EXHIBIT 1

KEARNS ACTIVE TRANSPORTATION PLAN

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ACKNOWLEDGMENTS

This plan was a joint effort between the communities of Kearns and Magna as well as several other agencies and stakeholdres. The Kearns and Magna Active Transportation Team would like to acknowledge the contribution of many individuals and groups who enriched the planning process and helped guide this document.

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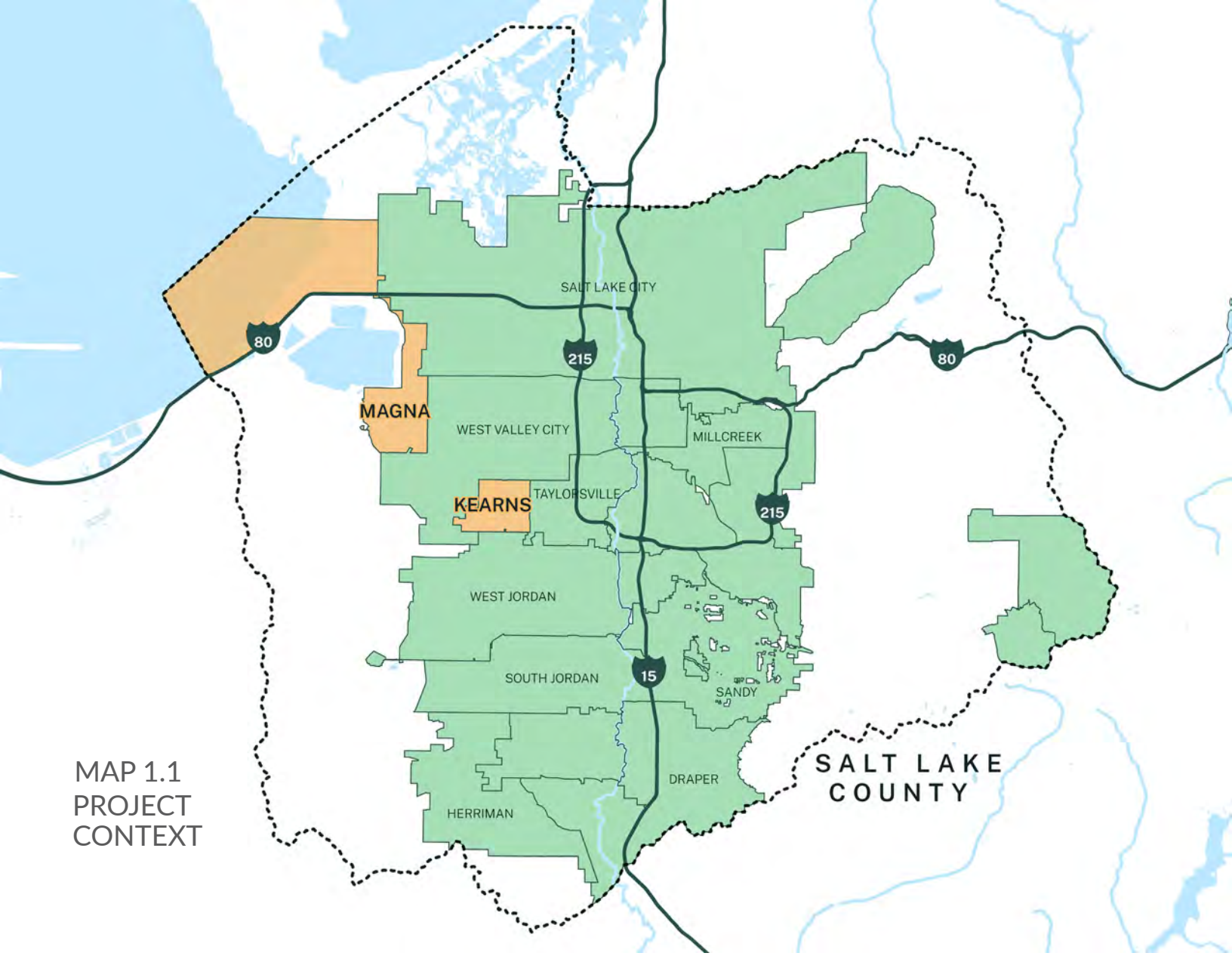
1

EXISTING CONDITIONS



MAP 1.1
PROJECT
CONTEXT

PROJECT CONTEXT

Kearns is a metro township located in the northwest quadrant of Salt Lake County with approximately 36,600 residents (ACS, 2019). The metro township has a total area of 4.6 square miles; it shares borders with Taylorsville, West Valley and West Jordan (Map 1.1).

According to the US Census (2020), about 36% of the population identifies as Hispanic or Latino.

For this reason, an inclusive planning process was put in place to incorporate the feedback from both English and Spanish-speaking residents.

About 41% of the population is either under 18 years old or over 65, and 10% have a disability. Additionally, about 10% of the population is below the poverty threshold. These people are more likely to rely on transit or active transportation (AT) to access destinations in and around the township.

EXISTING FACILITIES

An active transportation network is composed of walking, biking and shared-use facilities (see chapter 4 for details). These include:

Walking Facilities

- Sidewalk
- Curb Ramps
- Crosswalk
- Other Crossing Facilities

Biking Facilities

- Bike Lane
- Buffered Bike Lane
- Marked Shared-Roadways
- Shoulder Bikeways
- Cycle Tracks

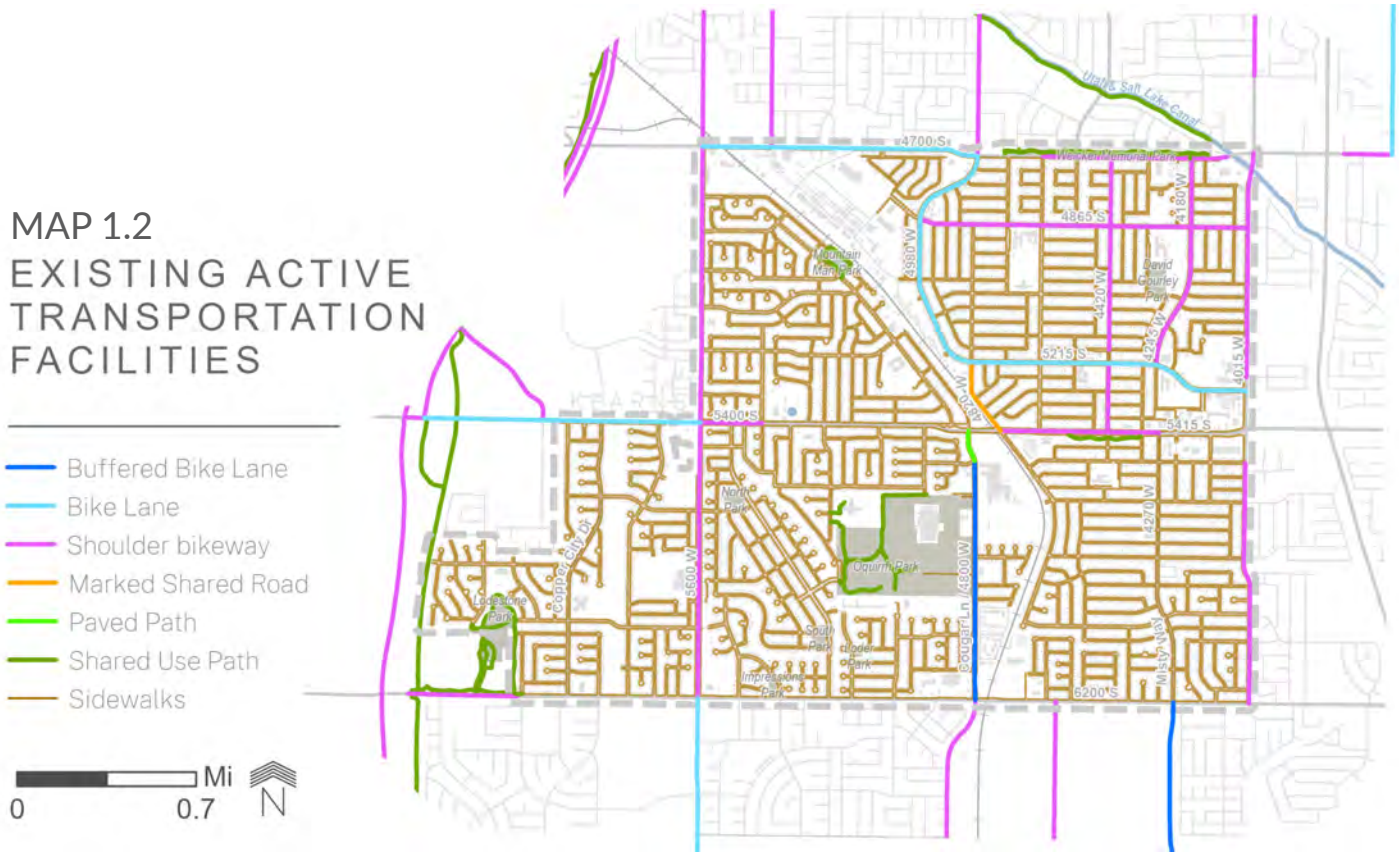
Shared-use Facilities

- Shared-use Path (paved trail)
- Sidepath

The Kearns Master Transportation Plan (2020) included a detailed sidewalk analysis for the township. The Kearns Active Transportation Plan (ATP) plan does not recreate the sidewalk analysis, instead uses the information to build upon previous recommendations. Overall, Kearns has a connected sidewalk system, but improvements could be made for shared-use and biking facilities.

The Kearns Active Transportation Plan focuses on analyzing and recommending biking and shared-use facilities in the township. There are about two miles of bike lanes, and almost two miles of shared-use paths (Map 1.2). These include internal park paths such as the path through Welcker Memorial Park .

