SOUTH UTAH COUNTY
ACTIVE TRANSPORTATION PLAN

Mountainland Association of Governments

December 2016

Elk Ridge
Mapleton
Payson
Salem

Santaquin
Spanish Fork
Springville
Woodland Hills

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1 Introduction and Background

The South Utah County Active Transportation Plan ("the Plan") is the final plan in a series of regional active transportation plans sponsored by the Mountainland Association of Governments (MAG). Building upon the fiscally-constrained 2015 Regional Transportation Plan (RTP) and the long-term vision outlined in MAG's **TransPlan 2040**, this planning effort is intended to establish a unified vision for active transportation in south Utah County and recommend a complete network of regional intercity bikeways. Beyond regional bicycle connections, this Plan also includes pedestrian, programmatic, and policy recommendations to improve the experience of walking and biking in south Utah County. This new, unified regional vision will provide a roadmap for implementation over the next ten years.

This Plan augments the near-term, fiscally-constrained 2015 Regional Transportation Plan (RTP) to fit the existing and future needs of the partner communities.

Regional Context

This Plan builds upon the support and enthusiasm for developing a strong network of active transportation facilities to connect communities in south Utah County. Utah County leaders have acknowledged non-motorized transportation as an integral part of improving air quality, reducing congestion, and improving quality of life. As Utah Valley continues to grow and urbanize, the demand for safe, efficient, and enjoyable opportunities for walking and biking continues to increase. In 2014, MAG documented 2.2 million user trips on nine regional urban trails, a figure that is expected to increase as the population grows.[1]

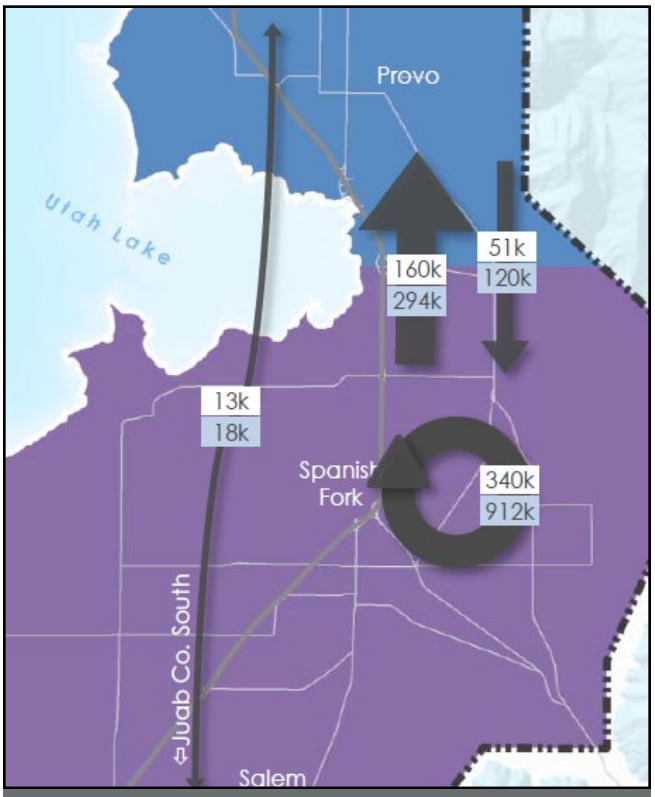
An online statewide survey called "Your Utah, Your Future" reached 52,845 Utahns to ask about topics such as housing, water, public education, air quality, and other issues that affect the State.[2] Related to transportation, "more than three of every four residents want neighborhood designs that encourage walking, public transit use, and shorter daily drive times." There is therefore a high need and desire for active transportation facilities across the state and in south Utah County.

Improving bicycle and pedestrian connections to existing and planned transit service supports transit investments and provides people with viable means by which to travel longer distances without using a car. Recommendations in this plan take into account the two Utah Transit Authority (UTA) bus routes, the 805 and 821, which currently serve the study area, and the new commuter rail service between Provo to Payson that is expected to be completed between 2025 and 2034.

Commute Patterns

Figure 1 shows the commute patterns and magnitude of traffic that crosses or stays within each area of south Utah County.[3] This analysis shows that in 2014 approximately 340,000 commute trips were made within south Utah County, 160,000 trips were made to the central county area (Orem and Provo), while 51,000 trips were received from the central county area. By 2040, trips within the area are expected to nearly triple (from 340,000 to over 900,000 trips), and trips to Provo and Orem are expected to nearly double. Therefore, strengthening the network of active transportation facilities in south Utah County and connections to the north will provide people with transportation choices and help to meet the region's transportation needs.

Figure 1 Existing and Forecasted Travel Patterns



Note: The circle indicates travel within an area while an arrow indicates the travel direction between two areas. The white numbers are 2014 total trips (in thousands), while blue is the projected number of trips in 2040. The line thickness indicates the magnitude of trips in 2040.

Study Area

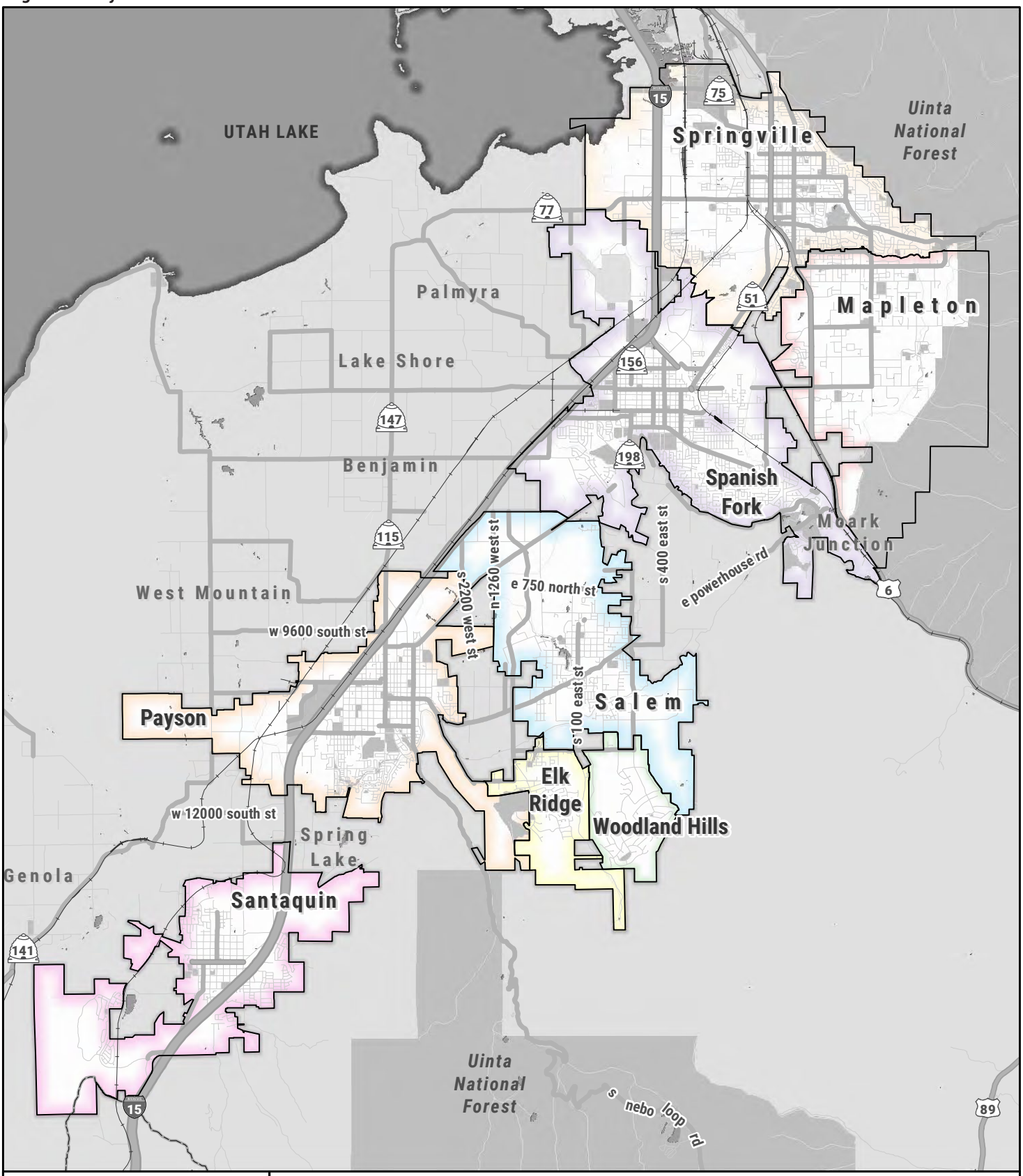
The study area is located along Utah's Wasatch Front, encompassing the communities of Springville, Mapleton, Spanish Fork, Salem, Woodland Hills, Elk Ridge, Payson, Santaquin, and the contiguous unincorporated Utah County land in between (see Figure 2). The focus of this Plan is to improve regional connections between the eight communities and access to public lands.

1 Mountainland Association of Governments. TransPlan 2040. https://mountainland.org/site/webroot/images/upload/files/regionalplanning/Transportation%20Plan/transplan40/TransPlan40.pdf

2 Semerad, Tony. "Utahns want mix of housing, neighborhoods to designed to cut driving." The Salt Lake Tribune. Sep. 6, 2015. Accessed Nov. 23, 2015. http://www.sltrib.com/home/2916140-155/utahns-want-mix-of-housing-neighborhoods

3 Ibid.

Figure 2 Study Area



S Utah County ATP

Study Area

- Existing Railroad
- Municipal Boundary
- County Boundary
- Parks
- Water

0 0.5 1 2 Miles

N

Plan Vision and Goals

A desire for active transportation is reflected in many of the current adopted plans for cities within the study area. This plan represents a comprehensive effort to address gaps in the region's key transportation corridors with regard to bicycle and pedestrian travel. The recommendations in this Plan work toward a vision of safe active transportation that is accessible to a wide range of people, including youth and seniors, people that are confident bicyclists and those that are not, and people with disabilities. This vision is characterized by the following goals that were developed by the Project Management Team (PMT) and selected by the public at the project open house.

1. **Institutionalizing trails as integral to our growth and future**
2. **Creating regional connections and routes**
3. **Developing well-used active transportation facilities**
4. **Creating collaborative energy and a shared vision between municipalities and others**
5. **Developing design and maintenance standards**

Walking and Biking in South Utah County Today

South Utah County boasts an impressive trail network that provides residents access to public lands—Powerhouse Mountain, Grindstone Ridge, Spanish Fork Peak, and Lone Pine Ridge—separate and safe from motor vehicles. New trails, such as the Spanish Fork River Trail, are very popular and quickly becoming community assets. In fact, institutionalizing trails as integral to the region's growth and future was chosen as a top goal by the public.

However, the active transportation network is disconnected and limited within the study area. The trail network is concentrated in the eastern portion of the study area, there are few on-street bicycle facilities serving more local destinations, and there are major gaps in the sidewalk network. Based on feedback received from the public and stakeholders, there is a desire for more trails, sidewalks, bike lanes, and improved street crossings, especially at high-volume, high-speed arterials.

The challenges to improving the active transportation network are related to the discontinuous street network and the size of the study network. For example, development patterns and distances between communities leads to high-volume arterials and few redundant connections between communities. The I-15 freeway and railroads are barriers to people walking and biking. The Union Pacific lines that converge in Springville and Spanish Fork create skewed crossings and create other challenges for Payson and Santaquin.

A lack of a complete sidewalk network is a barrier to walking in the study area. Sidewalks are one of the most fundamental elements of a pedestrian network because they provide safety and separation from motor vehicles. Gaps within a sidewalk system decrease pedestrian comfort and can result in unsafe walking conditions, particularly along higher speed roadways. However, implementing sidewalks is expensive and, in many cities, cost-prohibitive. Therefore, sidewalk recommendations are focused within higher activity areas of each city rather than at a county-wide scale.

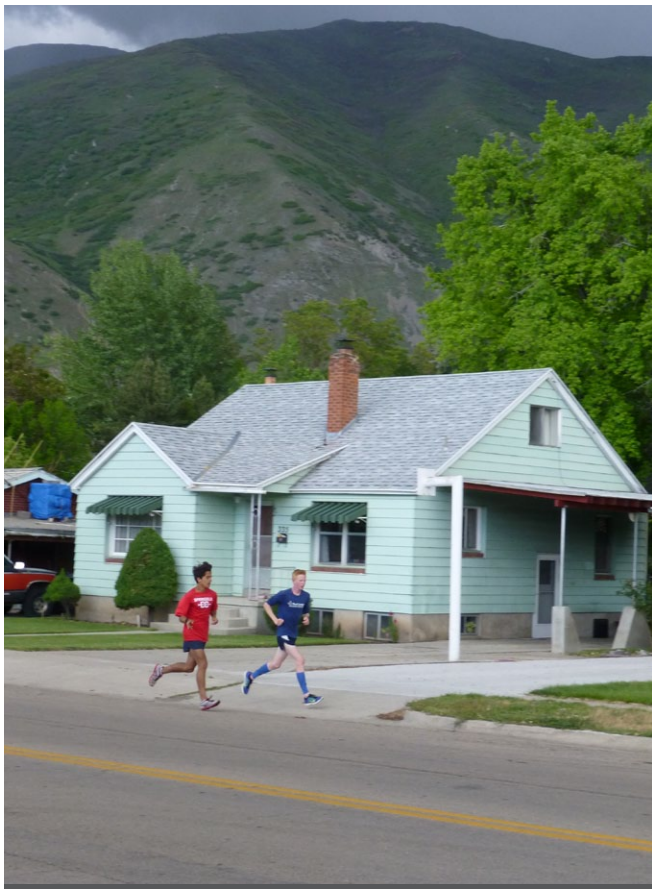
While south Utah County has some pieces of an active transportation network already in place there is much work to be done to create a connected, safe, and comfortable network that provides opportunities for people of all ages and abilities to walk or bike for both utilitarian and recreational purposes. This Plan outlines a vision and actionable steps to link existing trails and bikeways, address network barriers, improve existing design standards for a consistent and safe active transportation network, and make spot improvements to the pedestrian network within each community.

Existing Plans and Their Relationship to This Plan

In addition to local plans that make provisions for walking and biking, there are several regional and state plans that influenced the development of this Plan. They are summarized below.

TransPlan40 Regional Transportation Plan: 2015-2040 Plan for the Provo/Orem Metropolitan Area

MAG adopted a long-range transportation plan in June 2015. The TransPlan40 Regional Transportation Plan: 2015-2040 Plan for the Provo/Orem Metropolitan Area identifies several regional trail projects to connect population and employment centers based on projected densities through 2040. This analysis was completed using the Active Transportation Latent Demand Model, which uses population and employment densities, land use, demographic indicators, and proximity to schools, parks, transit, and existing facilities to show where higher pedestrian or bicycle uses are anticipated. The active transportation projects proposed in TransPlan40 are based largely on adopted municipal bicycle and pedestrian plans. The TransPlan40 includes 10 active transportation projects within the study area.



Joggers in Springville

UDOT State Bicycle Plan: Bicycle Facility Gap Analysis and Utah Collaborative Active Transportation Study (2014)

The Utah Department of Transportation (UDOT)'s 2014 State Bicycle Plan outlines an approach to help project managers, designers, and planners to choose projects that can make the biggest impact on bicycle transportation. The goal of the Plan is to enhance bicycle safety and mobility throughout Utah. As stated in the UDOT "Inclusion of Active Transportation" policy, "It is the policy of the Department that the needs of bicyclists, pedestrians, and other active transportation users will be routinely considered as an important aspect in the funding, planning, design, construction, operation, and maintenance of Department transportation facilities."[4]

Recommendations in the Wasatch Front metropolitan area, which includes this Plan's study area, are based on the Utah Collaborative Active Transportation Study recommendations (see below) and a bicycle facility gap analysis. This data driven assessment was used to identify areas with insufficient conditions for bicycle travel, or "gaps," on all state routes in Utah.

Utah Collaborative Active Transportation Study (2013)

The Utah Collaborative Active Transportation Study (UCATS) was developed as a regional active transportation master plan for infrastructure to enhance and coordinate pedestrian and bicycle connectivity. The study lays the groundwork for a network of urban bicycle routes (UCATS Regional Bicycle Network) and pedestrian-based recommendations throughout the Wasatch Front.

Utah Department of Transportation Pedestrian and Bicycle Guide (2008)

The Pedestrian and Bicycle Guide was created to provide UDOT staff and interested citizens information on how to improve walking and bicycling conditions. The guide addresses design and maintenance, funding, education and the UDOT project development process of active transportation facilities.

4 UDOT State Bicycle Plan: Bicycle Facility Gap Analysis & Utah Collaborative Active Transportation Study (2014)

Public Involvement

The development of this Plan relied on a variety of means to engage the public and stakeholders. A Project Management Team (PMT) composed of one representative for each city in the study area was convened to provide project direction, engage with the public, review recommendations, and provide input. A larger Advisory Committee, including members of the PMT, was formed to involve a greater selection of decision-makers within the region, including those from UDOT, Utah County, and UTA. The Advisory Committee provided oversight and input during key points during Plan development.

To engage the public, an open house was held at the Spanish Fork Park Pavilions on October 22, 2015. This open house was intended to provide an overview of the project and seek feedback from the public on potential bicycle and pedestrian facility types to be included in recommendations and desired regional connections. Presentation boards introduced the project, draft goals, existing conditions, and potential improvements. Through interactive exercises, the PMT learned that canyon access, continuous trails, and improved crossings of railroads, arterials, and freeways were among the top desires of those who attended the open house.

Additionally, an interactive online map was available as a means to provide input from mid-September 2015 through the end of October 2015. Almost 100 users provided location-specific information about the routes they currently, or would like to, walk and bike. Registration for the online map involved a short survey that asked limited demographic data. In total, 65 percent of users were male while just 30 percent were female (five percent chose not to specify). Nearly every responder (96 percent) walk or bike for recreation or exercise while less than half (44 percent) bike or walk for transportation.

The survey also asked users about their interest and comfort in riding (see Table 1). Research indicates that people fall into one of the four categories shown in Figure 3, which are closely correlated to the categories asked in the survey.[5] The research posits that the "interested but concerned" could become more frequent riders with safer, more comfortable facilities. The survey showed that 37 percent of respondents sit in this "interested but concerned" category. Another 43 percent are "enthusiastic and confident" by their willingness to ride in traffic, but prefer to ride in dedicated bike lanes and routes.

5 Dill, Jennifer and Nathan McNeil. "FOUR TYPES OF CYCLISTS? Testing a Typology to Better Understand Bicycling Behavior and Potential." Portland State University, 2012.

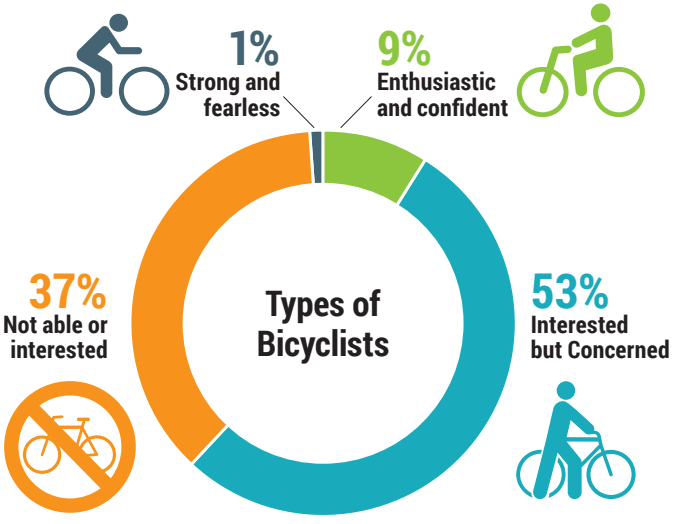
Attendees of the project open house discuss Payson's bike network

Information gathered via the online map showed that participants were interested in intercity connections, such as between Springville and Provo, Springville and Mapleton, Payson and Spanish Fork, Salem and Mapleton, and Santaquin and Payson. Users expressed an interest in accessing Utah Lake, Spring Lake, and the mountains via the canyon roads.

Table 1 Online Map User Survey

FREQUENCY AND COMFORT OF RIDING	PERCENTAGE
I do not ride a bicycle and am unlikely to ever do so.	6%
I would like to bicycle more, but I prefer not to ride in traffic	37%
I am willing to ride in traffic, but I prefer dedicated bike lanes and routes.	43%
I am willing to ride in mixed traffic with cars on almost any type of street.	14%

Figure 3 Types of Bicyclists



Plan Organization

This Plan is organized into six chapters including this one.

- **CHAPTER ONE** acts as the introduction to the plan including how the plan originated, the regional context, background information on Utah County, and an overview of important planning efforts leading up to the Plan's development.
- **CHAPTER TWO** provides an overview of the bicycle and pedestrian elements included within this Plan.
- **CHAPTER THREE** represents the pedestrian element of the Plan, including the selection of and development of community-based focus area recommendations.
- **CHAPTER FOUR** represents the bicycle element of the Plan, including existing bikeways and the study network development. The regional bicycle recommendations are included in this chapter.
- **CHAPTER FIVE** includes the programmatic elements, including education, encouragement, enforcement, and evaluation that enhance and complement the engineering recommendations presented in Chapters Three and Four.
- **CHAPTER SIX** covers implementation, including cost estimates, and funding strategies.
- **APPENDIX A** provides general design considerations for the implementation of bicycle and pedestrian facilities recommended within this Plan.
- **APPENDIX B** includes a bicycle and pedestrian crash analysis.

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2 Bicycle and Pedestrian Facilities

This chapter presents descriptions of the different types of bicycle and pedestrian facilities that are recommended in this Plan. Specific regionally-focused bicycle recommendations can be found in Chapter Four, and pedestrian- and locally-focused bicycle recommendations can be found in the community summaries in Chapter Three. Design guidance for all of these treatments is presented in Appendix A.

Bicycle Treatments

The following section provides descriptions of types of on-and off-street bicycle facilities recommended as part of this Plan.

Bikeway

A bikeway is any facility that is open for the use of bicyclists. Bikeways include on-street facilities such as bike lanes and neighborhood byways, as well as off-street facilities such as shared use paths. All of the on- and off-street bicycle facilities described in this section are considered bikeways.

Accessing open space via bicycle

Off-Street Facilities

Shared Use Path (Paved Trail)

A shared use path is an off-street bicycle and pedestrian facility that is physically separated from motor vehicle traffic. Typically, shared use paths are located in parks, stream valley greenways, along a utility corridor, or along abandoned railroad corridors. Shared use paths are for bicyclists, pedestrians, skaters, wheelchair users, and other non-motorized users. These are typically constructed of concrete or asphalt.

Soft Surface Trail

Soft surface trails provide bicyclists and pedestrians a low-stress facility separate from motor vehicle traffic. Typically, shared trails are located in parks, forests, along utility corridors, or along abandoned railroad corridors. Due to their unpaved surface, these trails are typically more recreationally-focused and are used by mountain bikers, hikers, walkers, and joggers.

