encourage community walkability by connecting people to city neighborhoods through signs created and installed by community members. It includes web-based campaign management and data collection that can provide maps and directions for peoples smart phones.

Citizens, community development groups and real estate companies are using the program's sign builder to design and install campaigns that embrace walkability on their communities.

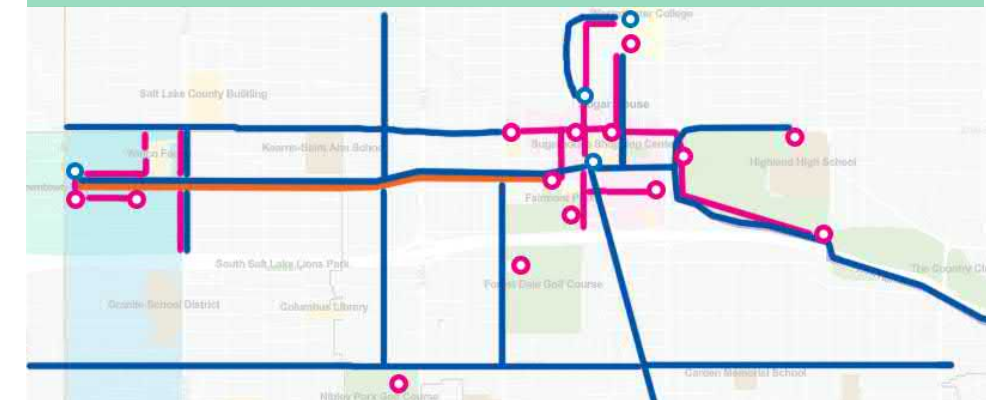
Legible London - is a pedestrian focused wayfinding effort that tries to coordinate signage across multiple neighborhoods in London. Prior to these efforts, an inventory of pedestrian signage in the city center identified 32 separate sign systems. The myriad of sign types lacked the consistency and confused citizens and visitors. Since 2005 the campaign's ongoing effort boasts over 500 signs as well as digital maps and smartphone apps that aid pedestrian navigation.

Walk Your City and other focused wayfinding efforts like Legible London demonstrate the way clear signage and citizen engagement can promote more active transportation choices, making communities healthier, safer, and more vibrant. Ideas present in signage campaigns like these are good case studies and examples and elements of them can be adopted within a comprehensive signage and wayfinding effort for the Local Link study area.



The Spanish city of Pontevedra implemented a drastic policy to promote pedestrian activity by closing the city center to vehicular traffic. The clear pedestrian signage campaign adopts colors, symbols and styles frequently seen in rail and bus wayfinding.

Identifying key locations within the Local Link study area then analyzing distances and routes between locations is the first step in creating a comprehensive wayfinding effort. Clear signage adapted for different users including bicyclists and pedestrians is crucial to activating streets across the study area and creating connection throughout neighborhoods and cities.





Bicycle Parking

Sugar House Business District

Existing Conditions:

Program Extent: Sugar House Business District

Project Alignment:

Guiding Principles: Safety, Sustainability, Choice, Connectivity, Health

Planning Integration:

This recommendation supports the safety, equity, choice, health, and collaboration guiding principles.

Collaborations and Partnerships:

Salt Lake City, Utah Transit Authority, and WFRC.

Implementation Phasing:

Short- to mid-term

Bicycle parking is an important component of the bicycle network. This study recommends that the cities incorporate the Association of Bicycle and Pedestrian Professionals' Bicycle Parking Guidelines into its development codes, making sure to specify proper rack placement and design.

SHORT TERM BICYCLE PARKING

Short term bicycle parking should be 1) close to the users' destination and 2) easy to use. It should be designed for people visiting businesses and community activity centers, trips typically lasting around 2 hours. In order to optimize use, short term bicycle parking should be easy to find and easy to use.

- Racks should be **less than 50'** from the entrance it serves.
- Adequate lighting** should be provided if the location is likely see use outside of daylight hours.
- Racks should be **sturdy and well-anchored**.
- Racks should be located in a **highly visible location**, and ideally visible from within the destination.