MAP 1.2
EXISTING ACTIVE TRANSPORTATION FACILITIES



PAST PLANS

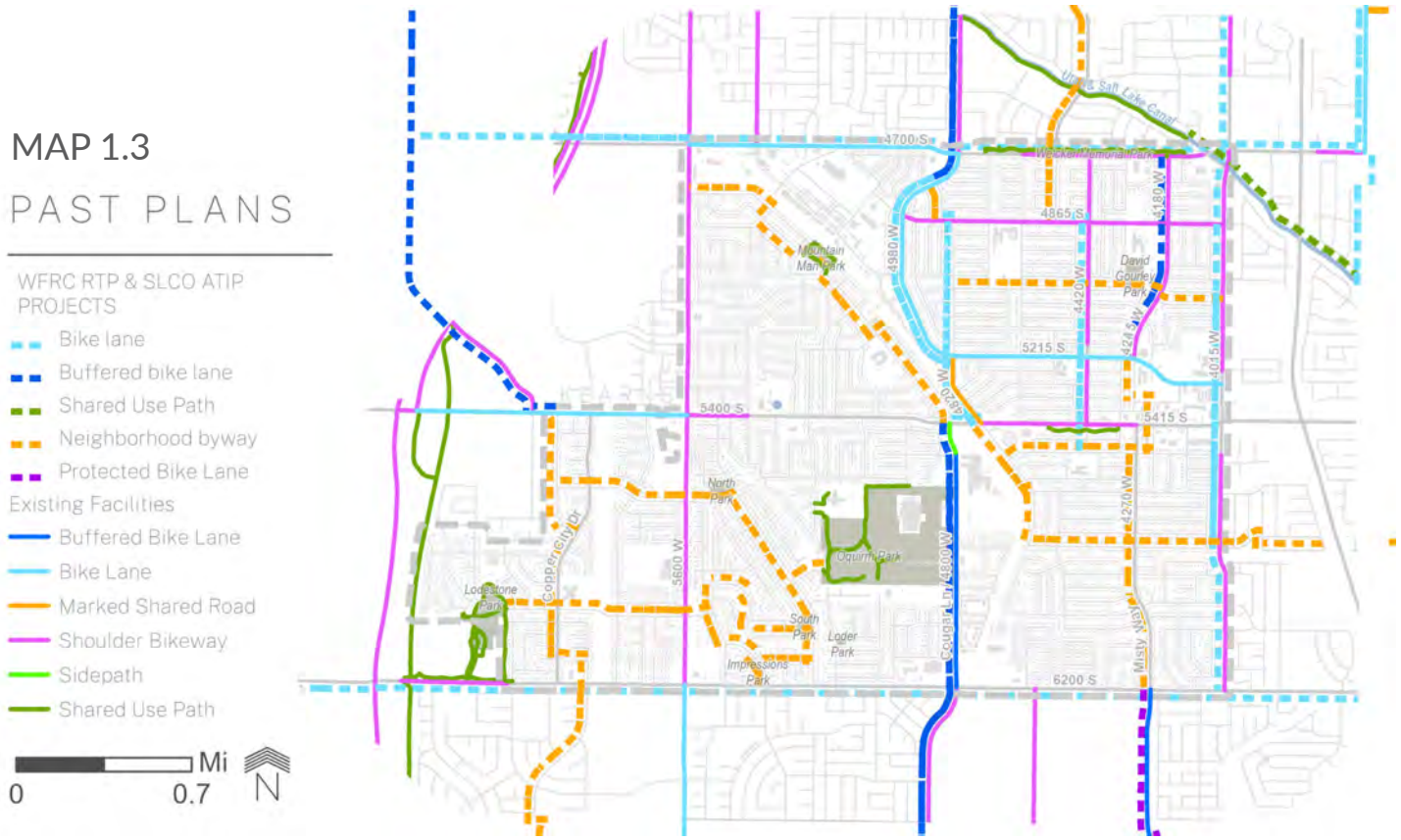
Several studies have addressed Active Transportation in Kearns over the years (Map 1.3). These include:

- Kearns General Plan
- Kearns Master Transportation Plan & Sidewalk Study
- Salt Lake County Active Transportation Implementation Plan
- Wasatch Front Regional Council Regional Transportation Plan
- Utah's Unified Transportation Plan, Region 2
- Utah Collaborative Active Transportation Study (UCATS)

The Kearns General Plan has the goal to connect people with the things that they need, whether or not a person has access to a private automobile or the abilityto drive. The Kearns Active Transportation Plan is in alignment with this goal by proposing active transportation facilities that connect to local destinations and provide regional connectivity.

The Kearns Transportation Master Plan analyzed a series of demographic and transportation datasets for Kearns, including population, employment, and land-use. It also included an in-depth sidewalk study and recommendations to improve the walking network in Kearns.

The goal of the present plan is to harmonize past recommendations and suggest additional biking and shared-use facilities as needed.



EXISTING TRANSIT

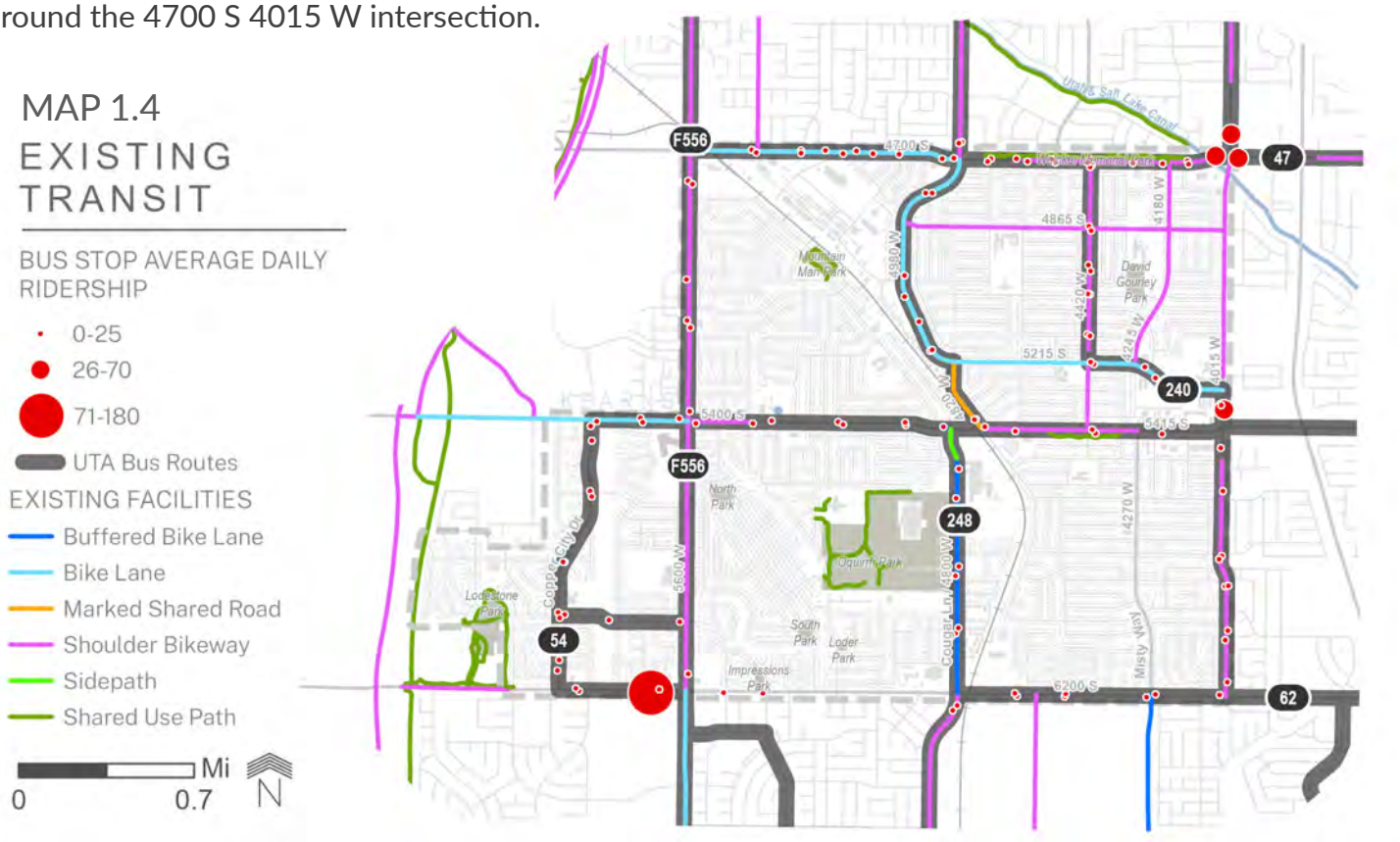
Kearns is serviced by six UTA routes as seen on Map 1.4 below, these include line 47, 54, 62, 240, 248, and flex route F556. Route 47 connects north Kearns to West Valley and all the way to the Murray Central TRAX Station where riders can connect to the Red and Blue TRAX lines, as well as the FrontRunner commuter line. Route 54 runs east and west through Kearns and also connects to the Murray Central TRAX Station. Route 62 runs east and west along south Kearns, loops with Route 54, and connects to Fashion Place West TRAX Station which serves the Red and Blue TRAX lines. Route 240 runs north and south along east Kearns, connecting West Valley Central (serving the Green Line) to Jordan Valley TRAX Station (serving the Red Line). Route 248 runs north and south through the center of Kearns and connects West Valley Central Station with Old Bingham Station (serving the Red Line).

A total of 124 bus stops serve Kearns. The most popular bus stops in Kearns are located west of 6200 S 5600 W, north of 5400 S 4015 W, and around the 4700 S 4015 W intersection.

Not all bus stops are serviced by existing active transportation facilities (Map 1.4). The first and last part of the journey that riders walk, bike or roll to and from their nearest station or bus stop is called the "first/last mile connection." These connections provide pathways to transit for people of all ages and abilities. First/last mile connections are crucial to ensure people can get to and from bus stops safely, as well as to reduce car trips to transit facilities.

Table 1.1 UTA Routes, frequency, and ridership in Kearns

ROUTE	FREQUENCY	AVG. RIDERS
47 | 4700 S	15 minutes	800
54 | 5400 S	15 minutes	750
62 | 6200 S	30 minutes	120
240 | 4000 W	30 minutes	770
248 | 4800 W	30 minutes	160
F556 | 5600 W	Flex 30 minutes	120



SAFETY

Pedestrian or Bicyclist-Involved Crashes

There were 31 crashes involving bicyclists and 94 involving pedestrians between 2016 and 2021 in Kearns (Map 1.5). Most pedestrian and bike crashes occurred at intersections, sidewalks, and crosswalks during day time. Few bicyclist crashes occurred in travel lanes in addition to sidewalks and crosswalks. Crashes were scattered throughout the township, primarily on busier roadways, including 5400 S, 6200 S, 4015 W, Cougar Ln, and 5600 W.

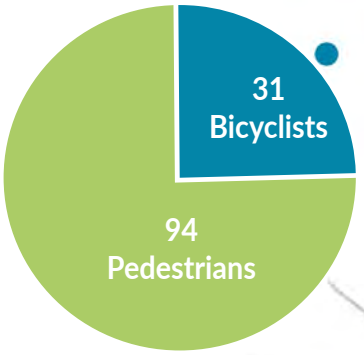
The intersections of 4015 W & 4700 S, 4270 W 5400 S, Cougar Ln & 5400 S, and 5600 W & 5400 S have the highest number of bike crashes. The intersections of 4015 W & 5400 S, Cougar Lane & 6200 S, as well as 5400 S, and, 4280 W 4700 S had the highest concentration of pedestrian crashes.

Crash-severity

Crash severity is reported according to a 5-category scale ranging from no injury to fatality. There is considerable emphasis in Utah among safety agencies, transportation planners and engineers to eliminate fatal crashes. The next level of crash severity, serious injury crashes, is often included in a crash severity analysis.

For the analysis period, there were 4 crashes with a fatality and 14 serious injury crashes (Map 1.6). Fatal crashes occurred primarily on 5400 S, mostly during low-light situations (late night to early morning). One fatality included a person on a bike at 5400 S 4820 W; remaining fatalities consisted of people walking. Most serious injuries occurred on 5400 S, 6200 S, and 4015 W.