On-Street Facilities

Bike Lane

A bike lane is a pavement marking that designates a portion of a street for the preferential or exclusive use of bicycles. Bike lane markings are typically dashed where vehicles are allowed to cross the bike lane, such as for right turns or at driveway crossings. Bike lanes are best suited for two-way local and collector streets where there is enough width to accommodate a bike lane in both directions, and on one-way streets where there is enough width for a single bike lane.

Buffered Bike Lane

Buffered bike lanes are created by striping a buffer zone between a bike lane and the adjacent travel lane. Some buffered bike lanes also offer a painted buffer between the bike lane and an adjacent parking lane. Buffered bike lanes should be considered at locations where there is excess pavement width or where adjacent traffic speeds are at or above 35 mph.

Separated Bike Lane

A separated bike lane, sometimes called a cycle track, is a bicycle facility that is physically separated from both the street and the sidewalk. A separated bike lane may be constructed at street level using street space, or at the sidewalk level using space adjacent to the street. Separated bike lanes isolate bicyclists from motor vehicle traffic using a variety of methods, including curbs, raised concrete medians, bollards, on-street parking, large planting pots/boxes, landscaped buffers, or other methods.

Separated bike lanes designed to be level with the sidewalk should provide a vertical separation between bicyclists and pedestrians, or different surface treatment to delineate the bicycle from the pedestrian space (such as asphalt versus concrete). Separated bike lanes can be one way for bicycles on each side of a two-way road, or two-way and installed on one or both sides of the road. Separated bike lanes provide bicyclists with a higher level of comfort compared to bike lanes, and are typically used on large multi-lane arterials where higher vehicle speeds exist. They may also be appropriate on high-volume but lower-speed streets.

Shared Street

Shared lane markings (sharrows) may be used to designate bicycle facilities where there is not sufficient width for bike lanes. Bicyclists and motor vehicles will share the same travel lane so the sharrow can help position bicyclists in the best riding location while directing bicyclists away from the "door zone" of parked cars, alerting motorists of appropriate bicyclist positioning, and encouraging safe passing of bicyclists by motorists. The "BICYCLES MAY USE FULL LANE" sign (R4-11 in the Manual of Uniform Traffic Control Devices [MUTCD] is commonly used in conjunction with shared lane markings).

Neighborhood Byway (Bike Boulevard)

A neighborhood byway (sometimes called a bike boulevard or greenway), is a street with low motorized traffic volumes and speeds designated to provide priority to bicyclists and neighborhood motor vehicle traffic. Neighborhood byways may simply have signs and shared lane markings, or may include traffic calming elements consisting of speed humps, traffic circles, chicanes, or traffic diverters. Neighborhood byways benefit neighborhoods by reducing cut-through traffic and speeding without limiting access by residents.

Paved Shoulder

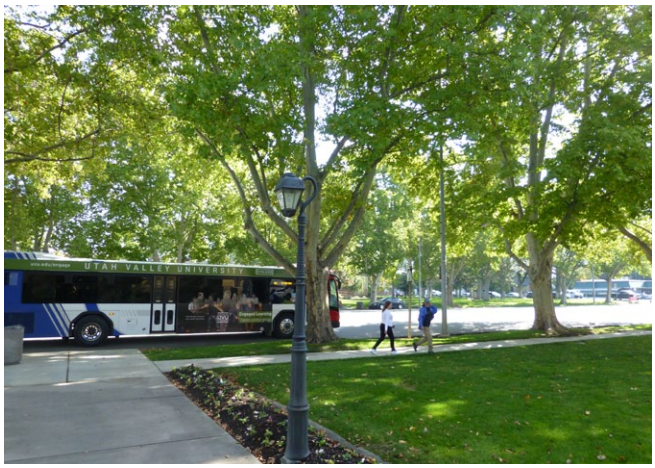
The shoulder is the section of the roadway outside of the travel lanes. When paved and of sufficient width, paved shoulders can serve as a bicycle accommodation. Additionally, paved shoulders provide safety and maintenance benefits. They should typically be four feet or wider to serve as a bicycle accommodation, although three feet may be acceptable on lower volume roads.

Pedestrian-Specific Facility Types

Pedestrian facilities is a general term to include a number of accommodations for people walking. These include sidewalks, paths, pedestrian signals, crosswalk markings, and median islands. Some of the recommendations for bicyclists, such as shared use paths and unpaved trails described previously, will also accommodate pedestrians.

Design details for these facility types are available from the following resources:

- The American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design, and Operation of Pedestrian Facilities (2004) **https://bookstore.transportation.org/item_details.aspx?id=119**
- The Federal Highway Administration's (FHWA) MUTCD (2009) **http://mutcd.fhwa.dot.gov/**
- The National Association of City Transportation Officials (NACTO) Urban Street Design Guide (2013) **http://nacto.org/usdg/**
- Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations Final Report and Recommended Guidelines **http://www.fhwa.dot.gov/publications/research/safety/04100/index.cfm**



Sidewalk

Sidewalks are used to separate foot traffic from vehicle traffic, to reduce conflicts, and to increase pedestrian comfort. Sidewalks are typically constructed of concrete and are located immediately adjacent to streets, preferably with a landscape buffer. Recent research has supported sidewalks as being very effective in reducing crashes.

Marked Crosswalks

Extensions of sidewalks through intersections are legal crosswalks under state and local laws, regardless of if they are painted on the street. At busier intersections, signalized intersections, and at mid-block crossings, crosswalks are marked for additional visibility for motorists and to direct pedestrians to the appropriate crossing area. Standard crosswalks are composed of two parallel lines across a street, however continental crosswalks provide greater visibility than standard crosswalks. Continental markings consist of 12 inch or wider bars that run in the direction of traffic; if perpendicular edge lines are included (as shown), the crosswalk may be referred to as a "ladder" style. Continental crosswalks should be considered at busier street crossings, at unsignalized crossings, in school zones, and any locations where pedestrian crossings are difficult.

Median Crossing Island

Medians provide space in the middle of intersections for pedestrians to stage crossings in multiple steps. These facilities make crossings easier and safer for pedestrians. They should be a minimum of six feet in width and length.

Rectangular Rapid Flash Beacon (RRFB)

Rectangular Rapid Flash Beacons (RRFBs) are user-actuated amber light emitting diodes (LEDs) that supplement warning signs at unsignalized crossing locations at intersections or mid-block. When a pedestrian triggers the system, the lights flash rapidly, drawing attention to the warning sign and the presence of a pedestrian. RRFBs are only active when triggered by a pedestrian either actively (i.e., push button) or passively. They cost less than full signals and have been shown to increase driver yielding behavior.

Curb Extension

Curb extensions extend the sidewalk into the parking lane of a street to narrow the roadway, provide additional pedestrian space, and reduce the distance of the street crossing for pedestrians. Curb extensions can be used at intersections or at mid-block crossings. Care should be taken to ensure that curb extensions do not extend into bike lanes. Curb extensions also function as a traffic calming device as the narrowing of the roadway tends to slow traffic speeds.

3 Focus Areas

Walking is the most universal mode of transportation. All people are pedestrians at one point or another—walking either on foot or using mobility devices. Those who cannot afford, or do not have access to personal cars, including children, many seniors, and people with disabilities, rely on walking to accomplish their daily tasks.

The Mountainland Association of Governments (MAG) and its member communities recognize that everyone is a pedestrian. Walking trips can be made alone or in conjunction with transit, driving, and/or bicycling. Coordination with these other modes can improve the functionality, as well as expand the scope of, a pedestrian network. Walking then becomes a viable part of any trip.

Across the County, walking is an important mode of transportation for all residents to access employment, transit, goods and services, community spaces, and recreational opportunities. Table 1 lists the top reasons why people walk, as documented in the US Department of Transportation's 2012 National Survey of Pedestrian Bicyclists Attitudes and Behaviors, Highlights Report.

Table 2 Why Are People Walking?

REASONS FOR WALKING	PERCENTAGE
Exercise or health	39%
Personal errands	17%
Recreation	15%
Walk the dog	7%
Visit a friend or relative	7%
Commuting to/from work	7%
Commuting to/from school	3%
Requires for job	2%

Table 3 Demand Weightings

FACTORS	WEIGHTING
Population Density	22%
Employment	22%
Trails	17%
Network Density	11%
Regional Facilities	11%
On-street bike lanes and routes	11%
Transit	6%

Focus Areas

Due to the importance of walking, a pedestrian-focused analysis was completed to complement the development of regional network recommendations as discussed in Chapter Four. As opposed to the regional nature of the network connections, focus areas provide an opportunity to hone in on challenges and opportunities related to walking and biking within specific neighborhoods of each community. This Plan includes eight areas within which more detailed recommendations for improving pedestrian mobility and safety were made. The types of improvements and method by which they were identified and prioritized in these focus areas may be replicated in other parts of each community.

Selection Methodology

The project team selected draft areas of focus within each of the eight communities based on the following analyses and input:

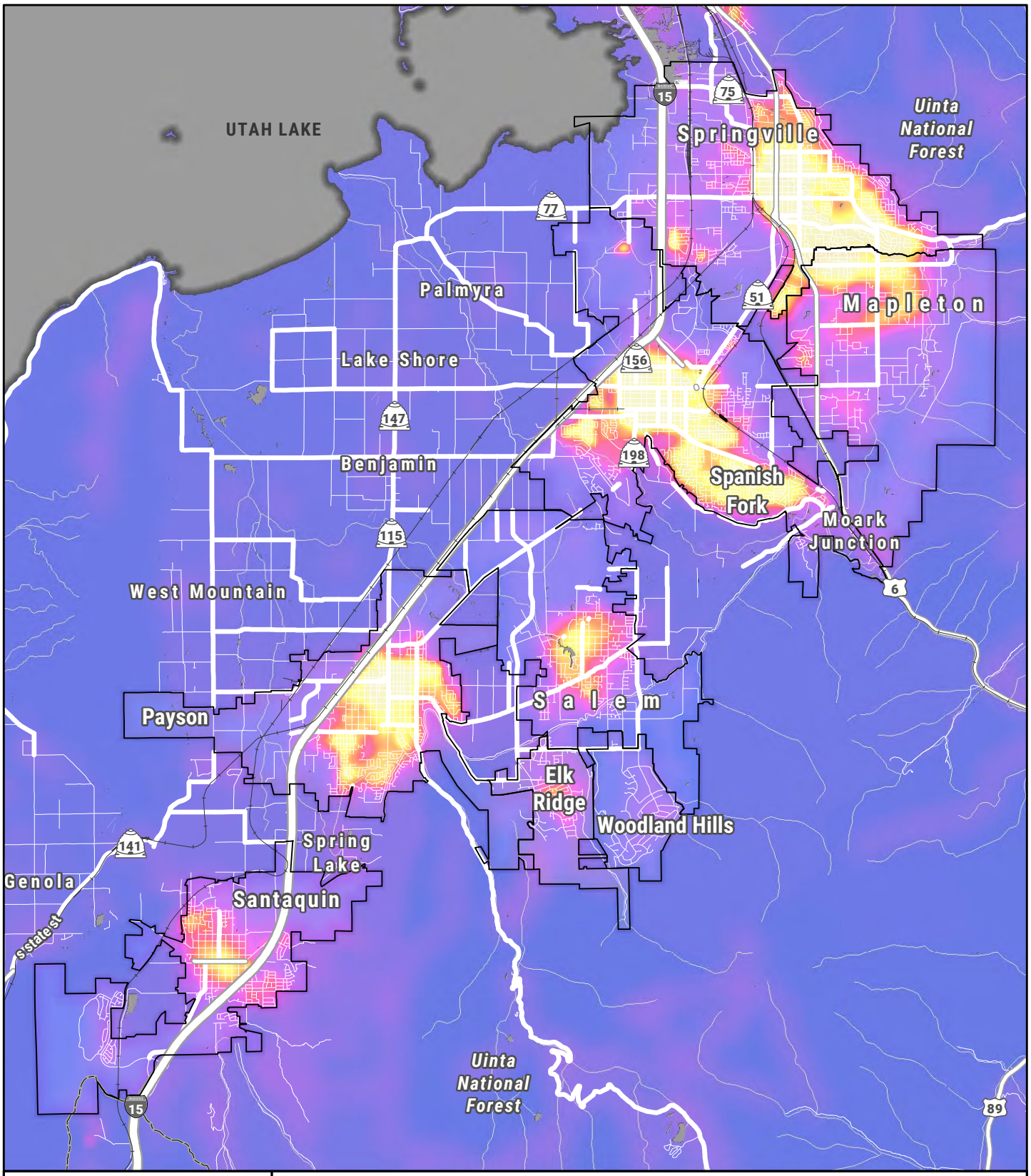
Demand Analysis

A Geographic Information System (GIS)-based demand analysis was conducted to assess the probable demand for active transportation infrastructure in the study area. Probable demand is based on the destinations and origins of trips for which people might choose to bike or walk if infrastructure conditions were adequate and desirable. Demand factors such as population and employment density, trails and on-street bike routes, transit facilities, and pedestrian network density were included in this analysis.

Table 3 shows the types of generators used to determine demand and the weight assigned to each, based on best practices. The following demand factors were chosen to estimate the demand for active transportation trips: population density, because it indicates the origin of a large portion of biking and walking trips; employment density to capture commute trips; trails and on-street bike routes to capture existing ridership; transit service and regional facilities to capture trip generators; and pedestrian network density to indicate the density of development patterns and street network connectivity.

Figure 4 shows the result of the demand analysis. The areas with the highest demand are shown in yellow. Within the study area, the highest demand is concentrated east of US-89 in Springville, in southern Springville where it connects with Mapleton, in Payson's downtown core near Main Street and 100 North, in Spanish Fork between Main Street and 100 North, and near Canyon Road in Spanish Fork. Areas with greater probable demand were first reviewed as potential focus areas as these hot spots are

Figure 4 Study Area Demand Analysis



School dismissal in Springville

likely to have greater foot and bike traffic. Further criteria, such as that listed below, was considered in addition to the GIS-based demand areas.

Stakeholder Input

Members of the PMT provided information about areas of challenge within their cities. This input was considered in addition to the demand areas.

Public Input

Input provided by the public via the online interactive map or at the public open house was considered when selecting focus areas. For example, the project team used GIS to overlay the desire lines and "places I would like to walk or bike" created in the online map with the areas of greatest demand to easily see overlap between the GIS-based analysis and the public's input.

Activity Generators

Presence of schools, churches, or other pedestrian-based activity centers influenced the selection of focus areas. The project team reviewed the existing barriers between residences and schools, parks, and commercial districts to evaluate the potential benefit of pedestrian- and bicycle-focused improvements.

Barriers

Barriers such as railroad lines, freeways, arterials, and other obstacles that make it uncomfortable to walk or bike were considered in selecting areas to make focused bicycle and pedestrian recommendations.

Street Grid

Areas with a gridded street pattern and potential parallel routes to principal arterials were selected over areas with less connected street pattern due to feasibility of implementation in the short-term.

Santaquin Active Transportation Workshop

Salem Pond

Recommendations Development

The project team inventoried the existing challenges and barriers to walking and biking within each focus area. A Google Earth desktop review identified challenges to mobility and comfort, such as:

- Missing crosswalks,
- Difficult crossings,
- Wide crossings,
- Uncomfortable bike facilities,
- Missing sidewalks,
- Wide streets, and
- Long distances between crossings.

Then, based on field visits, further desktop reviews, conversations with PMT members, and best practices, draft focus area recommendations were developed. Initial draft recommendations addressed the challenges listed above, with sensitivity to the feasibility of implementation, cost, and levels of effort. Generally, focus area recommendations address pedestrian safety and comfort, though some linear bicycle-oriented improvements are also included to complement the regional recommendations (see Chapter Four).

Draft recommendations were presented to the PMT and stakeholders during the May 2016 Active Transportation Workshops. These workshops provided an opportunity to combine field visits and on-the-ground brainstorming with collaborative decision-making. Based on input received, the draft focus area recommendations were further modified and refined.

Recommendation Summaries

The following section provides focus area summaries and maps for each of the eight communities within the study area. These include a community overview, brief summary of the Active Transportation Workshop, and a narrative about the key issues and how the focus area recommendations address them. These summaries are intended to help the PMT, community leaders, and other decision-makers prioritize infrastructure recommendations to improve walking and biking within their communities.

SOUTH UTAH COUNTY

ELK RIDGE

ACTIVE TRANSPORTATION PLAN

Community Overview

Elk Ridge is a small residential community with few non-residential land uses. Elk Ridge's focus area is south of Park Drive and north of E Alpine Drive and includes the Elk Ridge City Town Office, a park, and one church. Currently, the area has no sidewalks or crosswalks to accommodate pedestrians so people walk on the narrow streets, in the adjacent bike lane, or in the wide gravel shoulders. The only traffic control in the area is one pair of stop signs at Escalante Drive and Park Drive controlling traffic on Escalante Drive. This area was chosen as a site for further study as there are opportunities to improve connectivity to parks, schools, and residences.

Active Transportation Workshop Summary

The Elk Ridge workshop was held on May 18, 2016. A representative from Elk Ridge City Council, a Planning Commissioner, the City's contract planner, and project team members gathered to discuss draft focus area recommendations.

Focus Area Recommendations

The focus area recommendations are intended to address the following issues identified over the course of the Plan and refined through the active transportation workshop.

Identified Issue:

The existing two-way bike lane along Park Drive is well-used by pedestrians and bicyclists in the area. However, without vertical separation such as a curb, some vehicles are parked within the non-motorized travel lane.

Response:

The addition of a buffer, whether with paint or a removable low-cost curb, would improve this treatment throughout Elk Ridge while providing greater comfort for people walking and biking. A buffered bike lane is proposed along Park Drive, N Canyon View Drive, and along E Alpine Drive.

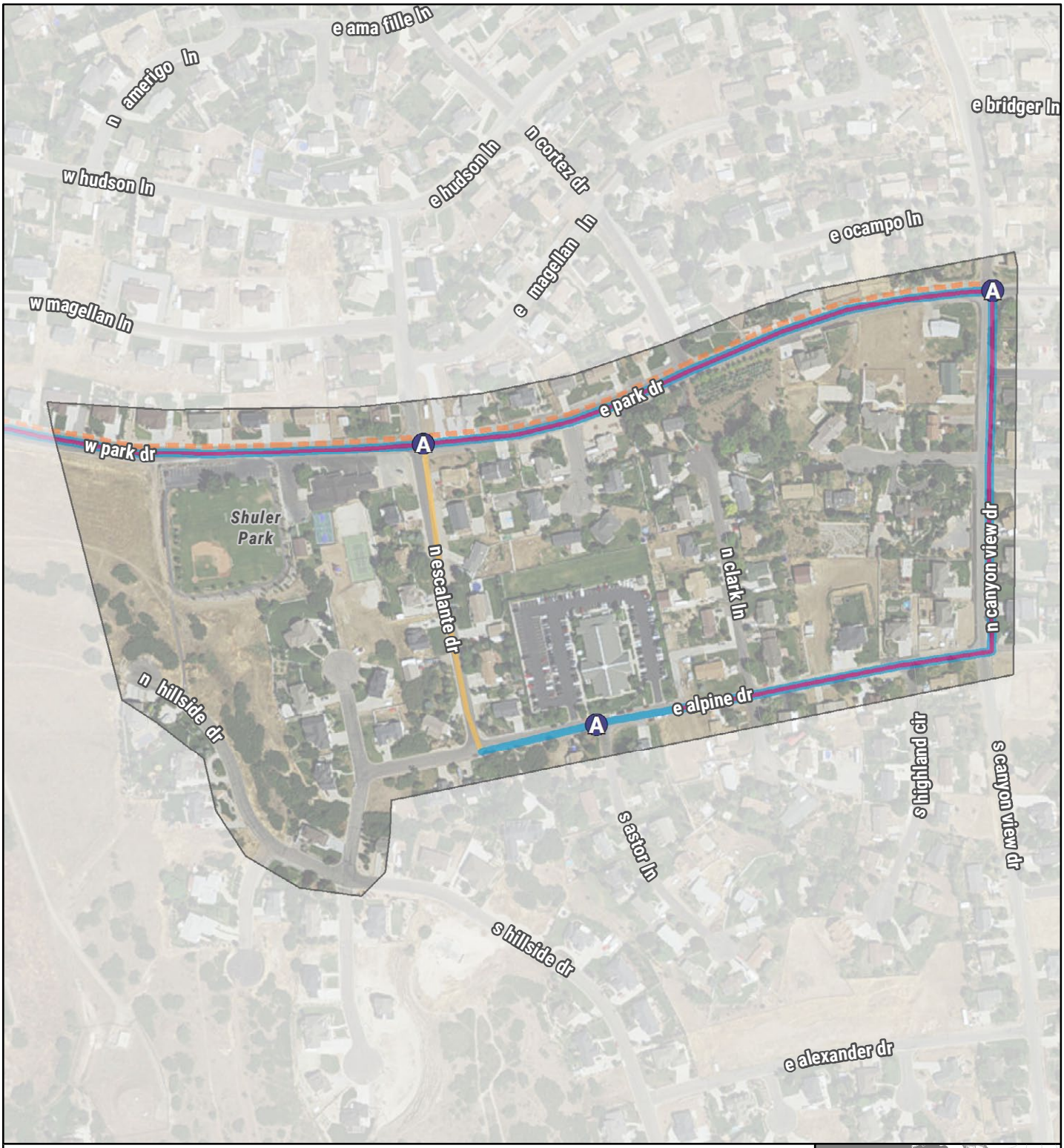
Identified Issue:

Vehicular traffic traveling along Park Drive often goes faster than the posted speed of 25 mph.

Response:

The addition of some traffic calming measures would improve travel for both pedestrians and bicyclists. Traffic calming is recommended along Park Drive to encourage drivers to travel at the posted 25 mph speed limit. This will create a safer, more comfortable environment for bicyclists and pedestrians that are riding with traffic or are walking along the shoulder of the road. Additionally, crosswalks should be added at the corner of Escalante Drive and Park Drive to supplement the existing pedestrian crossing warning signs and reinforce pedestrians' priority.

Figure 5 Elk Ridge



Elk Ridge Focus Area Recommendations

Recommendations

- A Crosswalk
- B High Visibility Crosswalk
- C Curb Extensions
- D Rectangular Rapid Flash Beacon
- E Median Island
- F Driveway Narrowing
- G Other

Recommendations

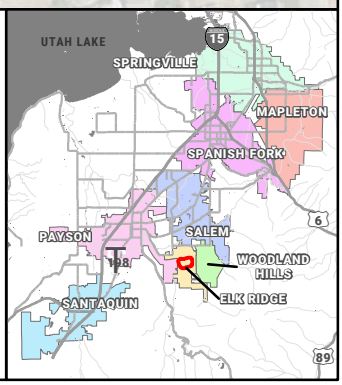
- Trail
- Separated Bike Lane
- Buffered Bike Lane
- Bike Lane
- Paved Shoulder
- Shared Lane Markings
- Traffic Calming

Regional Recommendations

- Trail
- Separated Bike Lanes
- Crushed Stone Trail
- Bike Lane
- Shared Streets

0 250 500 1,000 Feet

N



SOUTH UTAH COUNTY

MAPLETON

ACTIVE TRANSPORTATION PLAN

Community Overview

Mapleton's focus area is centered on Main Street and W 1200 N and it includes three schools, civic offices, and one church. This area was suggested for study as there are currently people walking and biking along the shoulder of 300 West Street, children biking along Maple Street, and a concentration of residents within and just north of the focus area.

