

**To:** Honorable Mayor and City Council  
**From:** *mk* Mark Hofman, Community Development Director  
**Meeting Date:** January 6, 2015  
**Agenda Item:** Blaine County Community Bicycle and Pedestrian Master Plan

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**SUBJECT:** Public hearing and action on Resolution 2015-02 supporting the Blaine County Community Bicycle and Pedestrian Master Plan.

**BACKGROUND:** The Blaine County Regional Transportation Committee identified the need for a comprehensive, multi-jurisdictional bike and pedestrian master plan and created a sub-committee/working group to address the need. A working group of representatives from Blaine County, Blaine County Recreation District, the City of Bellevue, the City of Carey, the City of Hailey, the City of Ketchum, the City of Sun Valley, Mountain Rides Transportation Authority, Friends of Mountain Rides, St. Luke's Center for Community Health, the Wood River Bike Coalition, and private individuals from the community collaborated financial resources and efforts to produce the Blaine County Community Bicycle and Pedestrian Master Plan (**Exhibit "CC-2"**). The goal of the Master Plan is to provide a tool to assist organizations in Blaine County to work together in creating a seamless, interconnected, and integrated multi-modal transportation and recreation system for residents and visitors.

**ANALYSIS:** The Master Plan is intended to be a visionary document only and shall be utilized as a guide that is not binding to any jurisdiction or entity without formal approval and engagement of the relevant jurisdiction or private entity potentially involved. Draft Resolution No. 2015-02 is attached as **Exhibit "CC-2"** for consideration and action by the City Council.

**RECOMMENDATION:** The Community Development Director recommends the City Council approve and adopt the Blaine County Community Bicycle and Pedestrian Master Plan, dated June 27, 2014, and authorize the Mayor to sign Resolution No. 2015-02.

**LIST OF ATTACHED EXHIBITS:**

- Exhibit "CC-1"                      Draft Resolution No. 2015-02.
- Exhibit "CC-2"                      Blain County Community Bicycle and Pedestrian Master Plan, dated June 27, 2014.

EXHIBIT "CC-1"

(DRAFT) RESOLUTION 2015-02

**A RESOLUTION OF THE CITY OF SUN VALLEY SUPPORTING THE BLAINE COUNTY  
COMMUNITY BICYCLE AND PEDESTRIAN MASTER PLAN**

**WHEREAS**, the City of Sun Valley has adopted the *2005 Comprehensive Plan Update (Comprehensive Plan)* by Resolution 2005-12, on September 8, 2005, and subsequent amendments; and

**WHEREAS**, the *Comprehensive Plan* is the primary document to guide and balance future development within the City of Sun Valley and establishes a general framework for use in making decisions about the physical, social, economic, and environmental development of the Community; and

**WHEREAS**, Goal 6 of the *Comprehensive Plan* states: Provide for an integrated transportation system that promotes a recreationally-active community, encourages non-motorized transportation, and reduces congestion and air pollution; and

**WHEREAS**, Objective 6.4 of the *Comprehensive Plan* states: Encourage the use and expansion of public paths and trails; and

**WHEREAS**, Action Item 6.4.3 of the *Comprehensive Plan* states: Encourage the establishment and maintenance of a system of dedicated recreational trailheads and trails throughout the City that 1) connect existing neighborhoods, parking, open spaces, and other natural areas and that 2) provide trail linkages to neighboring communities, the bike path, parking, transit services, and federal lands; and

**WHEREAS**, Goal 7 of the *Comprehensive Plan* states: Promote partnerships with neighboring communities, businesses, agencies and organizations to advance the City's and the region's economic health; and

**WHEREAS**, Objective 7.2 of the *Comprehensive Plan* states: Initiate, encourage, support, and participate in regional partnerships to provide for public transportation; and

**WHEREAS**, Action Item 7.2.1 of the *Comprehensive Plan* states: Initiate and participate in regional partnerships to provide for efficient and cost-effective mass transit, efficient highway and street expansion, and non-motorized travel in the region; and

**WHEREAS**, Objective 8.1 of the *Comprehensive Plan* states: Initiate, encourage, support, and participate in regional partnerships to provide for solutions to social, educational, and recreational issues; and

**WHEREAS**, Action Item 8.1.3 of the *Comprehensive Plan* states: Coordinate with Blaine County Recreation District and other partners such as the Sun Valley Community Trails Group to develop an integrated recreation system including open space, trails, parks, and other recreational amenities and services; and

**WHEREAS**, the cities, communities, residents, and businesses of Blaine County desire a cohesive and comprehensive vision for developing, standardizing, and growing bicycle and

pedestrian infrastructure, amenities, and policies in Blaine County and the municipalities within the county; and

**WHEREAS**, the Blaine County Regional Transportation Committee identified the need for a comprehensive, multi-jurisdictional bike and pedestrian master plan, and created a sub-committee/working group to address the need; and

**WHEREAS**, a working group of representatives from Blaine County, Blaine County Recreation District, the City of Bellevue, the City of Carey, the City of Hailey, the City of Ketchum, the City of Sun Valley, Mountain Rides Transportation Authority, Friends of Mountain Rides, St. Luke's Center for Community Health, the Wood River Bike Coalition, and private individuals from the community have collaborated financial resources and efforts to produce the Blaine County Community Bicycle and Pedestrian Master Plan (*Master Plan*); and

**WHEREAS**, the Blaine County community participated in several workshops, stakeholder meetings and surveys that contributed to formation of the *Master Plan*; and

**WHEREAS**, an inventory and analysis was conducted on current bicycle and pedestrian infrastructure provided throughout Blaine County, which found a consistent need for improved and enhanced bicycle and pedestrian infrastructure both within major jurisdictions and between jurisdictions; and

**WHEREAS**, the *Master Plan* incorporates policies and plans from all jurisdictions within Blaine County that contribute to well-planned mobility improvements; and

**WHEREAS**, the *Master Plan* provides a broad overview of the needs of the community and some solutions to meet those needs; and

**WHEREAS**, the *Master Plan* provides potential implementation steps for specific projects and improvements; and

**WHEREAS**, bicycle and pedestrian amenities are required to provide an accessible, safe, and attractive transportation mode that improves mobility, recreation, and the overall health of the community; and

**WHEREAS**, the national bicycling industry, according to a recent study, contributes an estimated \$133 billion to the United States economy and economic benefits of a well-planned bicycle and pedestrian system are known to include increases in tourist revenue, property values, retail sales, and the attraction of good employees looking for a high quality of life atmosphere; and

**WHEREAS**, the health benefits of a well-planned bicycle and pedestrian system contribute to a healthier population by improving cardiovascular health, creating strong social ties, and reducing stress, among other benefits; and

**WHEREAS**, the City of Sun Valley desires safer, more accessible, and more comprehensive bicycle and pedestrian infrastructure that can be built to serve the public and promote the general welfare of our community; and

**WHEREAS**, the *Master Plan* shall be utilized as a guiding document that is not binding to any jurisdiction or entity without formal approval and engagement of the relevant jurisdiction or private entity potentially involved.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SUN VALLEY, IDAHO,** that the City of Sun Valley approves and adopts the Blaine County Community Bicycle and Pedestrian Master Plan, dated June 27, 2014, and authorizes the Mayor to sign this Resolution.

**PASSED AND ADOPTED this 6th day of January, 2015.**

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Dewayne Briscoe, Mayor  
City of Sun Valley

Attest:

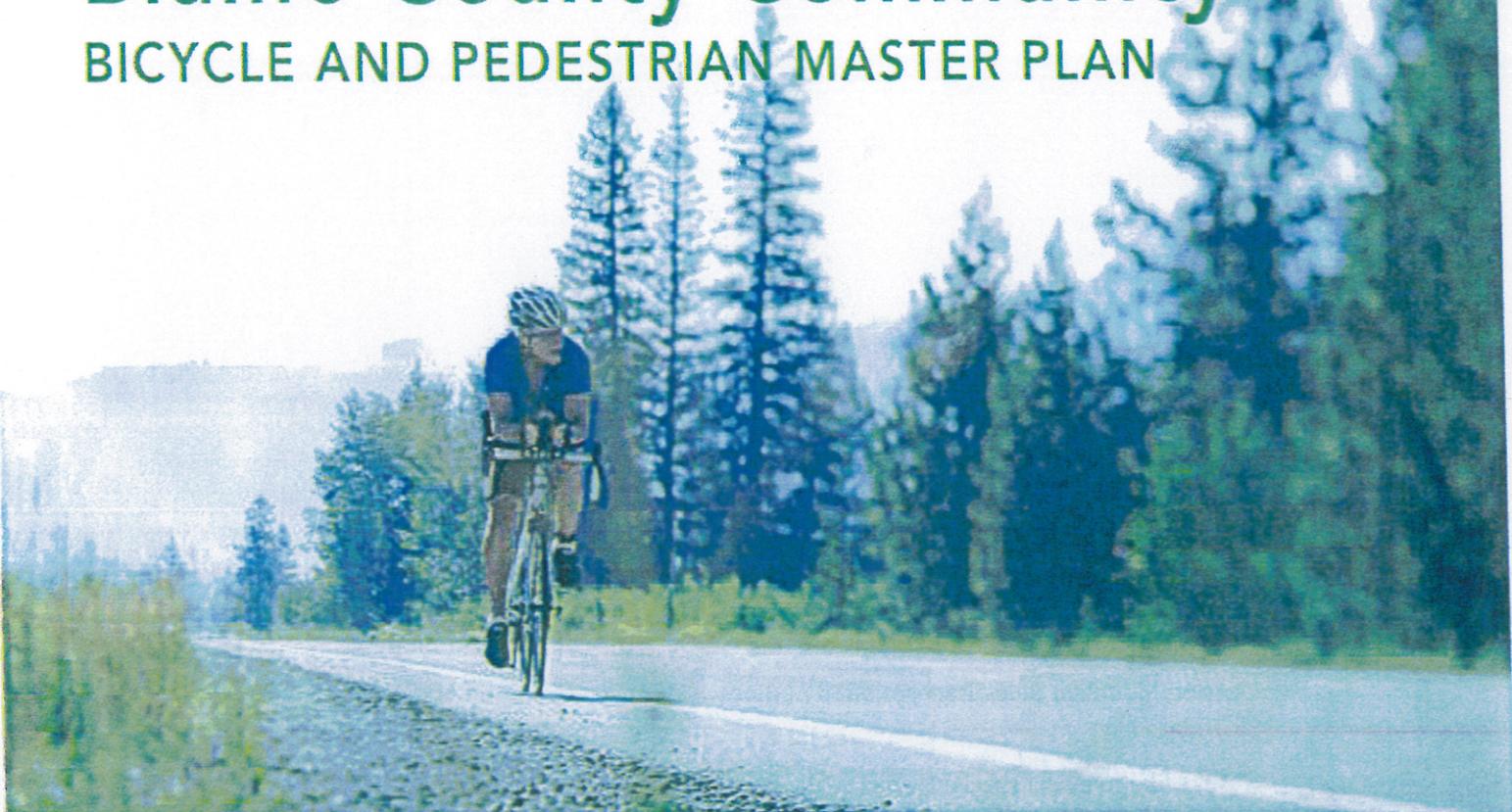
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Alissa Weber, City Clerk  
City of Sun Valley

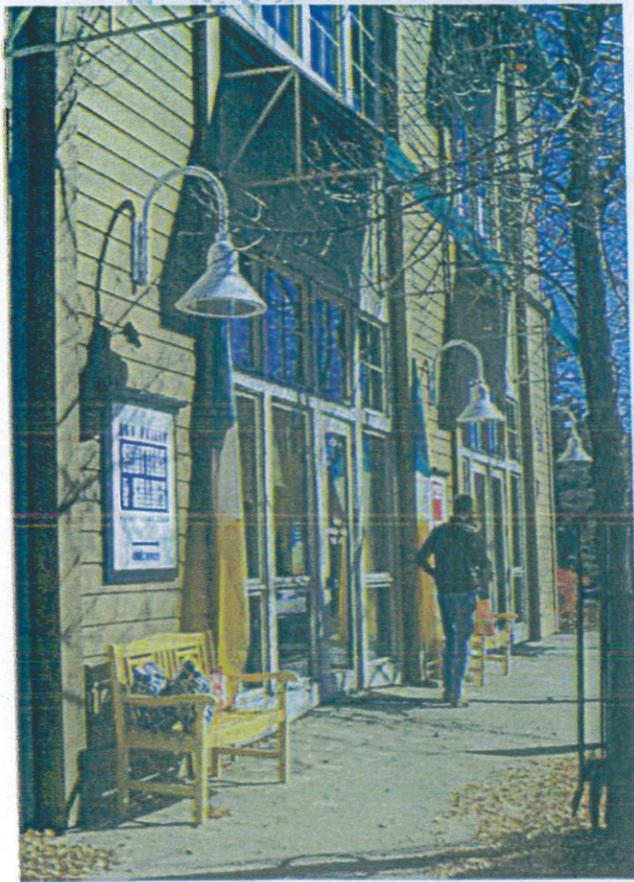
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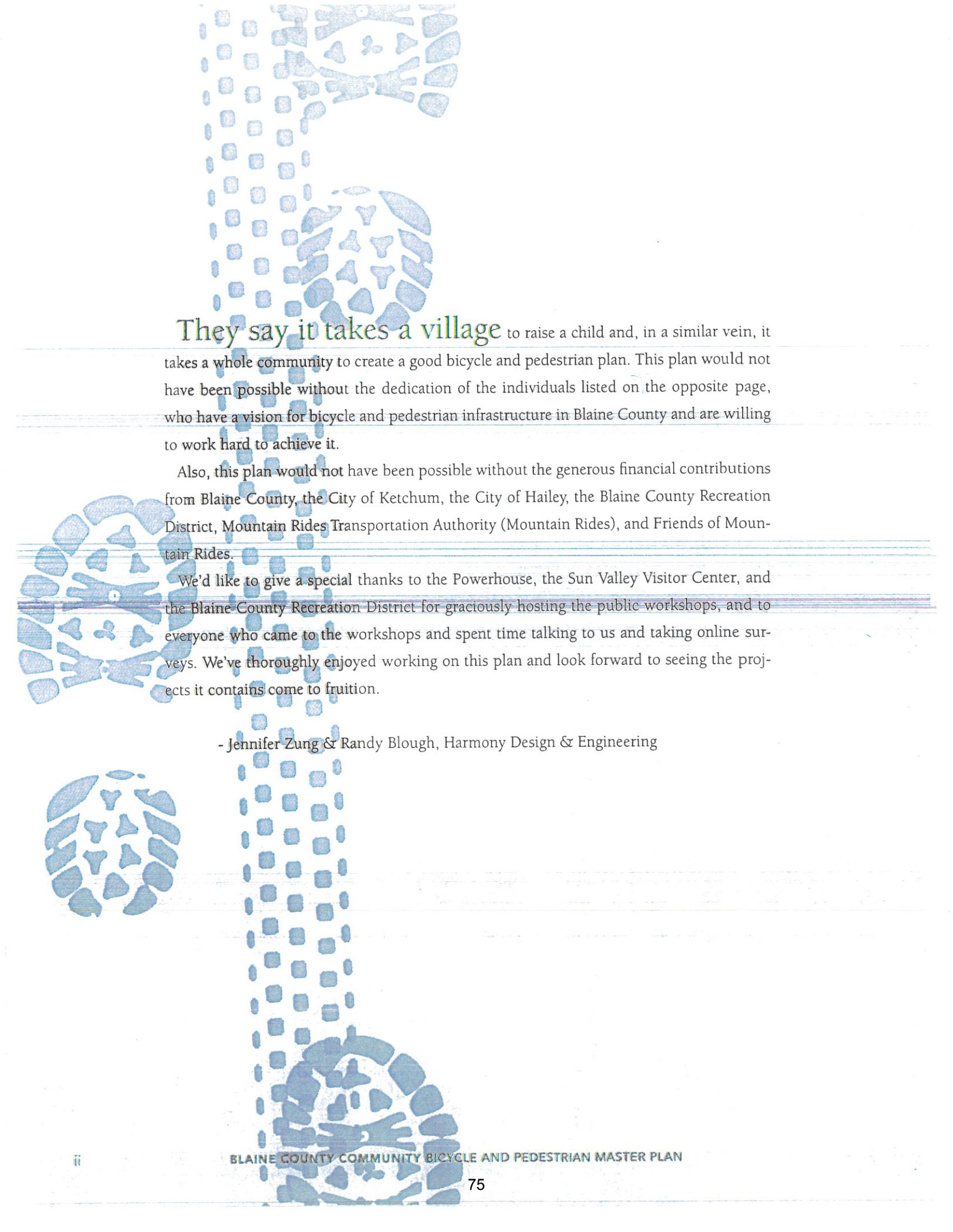
# Blaine County Community

## BICYCLE AND PEDESTRIAN MASTER PLAN



June 27, 2014



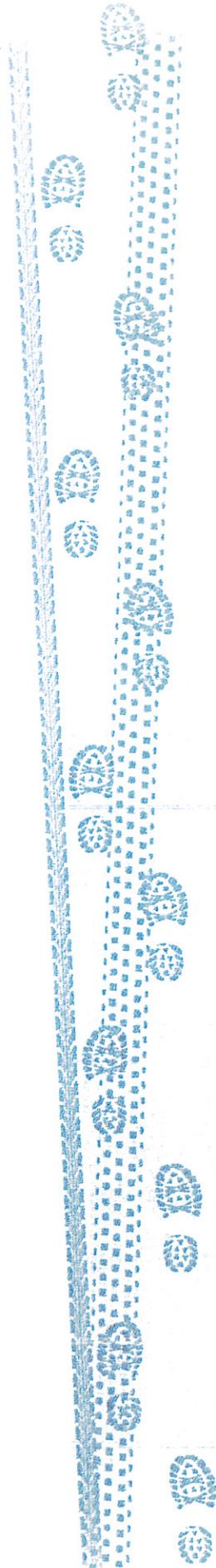


**They say it takes a village** to raise a child and, in a similar vein, it takes a whole community to create a good bicycle and pedestrian plan. This plan would not have been possible without the dedication of the individuals listed on the opposite page, who have a vision for bicycle and pedestrian infrastructure in Blaine County and are willing to work hard to achieve it.

Also, this plan would not have been possible without the generous financial contributions from Blaine County, the City of Ketchum, the City of Hailey, the Blaine County Recreation District, Mountain Rides Transportation Authority (Mountain Rides), and Friends of Mountain Rides.

We'd like to give a special thanks to the Powerhouse, the Sun Valley Visitor Center, and the Blaine County Recreation District for graciously hosting the public workshops, and to everyone who came to the workshops and spent time talking to us and taking online surveys. We've thoroughly enjoyed working on this plan and look forward to seeing the projects it contains come to fruition.

- Jennifer Zung & Randy Blough, Harmony Design & Engineering



# Aknowledgements

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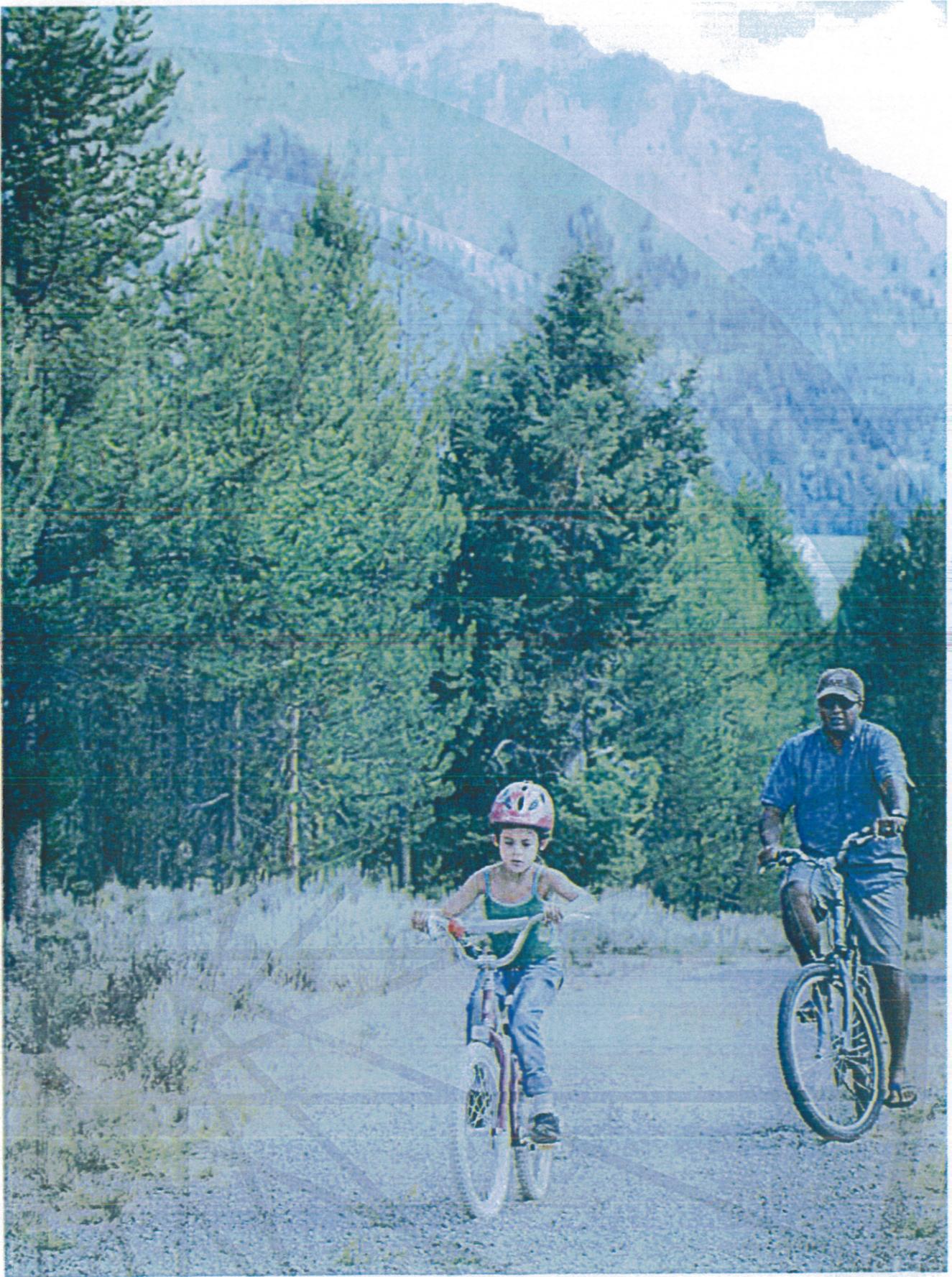
## **Master Plan Consultants**