Figure 1.1 HAWK crossing on 5500 S Cougar Ln. in Kearns.



MAP 1.5

CRASHES 2016-2021

Bike Crashes

Pedestrian Crashes

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N

4
Fatal

14
Suspected Serious Injury

MAP 1.6

CRASH SEVERITY 2016-2021

Crash Severity

Fatal

Suspected Serious Injury

Suspected Minor Injury

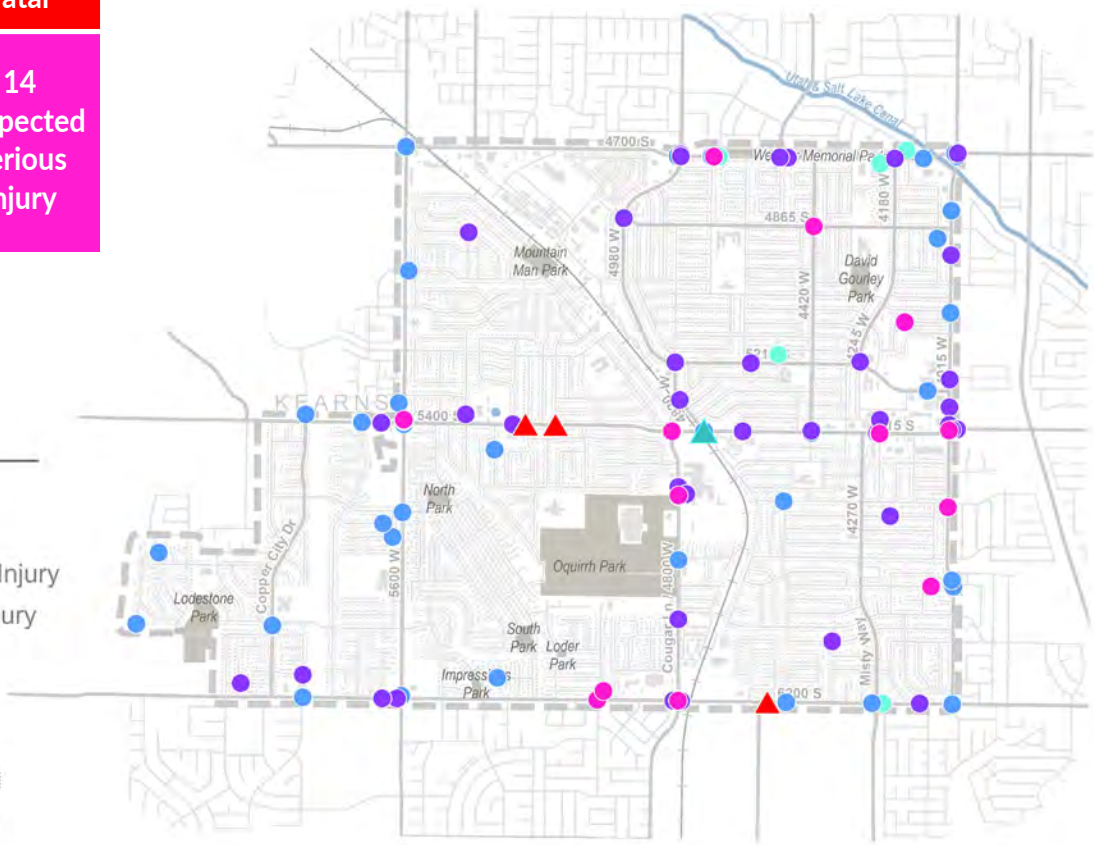
Possible injury

No injury/PDO

Mi

0 0.7

N



BIKE & PEDESTRIAN PRESENCE

Pedestrian Signal Actuation

Pedestrians experience the built environment on a fine-grained level and require frequent safe crossings to destinations for crosswalks to be effective. An area that has adequate crossing facilities can encourage walkability. Crossings that align with pedestrian desire lines (paths taken because they are the shortest, obvious, easiest, etc. to access a destination) may prove to have the highest use and/or greatest efficacy.

Pedestrians who wish to cross a street where an actuated traffic signal is present need to push a button to have their presence detected. The moment the crosswalk signal switches from stop to go is called "signal actuation" and helps us understand crossing patterns, intersection usage and presence of pedestrians within the transportation network.

Design and location are both important when considering the installation of a crosswalk. According to NACTO (National Association of City Transportation Officials) if a pedestrian has to spend over 3 minutes to get to a crossing, cross a road and get back on track to their destination, it becomes very likely the pedestrian will forgo the crosswalk entirely and choose a riskier option for crossing a street.

To provide a safe crossing facility, painted lines may be insufficient. Flashing beacons, HAWK (High-intensity activated crosswalk beacon) signals, pedestrian refuge islands, alternative textured or colored paving, or other traffic calming or safety measures should be considered (see chapter 4 for details).

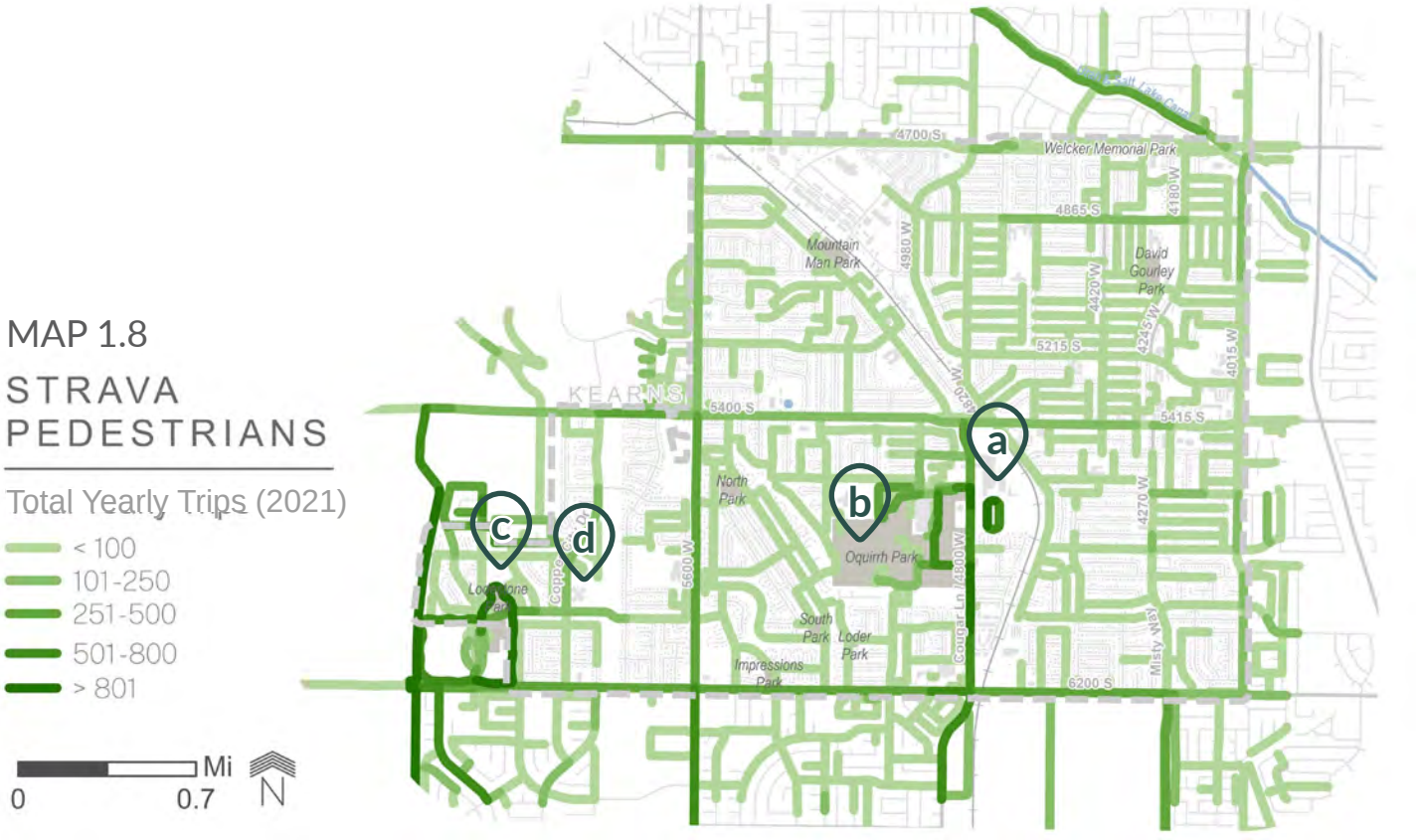
The highest actuation numbers in Kearns were found on 5400 S & 4015 W and 5415 S 4280 W (Map 1.7).

STRAVA Usage - Pedestrians

STRAVA is an app that uses GPS tracking to record a cyclist, runner, jogger, walker's, etc. specific route. The data provides a general idea of where people are participating in active transportation. It is understood that the data is representative of only certain segments and demographics of the population, such as expert bicyclists and those with access to mobile devices, and does not by any means represent all active transportation users. However, it is beneficial to see where these active transportation trips are occurring along the road network in Kearns.

When this data is combined on a map with Kearns's existing active transportation facilities, it can help identify where projects may be of highest use, or where there is a latent demand for active transportation infrastructure.

The highest numbers of pedestrians were found along Cougar Lane, 6200 S, and the southwest boundary of Kearns (Map 1.8). These areas provide connections between residential neighborhoods and destinations such as the Kearns High School (a), Oquirrh Park (b), Lodestone Park (c), Thomas W Bacchus Elementary and the Church of Latter Day Saints (d). The 6200 S corridor also provides access to residential and commercial properties.