Active Transportation Workshop Summary

The Mapleton workshop was held on May 17, 2016. Three City representatives took the project team for a tour of the focus area and the Mapleton Parkway Trail, which was still under construction at the time. Draft focus area recommendations and regional network recommendations were discussed in detail.

Focus Area Recommendations

The focus area recommendations are intended to address the following issues identified over the course of the Plan and refined through the active transportation workshop.

Identified Issue:
There is poor connectivity between Main Street and the Mapleton Parkway Trail, including missing sidewalks and crossings near Hobble Creek Elementary School.

Response:
Adding bike lanes, or shared lane markings where the rights-of-way along 1200 North Street are too narrow, will provide a place for people to safely bike. Closing a short sidewalk segment between the Elementary School and the trail will provide a direct connection between the two. Additionally, a crosswalk at the new trail crossing of 1200 North will improve visibility for people walking and biking.

Identified Issue:
Access to Mapleton Junior High School across 1200 North is challenging for people walking as the existing crosswalk lacks enhancements to call attention to the presence of pedestrians.

Response:
Adding a rapid flashing beacon across 1200 North Street will help students access the Junior High School.

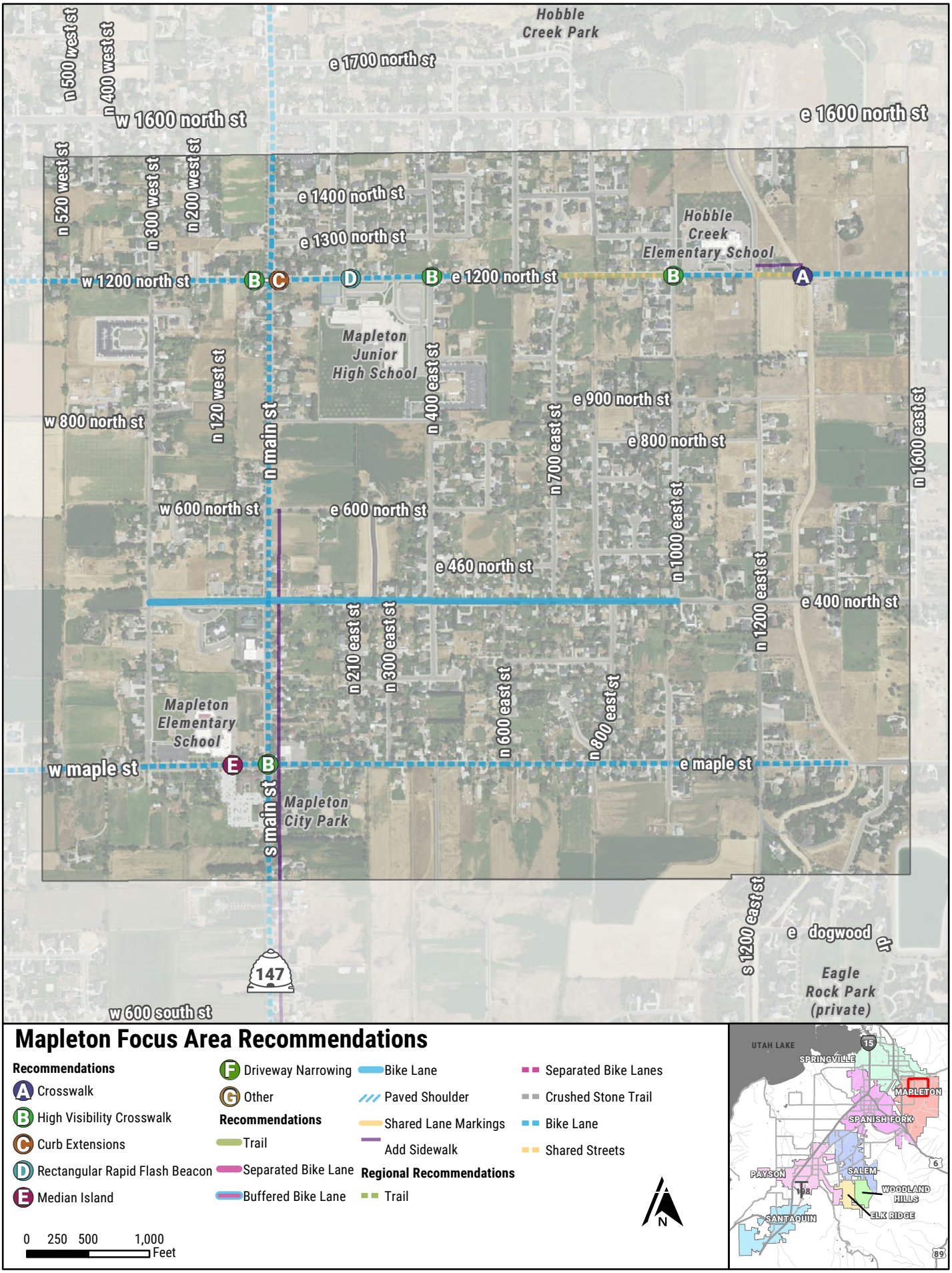
Identified Issue:
Crossing Main Street at 1200 North Street is a challenge for people walking and biking. The existing standard crosswalks along the east and southern approaches are insufficient to meet user needs.

Response:
Narrowing the crossing distance with curb extensions and adding high visibility crosswalks on all four approaches will improve pedestrian comfort and safety, especially important for children walking to school along 1200 North Street.

Identified Issue:
While driver compliance at the crosswalk across W Maple Street at Mapleton Elementary School is high, the crossing distance (of 56 feet) is still wider than is comfortable for pedestrians.

Response:
Adding a median crossing island on Maple Street will allow pedestrians to cross the street in two stages. This treatment will improve the comfort and safety for those crossing Maple Street, especially children and other vulnerable users.

Figure 6 Mapleton



Mapleton Focus Area Recommendations

Recommendations

- A Crosswalk
- B High Visibility Crosswalk
- C Curb Extensions
- D Rectangular Rapid Flash Beacon
- E Median Island
- F Driveway Narrowing
- G Other

Recommendations

- Trail
- Separated Bike Lane
- Buffered Bike Lane
- Bike Lane
- Paved Shoulder
- Shared Lane Markings
- Add Sidewalk

Regional Recommendations

- Trail
- Separated Bike Lanes
- Crushed Stone Trail
- Bike Lane
- Shared Streets

0 250 500 1,000 Feet

N

SOUTH UTAH COUNTY

PAYSON

ACTIVE TRANSPORTATION PLAN

Community Overview

Payson's focus area includes the commercial, residential, recreational, and cultural activity located south of 100 North Street and east of Main Street. This area includes the following activity generators:

- Peteetneet Museum and Cultural Arts Center
- Park View Elementary School
- Memorial Park
- Two churches
- Commercial activity south of 100 North

Active Transportation Workshop Summary

The Payson workshop was held on May 16, 2016. Payson City staff, a Payson City Planning Commissioner, a UDOT representative, and project team members gathered to discuss draft focus area recommendations. Due to inclement weather, the Payson workshop was held indoors at the Peteetneet Museum and Cultural Arts Center.

Focus Area Recommendations

The focus area recommendations are intended to address the following issues identified over the course of the Plan and refined through the active transportation workshop.

Identified Issue:

There is little to connect the Peteetneet Museum and Cultural Arts Center to Main Street. Additionally, the pavement width of E Utah Avenue is wider than necessary for existing traffic volumes.

Response:

City staff had indicated an interest in developing a cultural trail within the City and building upon the streetscaping along the north side of E Utah Avenue. Adding traffic calming along this street will slow vehicular speeds while increasing comfort for those walking and biking. Shared lane markings from N Main Street to 500 East Street will indicate that this is a multimodal street.

Identified Issue:

SR 198 presents a barrier for people walking to and from the downtown area. Existing crossings could be enhanced to improve visibility and reduce exposure of pedestrians crossing the street.

Response:

Adding high visibility crosswalks at Main St and 600 East would improve visibility of crossings. In addition, curb extensions at all crossings would narrow crossing distances and improve visibility, which is particularly important at unsignalized locations near transit stops (e.g., 200 East, 400 East, 500 E) A rapid flashing beacon at 200 East would increase motorist yielding and improve safety along this school walking route.

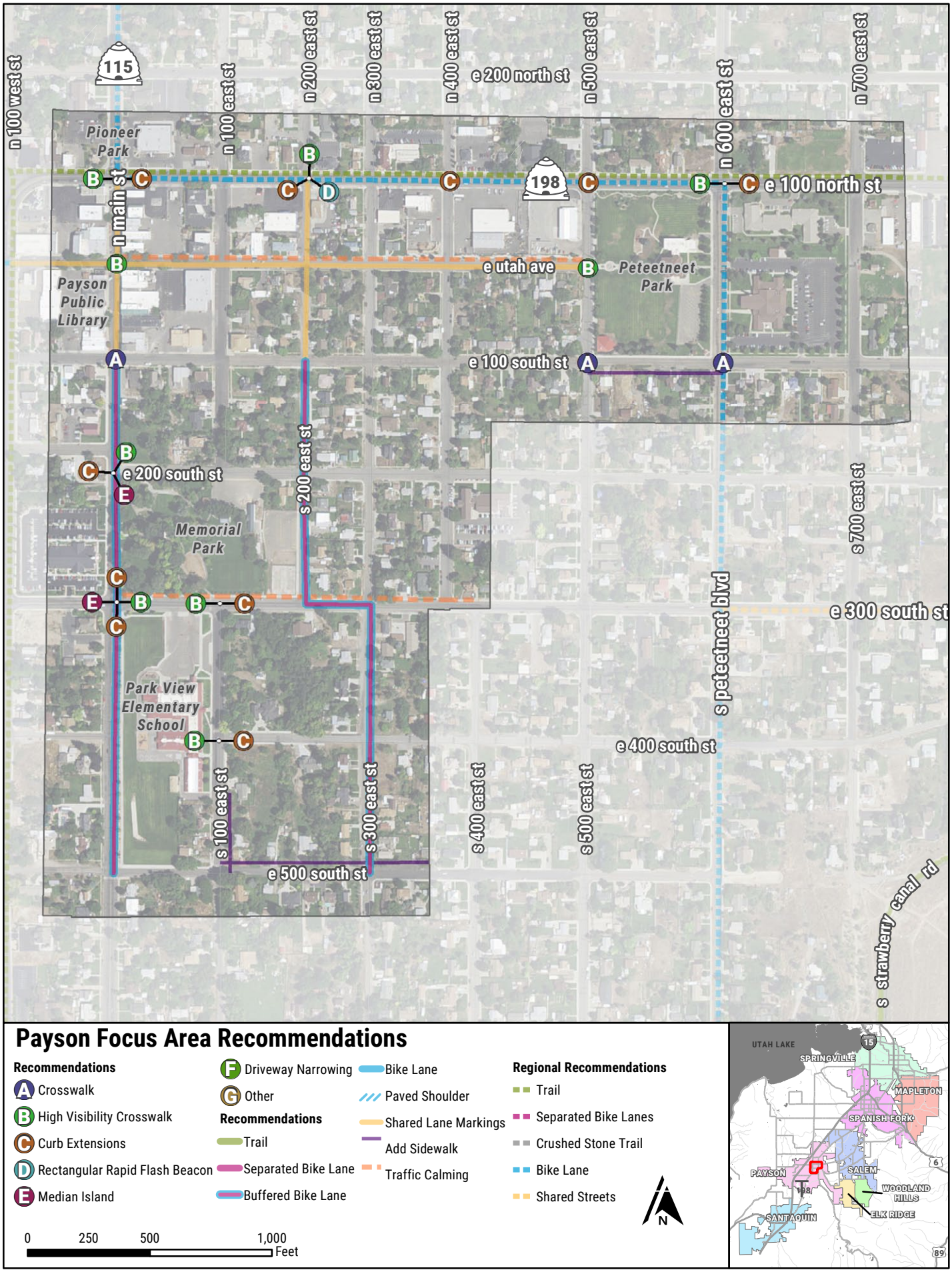
Identified Issue:

There are few crossings of 300 South to connect Park View Elementary School and Memorial Park. Additionally, there are no on-street bike facilities in this area for children biking to and from school.

Response:

The crossing of 300 South at Main Street is the most challenging for people walking and biking. Proposed curb extensions on 300 South, coupled with a median island and a high visibility crosswalk, would provide a safer crossing. Curb extensions added to the midblock crossing at 100 East Street leading to Memorial Park will shorten the crossing distance and improve pedestrian safety. Additionally, buffered bike lanes on S Main Street and 300 East Street to 200 East Street will provide improved bike circulation and connection throughout the focus area.

Figure 7 Payson



SOUTH UTAH COUNTY

SALEM

ACTIVE TRANSPORTATION PLAN

Community Overview

Salem's focus area includes the commercial, residential, recreational, and cultural activity located south of E 100 N Street and west of S Main Street. Knoll Park, Salem Pond, Salem Elementary School, and Salem Hills High School are key generators of walk and bike trips, but State Route (SR) 198 and the non-gridded street pattern are deterrents to connectivity. This portion of Salem was chosen as an area of focus due to its need for improved connections to schools and the park.

Active Transportation Workshop Summary

The Salem workshop consisted of a meeting with City Staff held on May 18, 2016. The group gathered to discuss Salem's draft focus area and regional network recommendations.

Focus Area Recommendations

The focus area recommendations are intended to address the following issues identified over the course of the Plan and refined through the active transportation workshop.

Identified Issue:

The crossing of SR 198 at 100 West Street poses a major challenge for pedestrians due to the traffic volumes, speeds, and width of SR-198. The high school just north of SR-198 generates high pedestrian activity at this crossing. Several near-misses have already occurred here, which indicates that crossing improvements are needed.

Response:

SR-198 is controlled by UDOT and the City of Salem is already working to add pedestrian crossing improvements at this location. Adding curb extensions and a median island will shorten the crossing distance while providing a refuge space for pedestrians, allowing them to cross the street in two stages. Adding a rapid flash beacon will alert drivers to the presence of pedestrians that are about to cross or are actively crossing.

Identified Issue:

Access to Salem Elementary School by foot and bike is limited. There are no bike facilities and places with missing sidewalks. Center Street has sidewalks that are too narrow to meet the demand of people walking to school.

Response:

Adding shared lane markings to Main Street south of SR-198 will provide a space for bikes. North of SR-198, the road widens and there is enough space for buffered bike lanes. Adding an asphalt trail on the south side of Center Street will accommodate people walking and biking to Salem Elementary School. Additionally, adding sidewalk along the south side of 100 South Street between 100 West Street and S Main Street will provide a place for people to walk that is separated from motor vehicles.

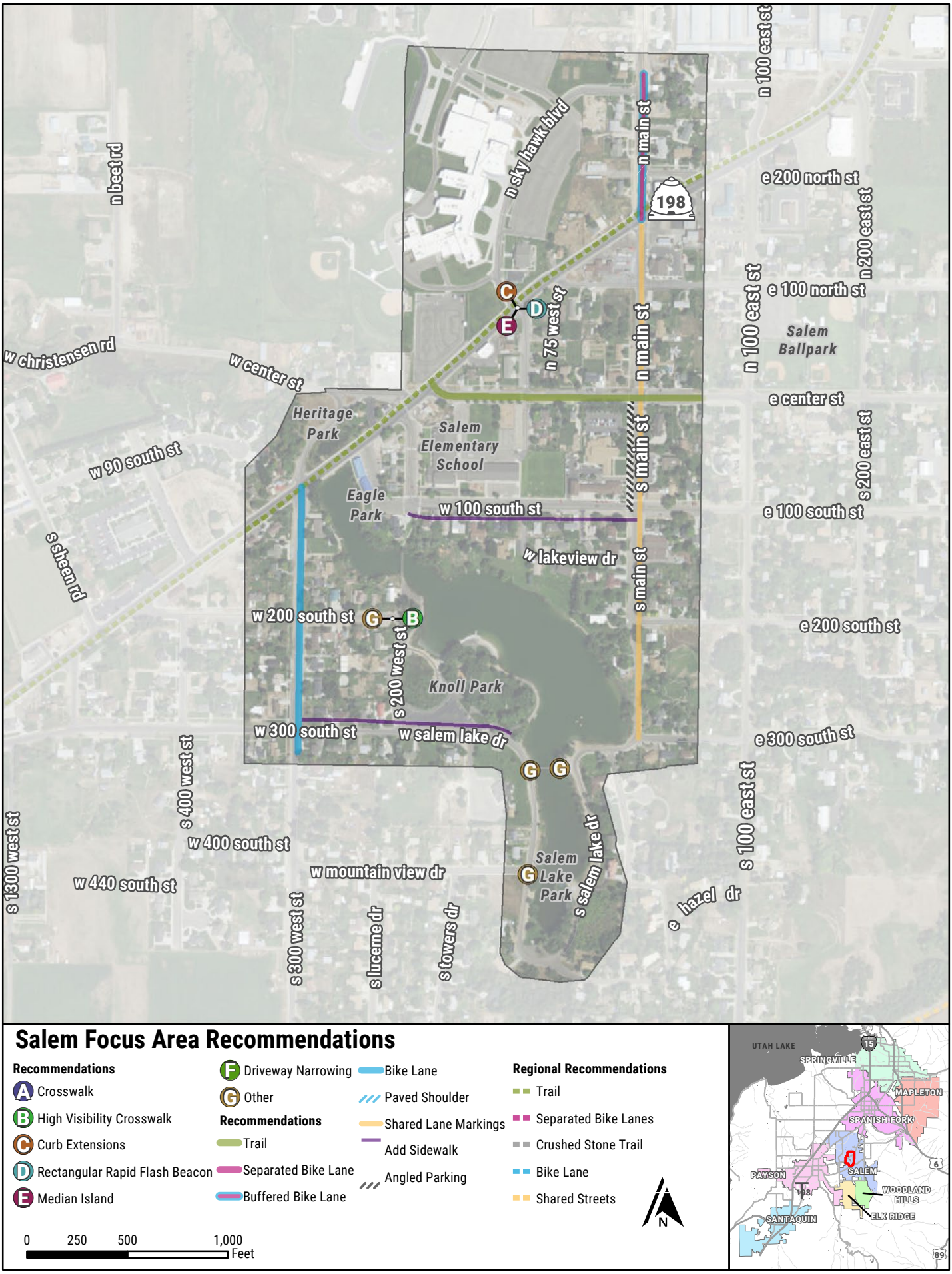
Identified Issue:

Knoll Park is a boon to the community with its picturesque views of the mountains and Salem Pond However, small barriers within and adjacent to the park prohibit connectivity. For example, the bollards placed at either end of the bridge between S Salem Lake Drive and W Salem Lake Drive make it challenging for people on bikes or using mobility devices to cross.

Response:

The bridge span is already too narrow for motorized access, so the bollards should be removed to allow for the free movement of people. At the intersection of 200 South Street and 200 West Street, where the street turns, adding a high visibility crosswalk and stop control will more clearly define the intersection. Further south, at W Mountain View Drive and W Salem Lake Drive, due to the slope of the street, some drivers may take the turning movement faster than the corner visibility allows. Adding a sign, STATE LAW YIELD TO PEDESTRIANS, will remind drivers to slow down and yield to pedestrians.

Figure 8 Salem



SOUTH UTAH COUNTY

SANTAQUIN

ACTIVE TRANSPORTATION PLAN

Community Overview

The area of Santaquin centered along E Main Street between S 500 W and I-15 was suggested as an area of focus as there are opportunities to improve connectivity to parks, Santaquin Elementary School, churches, stores, and other community destinations.

Active Transportation Workshop Summary

The Santaquin workshop was held on May 17, 2016. City representatives and Planning Commissioners took the project team for a tour of the focus area. Draft focus area recommendations and regional network recommendations were discussed in detail.

Focus Area Recommendations

The focus area recommendations are intended to address the following issues identified over the course of the Plan and refined through the active transportation workshop. Understanding that Main Street is expected to become a five-lane cross section within the next eight years, the focus area recommendations will lay a foundation for short term bicycle and pedestrian improvements within the city.

Identified Issue:

Santaquin Elementary School anchors western Santaquin, however, there are portions of sidewalk missing adjacent to the school along 400 West Street and the nearest perpendicular side streets. Additionally, pedestrian access to Main Street at 400 West is insufficient to meet user needs along this busy road. While a school guard helps children cross the street during school arrivals and dismissals, the existing crosswalk is insufficient in terms of drawing motorists' attention to the crossing.

Response:

A median island and rapid flashing beacon should be added to the crosswalk at 400 West Street and Main Street. This will shorten the crossing for children accessing the school by breaking it into two parts, while and the beacon will alert drivers to pedestrians' presence. Completing the sidewalk network immediately adjacent to the elementary school will help improve access and safety.

Identified Issue:

There is poor bike connectivity within the focus area, especially for crossing Main Street.

Response:

Adding bike lanes on 200 West Street, 100 South Street, and N Center Street will create a network of facilities within the area. The City anticipates future crossings of Main Street at 200 West and Center Street, which will improve connectivity. Additionally, there is a long-term plan for a 10-foot trail for 200 West with center landscape median. Adding a bike lane would establish the bike route in the short-term.