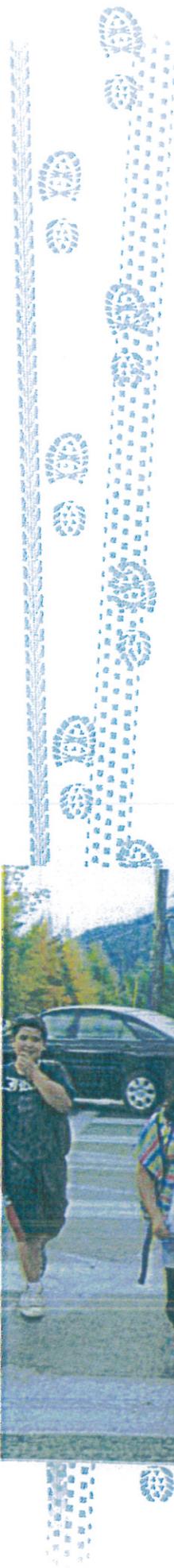
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## Chapter 1

# INTRODUCTION

## 1.1 ABOUT BLAINE COUNTY

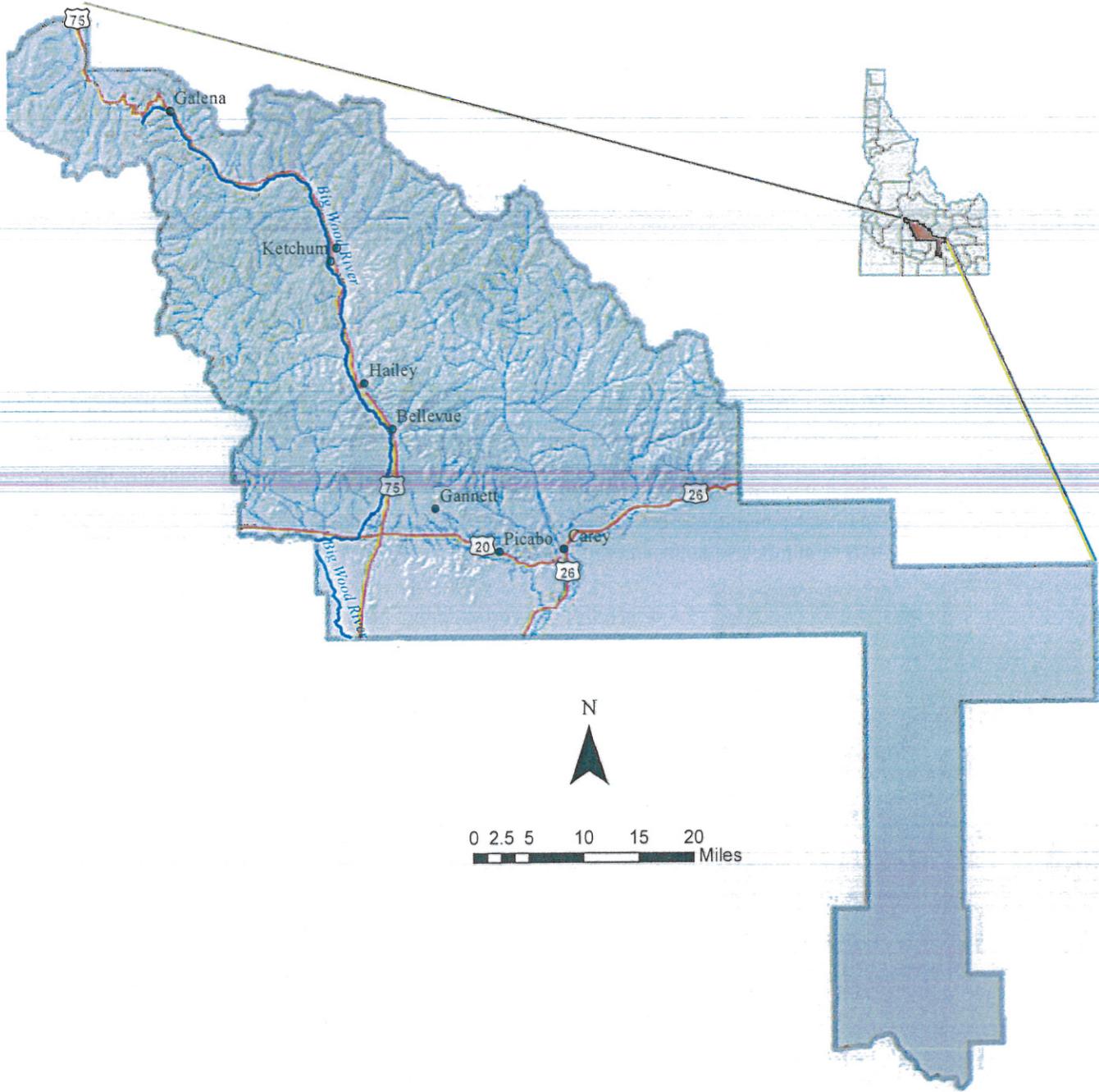
Known for its scenic beauty and abundant recreational opportunities, Blaine County is one of Idaho’s most unique places, featuring alpine and Nordic skiing, excellent fishing, and hundreds of miles of trails for hiking, biking, horse packing, and motorized off-road use. The existing trail system, programs such as Miles for Smiles and Safe Routes to Schools, and the thriving bike and pedestrian culture are all factors that led to its designation as an International Mountain Bike Association (IMBA) Epic Ride Center and the League of American Bicyclists recognition as a silver level Bike Friendly Community. These accomplishments are a testament to the dedication and commitment of non profit organizations, volunteer committees, local businesses and government agencies to developing world class bicycle and pedestrian facilities in Blaine County.

Located in south central Idaho, Blaine County is home to approximately 21,000 people, most of whom live in the northwestern portion of the county commonly referred to as the Wood River Valley. The Wood River Valley drains the Big Wood River and encompasses Sun Valley Ski Resort, as well as the cities of Bellevue, Hailey, Ketchum, and Sun Valley. The City of Carey is located in the southeastern portion of the county and has a population of approximately 600 people.



*Students walking to school in Blaine County.*

# Blaine County, Idaho



## 1.2 PLAN GOALS AND OBJECTIVES

The scope of the Blaine County Community Bicycle and Pedestrian Master Plan (Master Plan) includes bicycle and pedestrian facilities within Blaine County and its incorporated cities with some concentration on the Wood River Valley due to the location of the population base and existing facilities. Its focus is on pathways, which are broadly defined as any bicycle or pedestrian facility, including separated paths, bike lanes, bike shoulders, shared roads, or sidewalks, that connect the communities within Blaine County with each other and with recreational opportunities outside of the communities. The Master Plan does not include recreational dirt trails located on Forest Service, Bureau of Land Management, or other public or private lands, with the exception of the Harriman Trail and the Toe of the Hill Trail.

The goal of this Master Plan is to provide a tool to help the various governmental and non-governmental organizations in Blaine County work together to create a seamless, interconnected, and integrated multi-modal transportation and recreation system for residents and visitors. Having a comprehensive and cohesive Master Plan that all jurisdictions and organizations in Blaine County are working collaboratively to implement will be a great asset.

### Plan Goal

Provide a cohesive and comprehensive vision for developing, standardizing, and growing bicycle and pedestrian infrastructure, amenities, and policies in Blaine County.

#### This Master Plan includes the following to help reach this goal:

- Information on the current state of biking and walking facilities in Blaine County
- Tools for making existing and future infrastructure safer, more connectors, and reducing conflicts between different user groups
- Design guidelines that provide a framework for future facility improvements
- Flexibility to allow both cohesion among communities and the ability for each community to have their own identity
- A roadmap for future development, including short-, mid-, and long-term opportunities
- Adoption and implementation steps that are easy to understand and allow for coordination between jurisdictions

The Master Plan provides a **broad overview** of the needs of the community and **some solutions** to meet those needs. It is a **starting point for further detailed studies and provides implementation steps** for specific projects and improvements. The “Implementation Strategies” chapter at the end of this report outlines various ways to progress toward achieving the community’s goals and vision.

## 1.3 VISION

A working group was formed to lead and facilitate the creation of the Master Plan along with the consultant team. The working group was comprised of representatives from a wide range of organizations and jurisdictions, including those that would be responsible for building and maintaining bicycle and pedestrian facilities in Blaine County.

### Working Group Representatives

- Blaine County
- Blaine County Recreation District
- Cities of Carey, Hailey, Ketchum, and Sun Valley
- Community Transportation Authority of Idaho
- Friends of Mountain Rides
- Mountain Rides Transportation Authority
- St. Luke's Center for Community Health
- Wood River Bike Coalition

Through the vision of the working group, this Master Plan facilitates the development of bicycle and pedestrian infrastructure that is accessible, safe, attractive, and integrated for use as a transportation mode, form of recreation, and tool to improve the health of the community. It is also important that bicycle and pedestrian facilities in Blaine County are designed from the user's point of view; that they are consistent between the various municipalities; and easy to navigate, providing a pleasant experience for the user. This means

that the bicycle and pedestrian system has good wayfinding with seamless connections that are easy to figure out. A pleasant experience for the user might mean that there are opportunities for people to explore and have fun along the way and places to enjoy cherished moments.

Another vision for bicycle and pedestrian infrastructure is that it could encourage people who don't ride or walk on a regular basis to start using alternative modes of transportation. Making the system safer, easier to access, and attractive can help increase the number of people biking and walking for both transportation and recreation.

“We desire bicycle and pedestrian infrastructure and amenities that are accessible, safe, attractive, and integrated for use as a transportation mode, form of recreation, and tool to improve the health of the community.”

—Master Plan Working Group

## 1.4 BENEFITS

### Economic

The economic benefits of well-planned bicycle and pedestrian systems are significant. This includes increases in tourist revenue, property values, and retail sales, and the attraction of good employees looking for a higher quality-of-life atmosphere. Today, the national bicycling industry contributes an estimated \$133 billion a year to the United States economy. It supports nearly 1.1 million jobs and generates \$17.7 billion in federal, state, and local taxes. Another \$46.9 billion is spent on meals, transportation, lodging, gifts, and entertainment during bike trips and tours (Flusche, 2009).

Improving walkability and bikeability in the downtown areas of Blaine County can attract new money into the local economy. Retail stores are positively affected by improvements to pedestrian environments that encourage people to get out of their cars and shop. Studies have also shown that people who walk or bike to commercial areas regularly spend more money than those who drive (Litman, 2007). After bike lanes were added on 9th Avenue in New York City's Manhattan, retail sales increased 49 percent compared to a borough-wide rate of only 3 percent. The addition of bike lanes, bike parking, and other biking and walking facilities can increase pedestrian activity and spending on commercial streets in the cities of Blaine County.

After bike lanes were added on 9th Avenue in New York City's Manhattan, retail sales increased 49% compared to a borough-wide rate of only 3%.

The presence of sidewalks and bike facilities not only increases retail sales in commercial areas, it also increases the value of residential properties located adjacent to pathways. An examination of home sales in seven Massachusetts towns showed that houses near rail trails sold for a higher proportion of the asking price in about half the time (29.3 vs 50.4 days) than it took for other houses to sell (Penna, 2006). An analysis of Multiple Listing Service (MLS) sales of homes located along greenway systems in Indianapolis, Indiana, found that the average premium paid for a home within one-half mile of a greenway trail system was \$4,384 and the premium paid for a home within one-half mile of the Monon Trail, the flagship of the Indianapolis greenway system, commanded a premium of \$13,059 (Lindsey, 2003). Several studies support the finding that proximity to pathways increases property values through increased sales price or overall desirability (Duygu, 2008; Greer, 2000; NPS, 1995).

Today, the national bicycling industry contributes an estimated \$133 billion a year to the United States economy.

**Visitor spending was responsible for 37 percent of all jobs in Blaine County and 29 percent of all earnings.**

An increase in property values translates to increased tax revenue that can offset the public investment costs for installing and maintaining pathway amenities (Lindsey, 2003; Vom Hofe et al., 2011). Allison Monroe of Jackson Hole Real Estate Associates noted that “at least 50 percent of the buyers who scheduled showings for a home she listed adjacent to a neighborhood Nordic track first noticed the house while skiing or mentioned the proximity to the track as one of the main selling points.” She further stated that as many or more informational flyers were taken from the flyer box at the back of the property adjacent to the track as from the box on the street side.

## Tourism

Tourism is a significant component of the Blaine County economy and good bicycle and pedestrian infrastructure helps support the tourist industry. The Blaine County Economic Analysis published in 2001 showed that the total impact of visitor spending was responsible for 37 percent of all jobs in Blaine County and 29 percent of all earnings (Runyan, 2001). Visitors that used the existing trails in Blaine County reported spending an average of \$1,751 during their visit (Trail Survey, 2012). Pathways contribute significantly to the reputation of an area as an outdoor recreation destination and can help attract tourists, permanent residents looking for a lifestyle community, and businesses in outdoor related industries.

**Jackson, WY, has spent an estimated \$1.7 million over the past decade on area trail systems and, in return, has benefited from an estimated \$18 million annual boost to their economy.**

The Sun Valley/Ketchum area particularly competes directly with other mountain resorts in the West for tourist dollars. Jackson, WY, has spent an estimated \$1.7 million over the past decade on area trail systems and, in return, has benefited from an estimated \$18 million annual boost to their economy as a direct result of trail related goods and services purchased in addition to supporting \$3.6 million in jobs and generating \$1.8 million in taxes every year (Kaliszewski, 2011). Communities that have invested in bicycle and pedestrian infrastructure have experienced positive economic impacts by attracting bicycle industry dollars.

## Transportation

Biking and walking as a means for both transportation and recreation is growing significantly in popularity throughout the United States, including in Blaine County. The millennial generation is driving less and are attracted to areas that have good, adequate bike and pedestrian infrastructure. Nationwide, biking and walking make up 11.9 percent of all trips made in this country (FHWA, 2009). This is up from 9.5 percent in 2001, a 25 percent increase. In rural areas, 20 percent of all

**Nationwide, biking and walking make up 11.9 percent of all trips made in this country.**

trips are one mile or less and 25 percent of those are made by walking or biking. According to the U.S. Census Bureau's 2008 American Community Survey (ACS), the number of Americans that use a bicycle as the primary means of getting to work increased 36 percent from 2005 to 2008. This demonstrates that both short trips and longer commutes are a growing part of bicycle and pedestrian transportation trends.



*Mountain Rides 5B Bikeshare program provides a convenient, cheap, and healthy way to get around town.*

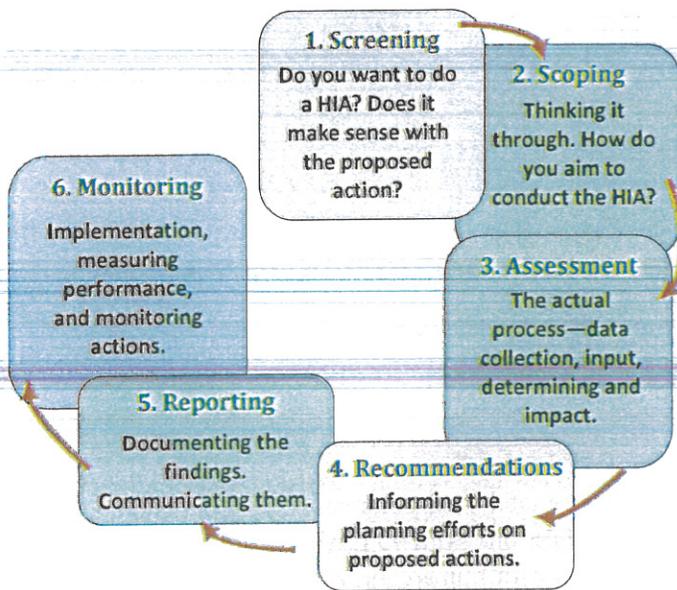
Pathways that are well connected and used for daily commuting help reduce traffic congestion and the environmental impacts of automobile use. Automobile transportation accounts for roughly 70 percent of greenhouse gas emissions, with 45 percent from cars and light duty trucks, and produces an array of pollutants with human and environmental health impacts (Campbell, 2004). Motor vehicles also contribute to significant noise pollution and water pollution that largely goes unrecognized compared to air pollution. Fortunately, Blaine County's busiest time of the year for traffic congestion is summer time, which is also the best time to take advantage of alternative means of transportation such as walking or biking.

## **Safety**

According to the National Highway Traffic Safety Administration, bicyclists and pedestrians account for about 13 percent of all traffic fatalities despite the fact that they make up only 10 percent of all trips. Youth (under 16) and seniors (over age 65) are particularly vulnerable and represent a high percentage of the overall fatalities. This statistic highlights the need to assure that bicycle and pedestrian facilities are constructed and maintained with safety in mind. Improvements to existing infrastructure and construction of new bicycle and pedestrian facilities where none currently exist can help to reduce the disproportionate risk for this user group. Following and educating the public on the rules and regulations put forth by the Idaho State Code (§ 49-701 to 49-724) for pedestrian and bicycles will also increase safety for everyone.

## 1.5 HEALTH IMPACT ASSESSMENT

Active transportation facilities and programs associated with bicyclists and pedestrians are viewed as community investments that promote and contribute to numerous measures of human health. To explore how the different dimensions of health can be impacted and the extent to which health measures amongst Blaine County residents could realize such impacts, a Health Impact Assessment (HIA) was drafted by Chris Danley from Vitruvian Planning in conjunction with this Bicycle and Pedestrian Master Plan. The HIA began in November 2013 and included preliminary conditions assessments, a half day stakeholder workshop, and an assessment and evaluation period prior to the drafting of the Plan's overall findings. The complete HIA is included in Appendix D of this report and a summary is included here.



*The HIA process includes six essential steps, which are shown in the figure below.*

### Current Blaine County Health Conditions

Blaine County residents are among the healthiest in the state of Idaho. Most health measures indicate that rates within differing categories are generally much lower than national averages and typically lower than state figures. For example, Diabetes, Asthma, and Cancer are common afflictions that are 50-90 percent lower in Blaine County compared to state and federal rates. (St. Lukes, 2013)

### Health Data

Through a 2013 Community Health Needs Assessment conducted by St. Luke's Wood River, general health information was summarized, on-going community health issues and community priorities for improvement were identified, and strategic strategies outlined. Based on surveys and an extensive analysis, the top four priorities for Blaine County health interventions include:

- Combating poor mental health;
- Reversing both overweight and obese adults and teenagers;
- Reducing substance abuse of both alcohol and illicit drugs; and
- Reducing the number of vehicle crash deaths.

## Demographic Factors

Demographics and social factors can often tell a story about what may be occurring in a given area. Where a person is born and raised and the conditions in which they live can have a significant impact on their health. Community characteristics such as income, education attainment, and the built environment are a few of the determinants that forge a healthy or unhealthy living condition. Based on an analysis of demographic data, it is clear that:

- The Hailey area should be a high priority due to high overall youth population and high number of Supplemental Nutrition Assistance Program (SNAP) recipients.
- West Ketchum/Sun Valley should be the focus of senior citizen-friendly designs and programs due to its higher senior citizen population (1 in 4). (St. Luke's, 2013)
- Bellevue/Carey has a large youth population and sizable population living below poverty levels, meaning infrastructure segments connecting with economic centers and programs targeting health and physical mobility would be advisable.



HIA workshop

## Blaine County Community Bicycle and Pedestrian Master Plan Health Findings and Recommendations Summary

Recommendations for the Blaine County Community Bicycle and Pedestrian Master Plan related to health benefits were derived principally via stakeholder input collected at the HIA workshop. The team gathered stakeholders for a half day workshop. Participants were first asked to think through how the recommended Master Plan projects could possibly impact health—specifically the identified seven dimensions of health (Social, spiritual, economic, intellectual, physical, emotional, and environmental). Stakeholders then worked together to identify the immediate impacts resulting from project implementation, then the resulting actions of area resident and corresponding health impacts.

Claims made by stakeholders regarding potential impacts to human health were organized and thoroughly evaluated using research and published medical journals. Stakeholders identified a slew of possible impacts ranging from stress reduction and stronger social ties, to improving cancer outcomes and improved cardiovascular health. Of all topics analyzed, those having the strongest correlation to active transportation facilities and impacting the most Blaine County residents are displayed below:

- Stress reduction
- Exposure to nature
- Fewer cars on local roads
- Housing values
- Business attraction
- Retail access
- Physical activity with increased street and pedestrian connectivity

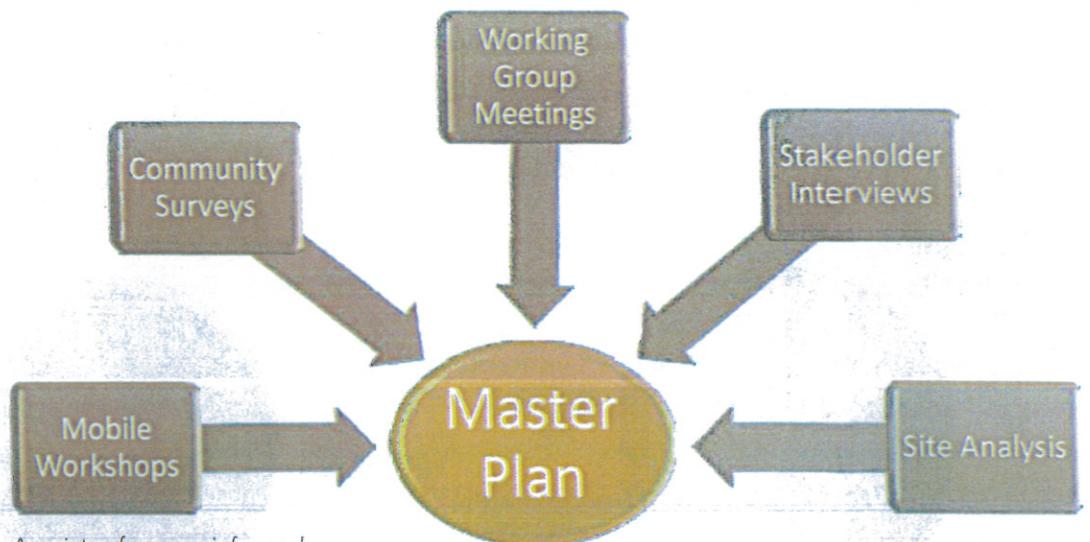


## Chapter 2

# COMMUNITY OUTREACH

Good community plans are founded on meaningful input from the community. Members of the community not only have the best knowledge of existing conditions, they also have good ideas on where improvements and connections are needed. Additionally, obtaining input and support from the organizations and government entities that will build, design, and maintain bicycle and pedestrian infrastructure is key to ensuring the Master Plan will be implemented with enthusiasm.