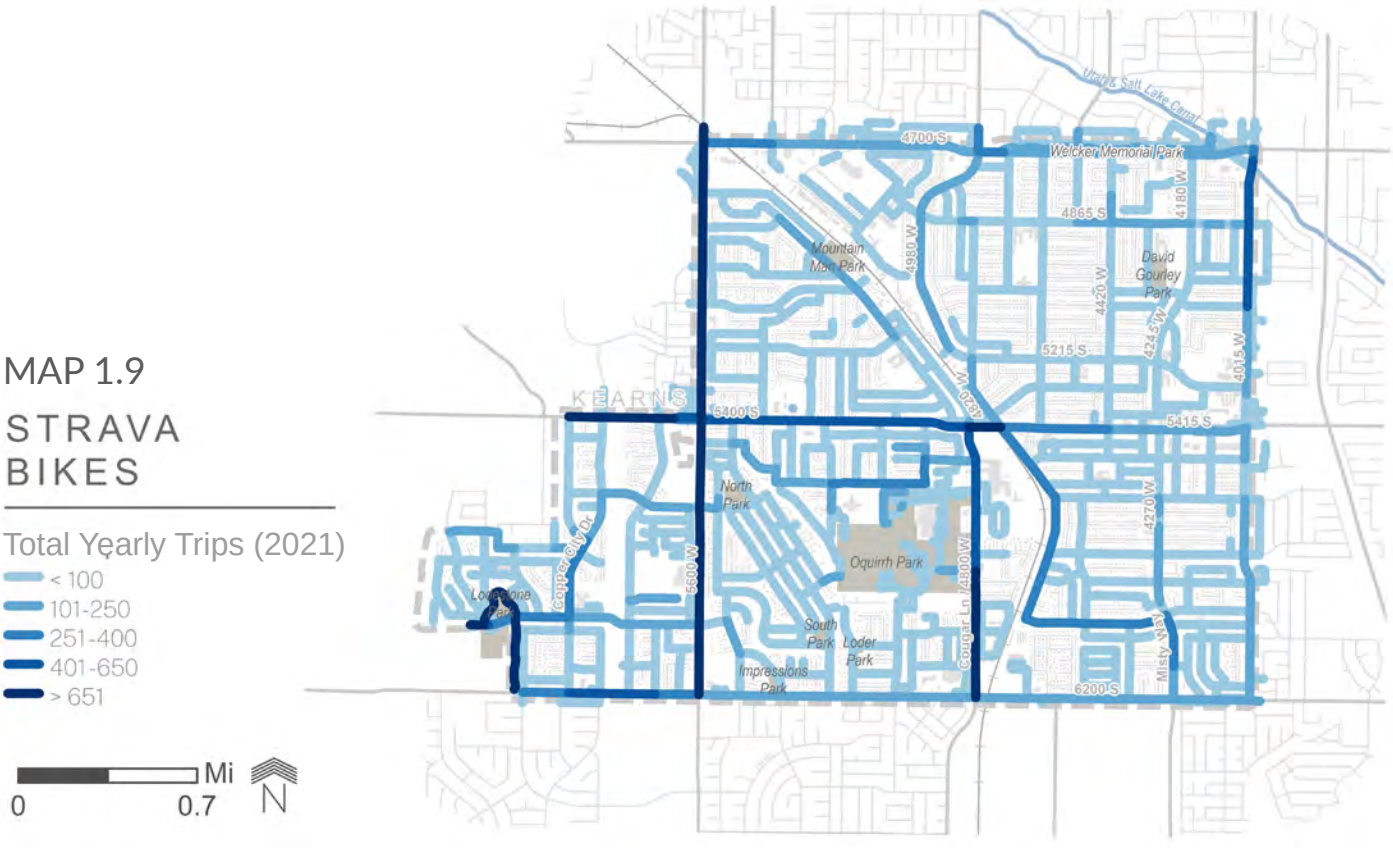


STRAVA Usage - Bikes

The STRAVA data for Kearns confirms the high-usage of roads that do not have established or high-comfort biking facilities such as 5600 W, 5400 S, and throughout neighborhoods (Map 1.9).

Most biking facilities in Kearns are shoulder bikeways which rank low in comfort level, discouraging most from biking, especially in wide roadways with speed limits above 30 mph, such as 5600 W and 5400 W. This supports recommendations of higher-comfort facilities in those locations.

It is also noticeable that there is biking activity throughout residential areas within Kearns which supports recommendations of finer-grain facilities to help connect residences to destinations.



EQUITY

Economic Status

Economic status was evaluated in Kearns using 2019 American Community Survey (ACS) data at a block group level.

This information helps us understand where communities may need enhanced access to biking and walking facilities as they may be more dependent on these modes to get to their daily destinations.

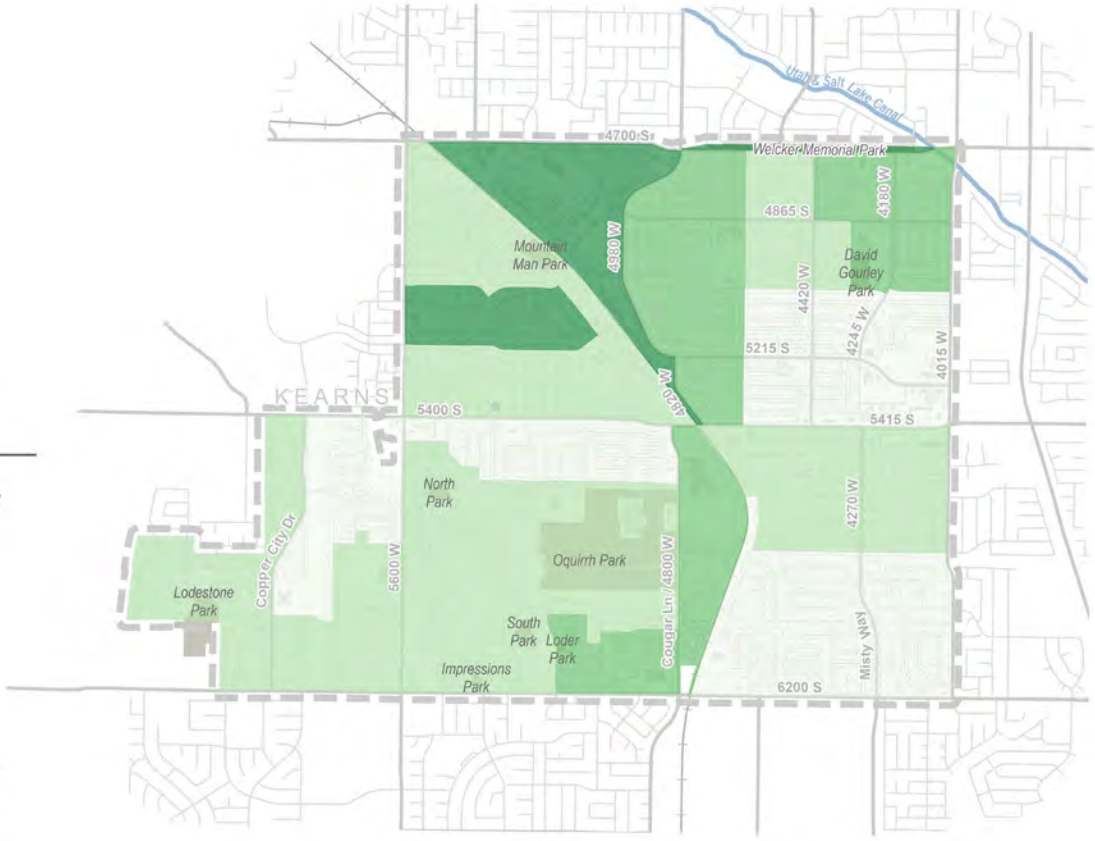
In general, the entirety of Kearns will benefit from more biking and shared-use facilities, but especially the areas highlighted in dark green (Map 1.10) which includes the communities near Mountain Man Park.

MAP 1.10

ECONOMIC STATUS

Population in Poverty

- < 5%
- 5%-10%
- 10%-15%
- > 15%



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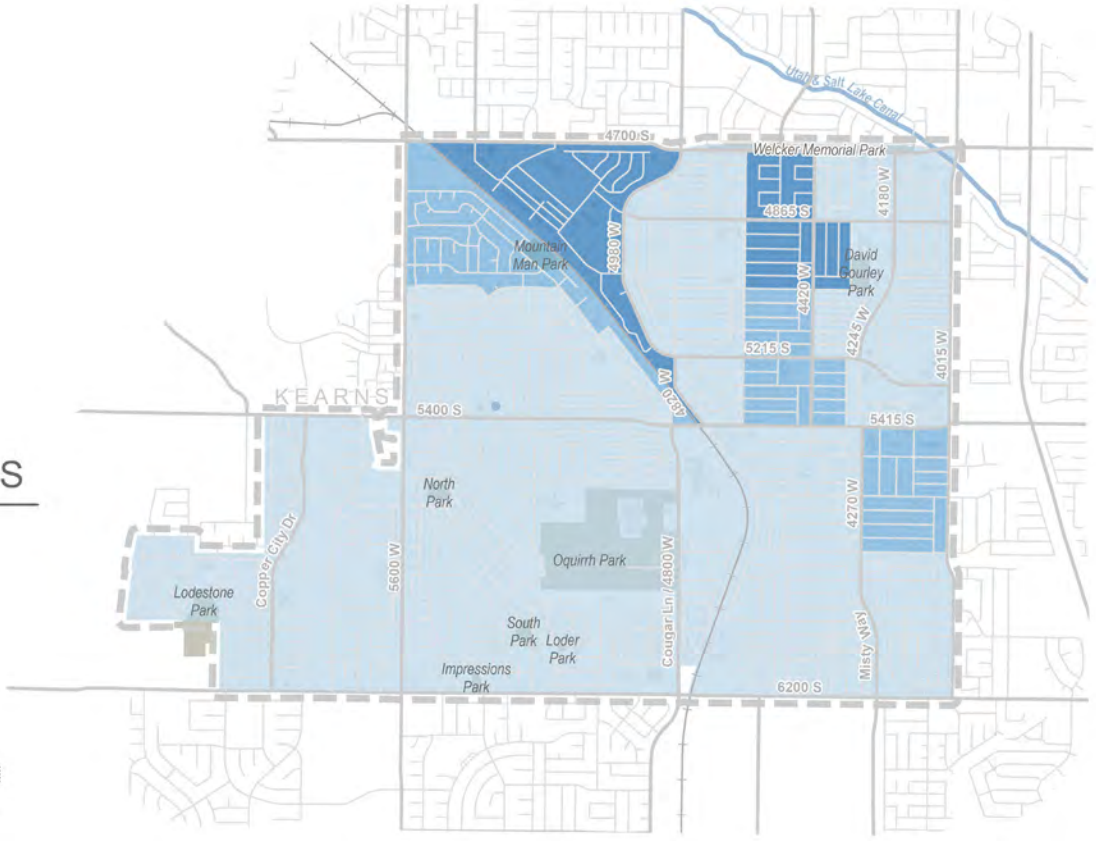
Carless Households

The percentage of carless households in Kearns by block group level (ACS 2019) was also analyzed. This information helps us identify areas where alternative transportation facilities are needed.

The northwest portion of the township, as well as neighborhoods near David Gourley Park have the higher percentages of households with no car. In these areas, residents might rely more on active transportation and transit than other parts of Kearns.

MAP 1.11
CARLESS HOUSEHOLDS

< 5%
5%-10%
> 10%



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VISION & GOALS

2

Figure 2.1 Vision Statement Vote

INTRODUCTION

The Vision and Goals for this plan were brainstormed and identified during a Vision Workshop held at the Kearns Library on November 16, 2021. Approximately 20 participants joined the meeting to provide input, including representatives from Evidence2Success, Salt Lake County Engineering, UPD Police Services, UDOT, WFRC, Salt Lake County Health, Salt Lake County Bicycle Advisory Committee, Greater Municipal Services District (MSD), and Get Healthy Utah.

The purpose of the workshop was to engage local stakeholders and community leaders in the planning process and to create a unified vision to guide the project.

VISION WORKSHOP

The project team began the Visioning Workshop by presenting existing conditions in Kearns and Magna which provided up-to-date area context. After reviewing existing conditions, the group was presented with a series of questions asking to identify strengths, weaknesses, and desires for the active transportation network which created a series of word clouds. These word clouds provided a framework for a vision and prepared the group to think of goals for the Plan, project recommendations, and the community.