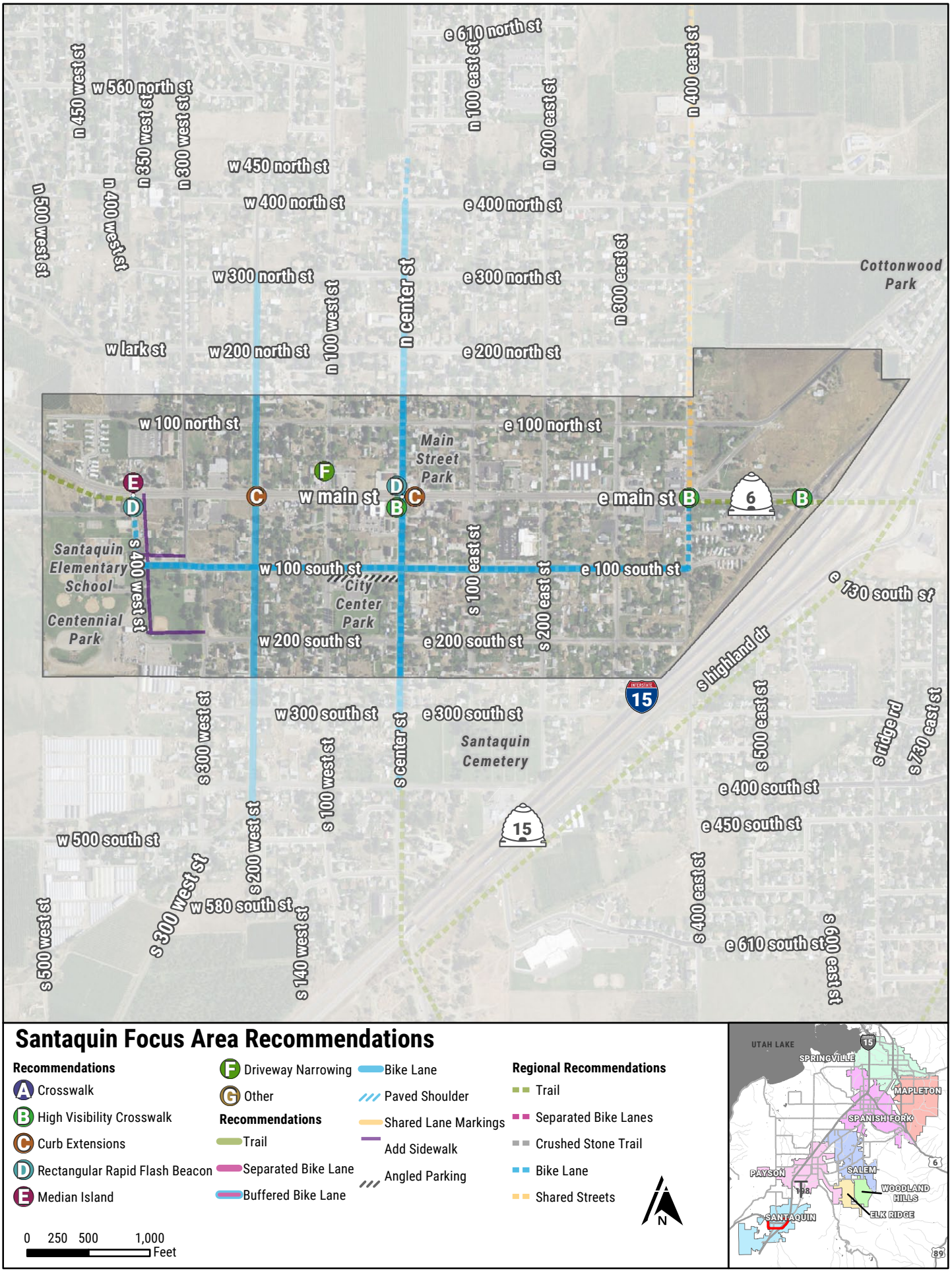
Identified Issue:

Center Street, the intended gateway to the City's north side, has a challenging crossing of Main Street. There are missing curb ramps, no crosswalks, and no signal. Due to the long spacing between signalized crossings, pedestrians have to walk over a half mile out of direction to cross at a signalized location.

Response:

Enhancing this crossing in the short-term will help improve safety for those walking and biking prior to the implementation of a full signal. Crosswalks will indicate to all roadway users where pedestrians are present, a rapid flashing beacon will alert drivers to pedestrians' presence in a very visible manner, and curb extensions will shorten the crossing distance.

Figure 9 Santaquin



SOUTH UTAH COUNTY

SPANISH FORK

ACTIVE TRANSPORTATION PLAN

Community Overview

Spanish Fork's focus area includes two high schools, residential neighborhoods, large city parks, and the convergence of the city's two primary arterials: Center Street and Main Street. The area was chosen because of the needed connectivity across these streets. The schools, churches, parks, government buildings, and Main Street generates a high level of activity within this area that can be served via improved bicycle and pedestrian facilities.

Active Transportation Workshop Summary

The Spanish Fork workshop was held on May 17, 2016. Spanish Fork City staff, City Councilors, and project team members gathered to discuss draft focus area recommendations. The team walked Main and Center Streets while discussing the draft focus area recommendations in detail.

Focus Area Recommendations

The focus area recommendations are intended to address the following issues identified over the course of the Plan and refined through the active transportation workshop. Spanish Fork's recommendations are consistent with the "Rediscover Historic Downtown Spanish Fork: Implementation Strategies to Promote Business, Heritage, and Community" published in September 2015 by the American Planning Association. This report outlines a vision for downtown N Main Street between E Center Street and E 400 N Street. The long-term Main Street Design Concept for this corridor includes a 32-foot landscaped median, similar to Provo, with a 12-foot outer lane shared lane marking to accommodate bicyclists. This cross section would include curb extensions and crosswalks at every intersection and across Main Street.

Identified Issue:

The existing marked crosswalks on Center Street are over a half mile apart, and only one crossing is marked near Spanish Fork High School. This detracts from pedestrian safety, comfort, and mobility along and across these two streets.

Response:

Two high visibility crosswalks should be added at 300 West Street and 200 West Street to increase pedestrian visibility across Center Street. Additionally, a rapid flashing beacon, median island, and high visibility crosswalks are recommended at 630 West street to improve visibility and crossings to the stadium. This actuated signal will be helpful during sporting events and during normal school hours for students who walk or bike to school.

Identified Issue:

People use 475 West Street between 100 South Street and W Center Street between the church and the residential neighborhood as a cut through route. There are reported speeding issues beyond the 25 mph speed limit that have not been ameliorated through short-term enforcement measures.

Response:

Traffic calming measures such as vertical and horizontal deflection along this street would slow traffic and improve safety.

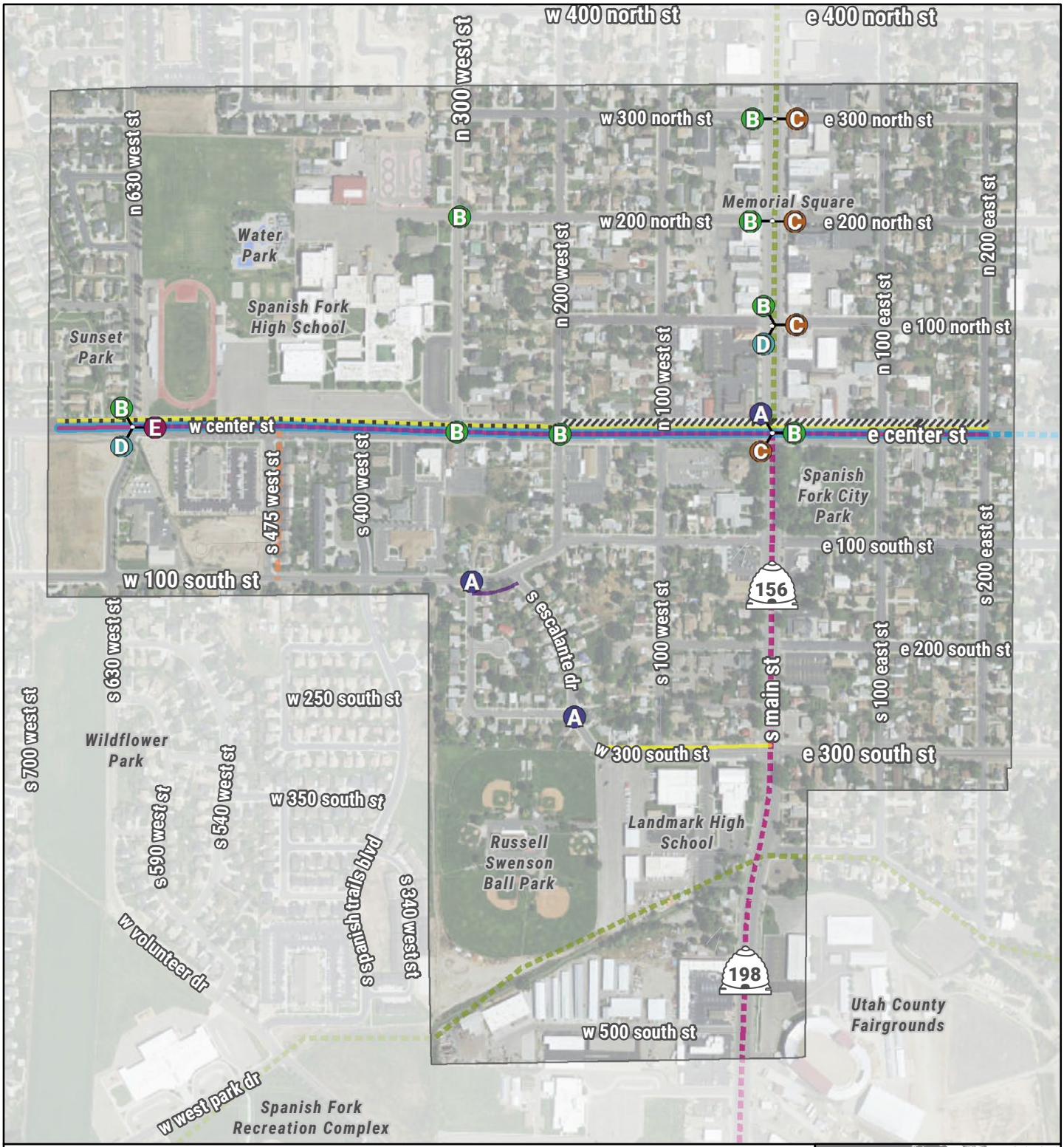
Identified Issue:

Main Street and Center Street have wide curb-to-curb widths (over 90 feet) and over five travel lanes plus on-street parking. These widths present a barrier for pedestrians and bicyclists crossing both streets while reducing comfort. Wide cross sections can lead to higher automobile speeds in spite of the 25 mph speed limit on Center and 30 mph speed limit on Main Street.

Response:

Narrowing the crossing distances will help to improve the pedestrian crossing experience. Spot improvements, such as curb extensions on Main Street at Center Street, will help narrow the crossing distances. Additionally, reconfiguring Center Street to have fewer or narrowed travel lanes would slow travel speeds while providing space for a buffered bike lane. Striping angled parking and on-street parallel parking will further narrow the visual cross section. These improvements will help to improve the walking and biking environments along and across these two streets.

Figure 10 Spanish Fork



Spanish Fork Focus Area Recommendations

Recommendations

- A Crosswalk
- B High Visibility Crosswalk
- C Curb Extensions
- D Rectangular Rapid Flash Beacon
- E Median Island
- F Driveway Narrowing
- G Other

Recommendations

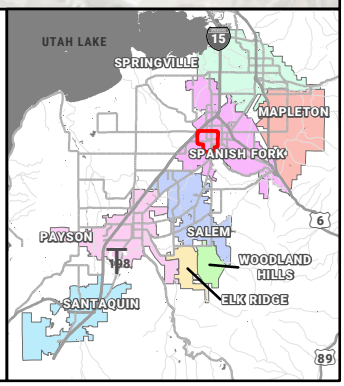
- Trail
- Separated Bike Lane
- Buffered Bike Lane
- Bike Lane
- Paved Shoulder
- Shared Lane Markings
- Add Sidewalk
- Stripe Parking
- Angled Parking
- Traffic Calming
- Street Reconfiguration

Regional Recommendations

- Trail
- Separated Bike Lanes
- Crushed Stone Trail
- Bike Lane
- Shared Streets

0 250 500 1,000 Feet

N



SOUTH UTAH COUNTY

SPRINGVILLE

ACTIVE TRANSPORTATION PLAN

Community Overview

The Springville focus area is centered on Memorial Park in central Springville. This area showed high demand for walk and bike trips. However, due to the street pattern and challenges in crossing E Center Street, 400 East Street, and 400 South Street, there are great opportunities to improve intersection crossings, connectivity, and residential access to schools, churches, and commercial activity.

Active Transportation Workshop Summary

The Springville workshop was held on May 17, 2016. The Mayor of Springville, City staff, a Planning Commissioner, and other representatives took the project team for a tour of the focus area. Draft focus area recommendations and regional network recommendations were discussed in detail.

Focus Area Recommendations

The focus area recommendations are intended to address the following issues identified over the course of the Plan and refined through the active transportation workshop.

Identified Issue:

Most issues in the Springville focus area that present problems for pedestrian and bicycle travel relate to the widths and configuration of streets. Portions of Center Street and 100 South Street are overly wide for the functions they serve. Each of these streets carries two lanes of automobile traffic, but is over 60 feet wide. Open sections like this may lead to faster vehicular travel speeds than posted speed limits, making crossing the street more difficult for pedestrians and riding along the street less comfortable for bicyclists.

Response:

Adding a buffered bike lane on Center Street between 200 East Street and 400 East Street will provide an enhanced bike facility without compromising vehicular operations. Additionally, adding traffic calming, a sidewalk, and back-in angled parking along 100 South Street will improve access to Memorial ballpark. Treatments such as striping of bike lanes or parking bays work to narrow the visual expanse of a roadway, thereby encouraging motorists to reduce travel speeds.

Identified Issue:

There is poor east-west connectivity for people biking through this area, especially for eastern Springville residents into the center city.

Response:

Adding bike facilities, shared lane markings and bike lanes, along 245 South Street between 400 East and 800 East Streets will provide a connection along this low-volume street that connects the church, Memorial Ballpark, and Summit Center. Adding back-in angled parking along both sides of the curved street between the church and park will further narrow the street and provide traffic calming. Continuing the shared lane treatment up to 200 South Street provides a second option for people to access the proposed bike lanes on 400 East.

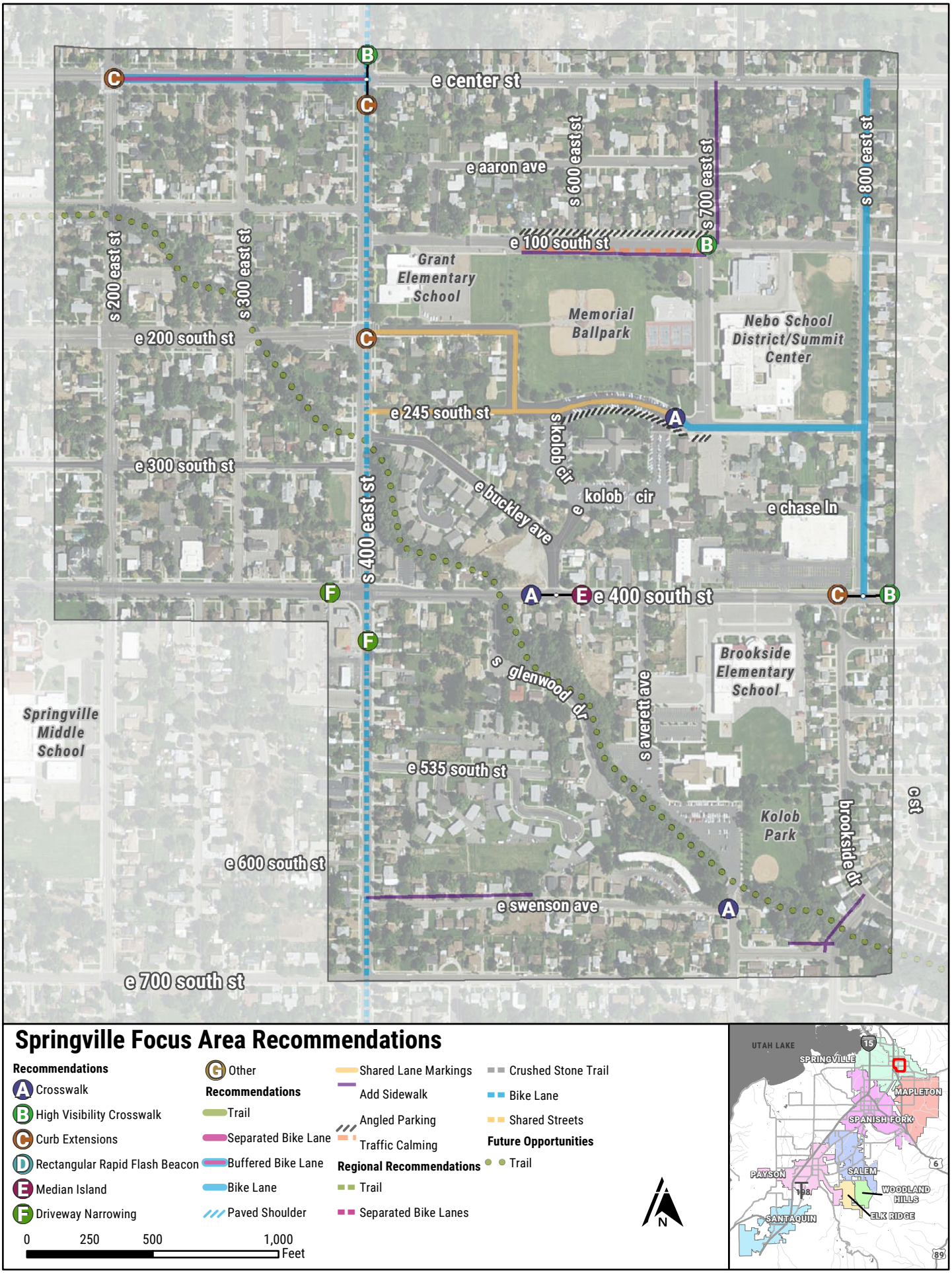
Identified Issue:

The crossing of 400 South Street at 800 East Street is an intersection that serves the Reams grocery store and Brookside Elementary School. However, the pedestrian waiting area on the northeast corner is small and only contains one curb ramp. Southbound traffic making a right turn onto 400 South Street will typically pull forward, thereby blocking the pedestrian pathway.

Response:

Adding a curb extension and high visibility crosswalks at this corner will provide a better pedestrian queue space and improved visibility. While crosswalks are not necessary on the many local residential streets in this area, they serve an important purpose of alerting drivers to pedestrians' presence at key locations like this intersection, which is especially important due to its proximity to the elementary school.

Figure 11 Springville



SOUTH UTAH COUNTY WOODLAND HILLS ACTIVE TRANSPORTATION PLAN

Community Overview

Woodland Hills a small community with residential land uses. Woodland Hill's focus area is centered on S Woodland Hills Drive in front of the City Office and community center. While it is narrower in scope than other focus areas chosen throughout the project, S Woodland Hills Road is an optimal place to look at opportunities to improve comfort and safety for residents.

Active Transportation Workshop Summary

The Woodland Hills workshop was the primary agenda of the Woodland Hills Planning Commission held on May 18, 2016. As such, members of the project team and Planning Commission members gathered to discuss Woodland Hills' draft focus area and regional network recommendations.

Focus Area Recommendation

The focus area recommendation is intended to address the following issue identified during the active transportation workshop.

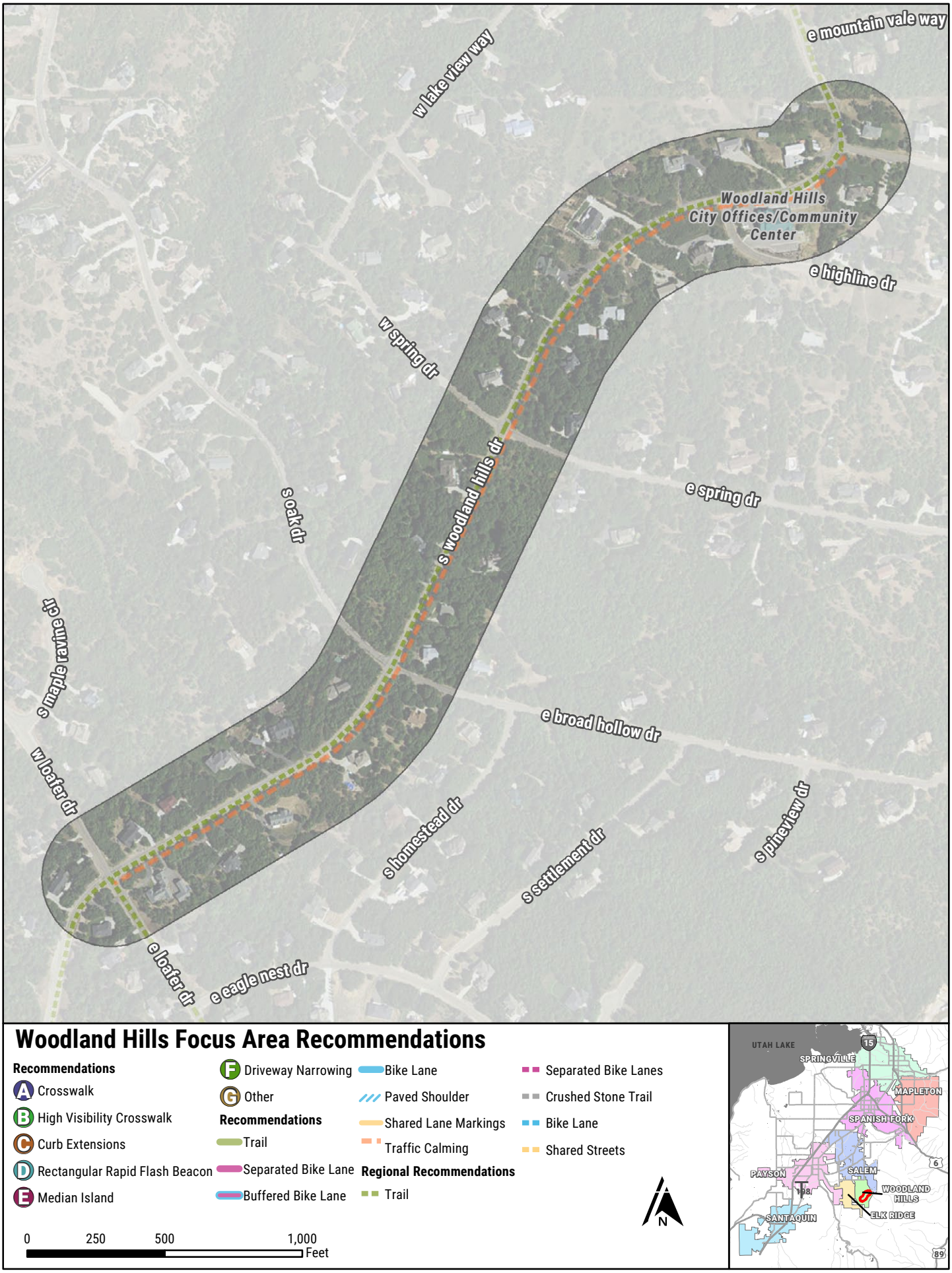
Identified Issue:

Woodland Hills Drive is well-used by pedestrians and bicyclists in the area. However, there are no sidewalks or paved shoulders. Due to the hilly terrain and curvilinear street pattern, visibility is more challenging throughout this area.

Response:

Traffic calming measures, including vertical and horizontal deflection, will encourage vehicular traffic to travel at the posted speed of 25 mph. This will improve the pedestrian and bicycle safety and comfort throughout this portion of the City.

Figure 12 Woodland Hills



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4 Regional Network

While south Utah County has some pieces of an active transportation network already in place, there is much work to be done to create a connected, safe, and comfortable network that provides opportunities for people of all ages and abilities to bike. This chapter identifies existing bikeways in the study area and outlines a vision to link existing trails and bikeways through the addition of trails, separated bike lanes, bike lanes, paved shoulders, and shared streets. These recommendations comprise a regional bike network to span the eight communities and unincorporated areas within south Utah County.

Existing Facilities

Elk Ridge trail user

Trails

The majority of south Utah County's bicycle facilities are paved off-street trails which provide excellent low-stress opportunities for active transportation and recreation. South Utah County is home to several regionally-significant trails that offer a safe and comfortable bicycling experience, near total separation from vehicular traffic and scenic surroundings. However, because of their orientation to waterways and the mountains, their use for serving everyday travel needs is limited by their distance from important activity centers and a lack of lateral connections because the trails run parallel to each other.