Multiple avenues for gathering public input were used in order to evaluate current conditions and assess the community needs for bicycle and pedestrian infrastructure. This included on-site mobile public workshops, online surveys, meetings with the working group, one-on-one interviews with stakeholders, and group stakeholder meetings facilitated by the working group. A summary of the community outreach efforts is given in this chapter and additional information is included in Appendix A.



*A variety of sources informed the Master Plan.*



## The Working Group

The working group was actively involved throughout the planning process and was instrumental in spearheading the Master Plan from the start. A kick-off meeting was held on November 4, 2013, with the purpose to validate the vision and goals for the Bicycle and Pedestrian Master Plan, gather information on existing bicycle and pedestrian infrastructure in Blaine County, and begin to identify potential projects and improvements. Additional meetings were held throughout the planning process with the working group in order to

The working group was instrumental during the planning process.

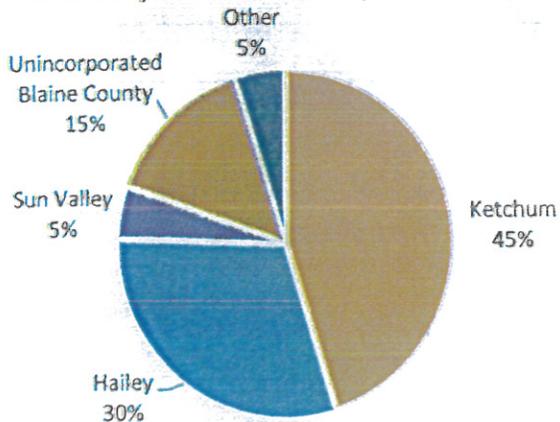
update the group on progress of the Master Plan and gather feedback. Working group members also facilitated stakeholder meetings in Blaine County, Ketchum, and Hailey in order to gather feedback from the community.

## Online Survey

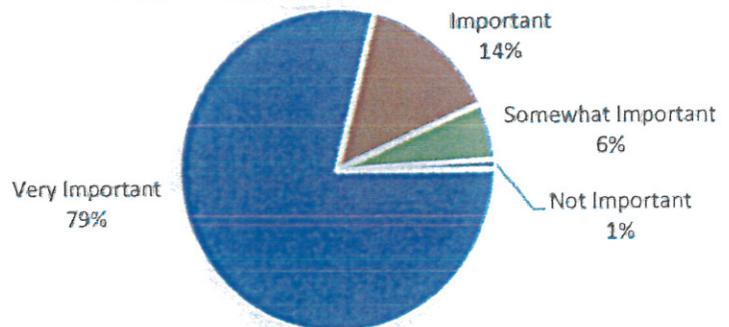
For those who could not attend the mobile workshops or stakeholder meetings, an on-line survey was available for approximately one month. A total of 215 people completed the survey, which asked opinions about the current state of bicycle and pedestrian infrastructure in Blaine County as well as priorities for potential project.

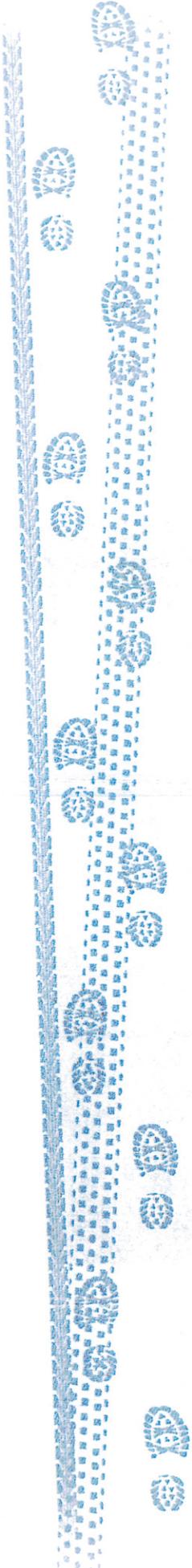
The survey was primarily distributed through the working group members via email and, for this reason, does not statically represent the desires of the entire county. However, it does provide good information on the desires and opinions of those who most actively use bicycle and pedestrian facilities in the county. Most of the survey respondents lived either in Ketchum (45 percent) or Hailey (30 percent) and more than 90 percent felt that an interconnected and well maintained pathway system is

Residency of Online Survey Respondents



Importance of pathways and sidewalks for quality of life and economic sustainability





important to the quality of life and economic sustainability in Blaine County.

## Stakeholder Interviews and Meetings

Several one-on-one and small group interviews were held with various stakeholders to gain a more in-depth understanding of existing conditions and needs for bicycle and pedestrian facilities. Some of these interviews were conducted by the consultant via telephone or in person. Others were conducted by members of the working group. The stakeholders included business owners and bike shop owners, city planners and officials, bicycle advocacy groups, and more.

## Community Workshop

During the week of January 13-16, 2014, a multi-day planning workshop was held to gather community input and feedback on the Master Plan. The workshop included meetings with specific stakeholder groups, meetings with the working group, and mobile workshops. On-site tours were also conducted by the consultant team.

## Government Group Stakeholder Meeting

Approximately 20 representatives of local and state governmental and county-wide agencies attended a meeting held on January 13, 2014, to begin the coordination efforts for bicycle and pedestrian improvements. This meeting was well attended by representatives from various entities, including Blaine County, Hailey, Ketchum, Bellevue, Blaine County Recreation District (BCRD), Sun Valley Company, U.S. Forest Service, Idaho Transportation Department, and Mountain Rides Transportation Authority (Mountain Rides).

The meeting consisted of an overview of the planning project and discussion regarding:

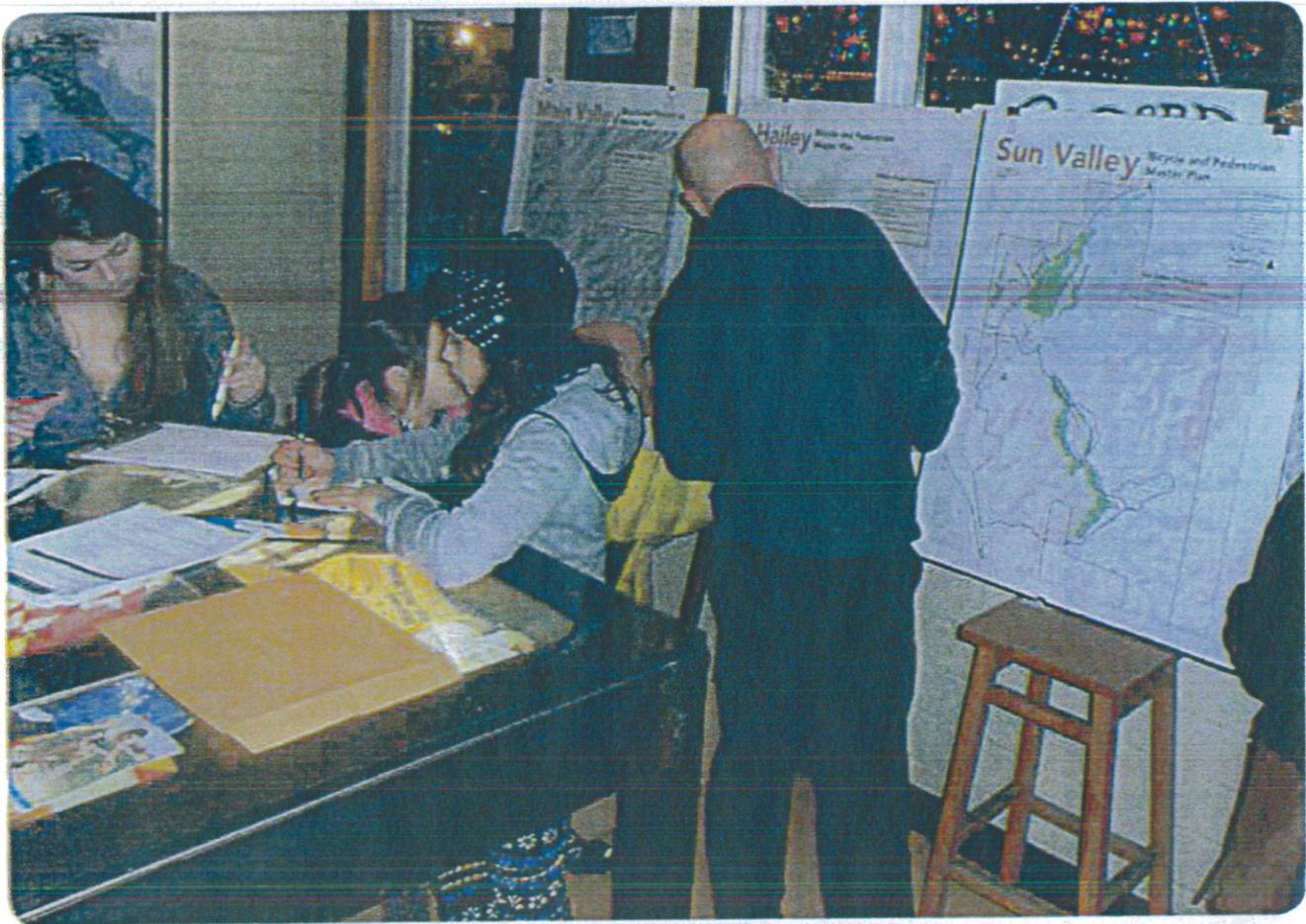
- How each jurisdiction or organization can benefit from bicycle and pedestrian improvements;
- How each entity can play a role in improving bicycle and pedestrian facilities in Blaine County;
- General design guidelines for bicycle and pedestrian facilities; and
- Community benefits of bicycle and pedestrian facilities and prioritization of those benefits.

The benefits of the Master Plan identified during the meeting included those listed in Chapter 1, as well as:

- Providing support for grant applications by prioritizing projects;
- Increasing public relationship through organizations working together; and

- Providing coordination with other infrastructure improvements.

The top contribution identified during the meeting that the various organizations could provide was the ability to partner financially on projects either through direct funding or by partnering on grant applications. Other contributions included providing or sharing maintenance support and/or equipment, providing right-of-way for improvements, and coordinating improvement opportunities. Some specific contributions that were offered included street sweepers owned by the BCRD that could possibly be used on county roads, grant writing assistance that could be provided by Mountain Rides, and the ability of the BCRD to lead coordination efforts for projects. City's planning departments are committed to helping support planning



*More than sixty community members gave input during the mobile workshops at the Powerhouse (above), the Ketchum visitor center and the BCRD Community Campus (opposite page).*

and implementation of this bike-ped master plan.

### **Bike Advocacy and Shop Owner Stakeholder Meeting**

Eleven people that were members of local bike advocacy groups or owners of bike and sporting goods shops attended a meeting on January 14, 2014. This meeting included representatives from the Wood River Bike Coalition, Durance Cycleworks, The Elephant's Perch, Backwoods Mountain Sports, PK's Ski & Sports, and Mountain Rides. The potential projects that had been identified by the working group were discussed during this meeting and participants were asked to rank their top three projects using key pad polling. The results are included in Section 5.3.

### **Mobile Workshops**

Mobile workshops were held in three locations in the county in prominent and popular locations in order to determine which potential projects were most important to the community. The workshop were held in the following locations:

- The Powerhouse in Hailey, (Monday, 1/13/2014 from 5:00pm to 7:00pm)
- The Visitor's Center in Ketchum, (Tuesday, 1/14/2014 from 11:00am to 1:00pm)
- BCRD Community Campus in Hailey, (Tuesday, 1/14/2014 from 4:00pm to 7:00pm)

Maps of potential projects were on display and participants "voted" for projects with dot stickers that were placed on the map. The purpose of this activity was to engage the public in a format different from the online questionnaire and provide the opportunity for the community to get involved with the project, ask questions, and give input.

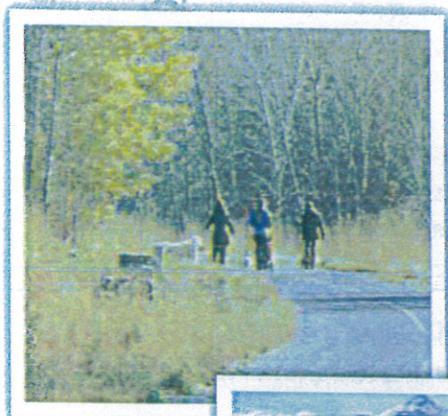




## Chapter 3

# CURRENT CONDITIONS

## 3.1 EXISTING INFRASTRUCTURE



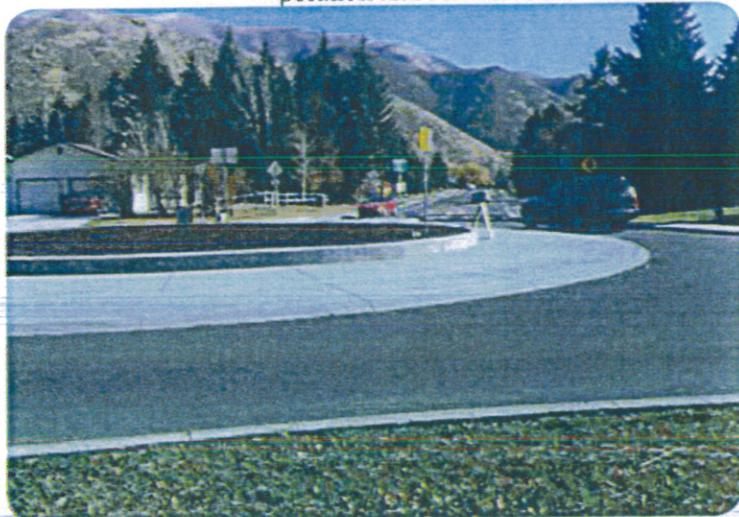
At the heart of the Blaine County pathway system is the Wood River Trail, a paved separated path that is groomed for nordic skiing in the winter, which sees more than 300,000 visits throughout the year. Bikers, hikers, runners, equestrian riders, walkers, parents with strollers, dog walkers, rollerbladers, and cross country skiers all use the Wood River Trail (WRT), commonly called the “bike path.” The WRT stretches 20 miles through the center of the Wood River Valley from Ketchum to Bellevue and provides a physical connection for the communities, as well as a place for social gatherings. When the fires of 2013 raged outside of Hailey, residents gathered along the bike path to share stories and console each other during the time of need.

Blaine County residents recognize the value of the WRT and recently approved a two year temporary tax levy for \$3.5 million to reconstruct, resurface, and rehabilitate the WRT in order to restore its useful life for another 30 years. Construction is scheduled to begin during the summer of 2014 and be completed in 2016.

There are other multi-use paths that branch off of the WRT. Sun Valley has approximately 8 miles of separated paths and 3 miles of cycle tracks (multi-use paths that are adjacent to the road). There are also smaller spurs in Hailey that connect the WRT with the BCRD Com-

munity Campus and other schools.

Downtown sidewalks are the focus of the pedestrian element of this plan. Ketchum, Hailey, Bellevue, and Carey all have downtown sidewalks that are good in some locations, in need of repair in others, and sometimes non-existent. An inventory of existing sidewalks and locations without sidewalks in Ketchum was completed by the Ketchum Community Development Corporation and known as the Walkable Ketchum Project.



*Roundabout at Woodside Boulevard and Fox Acres calms traffic while keeping traffic moving.*

Street and sidewalk improvements were recently completed on Woodside Boulevard in Hailey and included the addition of bike lanes, sidewalks, and a traffic calming roundabout at the intersection with Fox Acres Road. These improvements have earned good complements from the public and have improved the aesthetics of the neighborhood.

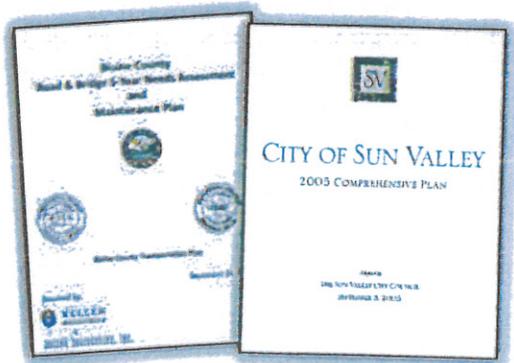
Public perception of the existing pathway system ranges from good to excellent, according to the community survey conducted for this Plan. The existing components that most people rated as “poor” were sidewalk conditions, sidewalk locations, and bike/pedestrian crossing safety. This

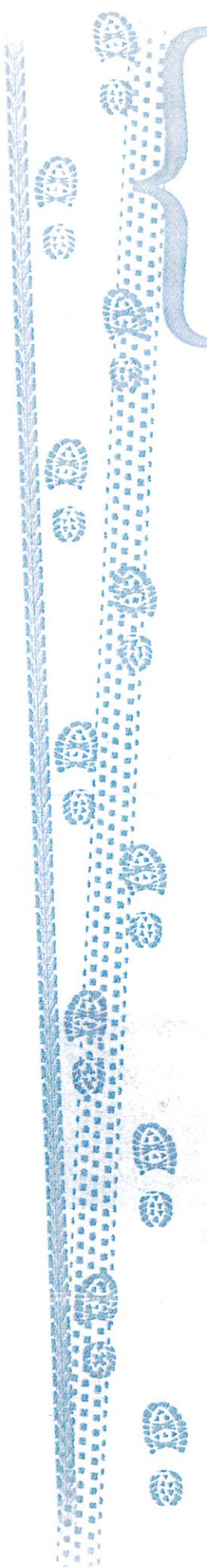
corresponded with the opinion that the most important destinations that needed connection were downtowns. The next most important destination that needed connection was schools, followed by trail systems on public lands.

Additional information on current conditions for specific locations is included in Section 5.1. Maps that show current infrastructure, along with potential improvements, are also included in Section 5.1.

## 3.2 POLICIES AND PLANS

Policies and plans for bicycle and pedestrian facilities in Blaine County are supported by several existing documents that have been commissioned and/or adopted by various local entities and organizations. These existing plans and policies helped guide the formation of this Bicycle and Pedestrian Master Plan with the intent to coordinate and build on these documents. The following summarizes excerpts from these documents that support and provide direction for





The community is actively marketing the area as a destination for bicycle tourism. This is important to the local economy, as other western resort areas compete to attract bicycle-based tourism.

–Blaine County Transportation Plan

the development of bicycle and pedestrian infrastructure and policy in Blaine County.

**Blaine County Transportation Plan (2012)**

Chapter 4 of the Blaine County Transportation Plan recognizes that “Blaine County is home to a robust bicycling community and bicycling is a point of attraction for tourists, as well. The community is actively marketing the area as a destination for bicycle tourism. This is important to the local economy, as other western resort areas compete to attract bicycle-based tourism. The characteristics of county roads are directly related to the comfort and safety of riders using these roads.”

“As [the Blaine County Transportation Plan] has made clear, the county lacks funding necessary to commit to specific projects at this time. Given these limitations, the county does endorse bicycle and pedestrian use of county roads and is dedicated to making needed improvements. This report [the Blaine County Transportation Plan] recommended that Blaine County begin engaging with other municipalities and agencies to formulate a separate Comprehensive Regional Bike and Pedestrian Plan. To begin this process, it is recommended that Blaine County adopt a resolution of support for appropriate bicycle and pedestrian use on county roadways.”

**Hailey Title 18, Mobility Design (2012)**

The purpose of this ordinance is to “provide a uniform set of standards and procedures for Infrastructure Projects; to update Hailey street design standards to adequately address and promote multi-modal needs and safe access for all users, including pedestrians, bicyclists, motorists, and transit vehicles and passengers; to establish a process for project design which provides flexibility and accountability, balances the safety and convenience of all users of the transportation system in the design, operation, maintenance, construction, and reconstruction of new and existing Infrastructure Projects; considers whether people of all ages and abilities are able to travel safely and comfortably within the right-of-way of public and private streets; and considers how design variations may affect the safety and convenience of certain user groups.”

**Hailey Transportation Plan (2007)**

According to this Plan, “the current street network was originally designed more for vehicular travel, as many of Hailey’s older neighborhood streets were originally constructed without sidewalks. Within the past 10-15 years residents have increased their walking and cycling activities. More residents are taking to the streets by foot and by bike for the range of recreation, school, work, and shopping travel needs. The combination of these factors has led to ever in-

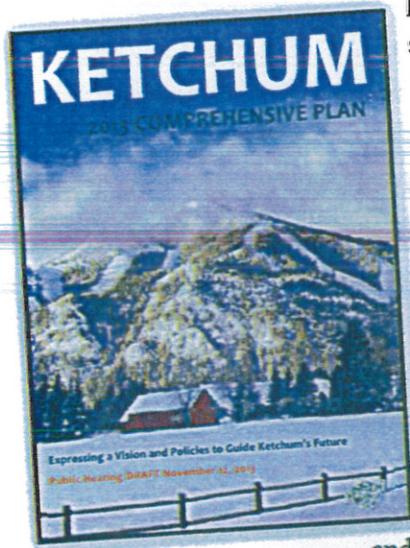
“A well-established system encourages healthy recreational activities, reduces vehicle demand on city streets, and enhances safety within a livable community.”

– Hailey Transportation Plan

creasing pressure on the city’s local street system to serve the full range of auto, truck, bicycle, and pedestrian traffic.”

“Pedestrian and bicycle travel has grown at similar, if not higher, rates than vehicular traffic within Hailey. More Hailey residents are walking and biking for recreational travel, which is not necessarily limited to warm-weather months. Due to the relatively flat terrain and viability of non-motorized travel, bicycle and pedestrian facilities play a vital role in the city’s transportation environment. The non-motorized transportation system is comprised of facilities that promote mobility without the aid of motorized vehicles. A well-established system encourages

healthy recreational activities, reduces vehicle demand on city streets, and enhances safety within a livable community.”