LONG TERM BICYCLE PARKING


Long term bicycle parking is designed for users that may need to leave their bikes unattended for longer than 2 hours, such as transit users, employees, and residents. These racks should value security and weather over convenience and can be provided in a variety of forms, such as a room within an office or apartment, a locked area within a parking garage, or bike lockers at a transit stop.

- Racks should provide a **secure and protected location** for long term users to park their bicycles.
- Access to parked bicycles should be **limited to the group of users** that will be using the long term parking through user-supplied locks, keys, smart cards, and other technologies.
- Racks should **accommodate a variety of bicycles and accessories**, including recumbents, trailers, and children's bikes.

RACK STYLES

When properly designed and installed, these rack styles typically meet all performance criteria and are appropriate for use in nearly any application.


SHORT TERM RACK STYLES



INVERTED U

Two points of ground contact

Can be installed in series on rails to create free standing bicycle parking in variable quantities.




POST & RING

One point of ground contact

Less likely to have bikes parked perpendicular.

Easy to convert from unused parking meters




CORRAL

Work well in areas that have limited sidewalk space

Use on-street areas that are unsuitable for car parking

One parking space can fit 8-12 bicycles

LONG TERM RACK STYLES




TWO-TIER

Used for high density indoor parking

Includes lift assist for upper-tier parking

Can create safety concern




VERTICAL

Used for high density indoor parking

Not accessible to all types of bikes

Can create safety concern



STAGGERED WHEELWELL-SECURE

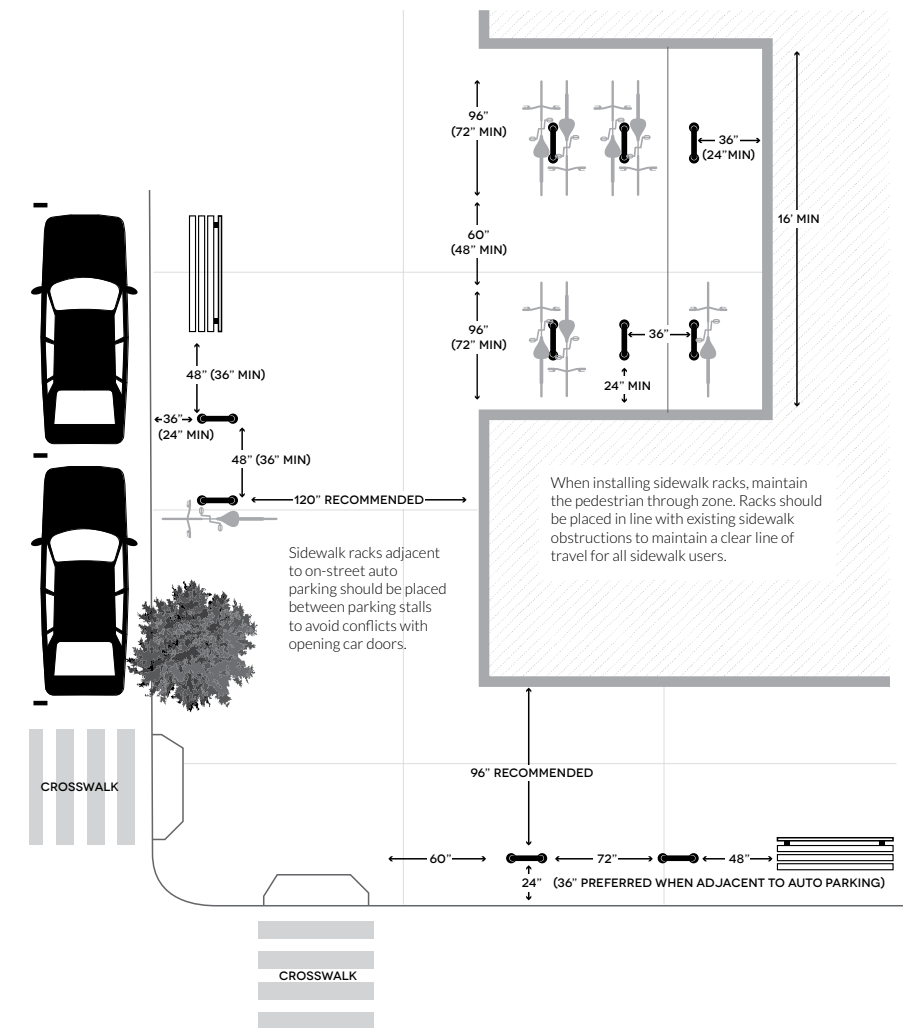
Variation of wheelwell-secure rack

Fits more parking in constrained spaces

Can reduce usability

RACK PLACEMENT

The following minimum spacing requirements apply to common bike rack installations, such as the inverted-U. Recommended clearances are given first, with minimums provided in parentheses. Note that the typical bicycle footprint is approximately 6' x 2', but some bikes may extend to 10' or longer.



Source: *Essentials of Bike Parking: Selecting and installing bicycle parking that works*. Association of Pedestrian and Bicycle Professionals, 2015.



WHERE ARE RACKS NEEDED IN SUGAR HOUSE?

Short-term bicycle parking is needed near many of the businesses and community activity centers in the Sugar House business District, including:

- The new apartment complex on Sugarmont Dr and McClelland St
- In the Sugar House Commons Development
- Within Fairmont Park and at the Fairmont Aquatic Center
- Near the Olive Garden and Sugar House Shopping Center
- At the Premier Plaza

Long-term bicycle parking is needed in all apartment buildings, near transit centers, and near major employment centers, such as the Sugar House Plaza.