After the word cloud exercise, the group was given the opportunity to suggest goals. All comments were recorded and reviewed for themes and common ideas, summarizing ideas to a short list of five goals.

Before ending the workshop, the project team presented several vision statements using word clouds to identify community priorities. Each participant was able to vote for the vision of their choice and discuss what they would add or revise. Connectivity to local destinations, existing active transportation facilities, and transit routes was a frequent theme of the discussion. Equity and planning for all ages and abilities was another common element.

Figure 2.3 illustrates the final vision and goals generated at the Kearns and Magna Active Transportation Plans Vision Workshop. These priorities will provide screening metrics for project recommendations as part of the final plan.

Figure 2.2 Word Cloud Polling Exercise

Figure 2.3. Final Vision and Goals for the Kearns & Magna ATPs

3

PUBLIC INVOLVEMENT

INTRODUCTION

An extensive community involvement effort was developed as part of this plan. This included building a project website, creating community surveys, holding meetings with the steering committee and local stakeholders, as well as public open houses and pop-ups in Kearns. The comments, observations, and opinions discussed with the community provided the team with invaluable information that helped guide the planning process.

PROJECT WEBSITE

A project website was developed early in the process to help inform stakeholders and the public about the study (activekearnsmagna.com).

Figure 3.1 The project website was available in both English and Spanish

The website was continuously updated throughout the development of this plan with schedule updates, project maps, access to the community survey, and notice for the public meetings held in Kearns and Magna.

STEERING COMMITEE MEETINGS

A series of meetings were held over the course of the project to help guide the planning process. These included a Vision Workshop, Brainstorm Workshop, Project Review and Refinement Meetings as well as a Final Draft Review Meeting.

The **Steering Committee** included the project consultant team as well as representatives from:

- Greater Municipal Services District (MSD)
- SLCo Parks and Recreation
- SLCo Engineering
- SLCo Planning and Transportation
- SLCo Health Department
- Wasatch Front Regional Council (WFRC)
- Utah Department of Transportation (UDOT)
- Utah Transit Authority (UTA)

Figure 3.2 Brainstorm Workshop

PUBLIC OPEN HOUSES

Open houses were held in Kearns on April 14th, 2022 and October 3rd, 2022.

The open house exhibited information on existing conditions, the need for AT planning in the area, as well as large maps showcasing the draft proposed active transportation projects. Attendants were encouraged to provide feedback, draw and leave comments on the map.

In general, attendees were happy to see the expansion of the AT network in Kearns. Some expressed concerns regarding what it might take to implement certain facilities, including parking removal, lane width reduction and right-of-way acquisition. Many voiced support for stronger east-west connections and improved access to off street trails and paths, and that a trail along the railroad with neighborhood connections could be an important facility for both commuting and recreation.

Figure 3.3 Pop-up Event at the Kearns Library

POP-UP EVENTS

The project team also hosted a pop-up event at the Kearns Library in May of 2022. This provided an additional opportunity for community members to comment on proposed projects. Participants wrote on the maps and were encouraged to visit the online survey and provide additional feedback.

Figure 3.3 Public Open House at the Kearns Library

SURVEY

Magna, Kearns, Salt Lake County, the Greater Municipal Services District, and others shared a nine-question survey that was hosted online from March-August and available in both English and Spanish.

The survey asked respondents to give feedback on the importance of walking and biking in their community, habits related to walking and biking, and areas of concern/issues related to walking and biking.

The following key take-aways were identified through the survey results:

- 96% of respondents said bicycle and pedestrian facilities were very important or somewhat important to them in the Kearns community
- 88% of respondents walk in their community weekly or daily
- Only 34% of respondents bike in their community weekly or daily
- 73% of respondents said they had avoided walking or biking in their community at some point because comfortable facilities were not available

In the open ended responses, residents voiced a desire for trails, bicycle lanes and improvements to existing infrastructure (in particular sidewalk maintenance and repair).

> *"The major East-West corridors have inadequate shoulders for biking, and the high speed traffic make it very risky"*

> *"Quality of sidewalks. You can't walk strollers, ride bikes, scooters, roller skates, skateboards, long boards, etc..."*

Figure 3.3 Survey Question: How important are bicycle and pedestrian facilities to you in Kearns and Magna communities?

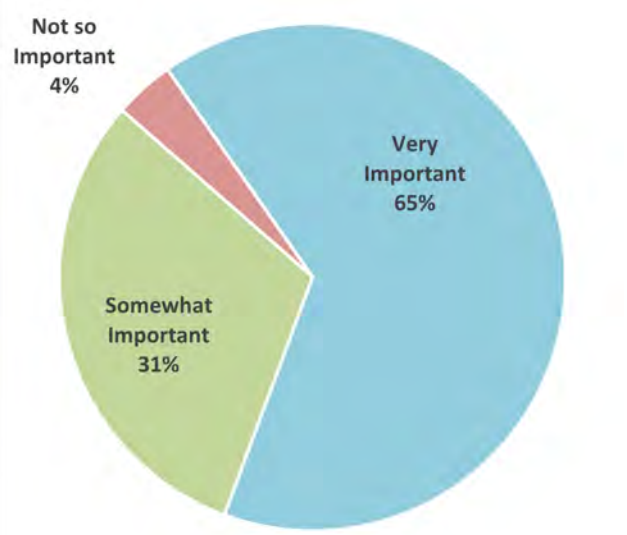
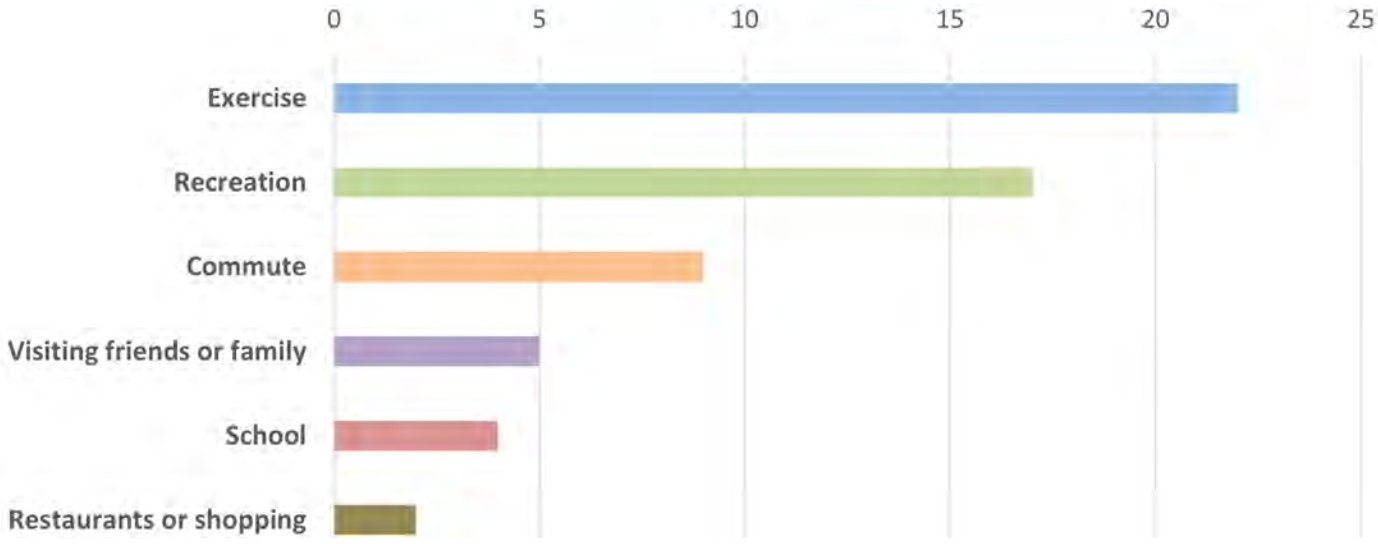


Figure 3.4 Survey Question: Why do you typically walk or bike? (Select all that apply)



ACTIVE TRANSPORTATION FACILITIES

4

INTRODUCTION

The **Kearns Active Transportation Plan** aims not only to provide recommendations on where AT facilities should be located, but also how they should be constructed.

There are best practices for building different types of active transportation facilities. The following guidelines are based on several national and local standards including:

- National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide
- Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD)
- UDOT Bikeway Schema & Design Manual Drawings

Figure 4.1 Informal trails (desire lines) leading to areas where pedestrians cross the railroad neae 5415 S & Northwest Rd. This area is mostly used by students accessing the Kearns High School.

FACILITY TYPES

Generally, active transportation facilities are classified between the following types:

- **On-Street Facilities:** shared roadways, shoulder bikeways, bike lanes, buffered bike lanes and cycle tracks.
- **Off-Street Facilities:** sidewalks, sidepaths and shared-use paths.
- **Spot Improvements:** intersection and crossing improvements, bridges and grade-separated crossings.

On-street facilities fall within the road right-of-way (ROW), while off-street facilities may or may not be located within the ROW. Examples of off-street facilities within road ROW include sidepaths and sidewalks. Off-street facilities outside of the ROW include shared-use paths.

Chapter 5: Proposed Projects, details the locations of different active transportation facility types throughout Kearns.

The facilities proposed in this plan include:

- Marked Shared Roadway
- Bike Lane
- Buffered Bike Lane
- Sidepath
- Shared-use Path

These facilities are represented in Figure 4.2 below.

Figure 4.2 Active transportation facility types proposed in the Kearns Active Transportation Plan.