**Ketchum Comprehensive Plan (2014)**

Vision #7 of the Ketchum Comprehensive Plan states “A connected community brings us together through a local, community-wide, and regional system of sidewalks, on-street bike lanes, trails, public transit opportunities, and functional streets for vehicles. The transportation system is designed in such a way that alternatives to automobile use are possible, and vehicular congestion throughout the community is minimized. Public transit is designed so citizens find it convenient and feel safe and comfortable using it. Connectivity also provides a means of linking neighborhoods and places to one another, to open spaces, bike trails, other desirable recreational/outdoor places, and transit. When our neighborhoods and places are well-connected, it encourages social interaction and gatherings, allows outdoor experiences to be more spontaneous and accessible,

**THE VISION FOR MOBILITY IN THIS PLAN INCLUDES:**

- A complete system of bicycle routes and trails for commuter and recreational bicyclists
- A safe, complete and comprehensive pedestrian circulation system

decreases pollution, and allows for healthier lifestyles through walking and bicycling.”

**Goals and policies from this plan include:**

Goal M-5 Enhance pedestrian connectivity and comfort.

Policy M-5.1 Complete Sidewalk Network

Connect destinations with pedestrian facilities and encourage walking for a wide variety of trips by filling in missing sidewalk links, restoring damaged sidewalks, and requiring sidewalks as part of development approvals. Ensure that sidewalks are accessible and clear of impedi-

ments to passage.

**Goal M-6** Enhance bicycling connectivity and comfort.

**Policy M-6.1** Complete Bicycle Network

Construct missing links in the bicycle network, especially from outlying areas to the downtown core. Strive for additional bike lanes in streets.

**Goal CHW-4** Safe and Convenient Non-Motorized Travel Options

Provide the opportunity for regular physical activity through safe, convenient recreation and non-motorized travel.

**Policy CHW-4.1** Community Design for Active Lifestyles

Promote community-wide design that encourages physical activity through the provision of parks and trails, river access, and the support of athletic and recreational pursuits.

**Policy CHW-4.2** Active Mobility System

The City will support, through design and construction, the extension of sidewalks, bicycle trails, on-street bicycle facilities, and lighting to facilitate non-vehicular use by people of all ages and abilities.

### **Ketchum Main Street Traffic Study (2010)**

The purpose of this study was to provide recommendations to Ketchum and the Idaho Transportation Department regarding the Main Street (SH-75) transportation corridor in Ketchum, Idaho. One of the objectives of this study was to “maintain high levels of pedestrian activity” by using a “complete streets” approach.

**Chapter IX**–Pedestrian Considerations includes the following recommendations to help continue the excellent pedestrian safety record in Ketchum into the future:

- Sidewalks should continue to be provided on any widened roadways.
- Bulb-outs on Main Street can help shorten the pedestrian crossing time and serve as traffic calming during off-peak times when vehicles may otherwise travel at higher speeds.

### **Ketchum Downtown Master Plan (2006)**

This plan includes the following guiding principles for transportation and circulation:

- Downtown circulation should balance the needs of pedestrians, bicyclists, transit riders, and motorists alike.
- The circulation system should accommodate people and their various travel needs, providing convenient access for all user groups, including businesses, employees, residents, customers, visitors, and tourists.
- Downtown circulation should accommodate travel for school children, bicyclists, public transit, seniors, and people with mobility challenges.
- Downtown is a pedestrian-priority district.
- Traffic demand management should include programs that offer a healthy mix of transportation modes to reduce automobile dependency and to increase the number of people accessing Downtown by foot, bicycle, or transit.



This plan recommended reconfiguring Main Street into a three-lane configuration with the middle lane devoted to left-turning traffic. Substantial nationwide experience demonstrates that a three-lane configuration in a town like Ketchum will be safer for both vehicles and pedestrians and significantly more supportive of pedestrian priorities. A three-lane configuration could provide more opportunities to enhance the pedestrian environment.

This plan recognizes that downtown will become a pedestrian-priority area. Vehicles will move at lower speeds through the city center, and in most places, they will be required to stop for pedestrians in crosswalks. (This will not be the case at signalized intersections.) Signage will be enhanced to guide drivers, cyclists, and pedestrians to key routes and destinations.

### **Sun Valley Comprehensive Plan (2005)**

This plan recognizes that “the primary recreational amenity is the paved pedestrian and non-motorized bike path that runs throughout the city on a combination of city-owned right of way and private property. The city will coordinate with Blaine County Recreation District and other partners (such as the Sun Valley Community Trails group) to develop an integrated recreational system to link neighborhoods and neighboring communities to open space, trails, parks, and other non-motorized recreational amenities and services for hiking, biking, and

**Goal 6 of this Plan states, “Provide for an Integrated Transportation System That Promotes a Recreationally-Active Community, Encourages Non-Motorized Transportation, and Reduces Congestion and Air Pollution.”**

nature walks.”

“A key component of the area’s transportation system, Sun Valley’s paved pathway system, is a well-used, recognized benefit for pedestrians, bicyclists, rollerbladers, and joggers. With the primary pathway system completed, the 1997 Transportation Plan recommended that a secondary pathway system be developed to promote greater pedestrian and bicycle travel along less heavily traveled streets in the city. While this proposal is currently unfunded, opportunities exist to expand the path system and connect to open space areas and other trail systems. With the support of trail management groups, the city can identify and obtain permanent access easements for recreational trailheads, trails, and parking.” The Sun Valley Transportation Plan is currently being updated and information from this Master Plan should be incorporated during the update process.

### **Wood River Trail Study (2012)**

The goal of this study was to create a comprehensive trail data set to be used by partners for trail planning, community planning, trail maintenance, and policy, economic impact studies, grant writing, and outreach/marketing. Objectives included counting trail (bikepath and singletrack) visits during the 2012 non-winter season in Wood River Valley; developing a better understanding of trail user profile and usage patterns; and employing a combination of infrared

count, direct observation, and survey instruments for data compilation.

**Highlights of the study include:**

- 725,000 total trail user days (April through November)
- Inferred minimum resident (local) usage of 46 percent
- Inferred minimum non-resident (visitor) usage of 28 percent
- Visitor Profile: 52 percent 40-60 years, 52 percent male, 3.1 people per party, 46 percent hiking, 46 percent biking, 61 percent by car to area, 47 percent in hotel, 4-7 days visited
- Origin of visitors predominately Intermountain West (76 percent)
- Hiking and biking predominate usage patterns
- Bike path usage 79 percent biking and 13 percent hiking/running
- Single track usage 58 percent hiking and 30 percent biking
- Trail Days in south and central systems 10x north system

**BCRD Bikeway and Path Standards (latest revision 2006)**

The purpose of this document is to establish standards for bikeways, pedestrian, equestrian and Nordic skiing paths and other non-motorized travel routes that are to be accepted for ownership and maintenance by the Blaine County Recreation District. It includes design criteria for separated arterial routes, design criteria for paths, design standards for shared arterial routes, design standards for trails, general signing for all routes, construction specifications, and construction permit and restoration requirements.

**Blaine County Road Standards (1994)**

The current standard county road cross section shows 13' paved travel lanes with 2' gravel shoulders within a 60' right-of-way or 16' paved travel lanes with 2' gravel shoulders within a 80' right-of-way. The standard for private roads that serve more than 4 lots that may eventually become public show 10' paved travel lanes with 5' gravel shoulders. These road standards were originally adopted in 1981 and revised in 1985.

**Mountain Rides Capital Improvement Plan (CIP) FY2014 to FY 2018**

Mountain Rides capital planning includes the development of a bike share program for the Wood River Valley using a combination of local and federal funding. The first phase of the project was started in the summer of 2013 using a grant from the EPA, in partnership with the City of Hailey. Mountain Rides planning calls for expansion of the bike share program to Ketchum in 2014.

**Bicycle Friendly Community Feedback Report (2013)**

The feedback report from the League of American Bicyclists included several key recommendations that the Wood River Valley should take to improve and promote cycling. Some of the recommendations that are being addressed or will be facilitated with this Master Plan include the following:

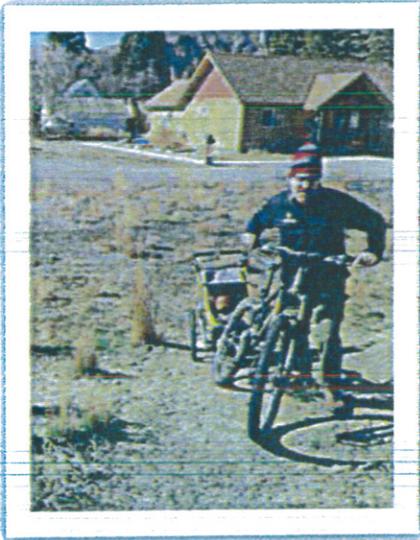
- Adopt a comprehensive bike master plan
- Ensure that there will be dedicated funding for plan implementation
- Ensure all bike facilities conform to current best practices and guidelines (NACTO, AASHTO, etc.)



- Continue to expand the bike network – using bike boulevards, bike lanes, cycle tracks, and shared lane arrows
- Make intersections safer and more comfortable

### 3.3 NEEDS AND ISSUES

The needs and issues related to bicycle and pedestrian facilities were identified through site tours, meetings with the working group and stakeholders, the online survey, and analysis of existing data. The overall needs can be categorized as being related to connections, safety, consistency, or amenities.



*Missing a connection from a city street in Hailey to the WRT.*

#### Connections

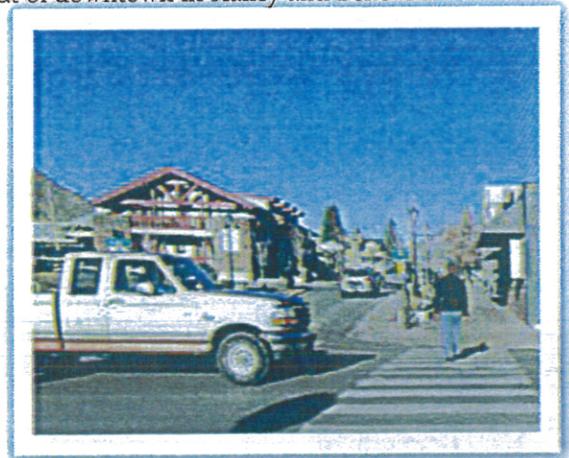
The primary needs when one thinks of pathways improvements generally focuses on connecting missing links within the system. Although the existing pathway system has a great spine provided by the Wood River Trail (WRT), there are several arteries that could be better connected to the bike path or with each other. Some general connections that were identified include:

- Connections into and out of downtowns (Sun Valley Road, WRT through Ketchum, Serenade Drive to 2nd Street in Ketchum);
- Sidewalk connections within downtowns;
- Connection of the end of the WRT at Hulen Meadows to the Sawtooth National Recreation Area (SNRA) Headquarters;
- Connections from the WRT to recreational trails (Ohio Gulch, Indian Creek, Quigley, Croy Creek, Deer Creek); and
- Connections in the southern part of the county (Gannett Road, Picabo) and within the City of Carey (Carey Park, fairgrounds, reservoir).
- Connections to/from WRT into and out of downtown in Hailey and Bellevue.

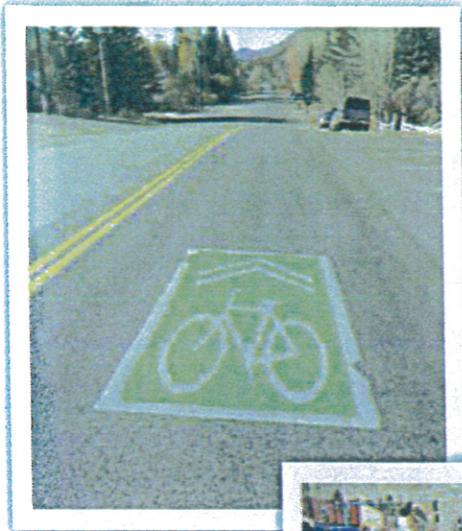
#### Safety

The number one category of needs and issues revolved around safety, both for cyclists and pedestrians. General safety issues that were identified include:

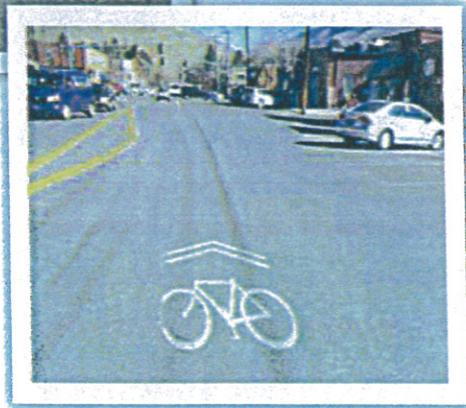
- Pedestrian crossings (4th Street in Ketchum, mid-block highway crossing near Albertsons in Hailey, highway crossing at Galena Lodge, intersections in old Hailey east of the highway);
- Pathway intersections with roads through all jurisdictions (need for consistency and adequate markings and signage along the WRT);
- Bike and road sharing (sharrows on 4th Street in Ketchum, SH-75 over Galena pass not wide enough for cyclists); and
- Traffic calming (roundabout along River Street, roundabout at Gannett and SH-75).
- Missing sidewalks within the cities and in other residential/employment centers, such as McHanville.



*4th Street in Ketchum is a designated bike and pedestrian route with no signal at the busy highway crossing.*



Two different variations of the sharrow are on trial in Hailey.



## Consistency

Overall consistency within the pathways system will help increase safety and improve the user experience. General needs for consistency include:

- Pavement markings (sharrows, bike lanes, roadway crossings);
- Wayfinding to and from the WRT, St. Lukes, downtowns, recreation areas, and streets;
- Treatment of pedestrian crossings at the highway (dismount zones); and
- Intersections of the bike path with roads.

## Amenities

Other general issues that are related to overall conditions and amenities include:

- Additional restroom facilities;
- Parking areas at trail heads (East Fork, Bellevue, Hulen Meadows);
- Removing power poles in the bike path;
- Improving the surface of the Harriman Trail; and
- Desire to create a unique and memorable ex-

periences.



Adding features such as this unique memorial bench next to the arboretum provides opportunities to intimately experience the bike path.



## Chapter 4

# DESIGN GUIDANCE

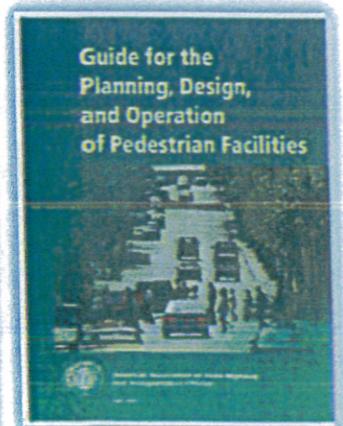
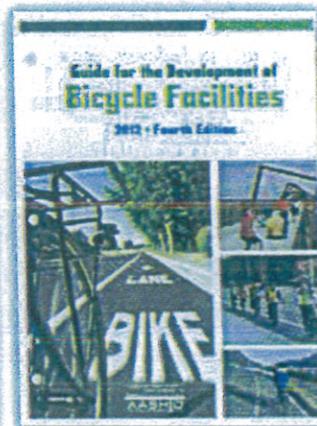
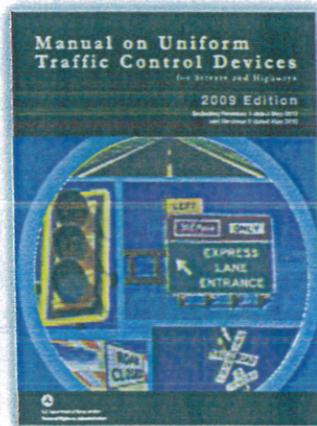
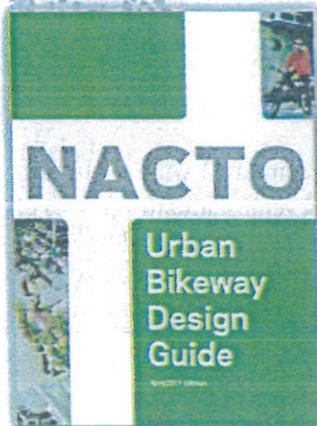
## 4.1 NATIONAL DESIGN GUIDELINES / STANDARDS

In order to create a pathway network that is safe, convenient, and consistent, it is important to have design guidelines and standards in place to direct the construction of new facilities and improvements to existing facilities.

At the national level, there are existing laws, guidelines, and standards that apply to bicycle and pedestrian facilities. At a minimum, pathway design should adhere to accessibility requirements of the Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG). Street crossings and pathways in a public right-of-way that function as sidewalks should also be designed in accordance with the draft Public Rights-Of-Way Accessibility Guidelines (PROWAG). Pathways built in independent corridors should meet the accessibility standards described in the Architectural Barriers Act Accessibility Guidelines for Outdoor Developed Areas (AGODA).

The following are national design guidelines for bicycle and pedestrian facilities that form the basis of the recommendations in this report. These publications are not necessarily laws, but are widely used and accepted national design standards that are intended to provide design guidance that results in facilities that meet the needs of bicyclists, pedestrians, and motorists.

- AASHTO Guide for the Development of Bicycle Facilities (2012)
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities (2004)
- Manual on Uniform Traffic Control Devices (MUTCD) (2009)
- NACTO Urban Bikeway Design Guide (2012)



These guidelines cover the design and construction of typical bicycle and pedestrian facilities including shared roadways, paved shoulders, bike lanes, bicycle boulevards, sidewalks, shared use paths, intersections, signage and pavement markings, bicycle parking facilities, and maintenance operations. These guidelines are very comprehensive, easily understood, and cover many different scenarios and site conditions. It is recommended that these guidelines be integrated as part of this Pathways Master Plan.

These national standards do not necessarily mandate a single best approach for all situations, but rather they provide a range of design values and alternatives for bicycle and pedestrian facilities. They address facilities that are appropriate for a range of community types from low density rural areas to high density urban environments.

## 4.2 RECOMMENDED GUIDELINES FOR BLAINE COUNTY

The recommendations presented in the Master Plan have been adapted for specific use within the context of the cities and rural areas of Blaine County. These adapted guidelines were developed through input from the working group, as well as other interested stakeholders and community members.

The intent of these guidelines is to establish a consistent and coordinated bicycle and pedestrian system county-wide. It is important to have continuity within the regional transportation system in order to create a safe and highly functional system that is easily negotiated by all users. Within these guidelines there is room, however, for individual communities to establish their own identity through unique branding of wayfinding signage and other treatments that will not be confusing to the user. Also, there may be specific instances where physical limitations or special circumstances require deviation (either more or less stringent) from these guidelines.

### Shared Lanes

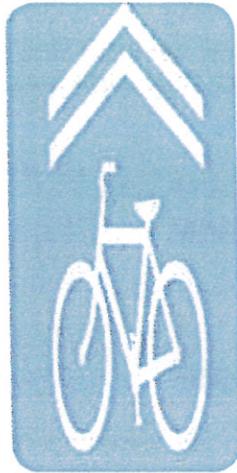


An example of recommended shared lane markings (opposite page) and signage.

In essence, all roadways within Blaine County are shared roadways. Bicycles may legally be operated on all roadways, except where prohibited by statute or regulation. Generally, roadways that carry low volume and low speed traffic are suitable for comfortably accommodating bicyclists within the vehicle travel lane. There are, however, some features such as pavement markings and regulatory signage that can be incorporated on local streets to make them more compatible with biking, alert motorists to the likely presence of bicycles, and guide the positioning of cyclists in the travel lane.

Sharrows are pavement markings that include a bicycle symbol combined with a “chevron type” directional arrow that is placed in the travel lanes. There are several standard versions of sharrows in the MUTCD. A green background can also be added to highlight and add emphasis to the marking, although AASHTO has discontinued experimental approval of this option. Thus it is recommended that sharrows within Blaine County use the MUTCD standard white

marking. The markings can be painted or thermoplastic applications. Thermoplastic markings are preferred due to their consistency, ease of application, and longer life.



**Typical application:**

- Low volume roads (less than 1,500 ADT)
- Low speed roads (less than 25mph)

**Features:**

- Shared lane markings or “sharrows”
  - Minimum 4 feet from curb face or pavement edge (where no on-street parking exists)
  - Center of travel lane (where on-street parking exists)
- Immediately after an intersection
- Intervals of no less than 250 feet
- “Bikes May Use Full Lane” or “Share the Road” signs to alert motorists of the presence of bicycles in traffic lanes
- Good pavement quality
- Maintenance to minimize gravel and debris

### Paved Shoulders

Paved shoulders can accommodate bicyclists on some rural roadways, although designated bike lanes are always more desirable. Where existing roadway pavement width is limited and in temporary retrofit situations, paved shoulders may sometimes be the only option. It is often possible to provide space for paved bike shoulders on existing roads by simply restriping narrower motor vehicle travel lanes (10 to 11 feet). The narrower vehicle lanes will also serve to slow down motor vehicles, making it safer for cyclists and pedestrians.

It should be noted that oftentimes the centerline striping of roadways is painted off center, resulting in varying widths of shoulders and bike lanes. The painted width of the travel lanes can vary as well giving the same undesirable result. With careful attention to the layout of the striping, sufficient and consistent shoulders can be achieved. If paved shoulders are used, they should be provided on both sides of the roadway to discourage wrong way riding. The minimum width of a paved shoulder should be 4 feet on roads without curbs or vertical obstructions such as guardrails. Wider 5 feet shoulders are desirable for roads with higher traffic volumes or speeds or where there is a vertical barrier to provide more operating room.

Road cycling on rural roads in Blaine County is very common and increasing in popularity. When a road is being resurfaced or sealed, this is a good opportunity to retrofit bike lanes if adequate space is available.



*Example of a bikeable shoulder in Driggs, ID.*

For example, the current Blaine County road standard within a 80 foot right-of-way includes a 16-foot travel lane. These roads could be retrofit and striped to provide a 12-foot travel lane and a 4-foot bike shoulder. Although it is not recommended by AASHTO to provide standard shoulders (AASHTO 2012), most cyclists in Blaine County that gave input on this project agreed that even a 1-foot or 2-foot striped shoulder was better than no shoulder and it could provide some area outside the traffic lane for cyclists and pedestrians.

**Typical application:**

- Rural roads with posted speed of greater than 35 mph
- Urban streets with low to medium traffic volume

**Features:**

- Minimum of 4 feet wide
- 6-inch-wide white line to delineate the shoulder
- Bicycle friendly drainage inlet grates
- Ongoing maintenance and clearing of gravel and debris from shoulders

*Recommended bike lane markings, signage (below), and example photo.*

**Bike Lanes**



Bike lanes are a portion of the roadway designated specifically for bicyclist use. They differ from paved shoulders in that they are specifically identified travel lanes for bicycles and cannot be used for parking or other uses. The minimum width of a bike lane should be 5 feet and delineated by a minimum 6-inch-wide white line. In some cases where motor vehicle traffic volume is heavy, speeds exceed 45 mph, or high turnover of on-street parking is provided, wider bike lanes are desired.