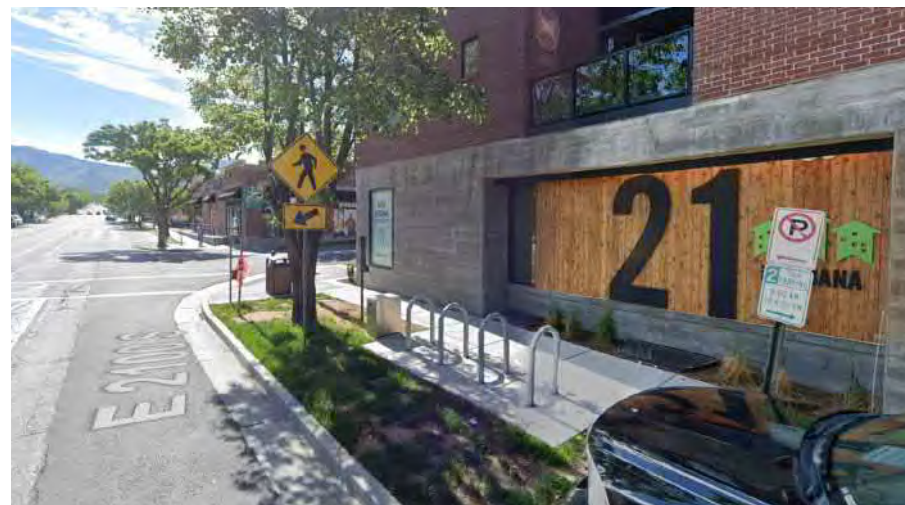
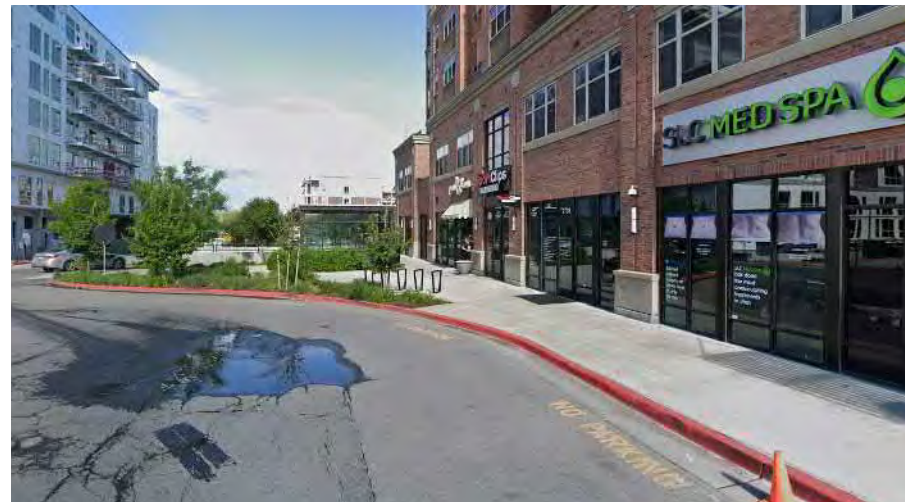