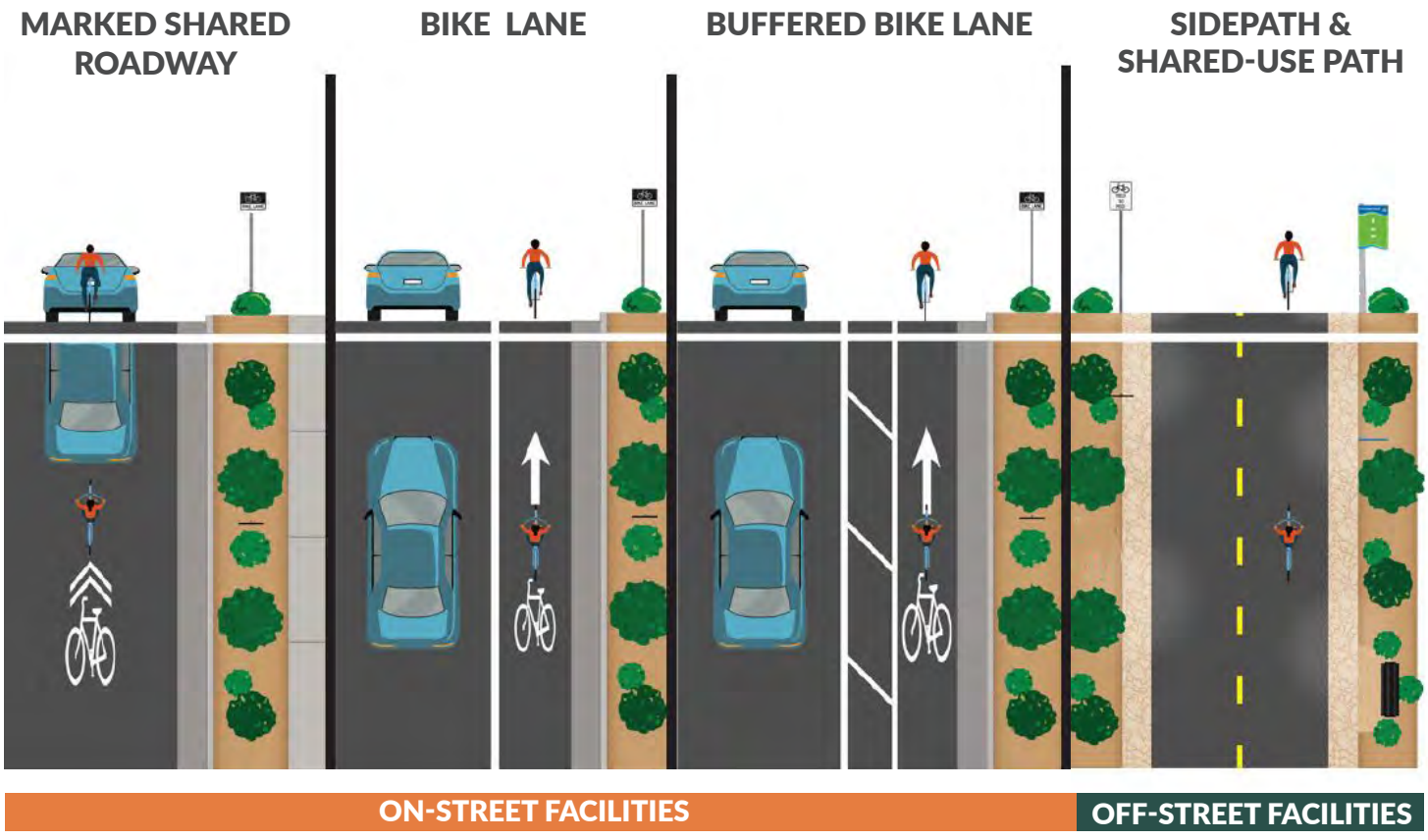


Table 4.1 General guidelines for the design of active transportation facilities

FACILITY TYPE	LOCATION	SIGNAGE	PREFERRED WIDTH	SEPARATION FROM ROAD/CANALS/ RAILROAD
Marked Shared Roadway	On-street	Yes	Shared lane marking (112" H x 40" W)	n/a
Bike Lane	On-street	Yes	6'	n/a
Buffered Bike Lane	On-street	Yes	6' Bike Lane, 3' Buffer	n/a
Sidepath	Off-street & above curb	Yes	10'-12'	5' preferred minimum park strip
Shared-use Path	Off-Street & usually outside of road ROW	Yes	12' min.	6:1 maximum slope adjacent to canals 20' preferred minimum separation from railroad

Table 4.1 summarizes key guidelines for the design of active transportation facilities that meet national standards. For more detail information, refer to the UDOT Active Transportation Design Manual.

SPOT IMPROVEMENTS

Spot improvements refer to "limited" improvement projects, such as intersections and non-linear small connections.

In the Kearns Active Transportation Plan, a number of crossings were identified for enhancement which might include different treatments depending on the location. Certain areas, such as railroad crossing areas, would also benefit from small scale connections referred on this plan as "Neighborhood Connectors" that can significantly improve access to active transportation facilities in Kearns.

Neighborhood Connectors

Neighborhood Connectors are small active transportation facilities used to improve connectivity within neighborhoods. They are mostly located between houses. Due to private property concerns, these connectors are mostly built during redevelopment or when the city owns small portions of right-of-way between homes.

Neighborhood Connectors are more flexible when it comes to design, and can fit within a wide range of scenarios.

Figure 4.3 Neighborhood Connector on Woodhaven Circle, Taylorsville, UT.

NEIGHBORHOOD CONNECTOR DESIGN GUIDELINES

- **Width:** 4' min.
- **Surface:** Concrete or asphalt
- **Notes:** Bicyclists expected to walk their bikes; fencing optional. No bollards.

Enhanced Crossings

Crossing facilities can be enhanced to increase safety and comfort for pedestrians and bicyclists.

Crossing enhancements might include:

High-visibility crosswalk

High-visibility crosswalks make use of patterns, such as "continental" or "ladder" style, which are highly visible to both drivers and pedestrians, more so than the commonly used transverse lines. Areas with high pedestrian volume and close to downtown or commercial centers might benefit from additional artwork to encourage a sense of place.

Curb Extension or Floating Curbs

Curb extensions visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians while increasing the available space for street furniture, benches, plantings, and street trees. They may be implemented on downtown, neighborhood, and residential streets, large and small. Similar to Curb Extensions, Floating Curbs increase pedestrian visibility by restricting parked vehicles from blocking slight lines. Floating curbs are easier to retrofit into existing infrastructure by maintaining existing curb flow lines and drainage systems.

Improved Lighting

In order to improve lighting at crossings, luminaires should be installed at forward locations to illuminate the pedestrian and create a positive contrast. When lights follow a standard configuration along a street line, it produces a high-level illumination behind the pedestrian which then appears as a dark silhouette to the drivers (i.e. negative contrast). Asymmetrical light beam distributions at crossings help mitigate that and better illuminate pedestrians for improved safety.

Enhanced Signing and Pavement Strategies

Pedestrian warning signs should be placed at non-signalized crossings and mid-block crossings (Figure 4.5). Mid-block crossing improvements might include Rectangular Flashing Beacon (RRFB) and High-intensity Crosswalk Beacon (HAWK).

Figure 4.4 Pedestrian warning sign at RRFB crossing.

Pavement enhacements include raised street crossings, speed humps, speed cushions and "shark's teeth" pavement markings.

Figure 4.5 High-visibility crosswalk with artwork in Greenville, NC.

PROPOSED PROJECTS

5

Figure 5.1 Sidepath on Cougar Lane near the Kearns High School.

INTRODUCTION

The planning process began by identifying the collective vision with key stakeholders, and engagement with the public further refined all the potential projects available. Then an extensive review and evaluation process brought the active transportation plan into focus. This led to the final list and map of identified projects. Guided by a collective vision, this list of projects creates a solid foundation to build a connected active transportation system for all ages and abilities.

This plan is not simply about identifying routes for trails and bike lanes. This active transportation plan provides a much larger opportunity to realize a system that unites Kearns's key destinations by connecting trails and bike lanes throughout the township while accommodating people of all abilities in safety and comfort.

After the **Kearns Active Transportation Plan** is adopted, efforts should be focused on completing connections between existing facilities and key destinations such as the Utah and Salt Lake Canal Trail.

All projects should contribute to the overarching goal of providing an active transportation system based on user needs, comfort level, and ease of accessibility.

PRIORITIZATION

Projects were identified through public and stakeholder feedback, prior plans, safety issues, and an analysis of gaps in the current network. Potential projects were evaluated based on a set of criteria that reflects the values of Kearns residents and stakeholders. The result of this prioritization process is a list of scored projects. The highest-scoring projects best meet the plan's goals to: foster healthy communities, plan comfortable facilities for all ages and abilities, promote equity, enhance connectivity, and provide connections to transit.

Table 5.1 Scoring Criteria Table

GOAL	TYPE	SCORING
Healthy Communities	Projects that connect to other active transportation facilities, existing or proposed, score points in this criterion.	• Connects to existing facility (+4) • Connects to proposed facility (+2)
Plan for Comfort	Projects are scored based on level of comfort. Any facilities outside of road right-of-way (shared-use path) will score higher, followed by those above curb (sidepath), and those within the roadway (buffered bike lane, bike lanes and marked shared roadways)	• Shared-use Path (+8) • Sidepath (+6) • Buffered Bike Lanes (+4) • Bike Lanes and Marked Shared Roadways(+2)
Promote Equity	Projects that connect to underserved neighborhoods score points.	• Connects to an underserved neighborhood (+5)
Enhance Connectivity	Projects that connect to destinations in Kearns score points in this criterion.	• Connects to destinations such as schools, retail, grocery stores, libraries, community services, parks, health care (+5)
Connect to Transit	Priojects that connect to UTA stops will score points in this criterion.	• Connects to UTA Stop (+3)

PROPOSED LINEAR PROJECTS AND SPOT IMPROVEMENTS

Linear Projects

Kearns Metro Township has 39 proposed projects including 1 shared-use path (Table 5.2). If all the projects below were completed as shown, 41 miles of active transportation facilities will be created in Kearns. Map 5.1 shows the recommended projects for the township.

Many of the facilities proposed in this plan are off-street and high-comfort, such as sidepaths and shared-use paths, which are usually more costly than on-street facilities such as bike lanes. For this reason, these high-comfort facilities might take longer to get built due to funding availability and possible right-of-way purchases. It is important to note that cheaper interim facilities are crucial to the development of a well-connected active transportation network. For example, stripping buffered bike lanes on roads where the current recommendation is to build sidepaths is an important step towards enhancing the active transportation network in Kearns.

For sidewalk improvement recommendations refer to the Kearns Master Transportation Plan (2020).

Spot Improvements

A total of 31 spot improvements (25 enhanced crossings and 6 neighborhood connectors) are proposed for Kearns (Table 5.3).

Enhanced crossings might include many different types of amenities. The Metro Township should decide on a case-by-case basis which improvements should be done at each crossing highlighted on this plan.

Examples of crossing enhancements are given on Chapter 5.

Cost-Estimates

Planning level cost estimates were applied to projects using generalized financial assumptions based on the length of the project and the facility type. These are high-level, per mile cost estimates derived from similar, recently completed projects constructed regionally and might include price for paving, stripping and signage depending on the facility type. No engineering has been done and these are not an engineer's estimate.

The cost-estimates do not include recent increases due to inflation, or materials. They include no cost estimate for right-of-way, land, or property acquisition.

Desire for a Rail Trail

Throughout the planning process many residents and project stakeholders voiced interest in a rail trail, or shared-used path. Union Pacific currently owns and operates on this rail line and does not allow for shared-use paths within its right-of-way. As a result, without a drastic change in operations a rail trail is not possible. If the rail were to no longer operate on the existing infrastructure the corridor should be considered for a shared-use path.