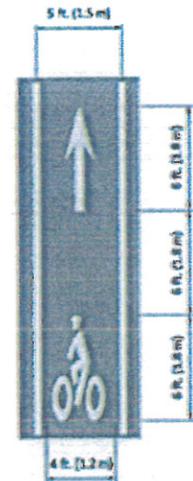
**Typical application:**

- Rural roads with posted speed of greater than 35 mph
- Urban streets with medium to high traffic volume
- Along designated bike routes



**Features:**

- Minimum of 5 feet wide
- Clear and identifiable pavement markings
  - o 6-inch-wide white line
  - o White bike symbol and white directional arrow
- Placed before and after intersections
- Placed at intervals of less than 1,000 feet in rural areas and less than 250 feet in urban areas
- “Bike Lane” signage adjacent to a pavement markings at appropriate intervals
- Bicycle friendly drainage inlet grates
- Ongoing maintenance and clearing of gravel and debris from bike lanes



## Bike Boxes at Roadway Intersections

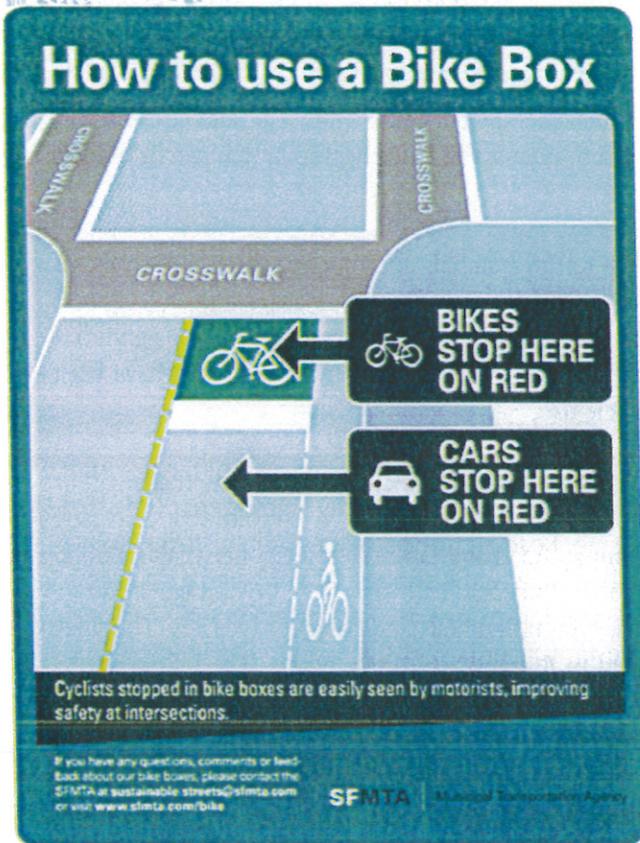
A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase. Having cyclists queued in front of motor vehicles at traffic signals eliminates the conflicts that often occur with right turning vehicles when bikes are queued to the side in a standard bike lane. They are relatively new to the United States, but are gaining popularity in places where bicycling is being strongly promoted and encouraged. The use of bike boxes may be appropriate at most signalized intersections within the cities where bike lanes or bike routes are provided. If bike boxes are used, it is recommended that they be painted green in order to alert motorists to this relatively new concept.

### Typical Applications:

- At signalized intersections with high volumes of traffic, especially bicyclist left turns and motorist right turns
- Where a left turn is required to follow a designated bike route or access a shared use path

### Features:

- Transverse lines used to hold queuing bicyclists, typically 10 to 16 feet deep
- Stop lines and pavement marking designating the space as a bike box
- A “No Turn on Red” sign at signalized intersections
- Color pavement recommended to encourage compliance



*Bike boxes improve safety at intersections*



*An example of a bike box in Edmonton, Canada.*

## Surface Treatments and Maintenance

Roads need periodic maintenance and resealing to rejuvenate the surface and extend its useful life between major repaving operations. A common method of maintaining roadways in rural areas in Idaho is the use of a "chip seal," which is an asphalt emulsion overlaid with a graded crushed aggregate (chip). Although this may be an effective and economical method for extending the service life of a road, it is quite detrimental to its bikeability. The surface created by typical chip seal operations is very coarse and often leaves loose aggregate that can be a safety issue for cyclists.

However, with some minor modifications to the materials and process, chip seal treatments can accommodate bicycle travel, as well as provide the needed rejuvenation and protection to the road surface. These improvements can be implemented easily and will have a significant impact on the quality of road cycling in the county. There are several options that have been used and studied for compatibility for bicycle use.

In 2012 and 2013, a series of tests of various chip sealing methods on county roads within Teton County, Wyoming, and Teton County, Idaho, was conducted by a group that consisted of representatives from Teton County, Wyoming, Road and Levee; Teton County, Idaho, Public Works; Friends of Pathways (WY); Teton Valley Trails and Pathways (ID); Wyoming Pathways; Jackson Hole Community Pathways; and several individuals and bicycle advocates. The final results and report for these tests is included in Appendix E of this report. The following are some of the initial findings from that study. It should also be noted that several of these modifications even saved money by using less materials.

## Surface Treatments

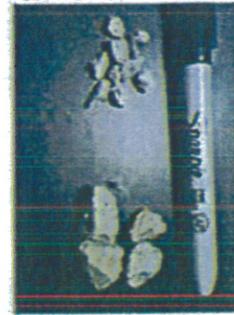
Road sealed with "chip sandwich"



Shoulders without chips



1/4" chips vs. typical chips



### Applications and Features:

- Chip sealing only the vehicle travel lanes and not the shoulders is a good solution for maintaining the smooth surface for cyclists, while saving money on materials. This is ITD's standard practice for state highways within Blaine County.
- Using a 1/4" crushed aggregate in lieu of the standard 3/8" or 1/2" chips makes a difference in the ride quality of the finished surface. Chips larger than 1/2" are not recommended.
- Coating the chipped surface with a fog seal not only improves rideability but helps retain the chips on the road.
- "Chipless" seal coats (such as GSB 88) seals the surface and reintroduces binders back into the asphalt while maintaining a smooth surface for cycling. This type of application used more frequently also extends the time in which a new, more costly wearing surface is needed.
- Although more expensive, slurry seals and micro seals are excellent resurfacing alternatives for priority cycling routes if funding is available.

### Bicycle Boulevards

Bicycle Boulevards are local streets that are modified to give preference to bicycle and pedestrian traffic while allowing access for local motor vehicle use. There are several locations in the cities of Blaine County that could be suitable for a transformation into a bicycle boulevard, including 4th Street in Ketchum and River Street in Hailey. This option will need further study and input from adjacent property owners to study its viability.



*Bicycle Boulevard in Long Beach, CA*

### Typical Applications:

- Streets that have low traffic volumes (< 3,000 ADT, < 1,500 ADT preferred) and slow speeds (< 25 mph) that either exist or are established with speed and volume management techniques
- Secondary streets that are parallel to major thoroughfares, which can provide a similar level of connectivity
- Streets that are already popular bike routes

### Features:

- Sign and pavement markings that designate the bike boulevard
- Speed management techniques to slow motor vehicles, such as speed humps or tables, edge islands, neighborhood traffic circles, chicanes, or reducing the speed limit
- Volume management techniques to discourage motor vehicle use such as choker entrances, channelized right-in/right-out islands, diagonal diverters, or full diverters
- Minor street crossings that give right-of-way to the bike boulevard to minimize bicyclist delay
- Major street crossing to maximize bicyclist safety
- Green infrastructure, such as stormwater bioswales and landscaping, may be provided to enhance the cyclist experience.

## Separated Paved Pathways

Separated paved pathways are multi-use pathways that are physically separated from motor vehicle traffic and typically accommodate two-way travel. They can be located within the right-of-way of the adjacent roadway or within an independent right-of-way or easement, and can be parallel to the road with some separation. They are intended for a variety of users, including bicyclists, skaters, pedestrians, joggers, cross country skiers, and other non-motorized users.

### Typical Applications:

- Provide short-cuts through neighborhoods and parks
- Safe alternative route parallel to busy roadways and highways
- Recreational opportunities
- Access to areas not reachable by motor vehicle

### Features:

- Hard surface paving (asphalt, concrete, pavers, etc.)
- Pavement section based on the loading capacity and characteristics of the existing soils and should be capable of sustaining loads from emergency and maintenance vehicles
- 10 minimum width (12' for high volumes, sharp curves, steep grades, high speeds)

BCRD has adopted Bikeway and Path Design Standards, and in order to maintain consistency within the regional pathway system, it is recommended that all separated pathways constructed in Blaine County conform to these design standards, regardless of whether they will be adopted for ownership or maintenance by BCRD.

## Intersections of Separated Pathways and Roadways

Pathway crossings come in many configurations and variables, including traffic speeds, traffic volumes, site distance, physical constraints, etc. Each intersection is unique and must be evaluated on a case by case basis. The AASHTO Guide for the Development of Bicycle Facilities is a great resource and gives recommendations for a wide variety of scenarios and configurations.

There are, however, some general guidelines that should be followed in order to provide consistency and predictability throughout the transportation system. In general, pathways crossing vehicular roadways should be signed for a pathway “stop” giving priority to vehicles traveling on the roadway. There are several reasons for this. First, although there is significant usage of the pathway system in Blaine County, in the vast majority of cases roadway volumes and speeds will exceed that of the crossing pathway and assigning right-of-way to roadway traffic will result in an overall reduction in total user delay. Secondly, and perhaps most importantly, is the fact that approaching bicyclists are often difficult to see and not anticipated by motorists. This is an unfortunate, but nevertheless a reality in the United States. Bicyclists and pedestrians should be aware of this reality and exercise responsible caution at crossings.

Idaho law is unique in regards to bicycle compliance at stop controls in that bicyclist can elect to treat stop signs as a yield situation. This allows cyclists to maintain momentum at crossings if it is safe to do so, while still encouraging caution and leaving the responsibility for yielding to roadway users.

### IDAHO STATUTE 49-720. STOPPING—TURN AND STOP SIGNALS.

A person operating a bicycle or human-powered vehicle approaching a stop sign shall slow down and, if required for safety, stop before entering the intersection. After slowing to a reasonable speed or stopping, the person shall yield the right-of-way to any vehicle in the intersection or approaching on another highway so closely as to constitute an immediate hazard during the time the person is moving across or within the intersection or junction of highways, except that a person, after slowing to a reasonable speed and yielding the right-of-way if required, may cautiously make a turn or proceed through the intersection without stopping.

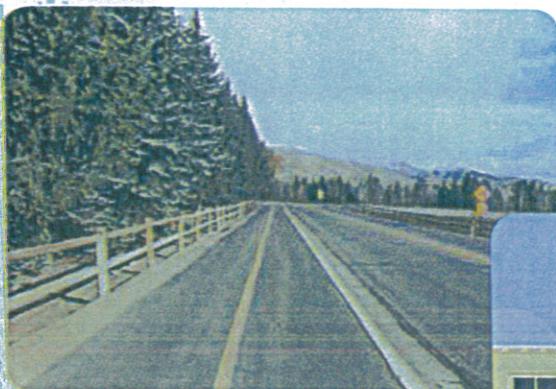
It should also be noted that laws pertaining to pedestrians in crosswalks apply here. Vehicles are required by law to yield to pedestrians in crosswalks at unsignalized intersections.

### IDAHO STATUTE 49-702. PEDESTRIANS' RIGHT-OF-WAY IN CROSSWALKS. (1)

When traffic control signals are not in place or not in operation, the driver of a vehicle shall yield the right-of-way, slowing down or stopping, if need be, to yield to a pedestrian crossing the highway within a crosswalk.

## Cycle Tracks / Sidepaths

Cycle Tracks or sidepaths, increasingly referred to as protected bike ways, are a type of shared use path that runs immediately adjacent to the road. Two-way cycle tracks, which result in cyclists moving in the opposite direction of adjacent motorist traffic, are not recommended due to the inherent conflicts with motor vehicles at intersections. Drivers of motor vehicles typically do not expect bicycle traffic approaching in the opposite direction of vehicular traffic, which can lead to vehicle-bicycle collisions. There are several existing cycle tracks within Blaine County that exhibit this negative characteristic. If new cycle tracks are developed, it is recommended that they be one-way in the direction of adjacent vehicular travel and located on both sides of the road.



*New two-way cycle tracks, such as this one in Sun Valley (above), are not recommended due to safety reasons. One way cycle tracks (right) are recommended.*

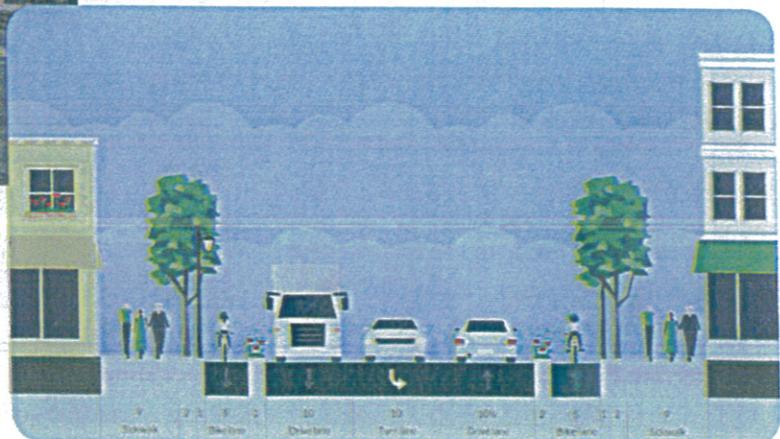
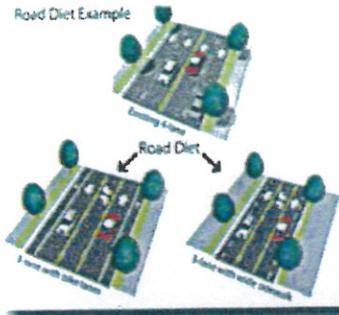


ILLUSTRATION: URBANLIFESIGNS.BLOGSPOT.COM

Road Diet Example



## Road Diets

A road diet is a concept involving reducing the number of lanes on a major thoroughfare through an urbanized area to promote walkability, while still accommodating efficient motor vehicle circulation. The most common scenario for a road diet is the conversion of a four lane road to a three lane configuration consisting of two travel lanes and a center “left turn” lane. The reduction of roadway width allows for increased space for bicycle and pedestrian facilities, thus transforming the street into a walkable and pedestrian oriented place. Main Street in Ketchum is an excellent candidate for this approach. Ketchum’s Downtown Master Plan (2006) recommends this and gives a good synopsis of the benefits and justification for this approach.



Road diets can allow for either bike lanes or wider sidewalks (top). Ketchum’s downtown Main Street sidewalks lack sufficient width (bottom);

A road diet on Main Street (SH-75) in Hailey would be more difficult, however, due to the higher traffic volumes and current five lane configuration. Studies have shown that roads with average daily traffic (ADT) greater than 20,000 vehicles will experience greater congestion after a road diet and that roads with an ADT less than 15,000 are best candidates for road diets (FHWA). The Blaine County Transportation Plan (2012) and the Hailey Transportation Master Plan (2007) both indicate ADTs on SH-75 through Hailey just below or equal to 20,000 currently and forecasted to be over 27,000.

### Ketchum Road Diet

It is recommended that the additional space afforded by a road diet on Main Street through Downtown Ketchum be used for sidewalk widening and pedestrian streetscape improvements. Currently, Main Street’s sidewalks are undersized considering the substantial volume of pedestrians and commercial activity on the street. Improving sidewalks here can help increase the level of activity even more.

Sufficient right-of-way width does not exist for both sidewalk widening and the addition of bike lanes along Main Street in Ketchum. Thus, it is recommended to use this space for sidewalk improvements rather than add bike lanes. Alternate routes for bicycles exist on parallel roadways one block from Main Street for cyclists wishing to pass through town or less experienced cyclists who feel uncomfortable riding in heavier traffic. Vehicular traffic speeds are slow through downtown and are easily negotiable by more experienced cyclists who will ride with traffic in the roadway. Also, parallel parking along Main Street could conflict with cyclists by car doors opening into the bike lanes.

Further study and consideration is needed before a road diet is implemented in Ketchum. Under cur-

rent traffic volumes, a road diet may have little to no impact on vehicular traffic flow but would allow for significant streetscape and pedestrian improvements. As traffic volumes increase, delays and congestion will also increase. This is true for the current four-lane configuration, as well. The Main Street Traffic Study (2010) evaluates several future scenarios. At the time of that report, several large development projects were anticipated. However, since the study was completed, most of those projects have been curtailed. It is recommended that the study be updated based on current projections and include an evaluation of Main Street in a three-lane configuration in the downtown core.

It is important for the community and its leaders to weigh the benefits of a walkable Main Street versus unimpeded vehicular traffic flow. It may be prudent to accept a lower level of service of vehicular traffic in order to realize the benefits of a vibrant walkable downtown. Also, consider that future congestion issues may be somewhat self-correcting. Congestion has a way of modifying driver behavior over time. As traffic delays increase on Main Street, many may opt toward alternative modes of transportation, ride sharing, or alternate routes into town.

## Sidewalks

Sidewalks and streetscapes within downtown, neighborhoods, parks, schools, and commercial areas are an integral part of the pathway infrastructure. These areas are often the points of origination and destinations for walking and biking trips. The streetscape adjacent to commercial enterprises, especially retail and entertainment, is extremely important for the viability of these businesses. It is critical that connections be made between sidewalks and the rest of the pathways network.

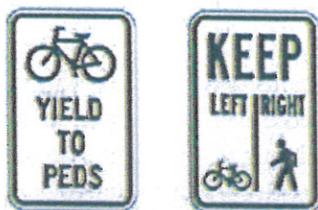
Sidewalk and streetscape improvements should be in conformance with the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities. This guide presents best practices for safely and effectively accommodating pedestrians with respect to sidewalk configurations, roadway crossings, pavement markings, signage, signalization, and maintenance.

Sidewalks are primarily the realm of pedestrians and they should be given priority over bicyclists and other users. Narrow sidewalks (less than 6') in congested areas should be restricted to pedestrian use only and all other users should be restricted to walking their bicycles or other wheeled vehicles (with the exception of wheelchairs). Wider sidewalks can potentially accommodate very slow bicycle and non-motorized wheeled traffic (walking speed) under the condition that they immediately yield to all other users at all times. Signage and education is critical to maintaining a safe and enjoyable environment on the sidewalks.

It is important that sidewalk width in urbanized streetscapes is adequate to accommodate, not only pedestrian flow (pedestrian zone), but also building entrance doors (frontage zone), landscaping and furnishings (furniture zone), and car door swings from adjacent parallel parking (curb zone). As a result, a sidewalk that takes into consideration all these factors will typically need to be a minimum of 16 feet wide.

Curb zone (3 feet) + furniture zone (4 feet) + pedestrian zone (6 feet) + frontage zone (3 feet) = 16 feet

Sidewalks wider than 16 feet might be desirable where outdoor seating or event space is needed or where pedestrian volumes are high.



Zones in downtown areas



Ideal sidewalk zones and signage (left); Recently widened sidewalks in Driggs, ID, provide adequate room for sidewalk cafes, sandwich boards, and pedestrians (above).

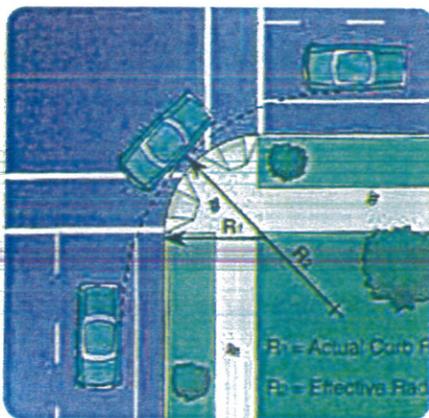
## Pedestrian Crossings

Pedestrian crossing facilities should be provided at all intersections where sidewalks exist and serve as the pedestrian right-of-way across the street. All crosswalks should be designed to minimize risk to pedestrians and provide accessibility for those with disabilities.

At a minimum, crosswalks should be of 6 feet wide and painted with “ladder type” markings for increased visibility. ADA compliant curb ramps should be provided at all crossings and should be aligned with the crosswalk (vs. diagonal to the cross streets as on Main Street in Hailey). This type shortens the crossing distance and helps align the visually impaired with the opposite side of the street. Crosswalks at signalized intersections within the cities should include pedestrian signals, as well, and should be synchronized with other signals to minimize wait time. Excessive wait times encourage non-compliance by pedestrians.

Additional guidelines provided by the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities should be used to evaluate and guide pedestrian crossing and facility design within Blaine County.

Illustration of effective turning radius.



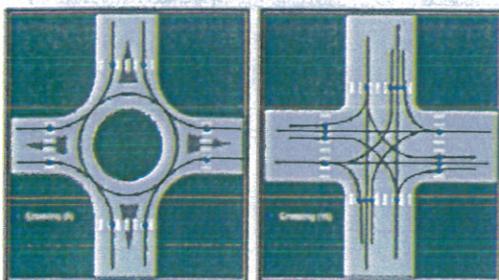
### Intersection Configuration

Intersection configuration should take into consideration pedestrian traffic. In general, curb radii should be as small as possible (10 feet to 15 feet), while providing for the needs of the largest vehicle anticipated. Larger radius corners allow vehicles to take the turn at a higher speed and also increases the distance that pedestrians have to walk. It should be noted that the actual “effective turning radius” of an intersection is greater than the actual radius of the constructed curb, especially where parallel parking or bike lanes exist on adjoining streets. In addition, if it is a local street, it may be preferable to allow infrequent large vehicles to turn into an opposing lane instead of creating an unnecessarily large street corner radius.