Bonneville Shoreline Trail

The Bonneville Shoreline Trail (BST) is a multiuse trail at the base of the Wasatch Front that was designated as Utah's Millennium Legacy Trail as part of a White House initiative.[1] Thirty miles of the BST have been constructed in Utah County composed of a gravel trail between Provo and Canyon Road in Springville, a dirt trail between Mapleton and Spanish Fork, and a discontinuous soft-surface trail throughout eastern Santaquin. The BST Coalition, an organization of entities that represents the communities in support of the trail, envisions building a non-motorized trail that serves as a connection between the urban areas and public lands along the Wasatch Front and provides trail users with a recreational experience that is safe and aesthetically pleasing.

1 Bonneville Shoreline Trail. BST Coalition Annual Report 2014. Accessed Dec. 4, 2015. http://www.bonnevilleshorelinetrail.org/resources/BST%20Coalition%20Annual%20Report%202014.pdf

Hobble Creek Parkway Trail

The Hobble Creek Parkway Trail provides canyon access from Springville. This asphalt trail parallels two miles of Hobble Creek beginning at the Hobble Creek Detention Basin, travels adjacent to the Hobble Creek Golf Course, and ends near Rotary Park.

Dry Creek Trail

Springville's Dry Creek Trail is in the southwest of the city between 1200 West and 600 West. The trail parallels the Dry Creek and terminates at the Union Pacific railroad line that crosses from Springville to Spanish Fork.

Spanish Fork River Trail

The Spanish Fork River Trail is a four-mile long paved trail that crosses south Spanish Fork between Canyon View Park and 520 South at the western limits of the city. The trail was completed in 2015 and is a point of pride for City staff and residents alike.

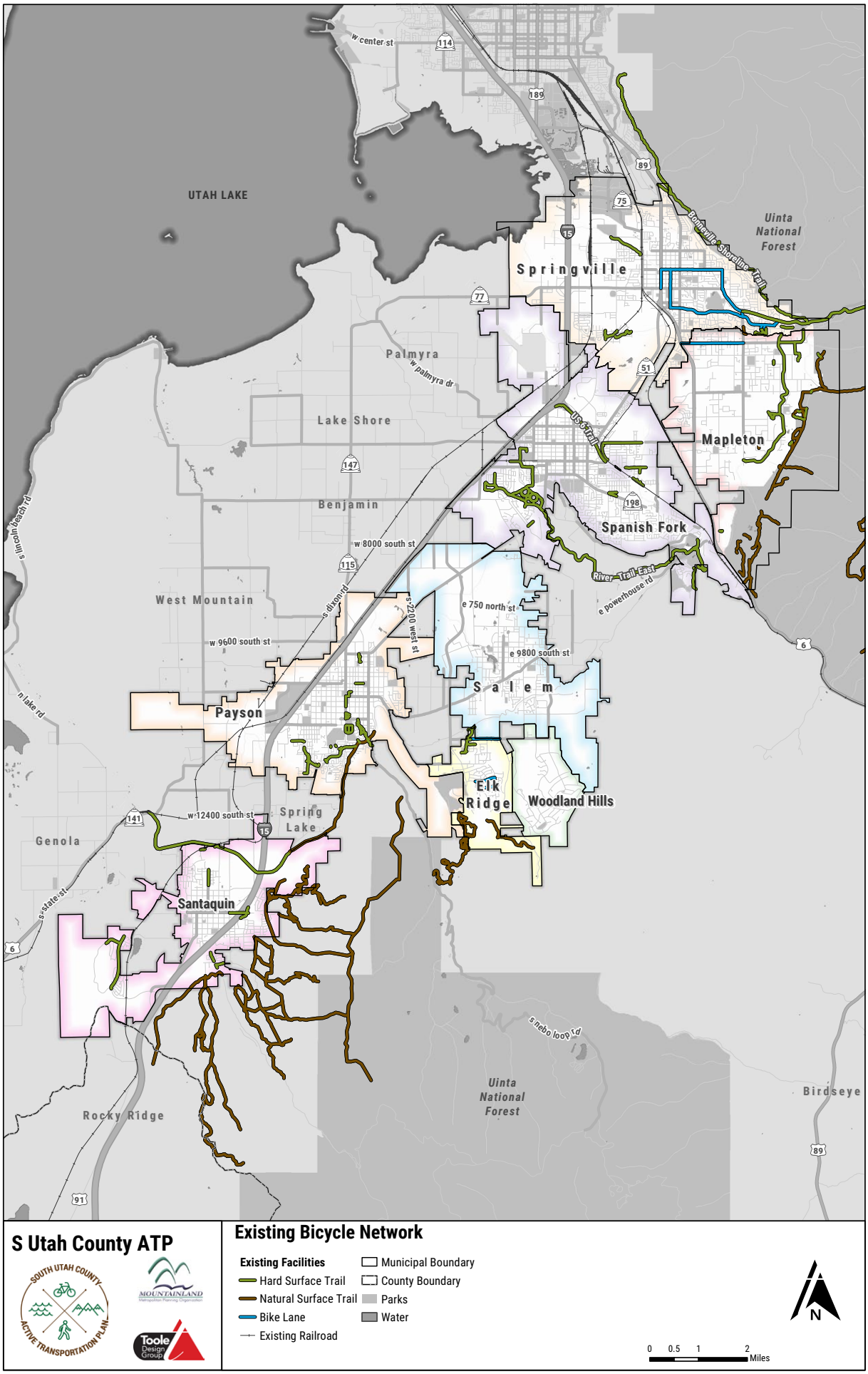
US 6 Trail

The US 6 Trail is a 1.5 mile paved sidepath in Spanish Fork that begins near the North Park at 200 East and ends at Center Street. This trail provides some access to the commercial and residential land uses to the south of US 6.

Dry Creek Parkway Trail

The Dry Creek Parkway Trail parallels the Dry Creek

Figure 13 Existing Bicycle Facilities



channel, extending from the entrance of Payson Canyon and almost reaching I-15. While sections of the trail have yet to be completed, those sections that are complete are heavily used.

On-Street Bikeways

Some on-street bicycle facilities exist throughout the County, but they are sparse and do not yet form an interconnected network. There are signed routes, shared lane markings, and bike lanes in Mapleton, Springville, and Spanish Fork, as well as off-street trails. Figure 13 illustrates the existing trails, bike lanes, and signed bike routes that currently exist in the southern portion of the County.

Bike lane in Elk Ridge

Bike lane in Santaquin

Challenges and Opportunities

The challenges with the existing bike network noted by the public and stakeholders are most notably about the lack of trails in the western County, a lack of north-south connections, poor crossings of arterials, and the barriers posed by principal arterials, railroads, and the freeway.

Opportunities for implementing a more connected bicycle network include streets with excess vehicular capacity that could potentially be retrofitted with bike facilities and trails that can be upgraded or completed to be more usable to a broader user group. In addition, some communities within the study area have interconnected street grids, namely in Spanish Fork, Santaquin, Salem, Springville, and Payson. Street grids tend to provide better connectivity and shorter travel distances between origins and destinations, especially compared to a more suburban pattern of cul-de-sacs and meandering streets. The parallel streets and frequently-spaced perpendicular cross streets of a traditional grid street pattern make it is easier to create a bicycle network that is comfortable for the broader population. For example, a low-volume, low-speed street parallel to an arterial can be easily signed and striped for bicycle travel which provides a comfortable alternative to bicycle facilities on a higher speed arterial roadway. A lack of a grid street pattern in parts of the study area make it more challenging to implement a cohesive bicycle network.

Network Development

The project team used the demand analysis (as explained in Chapter Three), existing facilities, barriers as noted by the public via the online map, crash data (see Appendix B), and Project Management Team (PMT) input to identify key gaps in the bicycle network.

These network gaps were compared to bicycle projects previously identified in regional and local bicycle plans (see Chapter One), including the 2015 Regional Transportation Plan (RTP) corridors. This showed clear differences between the existing network, planned projects, and user-provided feedback. In areas where planned routes did not address the network gaps, additional analysis was performed to locate routes that would meet connectivity and intercity transportation needs. Following this, the RTP projects and new recommendations were combined into one draft set of corridors that were reviewed and refined by the PMT.

Spanish Fork River Trail access

Recommendations

Using national guidelines, the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, and best practices related to the development of rural and suburban bicycle facilities, facility recommendations were developed for the draft network. Recommendations were developed based on technical analyses, demand, feasibility of implementation, ability to meet the project goals, ability to provide regional connections, and stakeholder input. For example, in looking at the street character, traffic volume, and existing pavement widths, the project team developed a series of facility recommendations like bike lanes or paths to meet user needs. A full explanation of the facility types is available in Chapter Two.

The draft regional network was further refined based on feedback and suggestions received during the Active Transportation Workshops, especially for refinements made at the focus area level (see Chapter Three). Finally, the full regional network, including facility recommendations, was developed to address the connectivity, safety, and access challenges throughout the County.

The online survey completed as part of this Plan showed that 37 percent of respondents are part of the "interested but concerned" category and another 43 percent are "enthusiastic and confident" by their willingness to ride in traffic, but prefer to ride in dedicated bike lanes and routes. Therefore, the recommendations presented in Figures 13 through 22 were developed to accommodate the "interested but concerned" riders by providing a mix of bike lanes, buffered bike lanes, paths, and trails. The recommended network is intended to create a comfortable and inviting space for people of all ages and abilities to ride while providing the desired connection between each community.

Figure 14 Existing and Proposed Bicycle Network

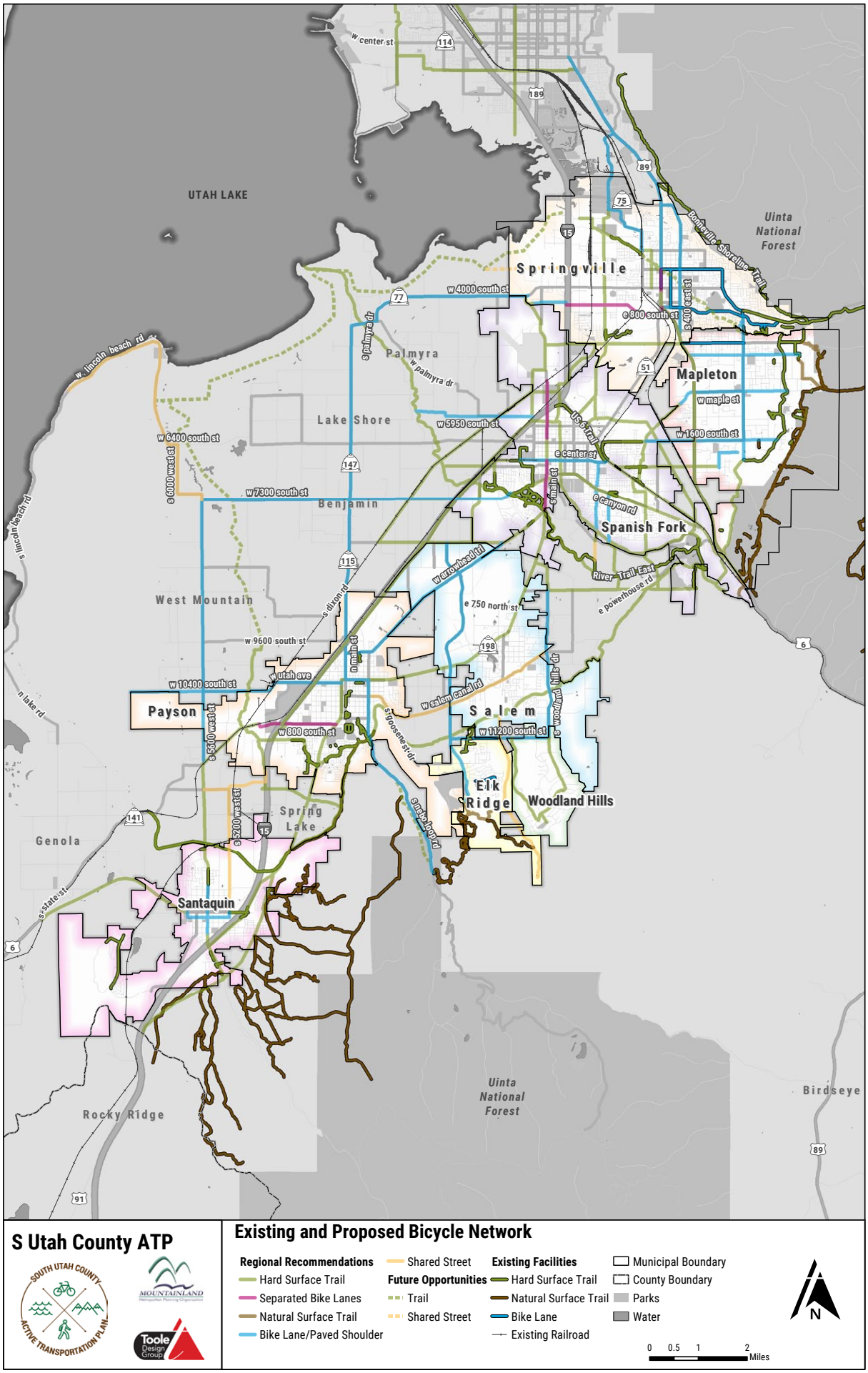
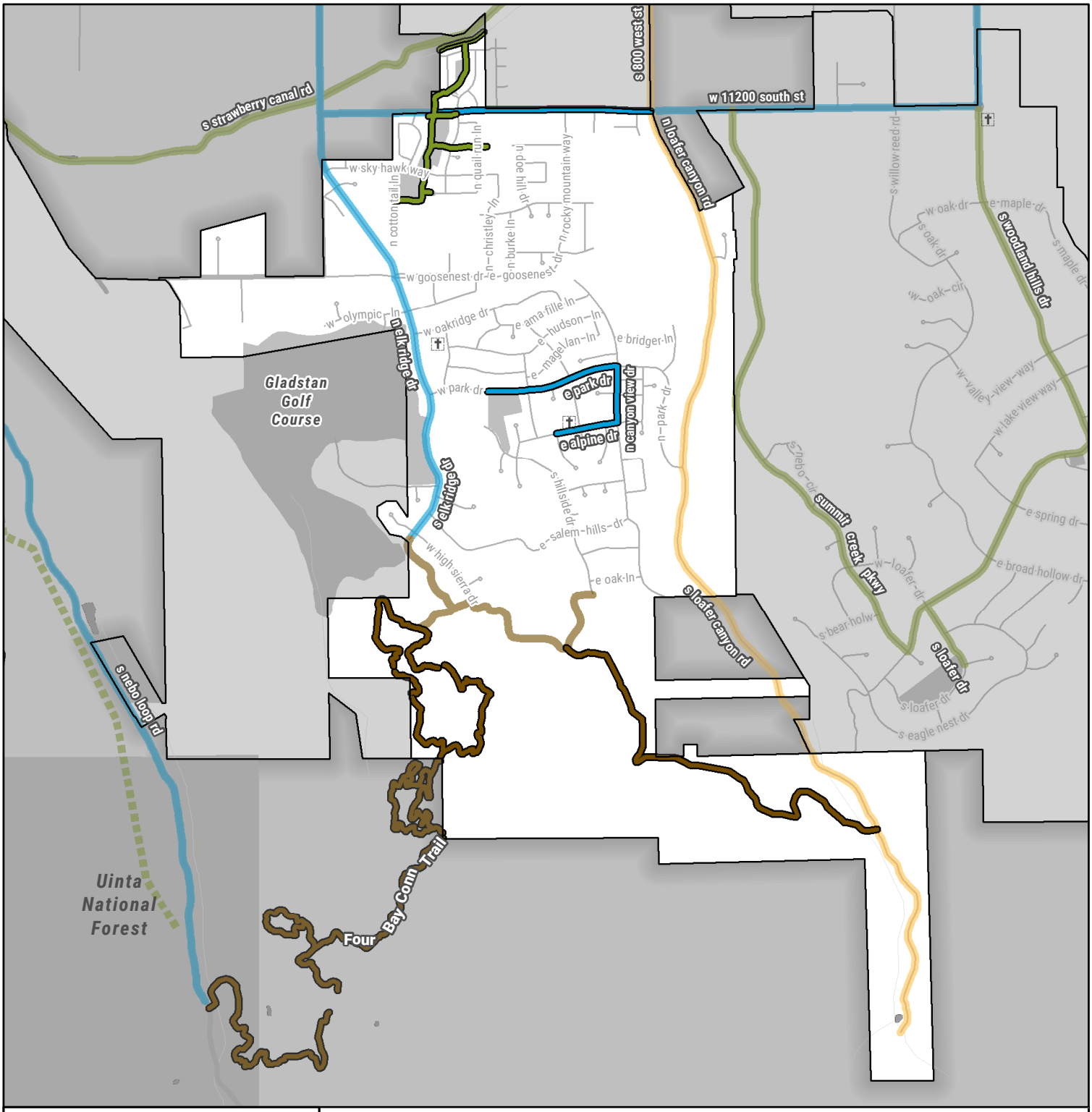


Figure 15 Elk Ridge Existing and Proposed Bicycle Network



S Utah County ATP

SOUTH UTAH COUNTY ACTIVE TRANSPORTATION PLAN

MOUNTAINLAND Metropolitan Planning Organization

Toole Design Group

Existing and Proposed Bicycle Network: *Elk Ridge*

Regional Recommendations
- Hard Surface Trail
- Separated Bike Lanes
- Natural Surface Trail
- Bike Lane/Paved Shoulder
- Shared Street

Future Opportunities
- Trail

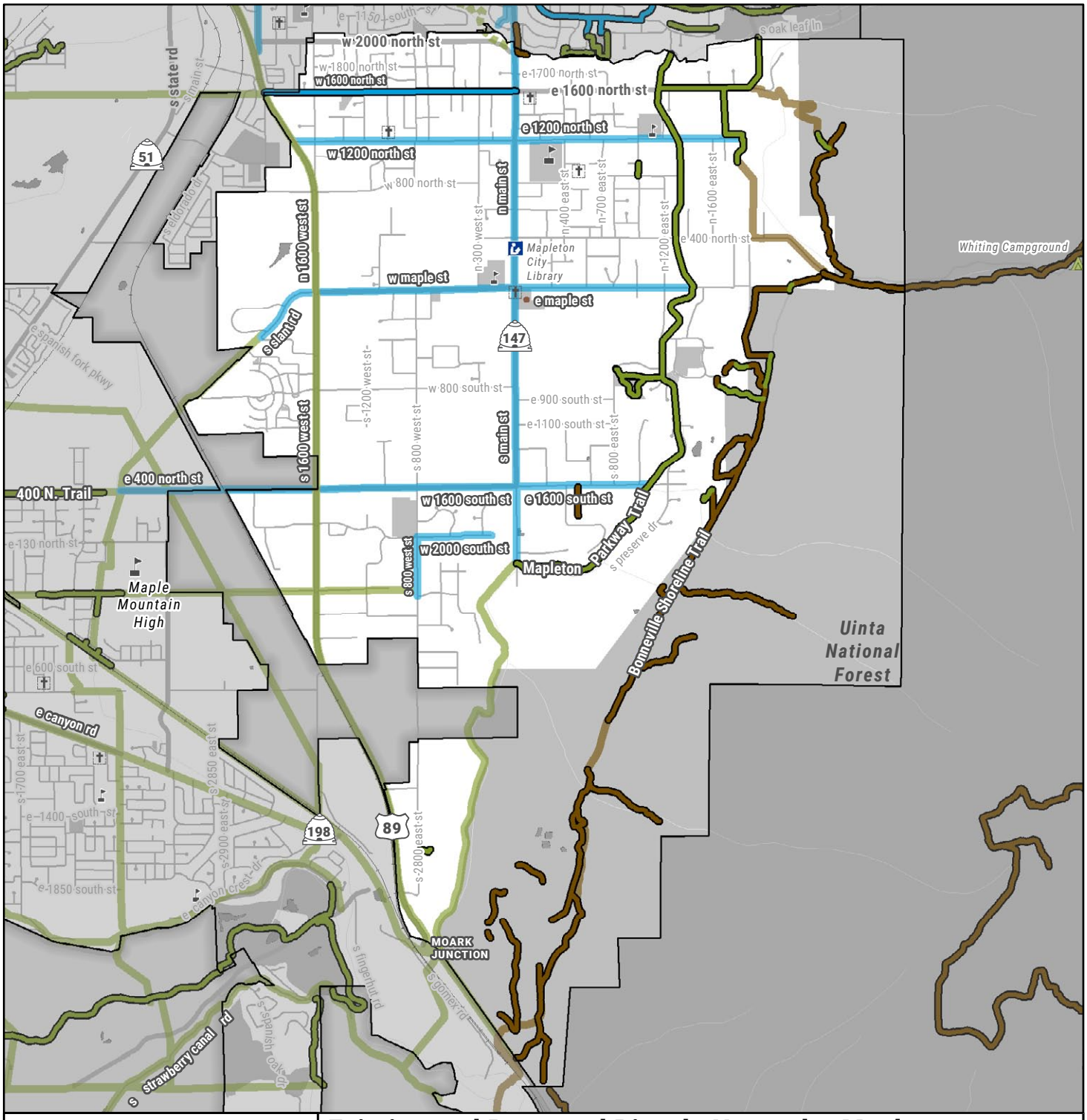
Existing Facilities
- Hard Surface Trail
- Natural Surface Trail
- Bike Lane
- Church
- Municipal Boundary
- County Boundary
- Parks

Water

N

0 0.5 1 Miles

Figure 16 Mapleton Existing and Proposed Bicycle Network



S Utah County ATP

Existing and Proposed Bicycle Network: *Mapleton*

Regional Recommendations
- Hard Surface Trail
- Separated Bike Lanes
- Natural Surface Trail
- Bike Lane/Paved Shoulder
- Shared Street