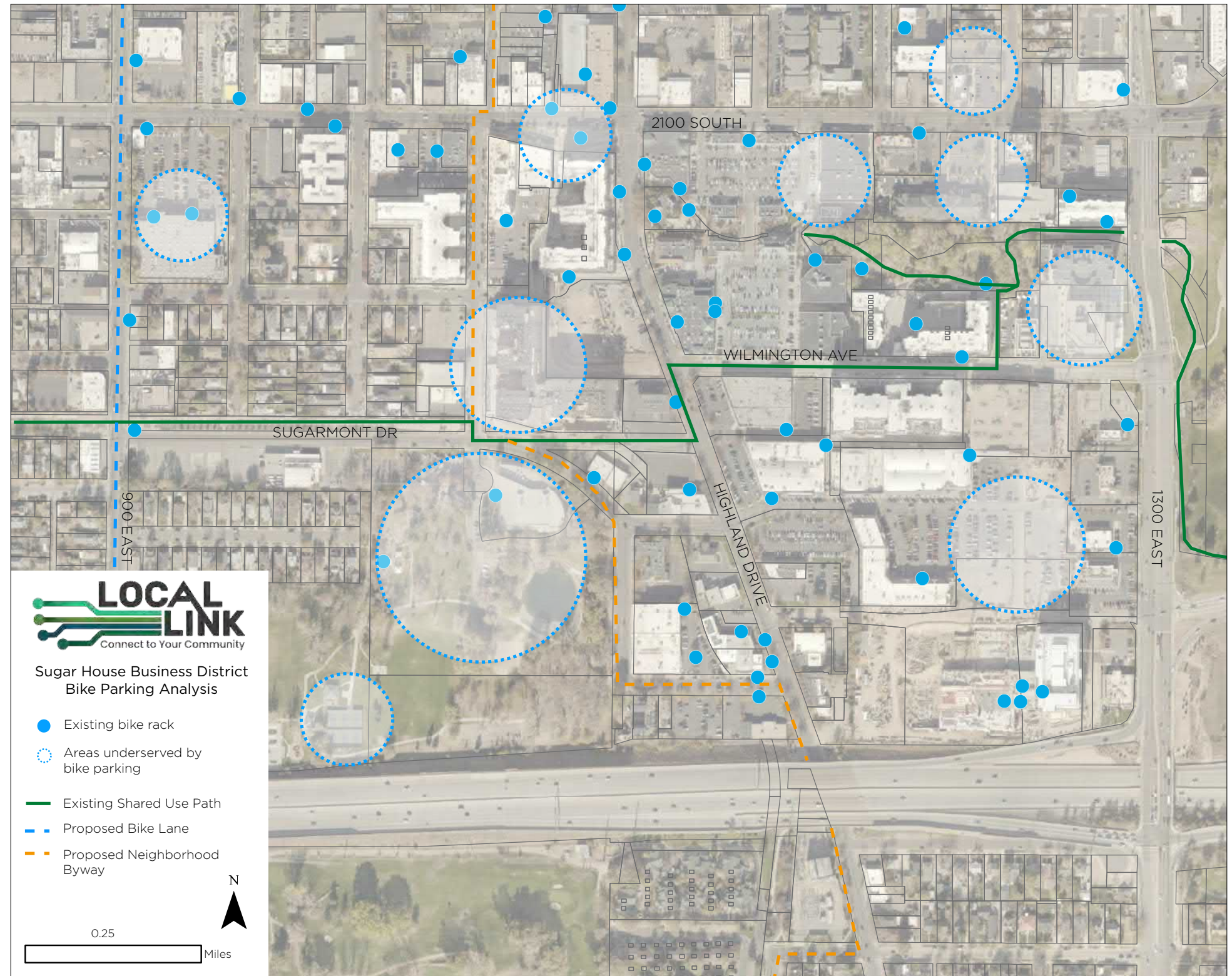