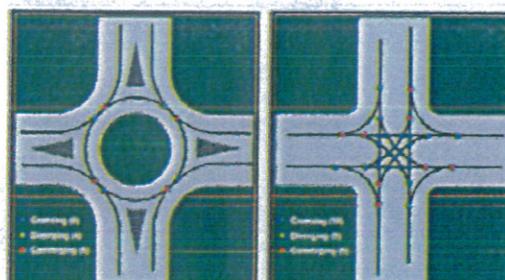
## Roundabouts

A modern roundabout is a compact one-way, circular intersection with low traffic speeds. Correctly designed roundabouts can help improve safety for pedestrians and cyclists at intersections. Studies have shown that roundabouts have 30 to 40 percent fewer pedestrian injuries or fatalities than traditional four way intersections (PWR, 2013). This is primarily due to the 75 percent reduction in conflict points, reduced driver speeds, and shorter crossing distances. Roundabouts can also be aesthetic features with public art or landscaping in the middle island, which also serves as a safety feature by alerting drivers that a roundabout intersection is ahead.

Pedestrian Conflict Points



Vehicle Conflict Points



Well designed roundabouts are safer for pedestrians and cyclists due to slower vehicle speeds and fewer conflict points. (FHWA, 2013)

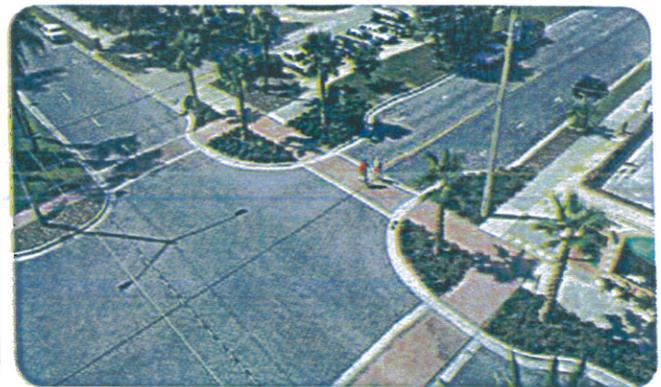
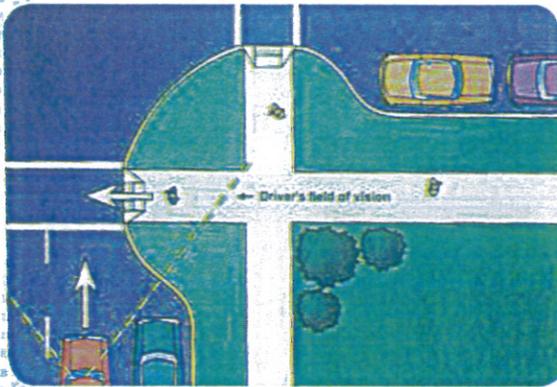
## Curb Extensions

Curb extensions or “bump outs” are an effective means of reducing the crossing distance for pedestrians on streets with parking. Curb extensions also serve to improve site lines, create landings and waiting areas for pedestrians, and prevent parked cars from encroaching into intersections. Increased visibility of pedestrians on extended curbs significantly reduces the number of vehicles that pass a waiting pedestrian before yielding (Johnson, 2005).

Typically, curb extension standards extend out to the width of the parking lane. This can cause safety issues for bicyclists, where no bike lane is provided, by potentially forcing the cyclists to merge into traffic at the intersection to avoid the gutter of the curb extension. It is believed that this scenario contributed to a recent fatal accident at the intersection of Main and 4th Street in Ketchum. A better design would be to construct the extension approximately 3 feet shorter than the width of the parking lane where no bike lane is provided to allow cyclists to remain to the right of vehicles in the travel lane.

Curb extensions can also make snow plowing more difficult. The use of a “rolled curb” on the extension can alleviate this issue and reduce damage to the curb from plowing operations.

## Mid-block Crossings



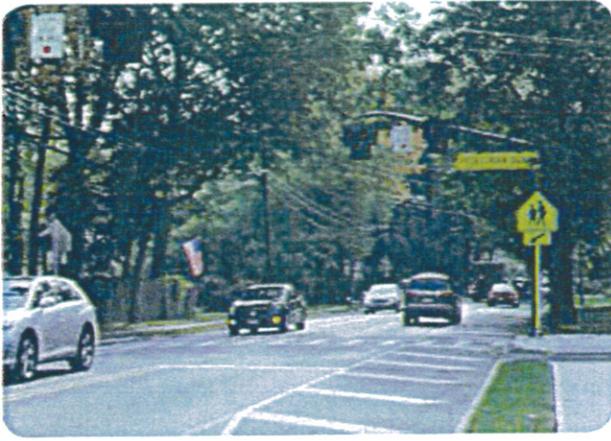
Curb extensions (left) and example photo (right).

Mid-block crossings can be used where intersections are placed far apart and substantial pedestrian crossings are anticipated. These crossings require special treatments because they are not typically expected by motorists.

In general, the simplest but least effective means of indicating a mid-block crossing are warning signs, flashing warning lights, and high-visibility crosswalk markings. Steps up in crossing safety are raised medians or pedestrian refuges in multilane roads, and curb extensions to shorten crossing distance. The most effective measure is a pedestrian activated High intensity Activated Cross Walk (HAWK) signal where driver compliance rises to almost 100 percent. This approach is best for high-volume or high-speed road where there are few gaps in traffic and should only be used at a marked crosswalk.

The MUTCD and the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities outlines additional measures that should be followed regarding the application, configuration, marking, signage, and signalization for various crossing scenarios.

## Bicycle Parking Facilities



*Pedestrian activated HAWK signals are safest for pedestrians.*

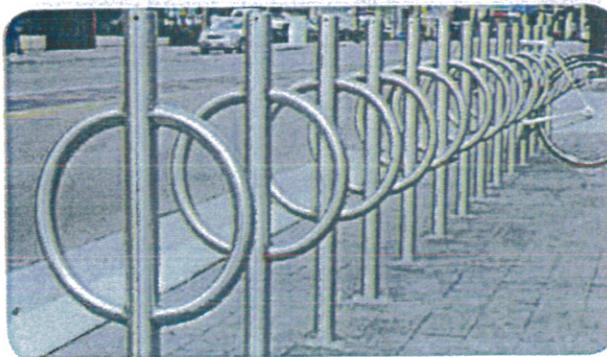
Bicycle racks and designated bicycle parking areas contribute to an orderly appearance of sidewalks, streetscapes, and building sites, and keep bicycles from interfering with the flow and accessibility of sidewalks and pathways. In addition, properly designed racks provide a means for securing bicycles and help prevent theft. There are an unlimited number of design options for racks from simple, production models, like the standard “inverted U,” to very unique artistic designs. Unique rack designs can help brand the identity of a place and show that bicycling is a meaningful part of the community’s culture. However, artistic designs should still function well and provide convenient and secure bike parking.

In general, any bicycle rack should be constructed out of sturdy material, fixed to the ground or other permanent structure, should support the bicycle at two points above its center of gravity, and have a loop or other feature that can accommodate a standard cable or “U” lock. Covered bike racks are especially useful in places such as Blaine County where cyclists can be undaunted by inclement weather.

#### **Guidelines:**

- Support the bike at two points above the center of gravity
- Accommodates high security U-shaped bike locks and locks securing the frame and one or both wheels
- Provides a minimum of 3 feet between spaces so that bikes do not interfere with each other
- Does not contain protruding elements or sharp edges
- Does not bend wheels or damage other bike parts
- Does not make the user lift the bicycle off the ground

*Sample bike racks that provide two points to secure bikes (below); indoor, year-round bike parking in Denver CO (right).*



#### **Wayfinding / Signage**



PHOTOS: TOP LEFT, COURTESY OF THE ALTERNATIVE PRESS

Bicycle route and guide signs are intended to help bicyclists navigate through the pathways network from important origins to major destinations and designating continuous routes that may be comprised of several different types of facilities (bike lane, separated pathway, shared road, etc.). Clear, visible, and understandable signage is important to establishing bicycle routes and encouraging use of the routes by residents and visitors. It is especially important in areas like the Wood River Valley that have a large number of tourists and visitors.

Guide signs should be placed at pathway intersections, road crossings, and where the pathway facility type changes along the route. Standard bike route signs such as the “D” series signs in The Manual of Uniform Traffic Control Devices (MUTCD) are universally recognizable and can include helpful directional and distance information to destinations. In addition to the standard MUTCD signage, a unique, artistic logo can be added to pathway signage to help brand and promote the area pathways system.

It is recommended that bike route signs include destination information, such as “To Downtown” or “To the Wood River Trail,” to help orient users and that the number of designated destinations be kept to a minimum in order to simplify navigation. Downtowns should be the central hub of the bike routes and guide signs should indicate directions to and from downtown to other destinations.

Additional guidelines for placement and design of signage are included in the AASHTO Guide for Planning, Design, and Operation of Bicycle Facilities and MUTCD.



Wayfinding in Boulder, CO, (left) and exist wayfinding in Ketchum (right).

## Snow Biking

Snow biking on “fat” bikes is an increasingly popular sport and transportation option during the winter in Blaine County and other destination ski resorts in the West. Fat bikes have wide, tires run with low pressure to give enough floatation and traction to travel over snow.

Ideally, snow biking would occur on designated snow biking trails within the National Forest, which are more fun for the snow bikers and avoids any user conflicts with nordic skiers. However, if snow bikers are using groomed nordic trails, such as the WRT, the following are best practices that should be used.

Recommended best practices for snow biking on groomed Nordic trails, snowmobile trails, and backcountry trails were developed by Grand Targhee Resort, Teton Valley Trails and Pathways, and IMBA. Snow bikers should be educated on these best practices using signage, brochures, and online media.

### Groomed Nordic Trails

- Only ride at ski areas that allow and encourage biking.
- Yield to all other users when riding. Skiers don't have brakes but you do!
- Ride on the firmest part of the track.
- Do not ride on or in the classic tracks.
- Leave room for skiers to pass (don't ride side-by-side with all of your buddies blocking the full trail).
- Allow the track time to set up after grooming and before riding.
- Respect alternate-use days for bikers and skiers.
- Some areas require riding only a purpose-built fat bike, not any old mountain bike. There may be a minimum tire tread width.
- Be an ambassador for the sport: stay polite, educate other riders, discourage bad behavior, and follow the rules.
- Help out and get involved by joining your local nordic club.
- Consider donating money for trail grooming.

### Snowmobile Trails

- When riding on snowmobile trails, use a front white blinker and rear red blinker at all times. Wear reflective material on both the front and rear of your body.
- Stay to the far right of the trail and yield to snowmobiles.
- Know and obey the rules of your local land manager. Understand that some trails may be on private property and might not be open to alternative uses.
- Be prepared. Winter travel in the backcountry requires carrying proper gear and dressing properly. Be self-sufficient!
- Use extreme caution when riding at night. Be visible and use the brightest lights you can find.
- Be friendly! Fat bikers are the newest trail users. Be courteous and open to suggestions from snowmobile riders.
- Help out by supporting your local snowmobile club.
- Consider donating to trail grooming and maintenance efforts.

## Natural Terrain and in the Backcountry

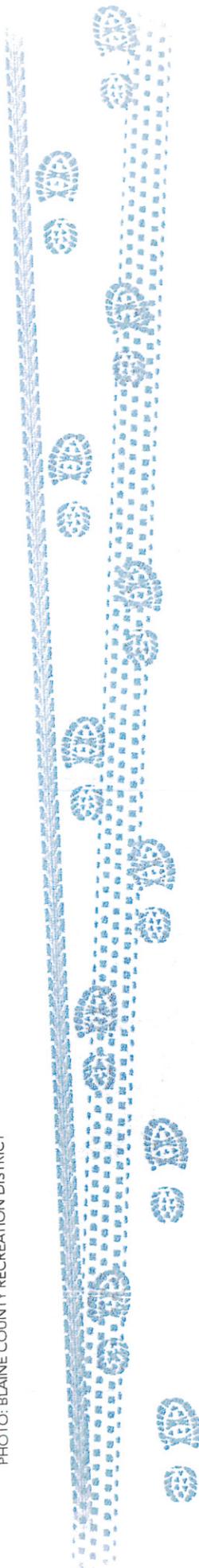
In the right conditions, a fat bike can be the ultimate winter backcountry travel tool. Frozen conditions and minimal snow coverage (1-5 inches) means access to areas that are impassible during the warmer months. But just because you can ride somewhere, doesn't mean you should. Be aware and be prepared.

- **Do not trespass!** Know whether or not you are on private property. Obey ALL land manager rules. Some land parcels are closed to bikes whether you are riding on a trail or not.
- **Do not ride through sensitive wildlife habitats.** This may be especially important on beaches or in places where animals hibernate. Learn about the area you want to ride in before you ride there.
- **Do not disturb wildlife.** Many species survive on minimal diets during winter. Stressors or the need to move quickly can deplete their energy stores.
- **Learn safe ice travel.** Riding on frozen water can be extremely dangerous. Is the ice thick enough to support you? Take ice fishing picks and a length of rope when riding on lakes and rivers.
- **Understand changing conditions.** New snowfall or warming temperatures can make the return trip much more difficult. Tire tracks can be covered, hard snow can turn to slush, rivers can start to melt. Always know the forecast and be aware of how changing conditions might alter the safe passage of your route.
- **Be prepared.** Carry provisions in case you have to stay out longer than planned.
- **Let people know.** Make sure someone else knows where you are going, when you left, and when you expect to return.
- **Learn to share.** Be aware that your tracks might attract other riders. Understand that "your" route might not remain a secret for long.



*Snow biking should only be done when conditions are right and the bike leaves less than 1" depression.*





## Chapter 5

# THE PLAN

### 5.1 PROJECTS AND MAPS

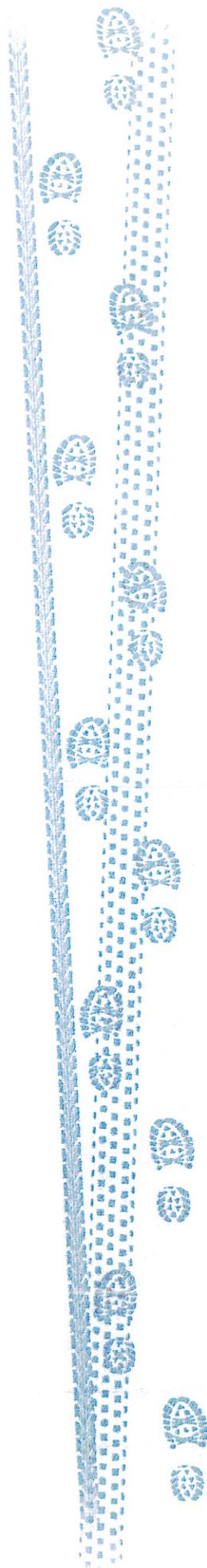
The Master Plan for the development of future bicycle and pedestrian facilities was created through the outreach efforts of this planning process and site analysis by the consultant. The types of projects range from small improvements or connections that could be easily accomplished to large undertakings that seem almost out of reach. In many cases, alternatives are presented for initial, short term solutions, as well as ultimate, longer term improvements.

The projects described here are organized according to their location within Blaine County and are not listed in order of priority. This is by no means an exhaustive list of all potential and worthy projects but is intended to be a starting point for further evaluation. The projects listed here are general in nature and most will require additional study for feasibility, right-of-ways acquisition, funding, plan approvals, final design, etc. The maps include general locations for identified projects and may not show exact locations of all projects.

# North Valley



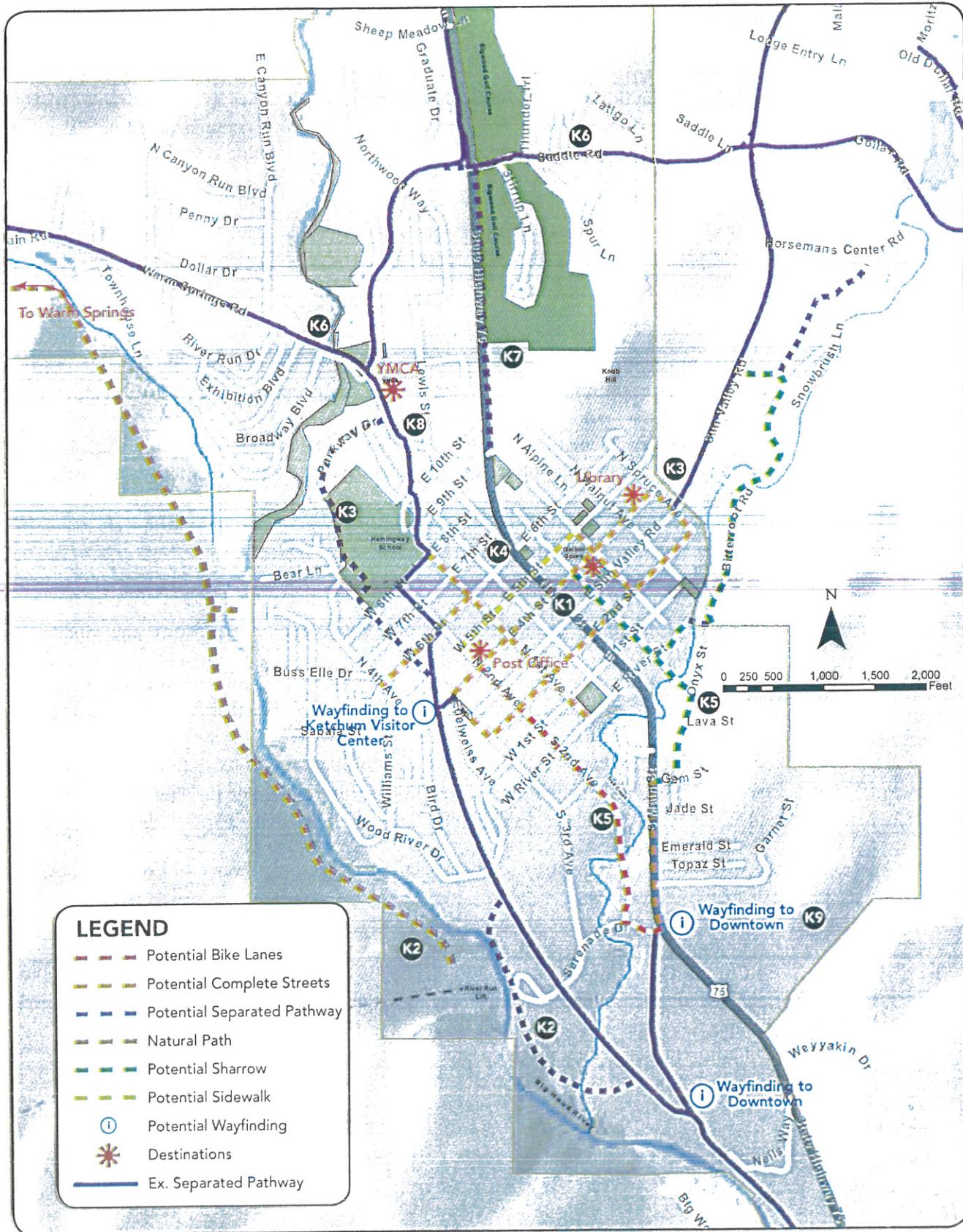
BASE MAP COURTESY OF BLAINE COUNTY GIS



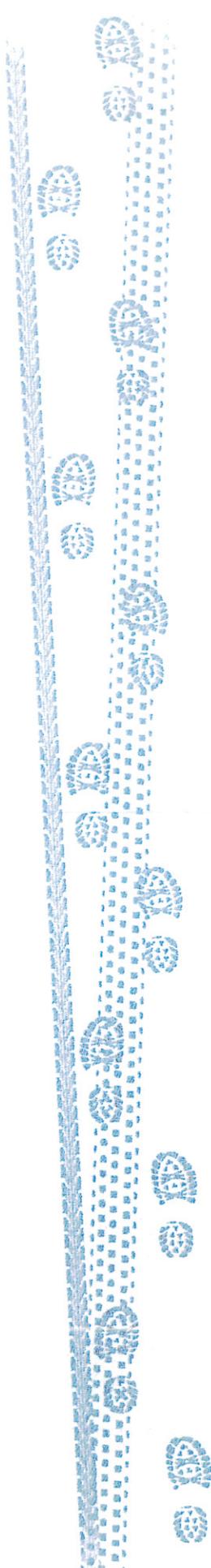
## North Valley Projects

- **N1 – Connect Wood River Trail (WRT) to Harriman Trail with Separated Pathway**
  - o **Current Conditions:** The WRT terminates at Hulen Meadows and the Harriman Trail begins at the Sawtooth National Recreation Area (SNRA) and continues north to Galena Lodge. The only way a cyclist or pedestrian can currently connect these trails is via the shoulder of State Highway 75.
  - o **Improvements:** Construct a separated, paved multi-use pathway from the north end of the WRT at Hulen Meadows to the south end of the Harriman Trail at the SNRA. This would provide a safe and desirable connection for cyclists between these two excellent amenities.
  
- **N2 – Improve Surface of Harriman Trail**
  - o **Current Conditions:** Many portions of the Harriman Trail are unridable in the summer due to soft or cobbled surfaces. This route is likely to become even more popular with the future biking trails planned near Galena Lodge.
  - o **Initial Improvements:** Improve the surface of the trail with graded crushed aggregate to provide a smoother and firmer all-weather surface that would accommodate travel by medium to fat tired bicycles.
  - o **Ultimate Improvements:** Pave with asphalt to provide a safe and pleasing alternative connection from the SNRA to Galena Lodge.
  
- **N3 – Biking Improvements over Galena Summit**
  - o **Current Conditions:** State Highway 75 over Galena Summit is a narrow and winding road that is popular with road cyclists that ride to Galena Lodge and beyond. The Sawtooth Relay brings 100 plus runners over Galena Summit and into Ketchum. It is also heavily travelled by tourists in motor vehicles and recreational vehicles that creates a safety issue for cyclists.
  - o **Initial Improvements:** This project entails restriping the roadway to narrower travel lanes (11 feet) and providing a wider shoulder (2-4 feet) for uphill travel for road cyclists. Add shared road downhill signage and/or sharrows for downhill cyclists to share the travel lane with motorists.
  - o **Ultimate Improvements:** Construct a separated, paved pathway over Galena Summit along the old road grade.
  
- **N4 – Improvements around Galena Lodge**
  - o **Current Conditions:** Galena Lodge is a popular destination for bikers and skiers. Trails are located on both sides of the highway causing bikers and skiers to cross the highway. During the winter, skiers park along the highway.
  - o **Improvements:** Reduce the speed limit along the highway in the vicinity of Galena Lodge. Add signage warning of pedestrian crossing. Add official parking area for winter use.