Future Opportunities
- Trail

Existing Facilities
- Hard Surface Trail
- Natural Surface Trail
- Bike Lane

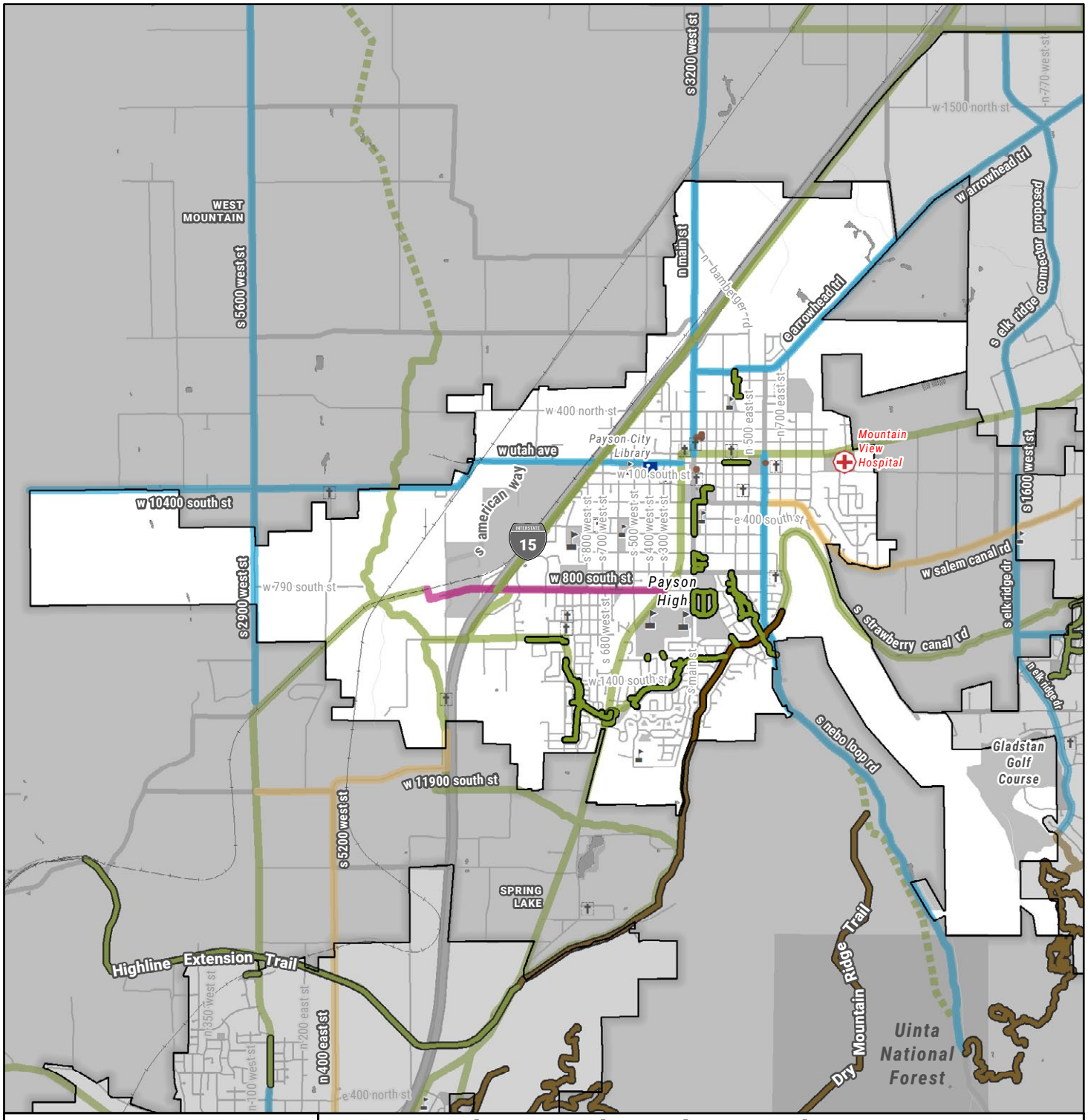
Other
- Junior & High Schools
- Elementary, Charter School
- Church

- Library
- Campground
- Historic
- Existing Railroad
- Municipal Boundary
- County Boundary
- Parks
- Water

0 0.5 1 2 Miles

N

Figure 17 Payson Existing and Proposed Bicycle Network



S Utah County ATP

SOUTH UTAH COUNTY ACTIVE TRANSPORTATION PLAN

MOUNTAINLAND Metropolitan Planning Organization

Toole Design Group

Existing and Proposed Bicycle Network: *Payson*

Regional Recommendations
- Hard Surface Trail
- Separated Bike Lanes
- Natural Surface Trail
- Bike Lane/Paved Shoulder
- Shared Street

Future Opportunities
- Trail

Existing Facilities
- Hard Surface Trail
- Natural Surface Trail
- Bike Lane

Other
- Junior & High Schools
- Elementary, Charter School
- Church
- Library
- Hospital
- Historic
- Existing Railroad
- Municipal Boundary
- County Boundary
- Parks
- Water

N

0 0.5 1 2 3 Miles

Figure 18 Salem Existing and Proposed Bicycle Network

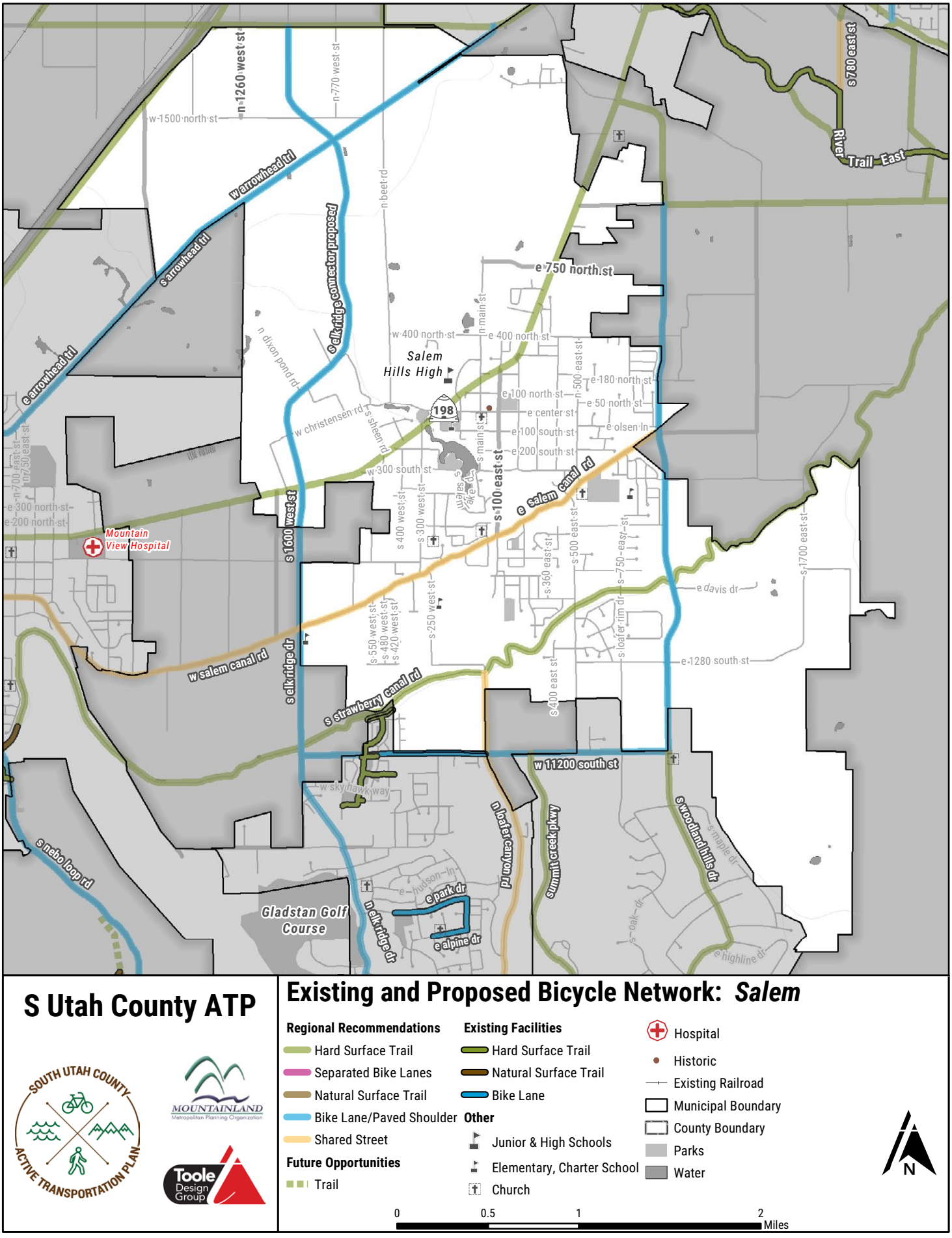
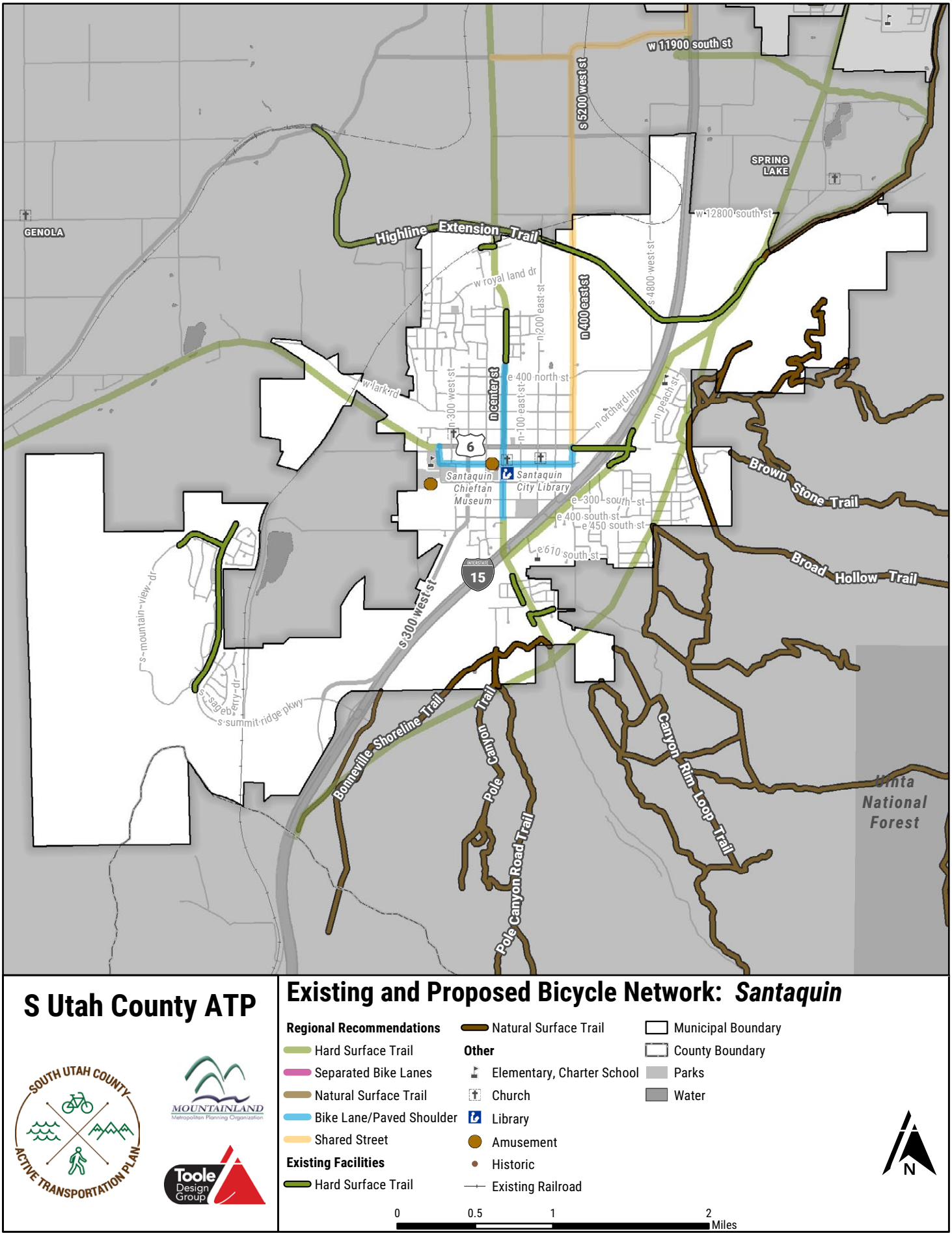


Figure 19 Santaquin Existing and Proposed Bicycle Network



S Utah County ATP

SOUTH UTAH COUNTY ACTIVE TRANSPORTATION PLAN

MOUNTAINLAND Metropolitan Planning Organization

Toole Design Group

Existing and Proposed Bicycle Network: *Santaquin*

Regional Recommendations
- Hard Surface Trail
- Separated Bike Lanes
- Natural Surface Trail
- Bike Lane/Paved Shoulder
- Shared Street

Existing Facilities
- Hard Surface Trail
- Natural Surface Trail

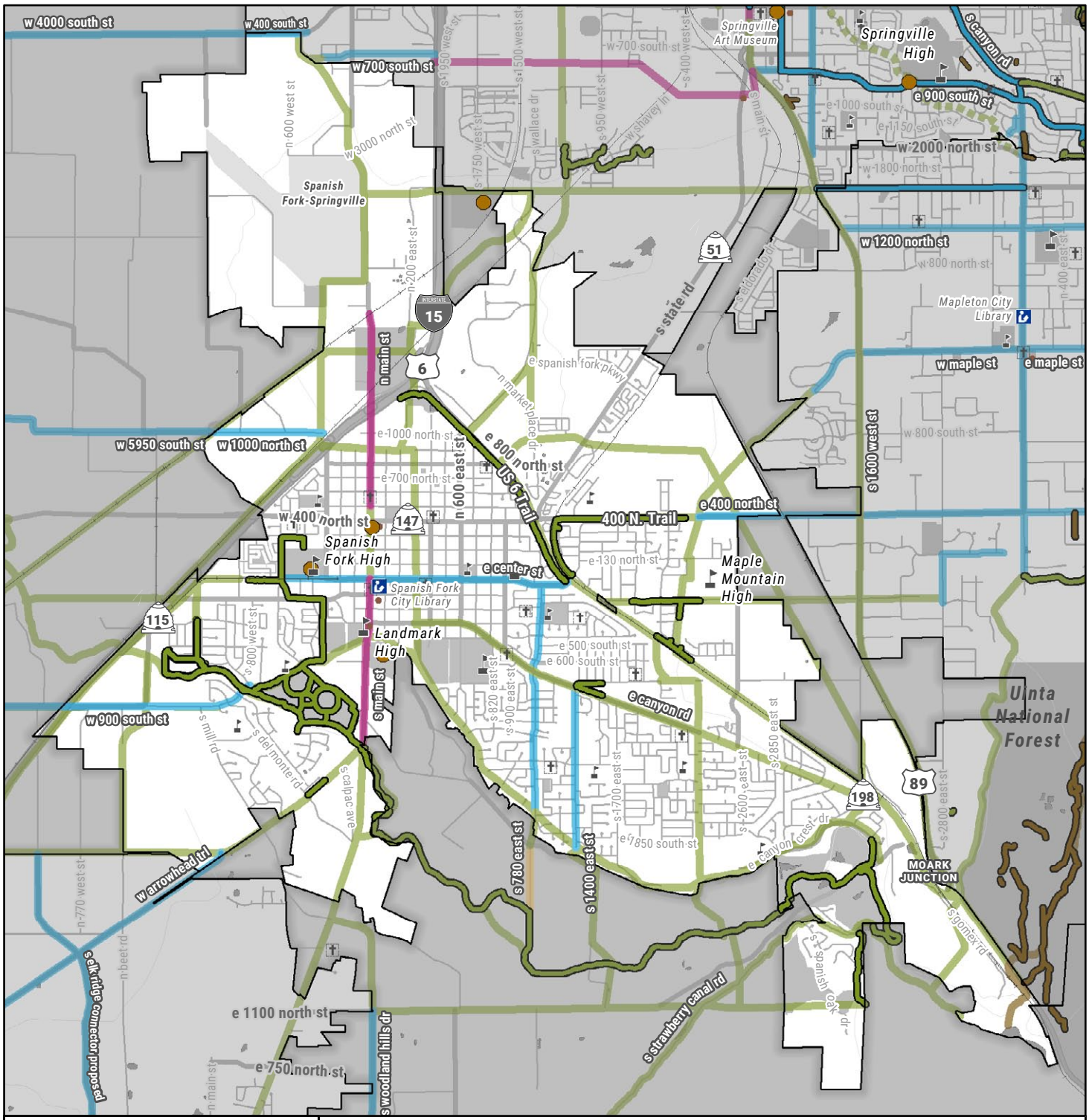
Other
- Elementary, Charter School
- Church
- Library
- Amusement
- Historic
- Existing Railroad

- Municipal Boundary
- County Boundary
- Parks
- Water

N

0 0.5 1 2 Miles

Figure 20 Spanish Fork Existing and Proposed Bicycle Network



S Utah County ATP

SOUTH UTAH COUNTY ACTIVE TRANSPORTATION PLAN

MOUNTAINLAND Metropolitan Planning Organization

Toole Design Group

Existing and Proposed Bicycle Network: *Spanish Fork*

Regional Recommendations
- Hard Surface Trail
- Separated Bike Lanes
- Natural Surface Trail
- Bike Lane/Paved Shoulder
- Shared Street

Future Opportunities
- Trail

Existing Facilities
- Hard Surface Trail
- Natural Surface Trail
- Bike Lane

Other
- Junior & High Schools
- Elementary, Charter School
- Church
- Library
- Amusement
- Historic
- Existing Railroad
- Municipal Boundary
- County Boundary
- Parks
- Water

N

0 0.5 1 2 Miles

Figure 21 Springville Existing and Proposed Bicycle Network

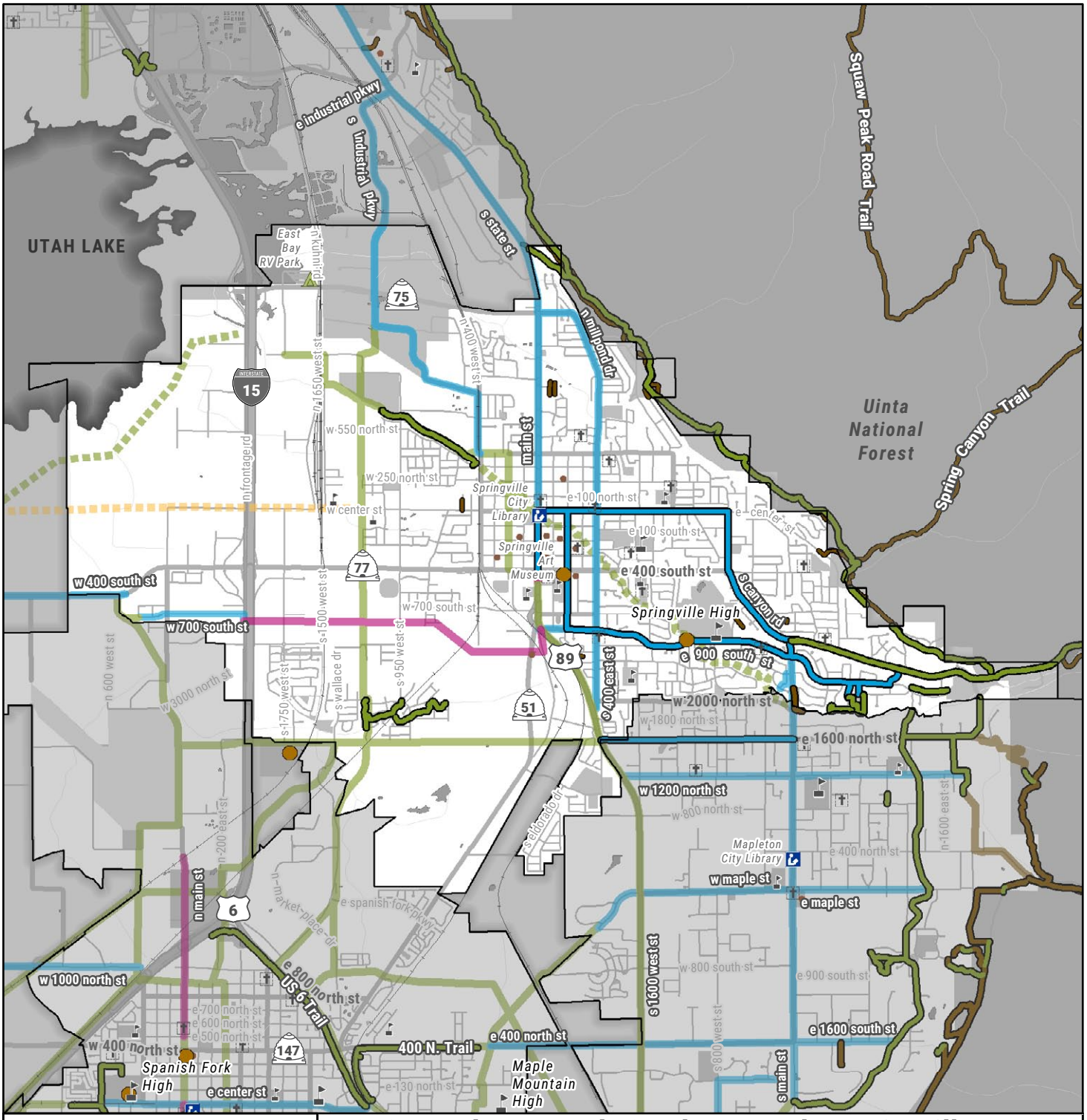
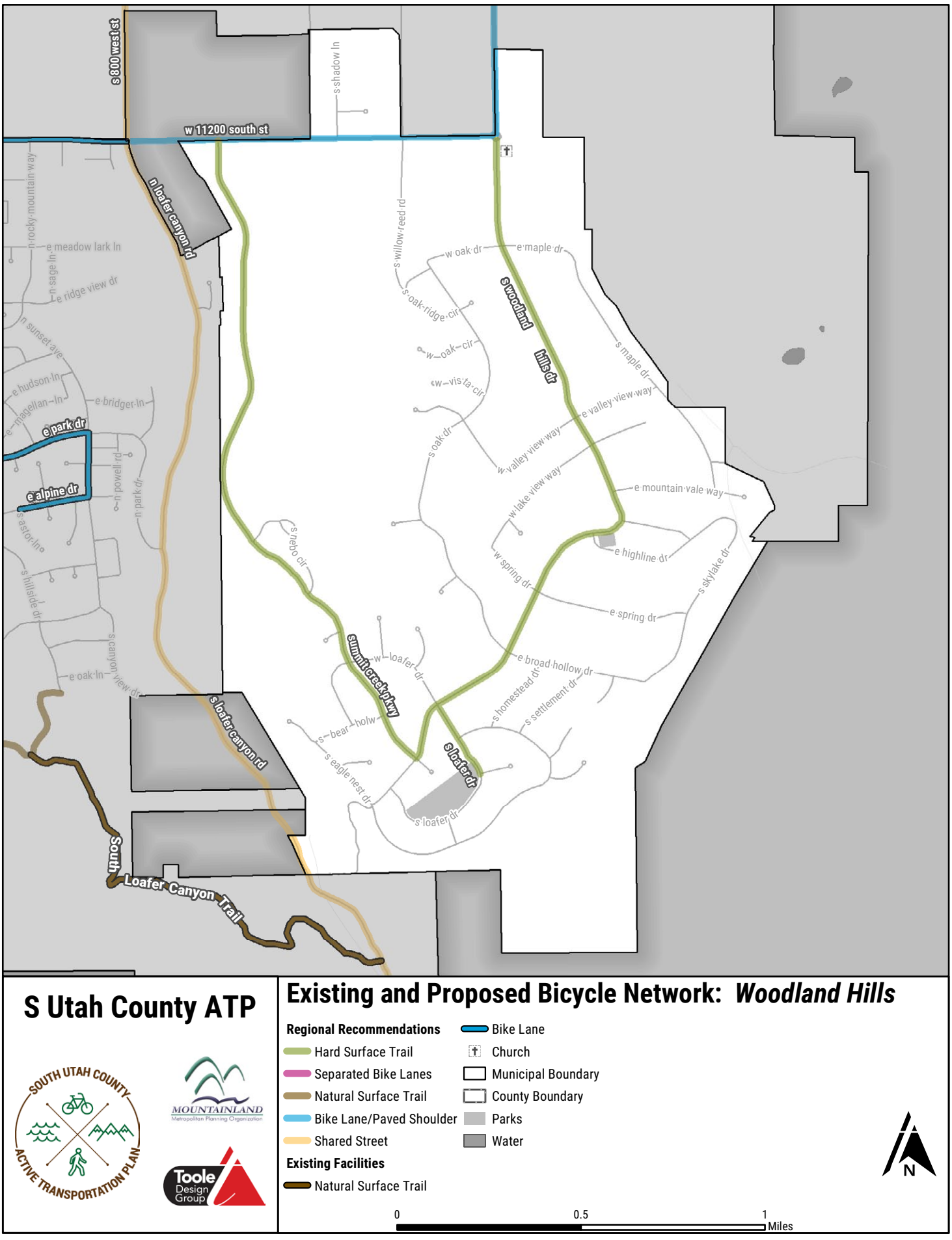


Figure 22 Woodland Hills Existing and Proposed Bicycle Network



5 Programmatic Element

In addition to the engineering recommendations presented in Chapters Three and Four, there are other strategies to improve safety, enhance mobility, and increase the number of people walking and biking. This chapter outlines education, encouragement, enforcement, and evaluation to improve active transportation within the study area. Together with engineering, these are referred to as the “Five E’s” of bicycle and pedestrian planning.