Photo 1: Existing inverted U rack near SLC Med Spa, Sport Clips, and Paw Paw.
Photo 2: Existing inverted U rack near bus stop on 2100 South.





Trail Oriented Development Local Link Study Area

Existing Conditions:

Program Extent: Primarily along urban or urbanizing areas of established trails such as Parley's and the McClelland Trail.

Land Use: Mixed use, commercial, residential

**Project Alignment:
Guiding Principles:** Safety, Sustainability, Choice, Connectivity, Health, Collaboration

Planning Integration: This form of development is compatible with the development patterns and proposed urban forms espoused in the Sugar House, South Salt Lake Downtown, and Millcreek City Center master plans.

Program Description:

Trail oriented development is an evolution of urban development from auto-centric to people-friendly design. Similar to transit oriented development, trail oriented development leverages infrastructure that supports active ways of getting around in urbanized areas.

Trail oriented development creates a safe and inviting environment for pedestrians and cyclists around active transportation paths connecting key destinations to activate districts and increase sense of place.

Furthermore, trails add economic development value. The value of properties within a block of the Indianapolis Cultural Trail have soared nearly 150 percent since the trail's opening in 2008. In both Salt Lake City and San Francisco, the replacement of some street parking with protected bike lanes along specific corridors resulted in higher retail sales in those areas. (Source: ULI)

Collaborations and Partnerships:

PRATT, Salt Lake City, South Salt Lake, Millcreek City, private developers and property owners

Implementation Phasing:

Mid-term to long-term; can and should happen as redevelopment occurs along these routes.



LANDSCAPE BUFFERS SIGNAGE & WAYFINDING SITE AMENITIES & MATERIALS ACTIVE FRONTAGES



BUILDING STORE FRONT CIRCULATION LANDSCAPE BUFFER TRAIL BUFFER PARKING





Trail Oriented Development Local Link Study Area



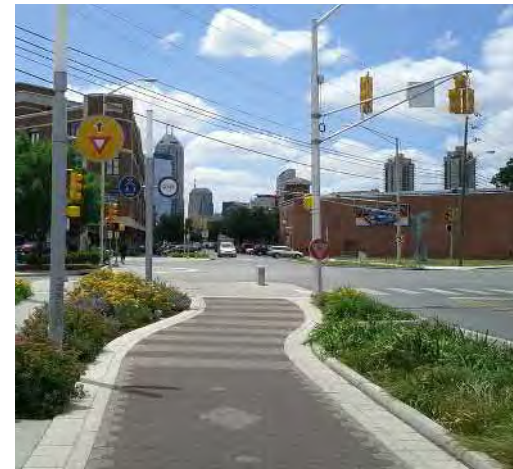
ACTIVE FRONTAGE AND ACCESS - Buildings should provide direct access from the trail and provide pedestrian-scale, high-quality frontages that provide a “front door” experience to adjacent development. Active uses such as patios or outdoor dining should be oriented towards the trail



SITE AMENITIES & MATERIAL CONSISTENCY - Adjacent development should include supporting site furnishings like benches, trash receptacles, bike parking and repair stands. Urban design of adjacent exterior spaces should include high quality materials and amenities that contribute to a rich pedestrian environment.