MAP 5.1 PROPOSED PROJECTS

Proposed Projects

- Bike Lane
- Buffered Bike Lane
- Marked Shared Roadway
- Sidepath
- Shared-use Path

Existing Facilities

- Bike Lane
- Buffered Bike Lane
- Marked Shared Roadway
- Sidepath
- Shared-use Path

Spot Improvements

- E Enhanced Crossing
- C Neighborhood Connector

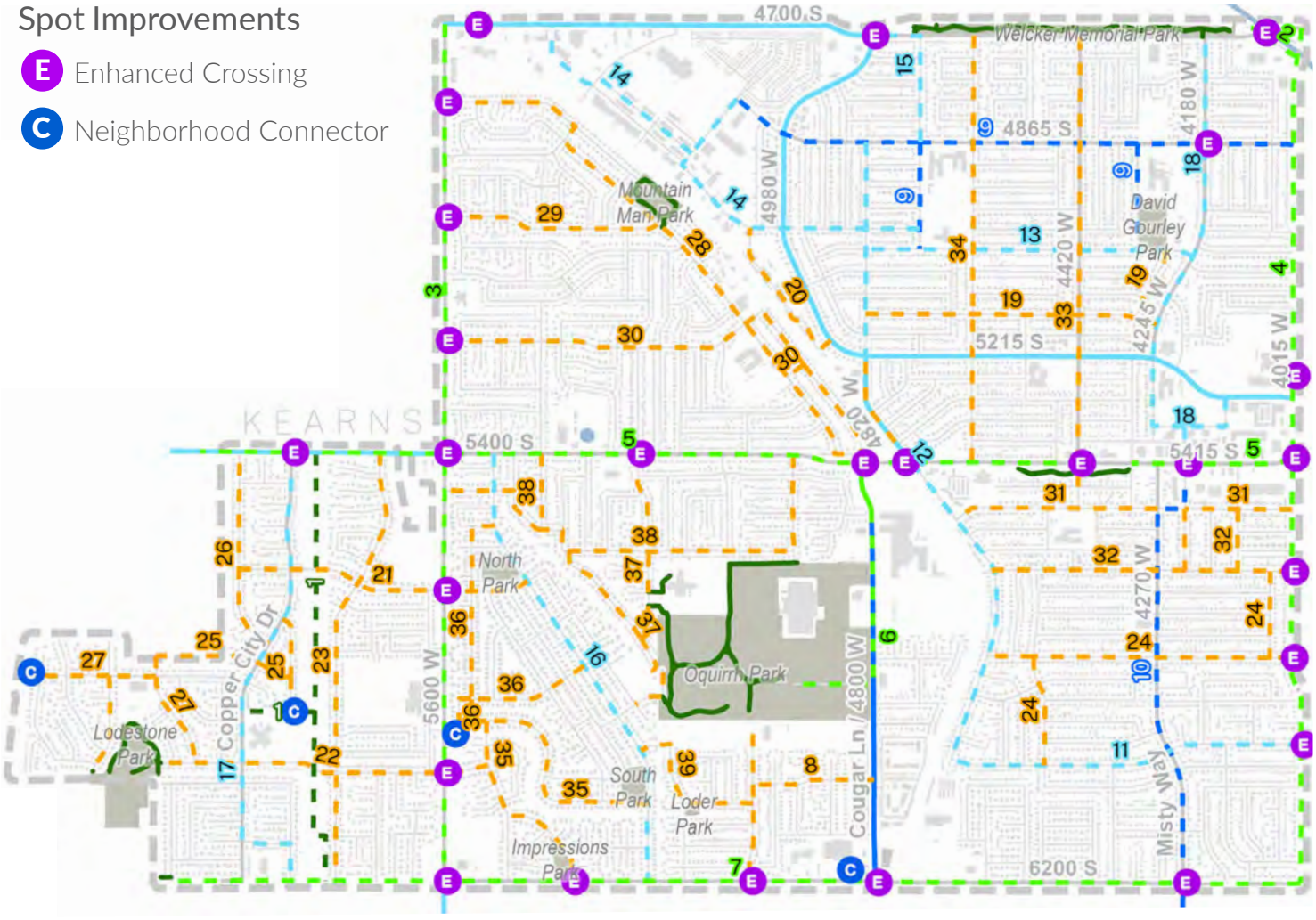


Table 5.2 Final proposed project list. Top six scoring projects are highlighted below.

PROJECT ID	FACILITY TYPE	PROJECT NAME	PROJECT LOCATION	SCORE	PROJECT LENGTH (MI)	COST ESTIMATE
1	Shared-use Path	West Side Connector	• 6200 S - 5400 S (5800 W)	14	1.2	$1,208,895
2	Sidepath	4700 S	• 4700 S (4000 W-4140 W)	18	0.2	$71,774
3	Sidepath	5600 W	• 5600 W (4700 S-6200 S)	18	2.0	$875,641
4	Sidepath	4000 W	• 4000 W (4700 S-6200S)	18	2.0	$877,016
5	Sidepath	5400 S	• 5400 S (4015 W-6055 W)	18	2.4	$1,041,251
6	Sidepath	Cougar Lane	• Cougar Lane (Niagra Way-Oquirrh Park)	18	0.6	$259,868
7	Sidepath	6200 S	• 6200 S (4000 W-6105 W)	18	2.6	$1,154,208
8	Marked Shared Road	Corriander Dr	• Coriander Dr (Cougar Lane-Park Wood Dr) • Parkwood Dr (6200 S-Oquirrh Park	14	0.6	$3,992
9	Buffered Bike Lane	4865 S	• 4865 S (4015 W-Warehouse Rd, 4720 W (4865 S-5015 S)	21	1.8	$81,229
10	Buffered Bike Lane	Misty Way	• Misty Way/4270 W (6200 S-5500 S) • 5500 S (4270 W-4220 W) 4220 W (5500 S-5415S)	16	1.1	$46,761
11	Bike Lane	Twilight Dr	• (4000 W- Salem Ave)	9	0.8	$21,023
12	Bike Lane	Salem Ave/ Northwest Ave	• Salem Ave Northwest Ave/4820 W (Twilight Ave-4865 S)	19	1.6	$39,592
13	Bike Lane	5015 S	• 5015 S (4820 W-Steele St)	12	0.8	$19,450
14	Bike Lane	Camp Kearns/ Industrial Park	• Cable Ridge Rd, 4820 S (5200 W-Warehouse Rd • Warehouse Rd (4850 S-4865 S) 4985 S (Warehouse Rd-4720 W)	19	1.3	$33,110
15	Bike Lane	4720 W (4865 S-4715 S)	• 4720 W (4865 S-4715 S) 4715 S (4720 W-4800 W)	19	0.4	$9,165
16	Bike Lane	Impressions Dr/ Eastview	• ImpressionsDr/ EastviewDr (6200 S-5400 S)	9	1.1	$28,011
17	Bike Lane	Copper City Dr	• Wakefield Way (6200 S - Willingcott way • Copper City Drive (Willingcott Way-5400 S)	14	1.1	$28,830

PROJECT ID	FACILITY TYPE	PROJECT NAME	PROJECT LOCATION	SCORE	PROJECT LENGTH (MI)	COST ESTIMATE
18	Bike Lane	Steele St	• Steele St (4715 S-5345 S) 5345 S (4280 W-4140 W) • 4220 W (5415 S-5345 S) 4140 W (5345 S-Sam's Blvd)	14	1.3	$32,036
19	Marked Shared Roadway	5135 S	• 5135 S (Steele St-4820 W) • 4320 W (5135 S-5015 S)	12	0.9	$5,433
20	Marked Shared Roadway	5130 W	• 5130 W (Pieper Blvd - 4985 S)	19	0.4	$2,416
21	Marked Shared Roadway	Plumbago Ave	• Plumbago Ave/Vista Ridge Way (Impressions Dr-China Clay Dr)	12	0.7	$4,386
22	Marked Shared Roadway	Lodestone Ave	• Lodestone Ave (Dewpoint Dr-Red Zinc Dr)	14	0.8	$4,897
23	Marked Shared Roadway	Trowbridge Way	• Trowbridge Way/Le Chateau Way (5400 S-6200 S)	9	1.0	$6,533
24	Marked Shared Roadway	Tressler	• Tressler Rd/4500 W (Twilight Dr-5615 S) • 5780 S (4580 W-4015 W) 4000 W (5780 S-5615 S)	7	1.2	$7,428
25	Marked Shared Roadway	Jargon Way	• Jargon Way (Blue Iron Way-West Bench Dr) Best Bench Dr to Copper City Dr	9	0.5	$3,436
26	Marked Shared Roadway	China Clay Dr	• China Clay Dr (S Copper City Dr-5400 S)	6	0.5	$3,049
27	Marked Shared Roadway	Borax Ave	• Blue Iron Way/Borax Ave (Blue Iron Way-Clear Vista Circle) • Far Vista Dr (Borax Ave-Lodestone Park)	11	0.8	$5,096
28	Marked Shared Roadway	Heath Ave	• Heath Ave (5400 S-Planda Way) Planda Way (Heath Ave-Townsend Way) • Townsend Way (Planda Way-5600 W)	19	1.4	$9,050
29	Marked Shared Roadway	Westslope Ave	• Westslope Dr (5600 W-Heath Ave)	11	0.5	$3,230
30	Marked Shared Roadway	Henley Dr	• Henly Dr/Hoopes St (5600 W-Charlotte Ave) Charlotte Ave (Hoopes St-5415 S) • Cross St (Charlotte Ave-Heath Ave)	14	1.2	$7,797

PROJECT ID	FACILITY TYPE	PROJECT NAME	PROJECT LOCATION	SCORE	PROJECT LENGTH (MI)	COST ESTIMATE
31	Marked Shared Roadway	5500 S	• 5500 S (Northwest Ave-4270 W) 5500 S (4220 W-4015 W)	9	0.7	$4,632
32	Marked Shared Roadway	5615 S	• 5615 S (Northwest Ave-4015) • 4220 W (5615 S-5500 S) • 4120 W (5615 S-5415 S)	9	1.0	$6,411
33	Marked Shared Roadway	4420 W	• 4420 W (5500 S-4715 S)	14	1.1	$6,664
34	Marked Shared Roadway	4620 W	• 4620 W (5415 S-4715 S)	14	1.0	$6,322
35	Marked Shared Roadway	Ridge Flower Way	• Ridge Flower Way (Stone Bluff Way-Impressions Dr) • Dewdrops Dr (Ridge Flower Way-Clernates Dr) • Clearnates Dr (Dewdrops Dr-6200 S)	9	1.0	$6,600
36	Marked Shared Roadway	Stone Bluff Way	• Stone Bluff Way (Ridge Flower Way-Impressions Dr) • Ridge Hollow Dr (Impressions Dr-Mt Flora Circle)	9	0.9	$5,664
37	Marked Shared Roadway	Sarah Jane Dr	• Sarah Jane Dr (5400 S-Honeysuckle Way) • Honeysuckle Way (Highwood Dr-Stony Park Dr) • Stony Park Dr (Honeysuckle Way-Impressions Dr)	11	1.0	$6,118
38	Marked Shared Roadway	Highwood Dr	• Highwood Dr (Morning Breeze Dr-5600 W) • 5425 W (Highwood Dr-5400 S)	12	1.3	$8,398
39	Marked Shared Roadway	6055 S	• 6055 S (Park Wood Dr-Loder Dr) Loder Dr (6055 S-Vista Point Dr) • Vista Point Dr (Loder Dr-Impressions Dr)	9	0.4	$2,400

Table 5.2 Final list of proposed spot improvements.