Overview

Education efforts typically focus on teaching all roadway users how to safely interact. Education may focus on teaching bicyclists, particularly children, how to properly interact with motorists. Motorist education typically focuses on reminding motorists of the rules of the road and how to properly interact with bicyclists and pedestrians. Education efforts may include:

- Bicycle rider education
- Bike rodeos
- Public Service Announcements (PSAs)
- Driver's education

Encouragement strategies focus on increasing biking and walking through fun and interesting activities, and may also involve social marketing and incentives. Encouragement efforts seek to demonstrate that biking and walking are valid, healthy, and fun modes of transportation and may include:

- Bike to Work Week and Bike and Walk to School Day activities
- Community bike rides
- Wayfinding
- Maps, brochures, and other ways of providing information to users

Enforcement activities focus on enforcing the rules of the road for all users. Enforcement also prioritizes links between the law enforcement community and the biking community. This may include efforts to:

- Reduce speeding
- Increase yielding to pedestrians
- Reduce red light/stop sign running
- Implement new training programs for law enforcement officers

Evaluation is about tracking progress of the other "E's" and identifying what's working, what's not, and where additional effort is needed. Evaluation can be ongoing or done on a semi-annual or annual basis. Evaluation efforts may include:

- Measuring the growth of bicycle and pedestrian facilities in a region
- Measuring the rate of biking in an area or the number of users on a specific facility
- Evaluating crash data for patterns or frequency

Education

Education is an important component of improving the safety and experience for people walking and biking. In addition to serving as a crash prevention tool, education can also increase the awareness of the rights of and challenges experienced by bicyclists and pedestrians. Finally, education can be used to encourage people to try walking and biking.

Active Education Efforts

The following education programs are examples of active education programs in south Utah County:

Bicycle Education in Schools

Bike Utah will soon launch the Youth Bicycle Education and Safety Training Program to teach 3,000 kids in Utah how to safely and confidently ride a bicycle. The training is a five-hour, on-bike program that will be administered at schools to target students between fifth and seventh grades. Bike Utah will provide a trained instructor, bicycles, helmets, and all other equipment.

For the past ten years Payson Junior High School has provided bicycles for after school clubs and some physical education classes. In 2013 the school began collaborating with Specialized Bicycle Components Company to study the correlation of physical activity and academic achievement.

Students walking home from school

Walking home from school in Santaquin

Safe Routes to School (SRTS) and the Student Neighborhood Access Program (SNAP)

To assist in addressing the public safety and health aspects of students walking and biking to school, UDOT provides Utah schools with walking and biking safety resources through the Safe Routes to School (SRTS) program and the Student Neighborhood Access Program (SNAP), which is administered as part of SRTS. The main goal of the SRTS Program is to assist and encourage students living within two miles of a school to safely walk or bike to school. Funding can be used for education and encouragement programs as well as infrastructure such as new sidewalks, pavement markings, signage, bicycle parking, and other projects. The SNAP program provides tools, information, and incentives to make walking and biking to school safer and more appealing for students. Every elementary, middle, and junior high school in Utah is required by law to have a SNAP Plan available, which includes a SNAP Map showing the safest walking and biking routes to the school.

School Safety Patrols

School safety patrols are usually composed of older student volunteers who help direct their fellow students to and from school in a safe manner. Activities often include traffic safety training, teaching fellow students, directing students in crossing the road during arrival and dismissal, assisting bus drivers, and serving in other school leadership and education roles.

Education Recommendations

Continue to Foster Relationships with Partner Organizations

Education about bicycling and walking should be implemented through partnerships with the groups listed below. These groups can help broaden education outreach to more people and groups by promoting SRTS programs, facilitating educational events, and distributing educational materials to all roadway users.

- School districts
- Churches
- Public health officials/educators
- Neighborhood associations
- Elected officials
- Chambers of commerce
- Individual businesses
- Media
- Law enforcement agencies and offices
- National and State advocacy organizations

Work with School Community Councils

In Utah, one of the responsibilities of all School Community Councils (except for high schools) is to create a Child Access Routing Plan. The SRTS and SNAP programs discussed above can be a valuable resource to School Community Councils in performing this function. City staff should work collaboratively with the School Community Councils in creating access routing plans and improving infrastructure for students to safely travel to and from school.

Pursue the Road Respect Community Program

Share the road campaigns educate all users of the road how to safely and respectfully operate together on roadways. They work to ensure that drivers and bicyclists alike, as well as other road users, follow the rules of the road and recognize the various other road users as sharing equal rights to using the road. In 2011, Bike Utah, UDOT, the Utah Department of Public Safety, and Zero Fatalities teamed together to run the Road Respect Program, which promotes safety and encourages mutual respect between drivers and cyclists in Utah. Cities can become a Road Respect Community with support from this program. The Road Respect Community Program highlights the communities that are taking action to support the Road Respect Message to ultimately become examples for other communities in Utah. City Staff should work with their communities to explore this designation option.

Encouragement

Providing safe opportunities for people to walk and bike is a key component of improving public health, enhancing quality of life, and providing equitable transportation choices in south Utah County. However, beyond providing safe infrastructure, encouraging people to walk and bike often involves additional support, information, community engagement, and, to a certain extent, convincing people that walking and biking are viable transportation options.

The current encouragement efforts in the County and recommendations for improvements are outlined below in Table 4.

Table 4 Encouragement Efforts in the Study Area

Encouragement Tool	Description	Active Efforts	Comments/ Recommendations	Lead Entities
Bicycle/Pedestrian Print and Online Maps	MAG's website has an interactive map that shows bikeways in the County. Individual cities may offer printable maps of existing trails.	MAG, Mapleton, Spanish Fork, and Springville	One County-wide bicycle and trail map should be made widely available throughout the study area, particularly at schools, community centers, and bike shops.	MAG, member cities
Bicycle, Pedestrian, or Trail Advisory Committees	Municipal planning departments can designate a subset of people to serve on a committee focused on bicycle and pedestrian needs.	Springville, Mapleton, Payson	Foster and support existing and new groups. Encourage transparency by advertising meetings online and posting meeting minutes so that anyone can stay informed even if they cannot attend in person.	Member cities
Bicycle and Pedestrian Advocacy Groups	Knowledgeable and interested community members can form a group to advocate for improvements in walking and bicycling infrastructure and to encourage more walking and bicycling.	Bike Utah, Provo Bicycle Committee	Engage advocacy groups when making changes to the roadway network to ensure the needs of people walking and biking are being met.	Member cities, MAG, Utah County, UDOT
Bike Month	Bicycle outreach during Utah's Bike Month of May includes bike rides, Bike to Work Day, National Bike to School, and other encouragement events.	Springville, Provo	Expand bike month activities by partnering with advocacy groups, businesses and engaging the media to get the word out and build excitement. Encourage Bike to Work and National Bike to School Day activities.	Member cities, MAG, Utah County, UDOT, Advocacy groups
Community Events	Many cities have an annual day or festival to celebrate their city's heritage or unique offerings. Smaller events may include summer concerts and outdoor movie screenings.	Santaquin, Spanish Fork, Springville, and Payson	Offer incentives such as free bicycle valet parking and "door prizes" for people who arrive by bike.	Member cities

Encouragement Tool	Description	Active Efforts	Comments/ Recommendations	Lead Entities
Bike Clubs	Clubs offer an informal way to share knowledge, ride bikes, and explore an area together.	Utah Cycling Club with the University of Utah, includes rides throughout the study area and free family Saturday rides	Broaden the types of cyclists participating in clubs by offering rides that appeal to cyclists of different skill levels and needs, e.g., new to biking, commuting, cargo bikes.	Existing clubs
Bike Repair Shops and Rentals	Bicycle shops not only sell bikes, but also offer repair services, bike fittings, and group rides. Some shops offer bike rentals.	Noble Cycling in Spanish Fork, Nebo Peaks Cycles in Payson,	Encourage bike shops to offer classes for adults and children such as basic maintenance, how to secure a bike, etc.	Bicycle shops, member cities
Walking School Bus	An adult leader gathers and walks with students to school.	Through UDOT's SNAP, parents can use the Walking School Bus phone app or more informal means to coordinate.	Walking school buses should be expanded throughout the County	Schools, member cities,
Donated Bicycle Programs	These programs turn donated bicycles into refurbished bicycles to be reused by others in a community. There is often an education component where people learn to repair bicycles (either their own or others that are donated.)	Provo Bicycle Collective	Expand donated bicycle programs throughout the study area.	Non-profit organizations
Wayfinding	Wayfinding signs direct people to destinations or guide them along routes.	None	A comprehensive wayfinding system will help people navigate the network with confidence and encourage greater use of the area's amenities. The member communities should pursue funding for a unified wayfinding system.	Utah County, MAG, member cities, UDOT
Bike Rodeos	Bike rodeos provide a fun environment for kids to learn to ride bikes safely.	Utah County has a bike rodeo kit available for groups to borrow. The kit includes common road signs (stop, yield, railroad crossing, etc.) as well as instructions for designing a chalk road for kids to practice riding on. Since 2013, Payson has collaborated with Utah County in hosting annual bike rodeos. This initially began when the Tour of Utah's stage finish was in Payson, and has since continued. . The Provo Bicycle Committee offers free basic bike tune-ups at local rodeos.	Add bike rodeos to school Physical Education curriculums	Member cities
Bike with the Mayor	Community members of all ages can connect with each other and their mayors in an active, community-oriented setting.	Springville	More cities within the study area should sponsor Bike with the Mayor rides.	Member cities

Speed enforcement in Salem

Warning Signage in Mapleton

Enforcement

Enforcement initiatives provide an opportunity to institutionalize a safe and consistent transportation system for all users by prioritizing the links between law enforcement and the active transportation community.

Existing Enforcement Efforts

According to the League of American Bicyclists (LAB) bicycle friendliness ranking, Utah is the fifth most bicycle friendly state in America. Some signs of success listed in the report card are due to the State's Traffic Code – such as a safe passing law of three feet or greater and a Vulnerable Road User (VRU) law, both discussed below.

Safe Passing Law (Three Feet or Greater)

Many states have safe passing laws that requires vehicles to pass each other at a safe distance, often defined as three feet. Utah's safe passing law (41-6a-706.5) states that a motorist may not "knowingly, intentionally, or recklessly…operate a motor vehicle within three feet of a vulnerable user of a highway." This law may deter drivers from passing a bicycle too close and may provide legal validation if a crash does occur due to unsafe passing.

Vulnerable Road User Law

Vulnerable Road User (VRU) laws help protect road users such as bicyclists, pedestrians, motorcyclists, skateboarders, and others using the roadway that do not have the protection offered by a motor vehicle. VRU laws ideally include two elements, according to the LAB: 1) a definition of a vulnerable road user and 2) specific penalties for car drivers injuring them. Utah is one of nine states with a VRU law (41-6a-706.5) that meets the two recommended elements described above.

Enforcement Recommendations

Bicyclist and pedestrian safety is a shared responsibility between all roadway users. To be effective, enforcement programs should focus on awareness and education, rather than punishment. Enforcement priorities should be established through a collaborative process involving local police departments, implementing agencies, MAG, bicycle and pedestrian advisory committees, and

other stakeholders. For this Plan, it is important that all jurisdictions support the enforcement program and are consistent in addressing enforcement priorities. The following recommendations focus on mitigating risky behaviors that lead to crashes such as speeding, distracted driving, running red lights and stop signs, and riding without lights.

Target Enforcement to Reduce Crash-Contributing Behaviors

Using the UDOT Traffic and Safety Application (see the Evaluation section) tool, crash data can be easily reviewed and analyzed to understand the contributing factors to bicycle/pedestrian and motor vehicle crashes, such as speeding, distracted driving, and riding without lights. Agencies within the study area should use this tool to evaluate crashes and work to mitigate prevalent crash contributing factors that can be reduced through enforcement. Agencies should work with police departments and traffic operations to develop high-priority enforcement and education locations based on crash data (for all modes).

Common motorist behaviors that can be targeted include the following:

- Turning left and right in front of bicyclists
- Passing too close to bicyclists
- Parking in bike lanes
- Failure to yield to pedestrians in crosswalks or at intersections
- Speeding
- Harassment or assault of bicyclists

Bicyclist behaviors that should be targeted may include:

- Ignoring traffic control (particularly traffic signals)
- Riding the wrong way on a street
- Riding without lights at night
- Riding recklessly near pedestrians on sidewalks

Law Enforcement Education

Given the numerous jurisdictions within the study area, it is important that all law enforcement personnel have a common understanding of current laws pertaining to bicycling along with motorists' and bicyclist's behaviors that lead to crashes. It is the responsibility of all officers in the region to emphasize the need for safe streets for all road users. To do so, regular trainings on traffic safety laws as they pertain to bicyclists, pedestrians, and motorists should be offered to law enforcement officials. As bicycling and walking in the region increases, it will be important for all patrol officers to be prepared for potential conflicts and incorrect behavior. The National Highway Traffic Safety Administration has several resources that can be integrated into regular training materials to keep the message fresh and engaging for officers. Individual police departments should provide educational training to officers about bicyclist rights and responsibilities as well as aggressive motor vehicle behavior toward bicyclists and pedestrians.

Enhance Enforcement Initiatives

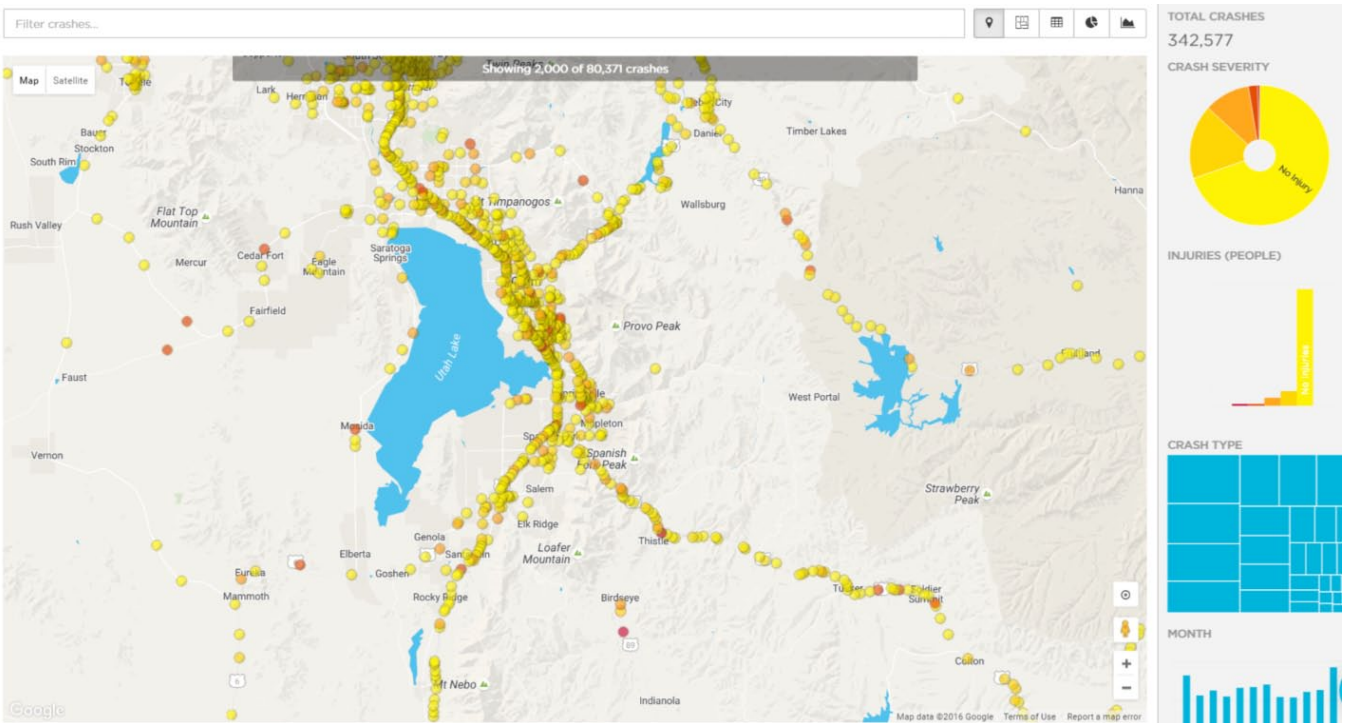
Building off the bike-friendly State laws, the communities in south Utah County have the opportunity to improve their education about and enforcement of laws directly impacting the safety of bicyclists and pedestrians. Initiatives could include:

- Develop and implement education and enforcement initiatives at key times of year (e.g., September, when school is back in session)
- Conduct annual workshops with police departments and other community stakeholders to collaborate on key messages and safety priorities, and develop a mutual awareness of bicycle-related laws.
- Conduct annual community safety discussions
- Partner with police departments to distribute safety items as part of an overall bicycle enforcement strategy (e.g., lights)
- Communicate enforcement campaigns to the public through print and social media
- Coordinate training sessions to ensure knowledge on current local, regional, and national bicycle policies and ordinances

Encourage Police Participation in Outreach Activities

Because police officers are seen as authority figures and respected by children, their involvement in programs and activities that promote safe cycling can help foster responsible riding while reducing the likelihood of injury. Local police agencies can get involved by being present at community bicycling events, developing bicycle and pedestrian safety messages for morning announcements, and being present on the street near schools during the morning and afternoon during school arrival and dismissal.

Figure 23 Crash data on udot.numetric.com (Source: UDOT; This data is protected under 23 USC 409).



Evaluation

Evaluation serves to track progress of the other "E's" and identify what's working, what's not, and where additional effort is needed. Evaluation can be ongoing or done on a semi-annual or annual basis. Evaluation is often related to safety and ridership.

Bicycle and Pedestrian Counting

UDOT recently prepared a best practices document for conducting non-motorized counts. One deliverable of this project is the Utah Bicycle & Pedestrian Counts Guidebook, which provides detailed guidance on counting methodologies, technology, and some analysis methodologies.

MAG has a countywide count program including two locations within the study area. Both locations include permanent bicycle and pedestrian counters along the Spanish Fork River Trail: one south of the Spanish Fork Sports Park and another east of 1100 East. MAG intends to leave its counters up for at least one year, with the possibility of relocation later. A year's worth of data can allow cities and other agencies to determine average demand including seasonal variation. Interested agencies can request this data from MAG.

Crash Data

The Crash Studies Team of the UDOT Traffic and Safety Division maintains a detailed database of crash statistics for all public roadways within Utah. This data is compiled from crash reports submitted to the Utah Department of Public Safety and post-processed by UDOT. These statistics are used to identify safety issues, prioritize potential safety projects, and allocate limited funding to the locations most in need of improvements. Crashes involving pedestrians and/or bicyclists are classified as such so that these types of crashes can be queried and evaluated in greater detail.

In an effort to more easily share crash and other safety related data, UDOT partnered with Numetric to create the UDOT Traffic and Safety Application which allows for crash analysis, reporting, and review in one streamlined platform. The tool allows merging of multiple data sets including crash data, roadway data, and safety layers for a seamless experience optimizing the ability to make data-driven decisions regarding roadway safety. The tool enables quick identification of crash patterns, as well as the ability to drill down within the data to analyze segments at varying levels, compare potential projects, and develop benefit-cost analyses according to Highway Safety Manual methods. The tool also provides a public portal, allowing anyone to view high-level crash data summaries. Data can be viewed spatially as points or in aggregated form on segments. Data can also be viewed in tables, charts, and other statistical views. Figure 14 shows an example of the visualized crash data.

Evaluation Recommendations

Track Crash Locations, Numbers, and Rates

Cities should use the UDOT Traffic and Safety Application to monitor crashes within their communities and implement crash countermeasures as needed. The crash rate – a ratio of the number of crashes occurring to the number of people bicycling - is a more useful measure of whether safety issues are effectively being addressed, but it requires data on the number of bicyclists traveling within a given corridor or area.

Expand Bicycle and Pedestrian Counting

MAG should continue collecting continuous counts along the Spanish Fork River Trail, though adding inductive loop counters to the existing passive infrared counters would provide information on the modal split of users, rather than a combined bicycle and pedestrian count. In addition, MAG should coordinate collection of short duration counts at strategic locations within the study area based on geographic distribution and facility types. These two types of counts will enable MAG to establish a regular and standardized bicycle and pedestrian count program aligned with statewide efforts.

Building on the existing count program will help MAG and the cities within south Utah County continue to evaluate ridership and safety, while supporting future investments in bicycle and pedestrian infrastructure. Systematic counting methodologies will help MAG in developing correction factors to mitigate shortcomings inherent in national and regional data sources. Additionally, year-to-year changes in counts can also help member cities in evaluating ridership and safety impacts at specific locations where new infrastructure has been built.

Pursue League of American Bicyclists (LAB) Bicycle Friendly Community Award (business, city, and county levels)

The LAB's Bicycle Friendly Community Program provides incentives, hands-on assistance and award recognition for communities that actively support bicycling. A Bicycle Friendly Community welcomes bicyclists by providing safe accommodation for bicycling and encouraging people to bike for transportation and recreation. The program provides a benchmark and roadmap for bicycling within a city and the guidance to improve all five E's. While the application to attain a Bicycle Friendly designation is lengthy, this process encourages reflection and action while establishing public recognition for great biking.

Project Management Team rides the Spanish Fork River Trail

Cities within the study area should work toward Bicycle Friendly Community status by working on their engineering, programs, and policies and applying for a formal designation. Additionally, the Bicycle Friendly Business designation should be encouraged in the business community for not only bicycle-related businesses, but to a wide range of businesses through chambers of commerce.