# Ketchum



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## Ketchum Area Projects

- **K1 - 4th Street Safety Improvements**

- o **Current Conditions:** 4th Street is heavily used by pedestrians and has been recently improved with substantial bicycle and pedestrian improvements. Conflicts between pedestrians, bicyclists, and motor vehicles still exist, especially at the intersection of Main Street (Hwy. 75).
- o **Initial Improvements:** Close 4th Street to motor vehicles for each half block on either side of Main Street to reduce intersection conflicts.
- o **Ultimate Improvements:** Improve pedestrian safety at the intersection with State Highway 75 by installing a pedestrian HAWK signal that is synchronized with other signals on Main Street.

- **K2 - River Run Connections**

- o **Current Conditions:** River Run and Warm Springs are the two base areas for Sun Valley Ski Resort. River Run to Warm Springs over Baldy is a popular mountain bike ride. Pedestrian and bicycle travel from Warm Springs is circuitous along Warm Springs Road and through Ketchum. Also, the WRT bypasses the River Run Base without a good connection to the River Run Lodge and base facilities.
- o **Improvements:** Construct a natural surface trail between River Run and Warm Springs on the west side of the Big Wood River and construct a new side loop paved, separated pathway to connect to the River Run base.

- **K3 - Pathway Routing Improvements in Downtown**

- o **Current Conditions:** The WRT through west and north Ketchum is circuitous and ambiguous. Connections to downtown and east Ketchum are undefined. The bike path along Sun Valley Road entering downtown makes a sharp right turn onto 4th that is easily missed, sending cyclists down a busy road with no bike lanes.
- o **Improvements:** Study alternative routes for the WRT through town to the YMCA and construct a new pathway segment, possibly through the ball field complex. Study alternative routes for the WRT near the church along Sun Valley Road. Clarify bike routes to downtown and east Ketchum with bike improvements and signage.

- **K4 - Downtown Sidewalks - Complete Streets**

- o **Existing Conditions:** Many city streets lack sidewalks and bike facilities and adequately serve only motor vehicle circulation and parking. The sidewalk on Main Street does not have adequate clear travel way for pedestrians. Connecting sidewalks at the Hospital Drive/SH-75 intersection are important for safety.
- o **Improvements:** Study street configurations, construct missing links in sidewalks, stripe bike lanes or sharrows, designate preferred bike routes and possibly reconfigure parking on city streets. Reduce lanes on Main Street (SH-75) from four lanes to three lanes.

- **K5 - Alternate Routes to Downtown**

- o **Current Condition:** Bicycle access to downtown from the south edge of town at Serenade Drive is undefined and potentially unsafe along State Highway 75.
- o **Improvements:** Improve and designate alternate routes to Downtown via 2nd Avenue and Leadville Avenue and add bike lanes or sharrows where appropriate. Improve bicycle and pedestrian infrastructure along State Highway 75 between Serenade Drive and Gem Street.

- **K6 - Sight Distance Improvements**
  - o **Current Conditions:** Hazardous conditions exist at several intersections along Saddle Road and Warm Springs Road where sight distance to pathway users is impaired.
  - o **Improvements:** Remove or modify obstructions or re-route pathways or roadways to resolve sight line issues.
- **K7 - Separated Path Saddle Road to Knob Hill**
  - o **Current Condition:** This route between downtown and Saddle Road currently forces riders to ride along the highway.
  - o **Improvements:** Construct a separated, paved path from Saddle Road to Knob Hill.
- **K8 - Warm Springs Road Improvements**
  - o **Current Conditions:** Warm Springs Road is heavily travelled by motorists, cyclists, and pedestrians. A paved, two-way cycle track exists on the north side that has sight line obstructions at some intersections, as well as the inherent safety issues of a two-way cycle track where motorists are not expecting cyclists traveling in the opposite direction of traffic. There are numerous private accesses to adjacent properties.
  - o **Initial Improvements:** Clear sight line obstructions within the right-of-way where possible. Re-align and improve pedestrian crossing at 10th Street.
  - o **Ultimate Improvements:** Re-construct Warm Springs Road as a complete street with bicycle and pedestrian facilities on both sides of the road.
- **K9 - Wayfinding**
  - o **Current Conditions:** There is some wayfinding along the WRT, but it is currently inadequate to direct visitors who are unfamiliar with the area. Some of the wayfinding is inaccurate.
  - o **Improvements:** Add signage at street crossings along the WRT indicating street names, correct misleading information on existing signage, and add signage designating preferred pedestrian and bicycle routes to and from Downtown and the WRT.

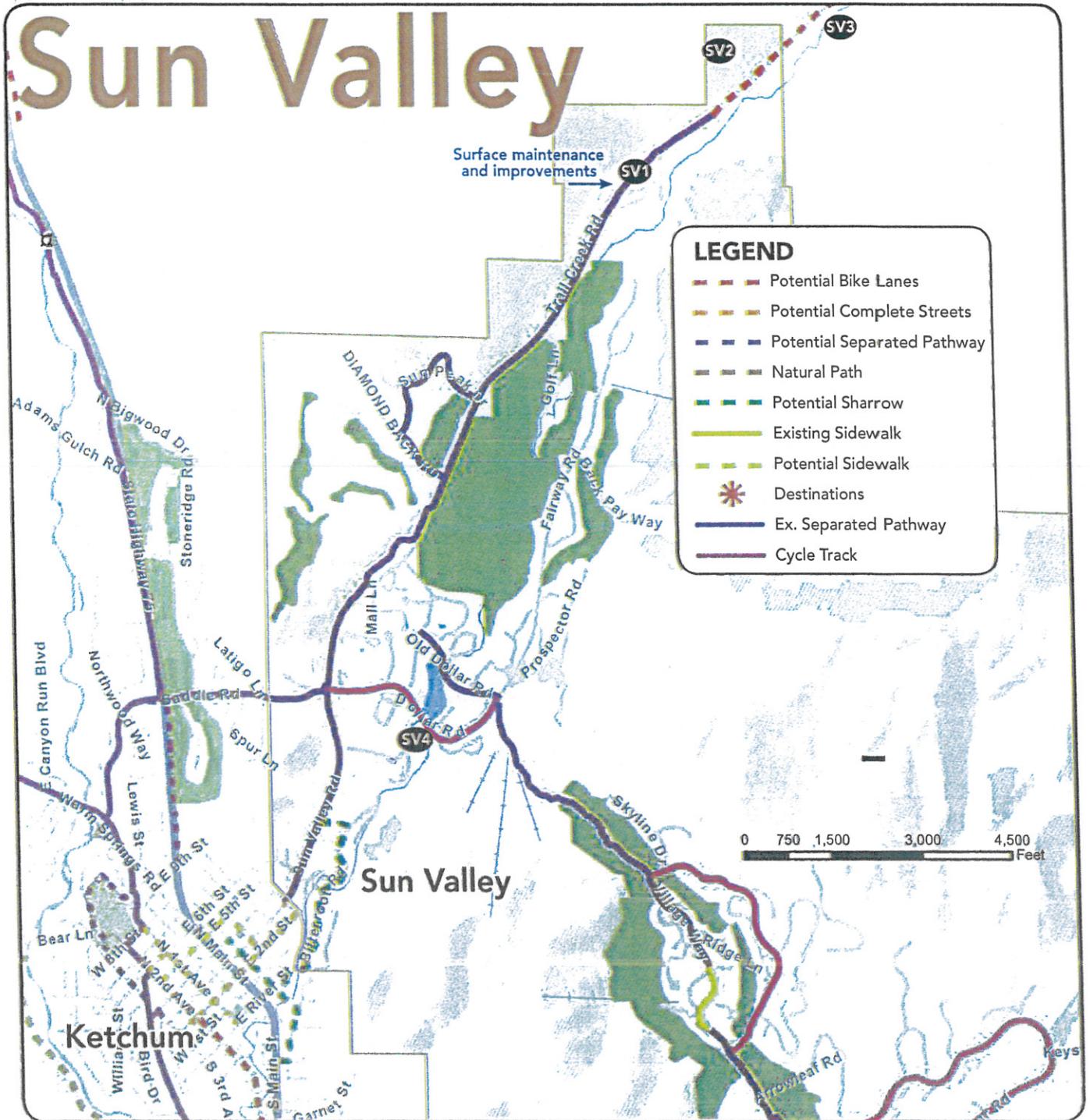
## Sun Valley Area Projects

- **SV1 – Trail Creek Path Improvements**
  - o **Current Conditions:** The surface of the separated path along Trail Creek Road is in very poor condition with rutting, heaving, and cracking. The poor condition discourages cyclists from using the path and forces them to use the roadway, which does not have an adequate shoulder and causes safety issues.
  - o **Improvements:** Reconstruct and improve the surface of the existing separated path along Trail Creek Road.
- **SV2 – Trail Creek Path to Boundary Campground**
  - o **Current Condition:** The separated pathway along Trail Creek Road terminates south of the Boundary Creek Campground which is a popular destination for trail riding.
  - o **Improvements:** Continue the paved, separated path from the end of the existing path to Boundary Creek Campground.
- **SV3 - Boundary Campground to base of Trail Creek Pass**
  - o **Current Conditions:** Trail Creek Road to the base of Trail Creek Pass or the end of the pavement from Boundary Creek Campground is narrow. This is a popular road cycling route with regular group rides using this as an out-and-back ride.
  - o **Improvements:** Widen shoulder from Boundary Creek Campground to the base of Trail Creek Pass or the end of the pavement and stripe lane lines. Use recommended surface treatments per chapter 4.2.

- **SV4 - Improved Bicycle and Pedestrian Connection to Community School Plus Traffic Calming**

- o **Current Conditions:** Existing sidewalk and bus shelter, no traffic calming. With a planned middle school addition these improvements will become more important.

- o **Improvements:** Traffic calming elements, improved bicycle and pedestrian connections, and crosswalks on Dollar Road.



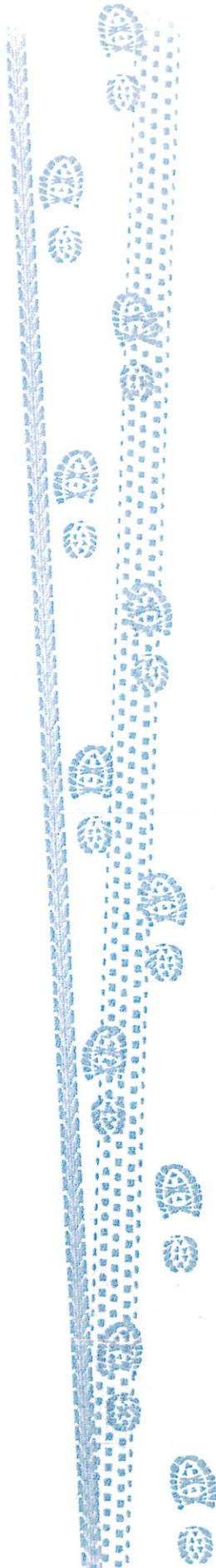
# Main Valley



**LEGEND**

- - - Potential Bike Lanes
- Existing Bike Lanes
- Existing Natural Path
- - - Potential Natural Path
- - - Potential Separated Pathway
- Potential Shoulder
- Existing Separated Pathway
- i Potential Wayfinding

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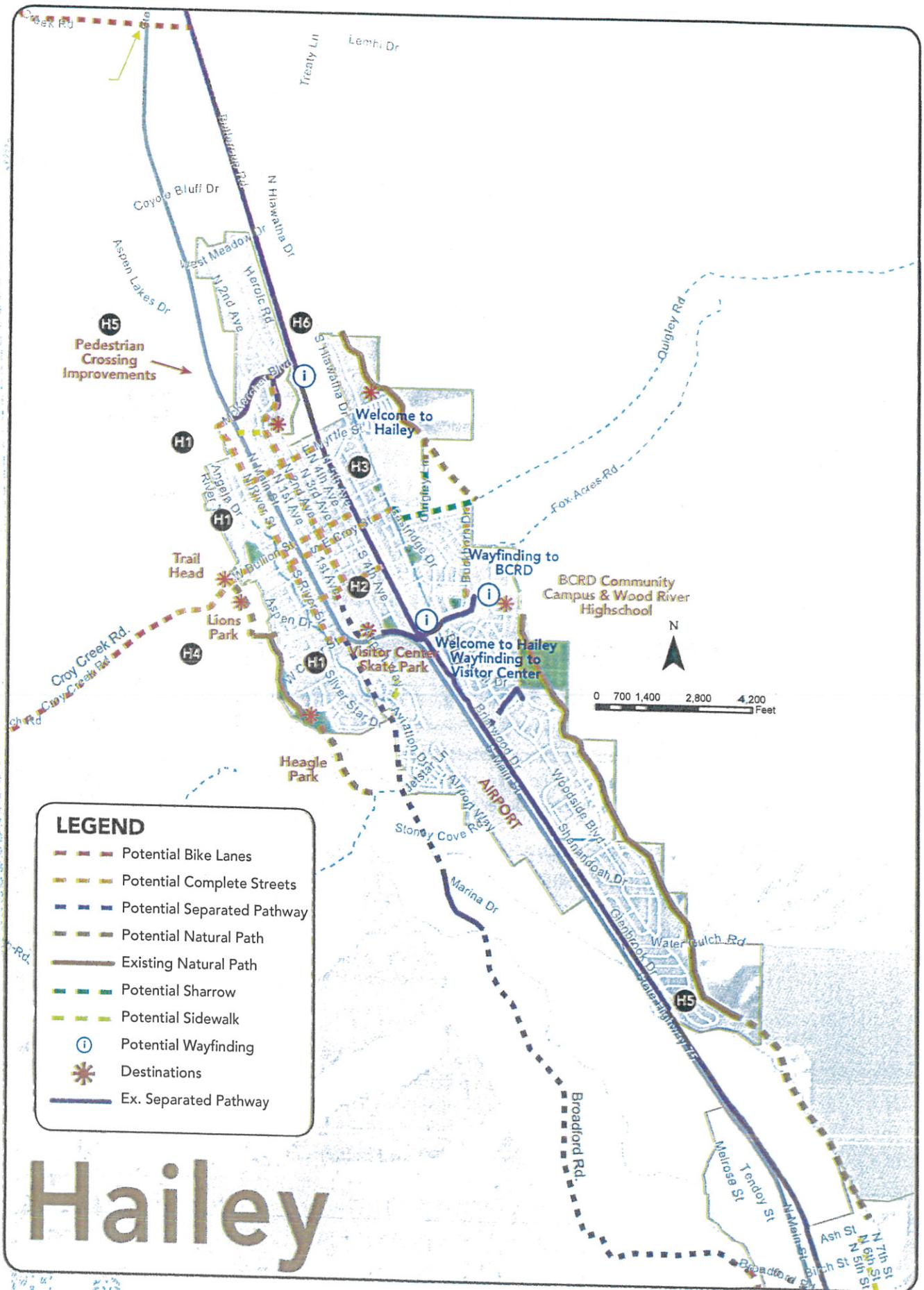
## Main Valley Area Projects

- **M1 – East Fork Bike Lanes and Intersection Improvements**
  - o **Current Conditions:** The bike lanes along East Fork Road end a short distance from State Highway 75 and then continue up East Fork for approximately six miles. This is a popular road bike ride. Also, the WRT is braided at the intersection of East Fork Road creating multiple crossings. The parking area is being used as a de-facto park-n-ride facility for the bus stop.
  - o **Improvements:** Stripe and sign bike lanes and widen shoulder where needed to accommodate bike lanes to end of pavement and connect WRT to existing bike path on west end of Eastfork Rd. Abandon unnecessary pathway segments to eliminate multiple crossings just east of the intersection with the highway. Improve restroom facilities, add a designated parking lot to serve the bus stop and construct a sidewalk from the parking lot to the bus stop.
  
- **M2 – Deer Creek Road Separated Pathway and Underpass**
  - o **Current Conditions:** Deer Creek Road lies on the west side of State Highway 75 and accesses a residential area.
  - o **Improvements:** Connect Deer Creek road to the WRT via a separated path and underpass under State Highway 75. Add bike lanes along Deer Creek to connect to recreational trails.
  
- **M3 – Croy Creek Road Improvements**
  - o **Current Conditions:** Croy Creek Road connects the City of Hailey to popular recreational trailheads and parks west of town. The road is narrow.
  - o **Initial Improvements:** Re-stripe roadway with narrower travel lanes to create a bike shoulder.
  - o **Ultimate Improvements:** Widen road where required to facilitate continuous bike lanes to trailheads.
  
- **M4 – Broadford Road Improvements**
  - o **Current Conditions:** Broadford Road is a popular walking and biking route that has easy access from residential areas and can be part of a loop from Hailey to Bellevue. The road is narrow and has a rough chip seal surface. A short separated pathway spur exists along the north end of Broadford.
  - o **Initial Improvements:** Improve road surface on shoulders and stripe bike shoulders.
  - o **Ultimate Improvements:** Construct a contiguous separated pathway parallel to the road from Hailey to Bellevue.
  
- **M5 – Bike Lanes along SH-75**
  - o **Current Conditions:** State Highway 75 is being reconstructed south of Ketchum and most of the highway has adequate shoulders. Many skilled road cyclists use the highway instead of the WRT for recreational rides, and the amount of use is increasing. Additionally, many year-round commuters must ride along SH-75 during the winter when the WRT is being groomed for nordic skiing.
  - o **Improvements:** Designate with painting and signage bike lanes along the highway. Widen the shoulder where necessary to provide the minimum bike lane width. There are some user conflicts between fast and slow riders on the bike path.

- **M6 – “Toe of the Hill Trail” connection between Hailey and Bellevue**
  - o **Current Conditions:** A natural surface single track trail exists between Hailey and Bellevue but has some large missing segments.
  - o **Improvements:** Construct missing trail segments to Quigley and Bellevue and improve existing trail where needed.
- **M7 – Wayfinding and Amenities**
  - o **Current Conditions:** Limited signage exists along the WRT to orient pathway users to major road crossings and destinations.
  - o **Improvements:** Add signage indicating road names at pathway crossings within cities, “you are here” information, and add signage and maps to popular destinations (cities, recreational amenities, visitor center, etc). Add parking and trail head signage at the ends of the WRT in Bellevue and Hulen Meadow.

## Hailey Area Projects

- **H1 - Roundabouts**
  - o **Current Conditions:** River Street runs parallel to Main Street (State Highway 75) and has a mix of residential and commercial land uses. Pedestrian and bicycle facilities in this area are spotty or non-existent. This corridor has been identified as a potential alternate pedestrian/bike route through town, in lieu of the State Highway.
  - o **Initial Improvements:** Improve sidewalks and delineate bike lanes along River Street.
  - o **Ultimate Improvements:** Construct “neighborhood scale” traffic circles at major intersections along River Street, West Cedar Street, and Silver Star Drive to calm traffic and create a bike boulevard along River Street.
- **H2 – Connections to the Visitor Center and Rodeo Park (Skate Park)**
  - o **Current Conditions:** Rodeo Park is a popular destination (especially for kids) but lacks safe connectivity to neighborhoods and the WRT. The new Visitor Center is hard for visitors to find from the WRT.
  - o **Improvements:** Construct separated pathway connections to adjacent neighborhoods to the north and the WRT to the east.
- **H3 – Downtown Sidewalks - Complete Streets**
  - o **Current Conditions:** Many streets within Hailey lack sidewalks and bike lanes. Neighborhood street edges are undefined and street parking is arbitrary. Although historic town site sidewalks are a significant asset, the old Hailey area east of the highway lacks stop signs at many intersections posing a safety hazard and sidewalks are very far from the road due to wide right-of-ways.
  - o **Initial Improvements:** Install a minimum of two stop or yield signs at all intersections in Hailey east of the highway to increase safety for cyclists, pedestrians, and motorists. Consider placement that allows for one primary north-south thoroughfare and one east-west thoroughfare to minimize the disruption of traffic flow.
  - o **Ultimate Improvements:** Accommodate pedestrian and bicycle circulation with sidewalks and bike lanes on city streets. Priority Streets include River Street, 2nd Avenue, Airport Way, Aviation Drive, Myrtle Street, Bullion Street, Croy Street, and Elm Street. Connect walks in old Hailey area and place new walks closer to the road to create a meandering system. Utilize existing sidewalk infrastructure to the greatest extent possible.



# Hailey

- **H4 – Connections to Trails and Parks**

- o **Current conditions:** Abundant public land is adjacent to the City of Hailey and many recreational trailheads and parks are accessible from town. Pedestrian and bicycle connections to some of these amenities are informal and undefined.

- o **Improvements:** Improve bicycle and pedestrian infrastructure to adjacent parks and public lands, including Croy Creek Road, Quigley Road, Colorado Gulch, Toe of the Hill Trail, Cutter's Trail, Lions Park, Heagle Park, and Hop Porter Park. Improvements include constructing sidewalks and adding bike lanes or bike shoulders.

- **H5 – Safe Routes to School Improvements**

- o **Current Conditions:** Some common walking and biking routes to schools are in need of safety improvements.

- o **Improvements:** Implement safety improvements on Glenbrook Drive to WRT (make connection with separated path), the pedestrian crossing of State Highway 75 near Albertsons (HAWK signal), and Myrtle Street between 2nd Street and the WRT (add sidewalks).

- **H6 – Wayfinding**

- o **Current Conditions:** Limited signage exists along the WRT to orient pathway users to downtown streets and popular destinations.

- o **Improvements:** Add signage indicating road names at pathway crossings within Hailey and Bellevue and gateway signage at entrance to cities. Add signage and maps to popular destinations (downtown, parks, schools, recreational amenities, etc).

## South Valley Area Projects

- **S1 – Roundabout at Gannett Road and State Highway 75**

- o **Current Condition:** This intersection has a sharply angled approach and is confusing, which can cause safety issues for motorists and cyclists.

- o **Improvements:** Re-align intersection and construct a roundabout to improve safety and create a gateway into Bellevue.

- **S2 – WRT and Street intersection improvements in Bellevue**

- o **Current Condition:** The WRT splits the N. 2nd Street in Bellevue with south bound traffic located on the west side of the bike path and north bound traffic located on the east side. This results in confusing intersections.

- o **Improvements:** Add better signage and striping, warning motorists of the location of the bike path. Better separation of the bike path from the road with vertical barriers.

- **S3 – Gannett Road Improvements**

- o **Current Conditions:** There is very little development between Bellevue and Gannett. Gannett Road, however, is a popular road bike ride for adventurous, long distance cyclists riding to Gannett, Carey, and other loops in the south county.