APPROPRIATE LANDSCAPING AND BUFFERS - Landscaping along the trail should meet CPTED (Crime Prevention Through Environmental Design) principles while helping to shade the trail, reduce urban heat island effects, separate trail from adjacent uses, and provide opportunities to manage stormwater runoff.



WAYFINDING & SIGNAGE - Path material should have consistency to aid in wayfinding and placemaking. Signage typography, colors and visual style should be consistent throughout the trail. Traffic crossing beacons at intersections, protective bollards and landscape buffers should work together to provide pedestrian safety and encourage trail use for a variety of users.



Coordinated Traffic Calming Strategy

Existing Conditions:

Program Extent: Applicable to local streets within and around the Sugar House Business District

Project Alignment: Safety, Sustainability, Choice, Connectivity, Health
Guiding Principles: Collaboration

Planning Integration: Salt Lake City is currently exploring development of a city-wide traffic calming program. This recommendation seeks to provide a framework to support neighboring jurisdictions near the Sugar House Business District to develop their own traffic calming strategies to provide a consistent approach across jurisdictional boundaries.

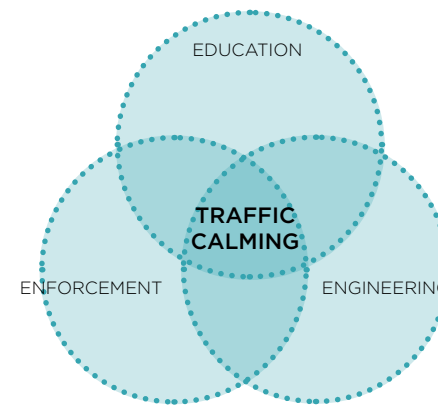
Collaborations and Partnerships: Salt Lake City, South Salt Lake, Millcreek

Implementation Phasing: Short- to mid-term



WHAT IS TRAFFIC CALMING?

Traffic calming involves physical measures to reduce motor vehicle speeds and/or cut-through traffic volumes in the interest of promoting street safety and livability. Education and enforcement strategies can also be used in addition to engineered infrastructure, although engineering strategies are often found to be most effective in influencing slower speeds and desired volumes.



WHY TRAFFIC CALMING MATTERS

The speed and frequency with which bicyclists and pedestrians are passed directly impact their sense of comfort and safety. Slower vehicular speeds reduce the likelihood of collisions by improving motorists' ability to see and react to pedestrians and cyclists and minimize conflicts at driveways and other turning locations. Slower speeds also reduce the severity of injury and property damage when collisions do occur.

A well-designed traffic calming program results in individual corridors or a network of streets that feel safe, promote active travel, and enhance neighborhoods' sense of place and livability.

APPLICATION

Successful traffic calming programs consider both flexibility and structure, striking a balance between analytical decision making and deploying solutions quickly. Salt Lake City, South Salt Lake, Millcreek, and Holladay should seek to implement traffic calming programs that are consistent across jurisdictional boundaries but easily adaptable to the local context. To guide the implementation process, each city should define and develop a data-driven prioritization system that scores streets and districts based on identified prioritization factors, such as:

- Traffic volumes and speeds
- The presence of existing or planned neighborhood byways
- Crash statistics
- Sidewalk availability
- Residential density
- Latent demand for walking and biking
- Equity

It is important to note that Salt Lake City is currently developing a traffic calming prioritization program; lessons learned from this effort can be shared and adapted to each city's unique context to promote consistency in the region.

FUNCTIONAL REQUIREMENTS

All traffic calming operates on the principle of deflecting the direction of motor vehicles and interfering with the ability to travel a straight, level path. Vertical deflection such as speed humps, maintains a vehicles straight path, but requires a brief elevation change. Horizontal shifts, such as chicanes, require vehicles to travel a meandering path and narrow the visual field to reduce travel speeds.