Create a South Utah County MAG Subgroup

The monthly trails meeting convened by MAG serves to collaborate and provide oversight and input on trails projects throughout the region. To continue this Plan, a monthly South Utah County Subgroup should be convened. This group would serve as a continuation of the Project Management Team with at least one representative from each city to discuss this Plan's recommendations, move recommendations forward, complete Transportation Improvement Plan applications, and collaborate on active transportation projects that cross city borders.

Other Recommendations

Develop Complete Street Policies

Complete Streets are streets that are accessible for all road users; they consider all modes of transportation, as well as all ages and abilities of people using those modes. Complete Street policies standardize when or in what contexts to apply Complete Street principles, as well as design guidelines. While there is not a Statewide Complete Streets Policy, each city within the study area should develop Complete Street policies to guide the development.

Project Management Team collaboration in Springville

6 Implementation Strategy

The Mountainland Association of Governments (MAG) plays a pivotal role in the planning and funding of transportation projects. MAG produces TransPlan40, the regional transportation plan for urbanized Utah County and the Transportation Improvement Program (TIP), which lists funded regional transportation projects and programs for the next four years. The TIP includes capacity projects from TransPlan40 and short term projects from federal, state, local governments, and transit agencies. Over the next ten years, MAG anticipates allocating approximately $3 million dollars per year for active transportation projects approved in the RTP.

There is therefore an established process for implementing active transportation projects at the regional level, however given the breadth of recommendations in this Plan and the need to stretch available funding to the largest degree possible, a creative and coordinated approach is needed. This chapter describes practical and feasible strategies for implementing the South Utah County Active Transportation Plan over the next ten years.

Strategies for Network Implementation

To move this Plan into implementation, a combination of agency partnerships, creative reuse of existing rights-of-way, improved design guidelines, and a combination of funding sources will be needed. Ultimately, this Plan needs the full support of the member cities who have helped in shaping the Plan's focus area and regional network recommendations. Recommended strategies are discussed below.

Build Upon Agency Partnerships

A transportation network is inherently interjurisdictional. The recommendations in this Plan are on roads within rights-of-way that are owned and maintained by a number of different agencies including local jurisdictions, the Utah Department of Transportation (UDOT), Utah County, and the Bonneville Shoreline Trail Coalition. Therefore, agency collaboration and partnerships will be needed for successful implementation of this Plan. Taking advantage of the momentum established through the Advisory Committee and monthly Project Management Team (PMT) meetings during the Plan development process, and the cooperative regional framework in place through the Council of Governments and RTP will be critical to this effort.

As outlined in Chapter Five, a south Utah County MAG Subgroup should be convened. This group would serve as a continuation of the PMT, with at least one representative from each city to discuss this Plan's recommendations, move recommendations forward, complete TIP applications, and collaborate on active transportation projects that cross city borders.

Project team members in Elk Ridge

Roadway Engineering Strategies

Retrofitting Existing Roadways

In many cases there is excess space within the roadway that can be reallocated to develop safe and comfortable bicycle facilities. Space that can be reallocated to bicycle facilities may be found in shoulders, underutilized on-street parking, excessively wide vehicle travel lanes (i.e., greater than 11 or 12 feet), or an excessive number of vehicle travels lanes or turn lanes relative to the volume of traffic. Repurposing shoulder space or underutilized on-street parking is the easiest, least costly roadway retrofitting strategy for implementing bicycle facilities. Other strategies include road diets and lane diets.

A road diet is a rechannelization technique where travel lanes are removed from a roadway and the space is redistributed to other travel modes or functions, including bicycle facilities and sidewalks. Potential road diet candidates are evaluated based on traffic volume and flow, turning volume, frequently stopping and slow-moving vehicles such as buses or trucks, and roadway function.

Lane diets are another rechannelization technique in which travel or turn lanes are restriped to be narrower, and the space is redistributed to other travel modes or functions, including bicycle facilities or sidewalks. Candidates for lane diets are based on traffic speed and volume as well as the traffic type and roadway function. The Federal Highway Administration has endorsed 10- and 11-foot travel lane widths. Studies have shown that such lane widths have no negative safety impacts, and may actually have safety benefits by encouraging slower travel speeds. Some engineering and analysis will be required to make roadway design decisions, especially to ensure that there is sufficient space for comfortable bicycle facilities. For example, the American Association of State and Highway Transportation Officials' (AASHTO) Guide for the Development of Bicycle Facilities states that five feet is the preferred minimum bicycle lane width, but on high-speed roadways, a wider bicycle facility is preferred and recommended.

Leverage New Roadway Construction

Roadway construction projects should be leveraged to implement the focus area and regional network recommendations found in this Plan. This requires close coordination with Capital Improvement Programs and development review to identify these opportunities and ensure they are included in the early scoping and design phases.

Potential roadway to retrofit with bicycle facilities

Routine Roadway Resurfacing

All resurfacing, repaving, and improvement projects should be evaluated to determine whether it is possible to provide the bicycle facility recommendations included in this Plan. The Federal Highway Administration (FHWA) produced the Incorporating On-Road Bicycle Networks into Resurfacing Projects guidelines in 2016 which provide strategies for using routine roadway resurfacing to implement bicycle networks.

Improved Design Guidelines and Standards

The level of design detail related to bicycle and pedestrian facilities varies widely among cities in south Utah County. For example, some local standards include sidewalk and trail width standards, but lack standards for on-street bicycle facilities such as bike lanes. Some design standards within the region already include provisions for bicyclists, such as requirements to include trails in all private development and bike parking. However, they lack details such as minimum width or configuration of bicycle facilities. Further, roadway and sidewalk width requirements tend to lead to wide arterials with relatively narrow sidewalks.

Improving the design guidelines and standards will lead to higher quality facilities and improved consistency across the County. As this is a regional plan with intercity recommendations, aiming for consistent standards across the cities will help unify the region and ensure a better experience for people walking and biking.

Given that the majority of projects within the County are developer-driven, improving the development standards and design guidelines will greatly improve the projects that are implemented. For example, cities could increase minimum sidewalk widths and improve pedestrian safety and comfort in many cases. Additionally, clear and specific design guidance can provide cities a more effective bargaining tool with developers when approving site plans and right-of-way improvements. Specific design guidance can help to strengthen the level of oversight and direction that cities can provide regarding street use and improvements. The Design Guidance included in Appendix A of this Plan may serve as a good starting point for modifying local standards and providing the guidance needed during the development approval process.

Cost of Implementing this Plan

The recommendations in this Plan will be implemented in phases. Some recommendations can be implemented in the near-term using relatively low-cost methods of reallocating existing street space such as on-street parking or shoulders. Other recommendations may take advantage of opportunities such as routine resurfacing projects or be incorporated into other projects or otherwise added as part of street or stormwater upgrades.

Planning-level estimates (shown in Table 5) were developed for this Plan. Unit costs are in 2016 dollars and were developed based on historical costs data from UDOT, where available. The costs shown are construction costs only and do not include planning, engineering, or survey costs. Construction costs will vary based on the ultimate project scope and economic conditions at the time of construction.

Table 5 Planning-Level Unit Cost Estimates

Bicycle and Pedestrian Facilities and Intersection Spot Treatments	Planning-Level Cost Estimates*
Shared Lane Markings	$19,000 per mile (includes signage)
Neighborhood Byway (Bike Boulevards)	$146,000 per mile (assumes no signal upgrades) to $335,000 per mile.
Paved Shoulders	$575,000 per mile (assumes no signal upgrades) to $880,000 per mile
Bike Lanes	$56,000 per mile (assumes no signal upgrades) to $107,000 per mile
Buffered Bike Lanes	$65,000 per mile (assumes no signal upgrades) to $118,000 per mile
Separated Bike Lanes	$230,000 per mile (assumes no signal upgrades) to $560,000 per mile
Shared Use Paths (Trails)	$910,000 per mile for paved trails, $880,00 per mile for soft surface trails
Sidewalks	$230,000 per mile
Marked Crosswalks	$8,000 each
Median Islands**	$28,000 each
Rectangular Rapid Flash Beacons	$55,000 each
Curb Extensions**	$10,000 each

* Estimates include lump sum items such as maintenance of traffic, utility adjustments, landscaping, mobilization, clearing, erosion, and sediment control, where applicable.

** Includes lump sum design estimates.

Prioritizing Plan Recommendations

Projects that offer the highest benefits and best return on investment should be implemented first. Due to funding constraints, member communities should focus on quick-to-implement, low-cost wins that can potentially be combined with or leveraged from other opportunities. Projects assigned to the quick wins category have the ability to rapidly make substantial improvements to south Utah County's bike and pedestrian system. The majority of these projects are along low- to moderate-stress streets that are already largely suitable for bicycling, but can be greatly enhanced with simple signage and pavement markings. The quick wins projects can be prioritized for near term implementation based on cost, ability to enhance safety and connectivity, and ability to form a continuous network of low-stress bikeways.

For larger projects identified in this Plan, MAG funding and the TIP selection process should be used to move projects forward.[1] First, cities will complete a TIP Concept Report which is reviewed and ranked based off information provided in the application.[2] The MAG staff ranking is provided to the MAG Technical Advisory Committee (TAC) for information. Then, TAC members visit each project in the field and listen to presentations from project sponsors.

Following this field visit, MAG staff use the project ranking List created by the TAC to assign available funding. When complete, the Draft Funding List is returned to the TAC for review and recommendation to MAG Regional Planning Commission.

Finally, the TAC members use their knowledge of the Concept Reports, MAG staff ranking, and field review to create a project ranking list. Each municipality, the county, UDOT, Utah Transit Authority, and the Department of Air Quality have one vote per project.

Pursue Creative Funding Opportunities

There are numerous funding sources to help implement active transportation projects (see below). Through a combination of local, regional, state, federal, and other funding sources, communities can better leverage their available funding as a means of implementing this Plan.

1 http://mountainland.org/img/transportation/TIP/TIP%20Process.pdf

2 https://mountainland.org/img/transportation/TIP/Project%20Selection/2016%20TIP%20Selection/TIP%20Selection%202016%20Presentation.pdf

A paved trail around Salem Pond is used by people of all ages

Funding Sources

Summarized here are potential Federal, State, regional, and locally-administered funds for bicycle and pedestrian infrastructure. Included within each category are a description of the funding source, some eligibility requirements, and direction to additional information where available.

Federally-Administered Funding

Although many funding sources identified in this plan rely on Federal funds, only two are administered Federally – that is, the Federal government (USDOT) makes the project selection decisions. The other sources that use Federal funds are listed under State-administered or regionally-administered programs.

In December 2015, President Obama signed the newest transportation authorization bill, Fixing America's Surface Transportation Act (the FAST Act), into law. The FAST Act streamlines some programs but is not expected to substantially affect program eligibility or funding requirements at the local level. As with any new legislation, it is possible that some of the individual components of specific programs will change in the near future. Therefore, the communities within south Utah County should use up-to-date information, regulations, and requirements when pursuing grant money.

Transportation Investment Generating Economic Recovery (TIGER) Grant

TIGER grants fund a broad array of road, rail, transit, bicycle, and pedestrian projects. The program focuses on capital projects that generate economic development and improve access to reliable, safe, and affordable transportation, especially for disadvantaged communities. TIGER grants only fund projects that have gone through preliminary design and there is typically preference given to projects with broad stakeholder support. Applicants are required to demonstrate that project benefits outweigh costs. Projects in more urban areas, such as Springville and Spanish Fork, must request at least $10 million with a minimum 20 percent match. Utah County, MAG and several other local and regional partners were recently successful in obtaining approximately $20 million in TIGER grant funding, which will be used to fund several active transportation projects in Utah County.

Transportation Alternatives

The FAST Act replaced the former Transportation Alternatives Program (TAP) with a set-aside of funds under the Surface Transportation Block Grant Program (STBG). For administrative purposes, the Federal Highway Administration (FHWA) will refer to these funds as the TA Set-Aside. The TA Set-Aside authorizes funding for programs and projects defined as transportation alternatives, including on- and off-road active transportation facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, recreational trail projects, and safe routes to school projects.

Federal Transit Administration Funds

Multiple FTA grant programs are able to help cities, towns, and rural areas invest in bicycle infrastructure to improve personal mobility and access to public transportation.

State-Administered Funding

This section describes State-administered funding sources, including those that use Federal funds and those that use state-generated revenue:

- Class B & C Road Funds
- Safe Routes to Schools (SRTS)
- Recreational Trails Program (RTP)
- Highway Safety Improvement Program (HSIP)
- Federal Lands Access Program (FLAP)
- Land and Water Conservation Fund
- Safe Sidewalk Program
- Utah Department of Transportation Maintenance Program

Class B & C Road Funds

Class B & C road funds are generated from a combination of state fuel taxes, registration fees, driver license fees, and other revenue sources. These funds are allocated to each city and county based on population, road mileage, and land area. Class B funds go to counties while Class C funds go to cities and towns. Funding can be spent on "enhancement of traffic and pedestrian safety" including sidewalks, curb and gutter, and the construction of bicycle facilities in the highway right-of-way.

Safe Routes to Schools (SRTS)[3]

This program provides funding for education, enforcement, evaluations, and infrastructure improvements near elementary and middle schools that promote students walking and biking to school. The Utah Department of Transportation (UDOT) administers the SRTS Program using Federal Surface Transportation Block Grant Set-Aside funds (formerly the Transportation Alternatives Program) and Highway Safety Improvement Program Funds, both described below. UDOT provides Utah schools with walking and biking safety resources for two purposes: (1) to educate children about how to walk and bike safely to school and (2) to build infrastructure improvements such as sidewalks to increase student safety.

3 http://www.udot.utah.gov/main/f?p=100:pg:0::::T,V:1388

Recreational Trails Program (RTP)

The RTP provides funds to develop and maintain trails and trail-related facilities. Projects can include: planning and design; land acquisition; maintenance and the purchase of maintenance equipment, and educational programming. The RTP funding could, for example be applied toward the planning and design of multiuse trails. In Utah, the Division of State Parks and Recreation runs the program and the Combined Trails Advisory Council reviews and recommends funding requests.[4] The finalized list of projects to be funded under RTP is submitted to the Director of the Division of State Parks and Recreation for administrative approval and funding. Projects authorized for funding become part of UDOT's Statewide Transportation Improvement Program (STIP).

Highway Safety Improvement Program (HSIP)

HSIP funds are available for safety projects aimed at reducing traffic fatalities and serious injuries. Bike lanes, roadway shoulders, crosswalks, intersection improvements, underpasses, and signs are examples of eligible projects. Projects in high-crash locations are most likely to receive funding. States that have identified bicycle safety and pedestrian safety as Emphasis Areas are more likely to fund bicycle and pedestrian safety projects. However, as of November 2015, UDOT's Emphasis Areas do not include bicycle safety or pedestrian safety.[5]

Federal Lands Access Program (FLAP)

The FLAP program provides funding to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators. Eligible project activities include transportation planning, research, engineering, preventive maintenance, rehabilitation, restoration, construction, and reconstruction of roads and provisions for pedestrians and bicyclists.

Land and Water Conservation Fund

The National Park Service provides oversight for The Land and Water Conservation Fund (LWCF) Act which was established by Congress in 1965 to provide funds for the acquisition and/or development of public outdoor recreation areas, including walking trails. Land

4 The RTP was consolidated into the Surface Transportation Block Grant Set-Aside with the passage of the FAST Act in 2015. Each state administers the RTP independently and their funding is set at 2009 levels.

5 UDOT. Emphasis Areas. Nov. 24 2015. Accessed Jan. 28 2016. http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:33,72787

School dismissal in Santaquin

acquisitions for public outdoor recreation are also LWCF eligible. The program is administered locally by Utah State Parks. Any site or facility that is purchased, developed, or improved with funding from the LWCF is protected in perpetuity as a public outdoor recreation area. LWCF funding requires a 50 percent match from the applicant. The grant recipient must be able to fund 100 percent of the project up front and is reimbursed periodically by LWCF up to 50 percent of the costs.

Safe Sidewalk Program

The Safe Sidewalk Program provides a legislative funding source for construction of new sidewalks adjacent to state routes where sidewalks do not currently exist and where major construction or reconstruction of the route, at that location, is not planned for ten or more years. Sidewalk locations must be located adjacent to a State highway within an urban area or an area of an urban nature, and have significant pedestrian traffic. A 25 percent local government match is required. This program is admistered by UDOT.

Utah Department of Transportation – Maintenance Program

Through close coordination between agencies, UDOT can use routine street resurfacing as an opportunity to add bicycle lanes or buffers on to existing facilities. This option would not require additional funding. For agencies interested in learning more about this, the Federal Highway Administration published, "Incorporating On-Road Bicycle Networks into Resurfacing Projects" in March 2016.[6] This report provides guidance on using routine resurfacing projects to implement bike facilities.

Regionally Administered

This section describes funding sources administered by MAG, including several Federal funding programs. In the descriptions below, the programs are referred to by their new names under the FAST Act:

- Surface Transportation Block Grant Program
- Surface Transportation Block Grant Program Set-Aside
- Congestion Mitigation and Air Quality Improvement (CMAQ) Program
- Community Services Block Grant Program (CSBG)

Surface Transportation Block Grant Program

The STBG Program is the new name for the Surface Transportation Program. This flexible program may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure anywhere, and transit capital projects, including intercity bus terminals. Eligibility includes bicycle transportation

6 http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/resurfacing/resurfacing_workbook.pdf

Construction of the Mapleton Parkway Trail, May 2016

and pedestrian walkways, ADA sidewalk modification, recreational trails, and any activity eligible under the Set-Aside program (see below). MAG and the State control funds which they can spend or distribute within the MAG region.

Surface Transportation Block Grant Program Set-Aside

This Set-Aside, established in the FAST Act, replaces the Transportation Alternatives Program (TAP).[7] Funding through the Set-Aside can be used for the construction of sidewalks, walkways or curb ramps; bike lane striping, bike parking and bus racks; traffic calming; off-road trails; bike and pedestrian bridges and underpasses; ADA compliance; acquisition of railroad rights-of-way; and planning, design and construction of multiuse trails and rail-with-trail projects. Larger Metropolitan Planning Organizations, such as MAG, control a share of the funds to distribute locally through a competitive process.

Congestion Mitigation and Air Quality Improvement (CMAQ) Program

The CMAQ program supports surface transportation projects, like those for active transportation projects, due to their linkage to air quality improvements. Because Utah County includes Nonattainment and Maintenance Areas that are not in compliance with the National Ambient Air Quality Standards, projects to improve active transportation could be eligible for CMAQ funding.[8]

Community Services Block Grant Program (CSBG)

The CSBG Program provides funds to alleviate the causes and conditions of poverty in communities and includes transportation projects. Administered by the Department of Health and Human Services, funding is allocated to states that make funding available to local communities. Funded projects have included: commercial district streetscape improvements, sidewalk improvements, safe routes to school, and neighborhood-based bicycling and walking facilities that improve local transportation options or help revitalize neighborhoods.

Local Funding

This section describes locally-administered funding sources:

- General Fund
- Bond Financing
- Impact Fees
- Special Assessment or Taxing Districts
- Development-driven Projects

7 The TAP included the former Transportation Enhancements Program, the Safe Routes to School Program, and the Recreational Trails Program.

8. Utah Division of Air Quality 2014 Annual Report. Feb 2015. http://www.airquality.utah.gov/docs/2015/02Feb/2014DAQAnnualReport_FINAL.pdf

General Fund

General funds, like those used for maintenance and some capital improvement projects, can be leveraged to enhance bicycle and pedestrian access. For example, streets identified for reconstruction or repaving should be evaluated for their potential to complete or augment the existing bicycle and pedestrian networks.

Bond Financing

Bond financing is a long-term borrowing tool used to provide funds for capital projects. Bond measures are approved by voters and can authorize specific projects, including transportation improvements identified through the legislative process.

Impact Fees

Impact fees are paid by the developers to fund a fraction of the improvements that are required because of the new growth. Impact fees can be instituted to fund bicycle and pedestrian projects, such as trails. Impact fees are typically tied to trip generation rates and traffic impacts produced by a proposed project. Establishing a clear nexus between the impact fee and the project's impacts is critical. Impact fees may be considered at a citywide scale or for new developments along the corridor.

One challenge with using road impact fees to implement bicycle and pedestrian infrastructure is how and whether the facilities are shown as continuations of existing infrastructure. Therefore, cities with existing bike lanes may have an easier time making that case to add additional bicycle facilities then cities with no existing bike lanes. Therefore, cities should perform a more detailed analysis to see how impact fees can be used.

Park impact fees are another potential source of funding for trails. Again, cities should perform a more detailed analysis to see how park impact fees could be used.

Special Assessment or Taxing Districts

Special districts are organized to fund a specific project that benefits an identifiable group of properties.

Special districts are designated areas within which property owners are assessed a charge to defray the costs of capital improvements that can benefit the properties within the district. The costs of improvements are generally divided among property owners within a specified area. The contribution by owner can be allocated based on property frontage or other methods such as traffic trip generation. Transportation Development Districts (TDD) are one example of these districts used to finance transportation improvements, such as bicycle and pedestrian amenities. A TDD has the power to issue a bond to pay for the construction of projects that can benefit the district. Special districts may be considered for some areas within the study area; especially within downtown cores.

Development-Driven Projects

Developers construct the local streets within subdivisions and may participate in the construction of collector/arterial streets and trails adjacent to their properties.

Other Sources

This section describes other potential funding sources:

- The Kresge Foundation
- People for Bikes
- Crowdfunding

The Kresge Foundation

The Kresge Foundation provides grants to nonprofit organizations and government agencies seeking financial assistance for projects that contribute to improving health at the community level. The goal of these grants is to create a comprehensive system that improves health outcomes, promotes health equity, reduces per-capita health costs, remove barriers to health, and offers the greatest promise for adoption on a larger scale. Active transportation projects may be competitive for this funding.

People for Bikes

People for Bikes supports bicycle infrastructure projects and advocacy initiatives that make it easier and safer for all people to ride. Their grant funds are awarded to infrastructure projects such as bike paths, lanes, trails, bridges, and end-of-trip facilities such as bike racks, bike parking, and bike storage. Some examples of People for Bikes grants in Utah include:[9]

- Moab Canyon Path - A $10,000 grant went to the Moab Trails Alliance to help complete the Moab Canyon Path, a paved path linking key destinations.
- Historic Union Pacific Rail Trail - The Mountain Trails Foundation received $3,000 to help extend the Historic Union Pacific Rail Trail in Park City.
- Boulevard Parkway Trail - The Cache County Trails Coalition used a $2,000 grant to help connect communities throughout Cache County with bicycle facilities.

9 Utah. People for Bikes. Accessed Jan 28, 2016. http://www.peopleforbikes.org/get-local#state-UT

Crowdfunding

Crowdfunding focuses on raising money for projects through many small donations. Websites, such as gofundme.com, ioby.com, and indiegogo.com, allow fundraising campaigns to be easily established. In 2014, Memphis raised $70,000 through crowdfunding to build a separated bicycle lane. In 2015, Denver launched a crowdfunding campaign focused on corporate donors for the planning and design of a protected bike lane in downtown. Crowdfunding can be a creative approach to using community-based donations to leverage public funding.

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SOUTH UTAH COUNTY
ACTIVE TRANSPORTATION PLAN