LOCATION	TYPE
Townsend Way 5600 W	**Enhanced Crossing**
5600 W Henley Dr	**Enhanced Crossing**
5400 S 5240 W	**Enhanced Crossing**
5600 W Plumbago Ave	**Enhanced Crossing**
5600 W LodesWtone Ave	**Enhanced Crossing**
5415 S 4420 W	**Enhanced Crossing**
4700 S 5475 W	**Enhanced Crossing**
5615 S 4015 W	**Enhanced Crossing**
5780 S 4015 W	**Enhanced Crossing**
Twilight Dr 4000 W	**Enhanced Crossing**
5600 W 5400 S	**Enhanced Crossing**
5400 S Copper City Dr	**Enhanced Crossing**
5600 W Westslope Dr	**Enhanced Crossing**
5415 S Northwest Ave	**Enhanced Crossing**
5415 S 4220 W	**Enhanced Crossing**
4700 S 4800 W	**Enhanced Crossing**
6200 S Cougar Lane	**Enhanced Crossing**
6200 S Misty Way	**Enhanced Crossing**
6200 S 5600 W	**Enhanced Crossing**
6200 S Park Wood Dr	**Enhanced Crossing**
6200 S Clernates Dr	**Enhanced Crossing**
4865 S 4180 W	**Enhanced Crossing**
Squire Crest Dr 4015 W	**Enhanced Crossing**
5415 S Cougar Lane	**Enhanced Crossing**
40715 S 4089 W	**Enhanced Crossing**
5415 S 4015 W	**Enhanced Crossing**
5875 Westbench Dr	**Neighborhood Connector**
6368 Borax Ave	**Neighborhood Connector**
5918 S Mount Flora Cir	**Neighborhood Connector**
6200 S 4874 W	**Neighborhood Connector**

MAINTENANCE

Maintenance of active transportation facilities may be as important as the initial installation. Kearns should develop a policy to ensure maintenance will occur on a consistent and ongoing basis. Maintenance includes regular upkeep of pavement, paint, landscaping, trash removal, and signage replacement. The following is general guidance for developing a maintenance policy:

- Kearns, MSD and their public works departments should plan for yearly and reoccurring routine maintenance;
- Ensure that active transportation facility maintenance is incorporated into line items for the township's annual budget;
- A general timeline for repairing each type of facility should be established. This can help effectively prioritize facility upkeep;
- Maintenance should be incorporated into private development requirements;
- Sweeping of facilities should occur multiple times per year.

Snow removal along bike facilities should occur when necessary. It should receive the same urgency and frequency as vehicle travel lanes. Equipment needed to remove snow along specific facilities, such as shared-use paths, should be incorporated into the township's budget.

PLAN ADOPTION AND COORDINATION WITH WFRC

Once this plan has been presented to and adopted by the metro township council, MSD staff should work with the Wasatch Front Regional Council (WFRC) to ensure that projects are incorporated into the Regional Transportation Plan (RTP).

Amending these projects into the RTP will further ensure that they become a reality. Projects that are included in the RTP qualify for specific funding sources and are more easily implemented due to the regional visibility and recognition.

FUNDING

6

INTRODUCTION

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

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

FEDERAL AND STATE FUNDING

Federal funds are available to muticipalities and counties through the federal aid program. UDOT administers the funds. To be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP)

Learn more about the STIP at https://udot.utah.gov/connect/about-us/commission/stip/

Surface Transportation Program (STP)

The Surface Transportation Program (STP) funds can be used for transportation enhancements in twelve categories, including bicycle and pedestrian facilities.

The Joint Highway Committee allocates a portion of the STP funds for projects around the state in urban areas. This is a five-year funding tool, and the STIP projects are updated regularly to maintain a five-year list of projects.

Figure 6.1 Signalized mid-block crossing on 5600 W near Thomas Jefferson Jr High School.

Adding active transportation projects and other projects in the study area to UDOT Region 2's transportation plan is an important early step.

Learn more at https://wfrc.org/programs/transportation-improvement-program/surface-transportation-program/.

State Class B and C Program Fund

The distribution of State Class B and C Program funds is established by State Legislation and is administered by UDOT. Revenues for the program come from state fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. UDOT keeps seventy-five percent of these funds for their construction and maintenance programs. The rest is made available to counties and municipalities. Some of the roads with active transportation facilities in the study area fall under UDOT jurisdiction. It is in the best interest of Kearns that staff are aware of the procedures used by UDOT to allocate those funds and are proactive in requesting the funds be made available for UDOT-owned roadways in the City. Class B and C funds are allocated to each municipality and county by a formula based on population, centerline miles, and land area. Class B funds are given to counties, and Class C funds are given to municipalities and towns. Class B and C funds can be used for maintenance and construction projects, including active transportation; however, thirty percent of those funds must be used for construction or maintenance projects that exceed $40,000. The remainder of these funds can be used to match federal funds or pay the principal, interest, premiums, and reserves for issued bonds.

Learn more at https://site.utah.gov/connect/business/public-entities/local-government-program-assistance/.

Transportation Investment Fund (TIF) Active

The State of Utah via UDOT allows for active transportation projects to be put on a regional important input list for funding.

In order to qualify for this funding, local jurisdictions must:

- Provide 40% match (non-UDOT dollars and/or in-kind match);
- Propose projects that are paved;
- Propose projects that are locally maintained;
- Ensure projects are identified on the UDOT Active Transportation Plan; and,
- Demonstrate a congestion reduction on state facility.

To learn more, visit: https://udot.utah.gov/connect/about-us/commission/project-prioritization-process/

Safe Routes to School (SRTS)

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

Learn more at https://saferoutes.utah.gov/.

Transit Transportation Investiment Fund (TTIF First/Last Mile)

The Transit Transportation Investment Fund (TTIF) was created under Senate Bill 136. This new fund, beginning July 1, 2019, allocates state funding from the fuel tax specifically for public capital transit projects. However, Senate Bill 72 opened this fund up to non-motorized projects as well. These dollars can also be used for active transportation projects around transit facilities with the new infrastructure providing access to transit stops.

It also requires 40% matching funds from local governments. Cities can use federal (but not UDOT) dollars for the match. More information on this fund will be developing in the coming years.

Learn more at https://www.udot.utah.gov/connect/about-us/commission/project-prioritization-process/.

MPO-LEVEL FUNDING

The WFRC administers several funding programs of both federal and state dollars for the region.

Carbon Reduction Program CRP)

The Carbon Reduction Program (CRP) funds a wide range of projects that support the reduction of on-road CO_2 emissions. This may include projects and strategies that reduce traffic congestion by facilitating the use of alternatives to single-occupant vehicle trips, including public transportation facilities, pedestrian facilities, bicycle facilities, and shared or pooled vehicle trips within the Urbanized Area.

Learn more at https://wfrc.org/programs/transportation-improvement-program/carbon-reduction-program/

Transportation Alternatives Program (TAP)

The Transportation Alternatives Program (TAP) funds the construction and planning of bicycle and pedestrian facilities. All cities in Salt Lake, Davis, and Weber Counties are eligible. Funds may be used to construct, plan, and design on- and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation. Non-motorized forms can include sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting, and other safety-related infrastructure that will provide safe routes for non-motorists. WFRC asks cities to submit letters of intent in the fall, with full applications due December 12th this year for funding in July of the following year. Salt Lake County cities typically receive $800,000 to $900,000 every year from this fund.

Learn more at https://wfrc.org/programs transportation-improvement-program/ transportation-alternatives-program/

Congestion Mitigation and Air Quality Program (CMAQ)

The Congestion Mitigation and Air Quality Program (CMAQ) funds are for transportation projects and programs to help meet the requirements of the Clean Air Act.

Funds must be used for projects which improve air quality. Eligible projects include transportation activities in the State Air Quality Implementation Plan (SIP), construction and/or purchase of public transportation facilities and equipment, construction of bicycle or pedestrian facilities serving commuter transportation needs, and promotion of alternative modes such as ridesharing.

Learn more at https://wfrc.org/programs/transportation-improvement-program/congestion-mitigation-air-quality-program/

STATE-LEVEL FUNDING (NON-UDOT)

Recreational Trail Program

Administered by the Utah Division of State Parks and Recreation, the Recreational Trails Program required that motor fuel tax revenues generated from motor fuel sales for off-highway recreational purposes be transferred from the Highway Trust Fund to the Trails Trust Fund for recreational trail and facility improvements. This program provides grants for non-motorized and motorized trails, including the construction and maintenance of trails and facilities, staging areas, trailheads, restroom facilities, and trail signing.

Learn more at https://stateparks.utah.gov/resources/grants/recreational-trails-program/

Land and Water Conservation Fund

Administered by the Utah Division of State Parks and Recreation, the Land and Water Conservation Fund Act provides federal grants for the acquisition and/ or development of public outdoor recreation areas. Any site/facility purchased, developed, or improved with funding from this grant is protected in perpetuity (forever) as a public outdoor recreation area.

Learn more at https://stateparks.utah.gov/resources/grants/land-and-water-conservation-fund/.

Utah Outdoor Recreation Grant

Administered through the Office of Outdoor Recreation, the Utah Outdoor Recreation Grant project helps communities build trails and other recreation infrastructure by awarding matching grants. The grants help enhance recreational opportunities and amenities in Utah's communities.

Learn more at https://business.utah.gov/outdoor/uorg/.

COUNTY-LEVEL FUNDING

CDBG Public Services Funds

Community Development Block Grants (CDBG) are awarded to entitlement cities and counties by US Housing and Urban Development (HUD). Funds are used to support development activities that build stronger and more resilient communities. Activities may address needs such as infrastructure, public facilities improvements, clearance/acquisition, among other public service and housing activities. County owned roads and facilities in Kearns and Magna needing active transportation improvements could be eligible for CDBG funding through Salt Lake County.

Salt Lake County "4th Quarter" Local Option Sales Tax

Utah State law authorizes the imposition of local option sales taxes for transportation, which is sometimes referred to as "quarters" because generally they are 0.25% tax rates. These local options provide funding for city and county roads and active transportation needs, as well as public transit.

Under adopted legislation Senate Bill 136 and action by Salt Lake County, there is an opportunity for cities to receive funding for priority transportation needs in their communities, including projects identified in Utah's Unified Transportation Plan.

A quarter of one percent sales tax goes to the Regional Transportation Choice Fund. Salt Lake County has an ongoing transportation fund that can be spent on a variety of transportation projects, including active transportation. One-quarter of this fund is earmarked for active transportation projects. Salt Lake County administers these funds and requires cities to submit applications. Every project is scored based on several criteria, including if the project is multi-jurisdictional. For more information, contact Salt Lake County Regional Planning and Transportation.

CITY-LEVEL FUNDING

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

Private interests may also provide resources for active transportation improvements. Developers can construct the local streets with bike lanes within subdivisions. They may often dedicate right-of-way to trails and parks.

Areas with planned or anticipated new growth may include new active transportation facilities provided by the developers. Cities can encourage developers to include active transportation amenities during development review. From small site plans to larger master-planned communities, as city staff and planning commissions review new developments, they can require developers to show how the proposed development will accommodate or enhance active transportation connections.