HORIZONTAL DEFLECTION

Mini Traffic Circles are a type of horizontal traffic calming that can be used at minor street intersections to reduce conflict potential and severity at intersections and to reduce traffic speeds along a street.



Curb Extensions are extended sidewalk or landscaped areas on one or both sides of the road to reduce the roadway width. By reducing crossing distances, curb extensions also facilitate easier and safer pedestrian movement.



Chicanes are raised curbs that create a horizontal shifting of the travel lanes along a road. The shifting lanes reduce speeds by eliminating long stretches of straight roadway where motorists can pick up speed.



VERTICAL DEFLECTION



Speed Humps are raised areas, typically 3-4" high, in the roadway pavement surface extending across the roadway. Speed humps can be round or flat-topped.



Raised Intersections can eliminate grade changes from the pedestrian path and give pedestrians greater prominence as they cross the street.



Micromobility Infrastructure and Mobility Hubs

Various Locations

Program Extent:	Neighborhood centers and near high ridership transit routes
Project Alignment: Guiding Principles:	Choice, Connectivity, Collaboration
Planning Integration:	This recommendation supports the equity, choice, health, and connectivity guiding principles.
Collaborations and Partnerships:	Salt Lake City, South Salt Lake, Millcreek, Salt Lake County, Utah Transit Authority, WFRM, and the Salt Lake City Redevelopment Agency.
Implementation Phasing:	Mid- to long-term

Transportation is undergoing a rapid evolution in Salt Lake County. Technology-enabled services have expanded the suite of options available for getting from point A to B. Urban transportation systems now need to reflect:

ON-DEMAND SERVICES

- In addition to biking, walking, driving, and taking transit, many people have **access to on-demand services from private companies** (taxis, Uber, Lyft), scooter share, bike share, car-sharing, and micro-transit shuttles.

ROLE OF PRIVATE SECTOR

- New business models have increased the role of the **private sector in transportation and changed the nature of services operating in the public right-of-way.**

TRIP PLANNING

- Trip-planning services** are changing the way people make decisions about routes, mode, and cost to travel.

ELECTRIC VEHICLES

- Global trends toward electric vehicles, combined with the locally-adopted goals for reduced greenhouse gas emissions, has **increased demand for electric charging options** as part of public infrastructure.

E-COMMERCE

- E-commerce is reducing personal trips** to retail stores and restaurants and **increasing the volume of urban delivery and courier trips** occurring.

CURB SPACE DEMAND

- There is increasing **demand for curb space** for transit services, ride-share, pick-up and drop off, walkways, bikeways, and freight delivery.

As a result, cities and transit agencies around the country are identifying new ways to connect the expanded suite of mobility options to one another and to manage use of the right-of-way. By creating a physical platform for integrating public and private, shared and individual, transportation services, mobility hubs offer one such strategy.

MOBILITY HUB ELEMENTS

In practice, mobility hubs are the sum of their parts. The services and amenities commonly considered in mobility hub planning include the following:

TRANSIT AND TRIP-MAKING SERVICES



Micro-transit pick up & drop off area



Transit ticket and integrated payment kiosks



Bus, shuttle, or light rail stop



Real time transit information & other shared mode information

PARKING AND CHARGING SERVICES



Electric vehicle charging



Short term bike parking



Long term bike parking



Bikeshare & scootershare parking



Freight loading/unloading area



Carshare parking and access points

PRIORITY ACCESS

AMENITIES



Prioritized walkways



Prioritized bike and micro-mobility access



Safe bicycle and pedestrian crossings



Community space



Retail

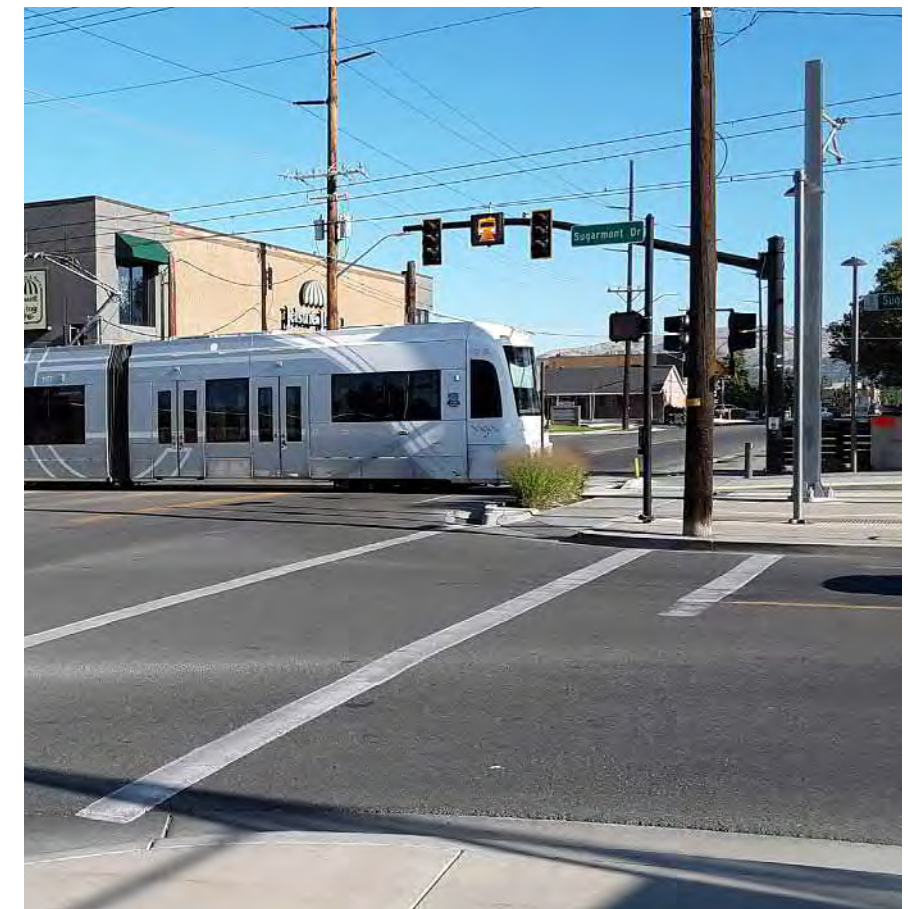


Activated furnishing zone with appropriate support infrastructure

WHY MOBILITY HUBS MATTER

Current trends related to new and emerging transportation technology, suggest that the site programming and available amenities of a mobility hub can aid the City in:

- MAKING TRAVEL CHOICES BETTER FOR EVERYONE
- EXPANDING COVERAGE OF TRANSPORTATION SERVICES
- MANAGING PRIVATE MOBILITY SERVICES



The S-Line Streetcar is part of Salt Lake City's Frequent Transit Network (FTN) for those traveling to or from the Sugar House Business District.

	LARGE HUB	SMALL HUB	MICRO HUB
Bus and/or shuttle stop	●	●	●
Fixed guideway transit stop (BRT or LRT)	●	○	
Transit ticket kiosks	●	●	●
Seating	●	●	○
Shelter/Shade Structure	●	●	●
Indoor waiting area	●	○	
Bikeshare and scootershare parking	●	●	●
Short term bike parking	●	●	●
Long term bike parking	●	○	
Personal vehicle parking*	○	○	
Carshare	○	●	○
Electric vehicle charging*	○	●	○
TNC pick-up/drop-off	●	●	○
Wayfinding	●	●	●
Real-time information	●	●	●
Wifi hub*	●	○	○
Water fountains	●	●	○
Restrooms*	●	●	○
Sidewalks	●	●	●
Safe pedestrian crossings	●	●	●
Dedicated bike infrastructure	●	●	●
Active public space*	●	○	○
Convenience retail**	○	○	○

* May require coordination with adjacent private development
 ** Convenience retail could include uses such as gyms/showers, convenience day care, package delivery, etc.

● Recommended ○ May be included