- o **Initial Improvements:** Stripe bike lanes and widen shoulders where necessary. Use road surface and maintenance recommendations from chapter 4.2.

- o **Ultimate Improvements:** Construct a paved separated pathway on the east side of the road along the old railroad bed. If more development occurs along Gannett Road in the future, this may become a more critical link to Bellevue and the WRT. Contributions to the cost of building a separated pathway could be included in development proposals.

- **S4 – South WRT Terminus and Extention to Carey**

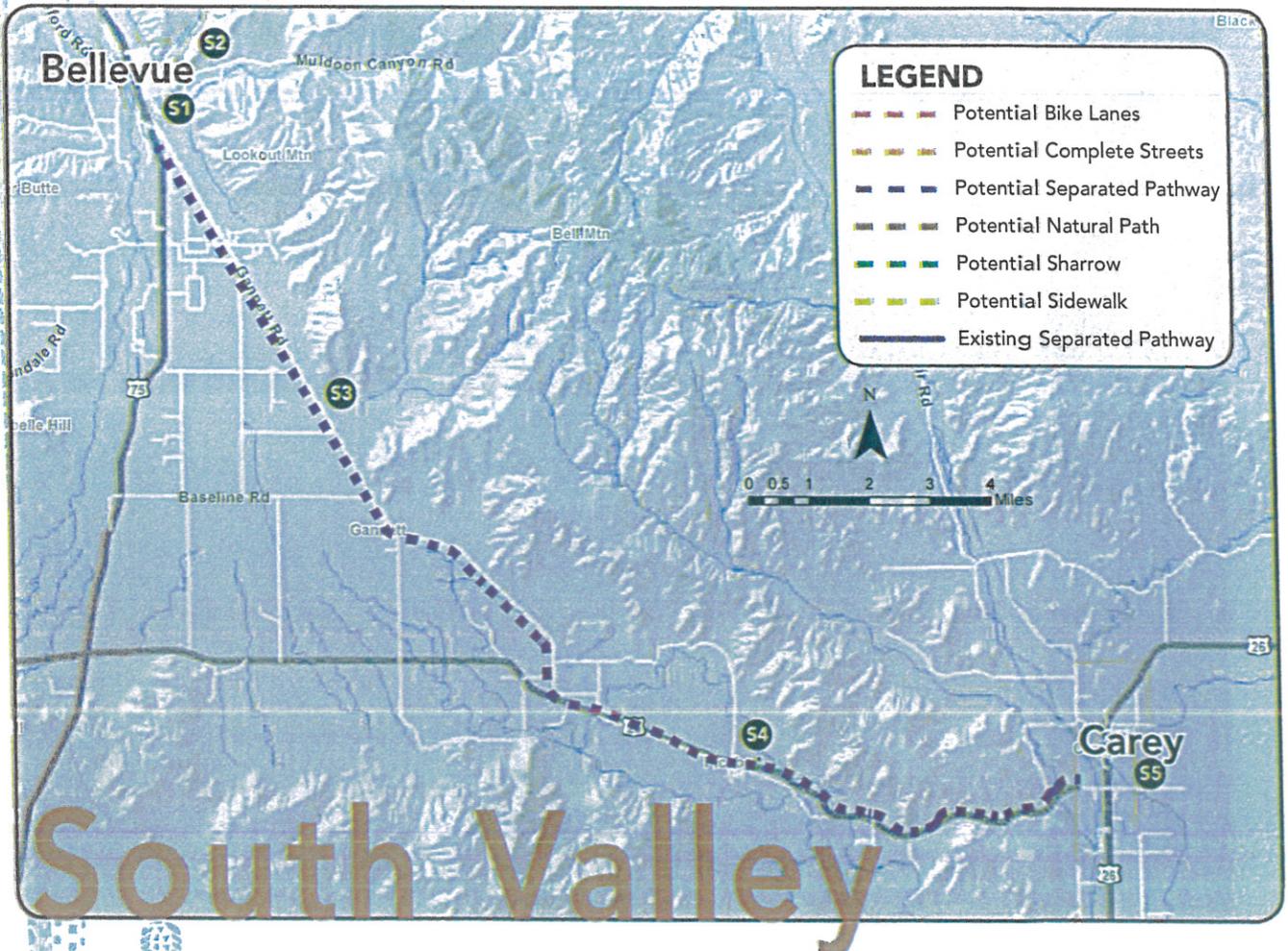
- o **Current Condition:** The WRT ends in Bellevue and there is no connection to the southeastern portion of the county via pathways.

- o **Improvements:** Improve the current terminus of the WRT at Gannett Road to include a parking area and signage. When demand warrants, construct a separated path from the end of Gannett Road to Carey along the north side of the highway.

- **S5 – City of Carey Pathway Connectivity**

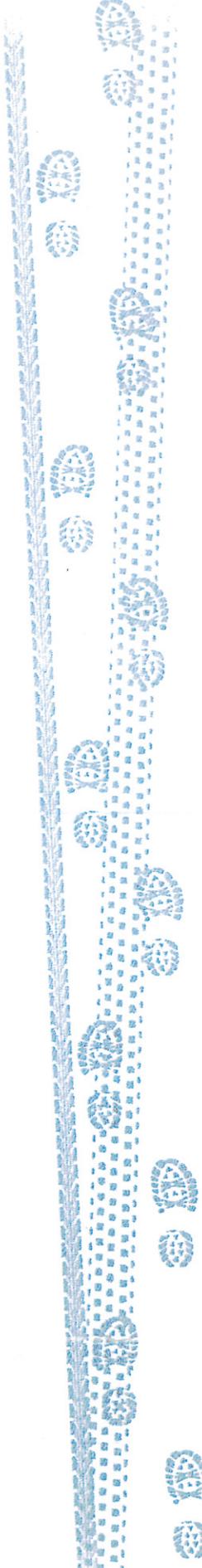
- o **Current Conditions:** Few pathway amenities exist within Carey.

- o **Improvements:** Create a system of separated paths, sidewalks, and bike lanes within Carey utilizing existing right of ways and easements.



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## Chapter 6

# MAKING IT HAPPEN

## 6.1 PROJECT PRIORITIZATION

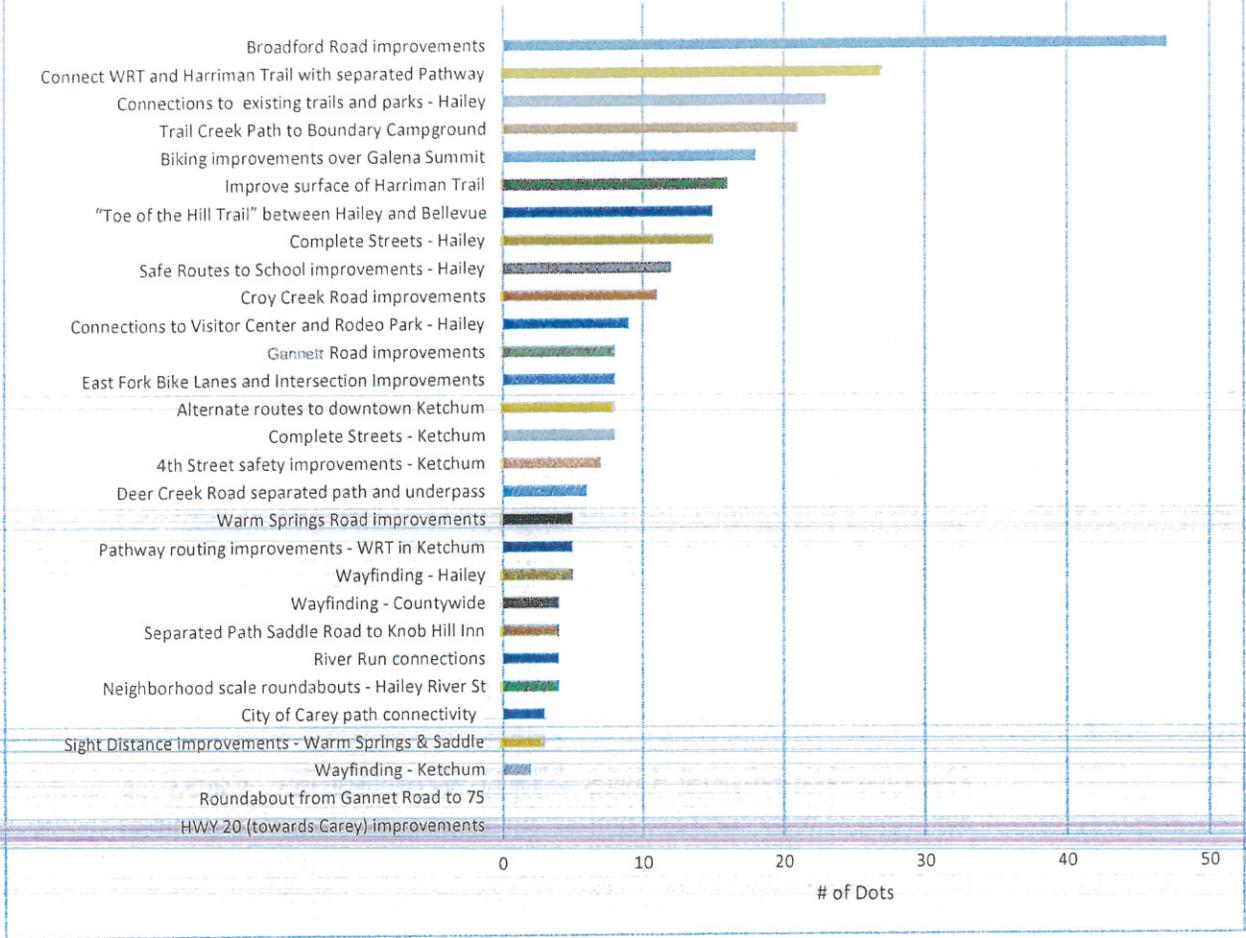
Implementing this Plan would be easy if money were no object and all of the identified projects and recommended programs could be constructed and launched. The reality is that all of the entities that will potentially construct and maintain these facilities have limited budgets. Thus, the following prioritization of projects in conjunction with the implementation strategies outlined in the next section can help guide future development in an orderly and manageable way.

Each project was evaluated with respect to the degree to which it met the vision of this Master Plan and the benefits associated with the project. Projects were rated on a scale of 1 to 5 according to the following criteria:

- 1. Connecting Missing Links** – Projects were given the highest rating of 5 if they connected important destinations that were highly valued by the community. According to the online survey, the top destinations that should be connected were downtowns (77 percent), schools (63 percent), and trail systems on public lands (53 percent). Less important connections were YMCA/BCRD Campuses (28 percent) and Ski Resorts (17 percent).
- 2. Safety Impacts** – Projects that have the most impact on safety or addressed current safety issues were given the highest rating of 5. Almost all identified projects address some aspect of safety.
- 3. Community Desire** – Projects that were rated as most important by the community were given the highest rating of 5. This was measured by the collective results of the online survey, mobile workshops, and stakeholder meetings, as seen on the following pages.

# Mobile Workshops Results

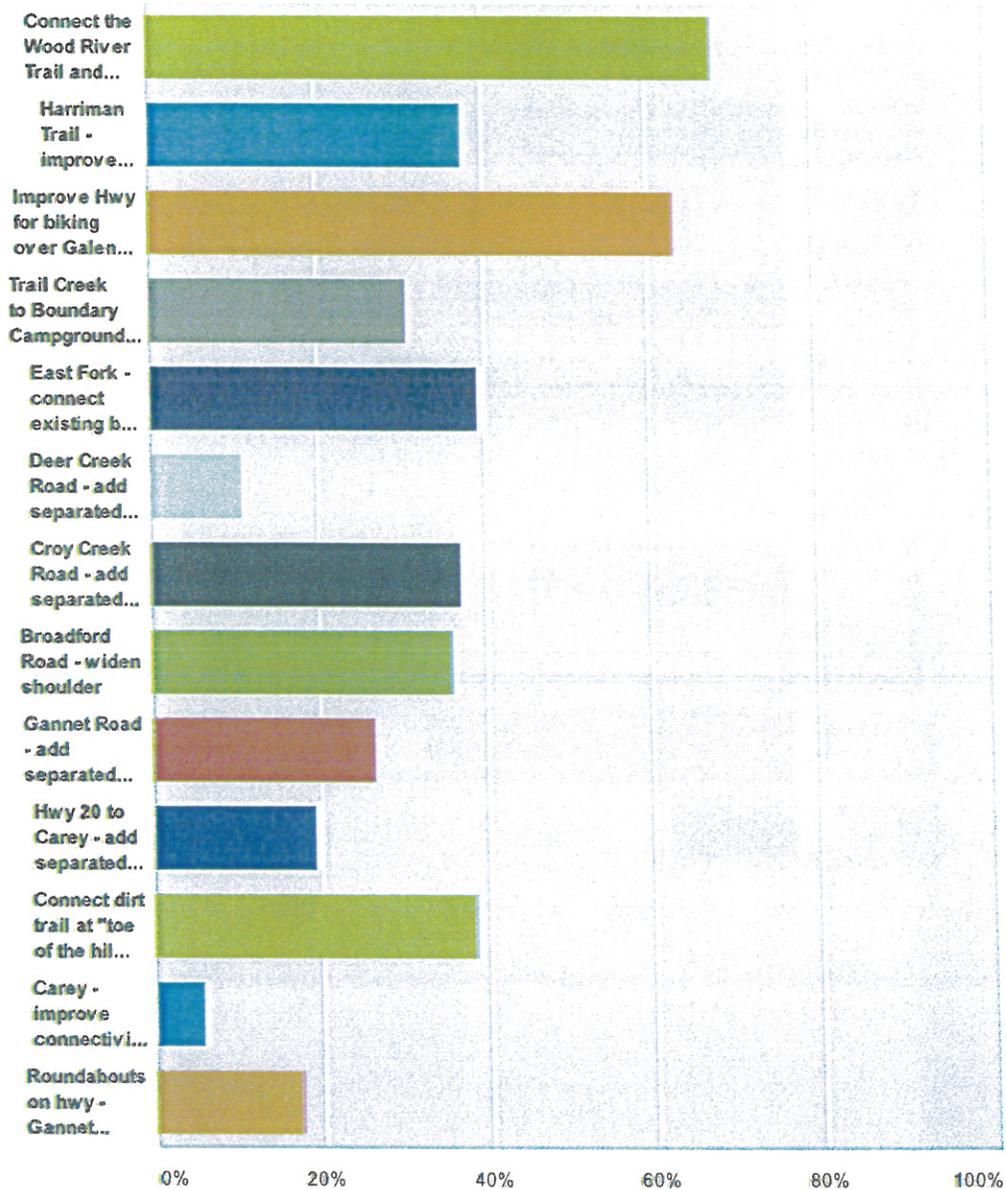
## Map "dot" Exercise



# Online Survey Results

## Q6 What do you feel are the top five (5) most important pathway projects within Blaine County?

Answered: 191 Skipped: 24

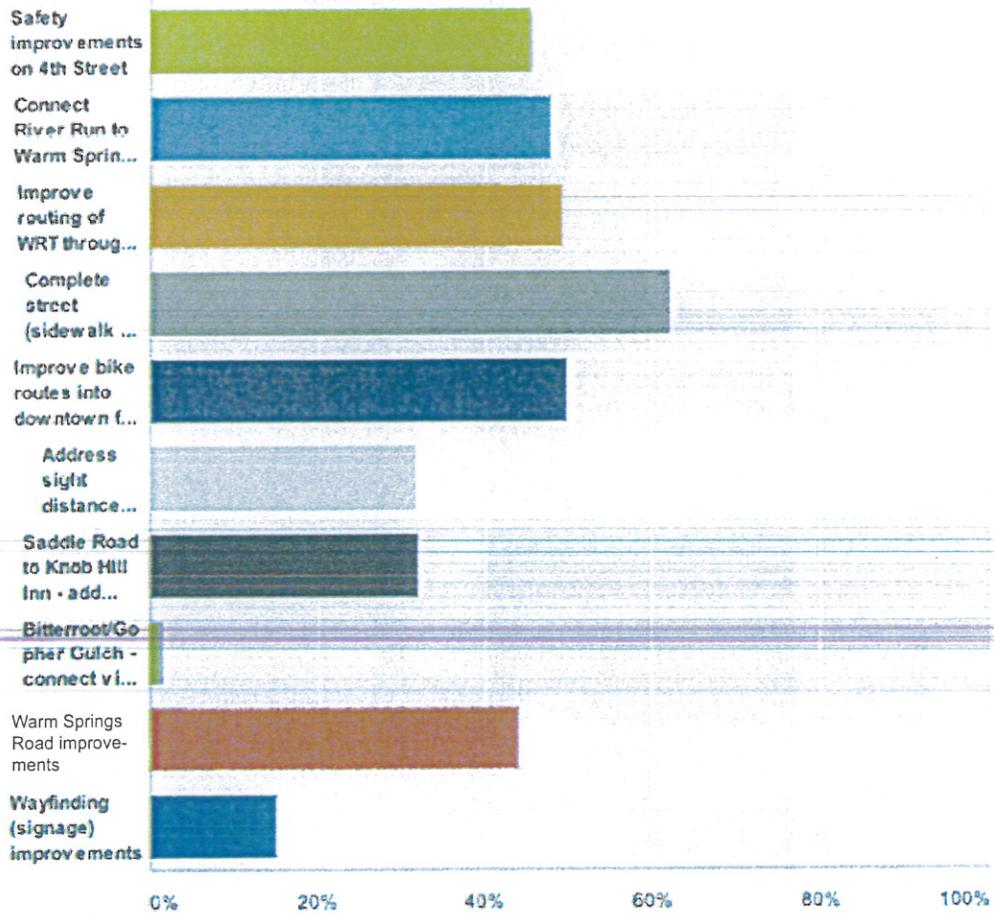


Online survey results

# Online Survey Results

**Q7 What do you feel are the top four (4) most important pathway projects within Ketchum and Sun Valley?**

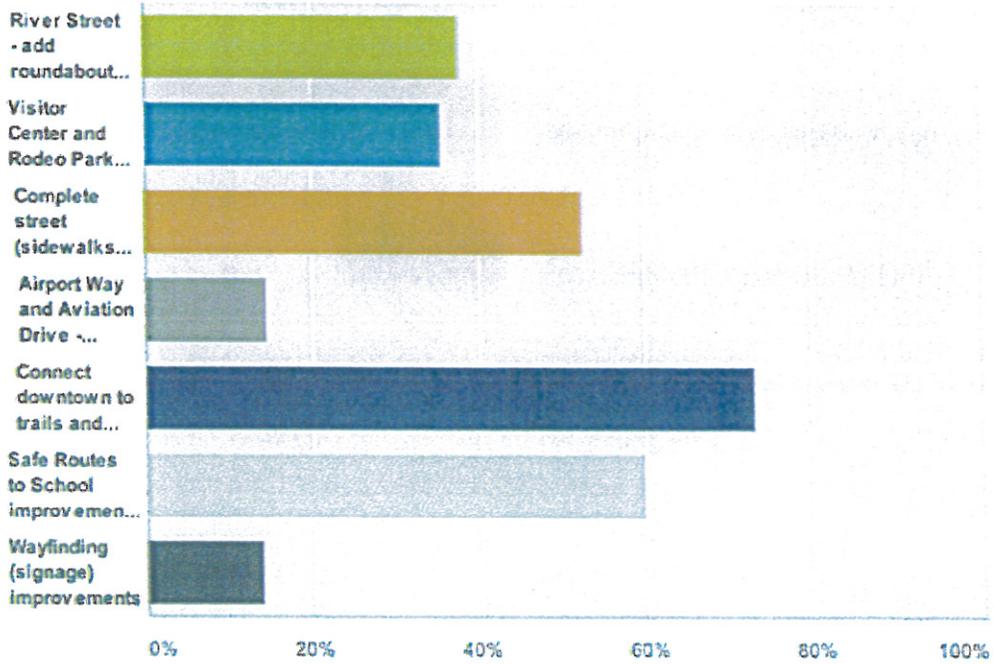
Answered: 190 Skipped: 25



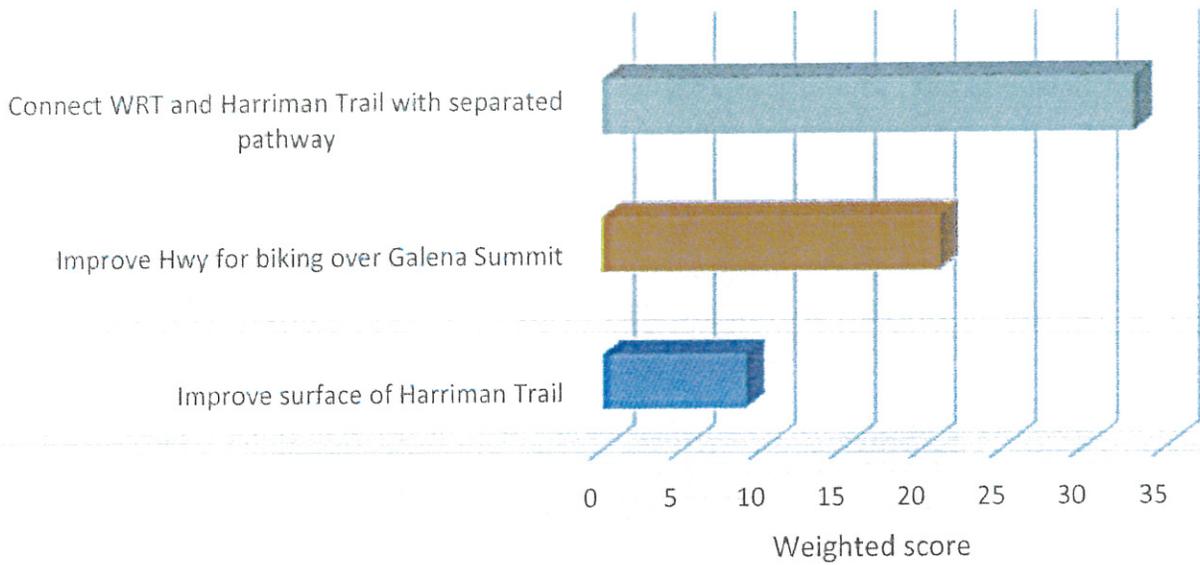
# Online Survey Results

Q8 What do you feel are the top three (3) most important pathway projects within Hailey?

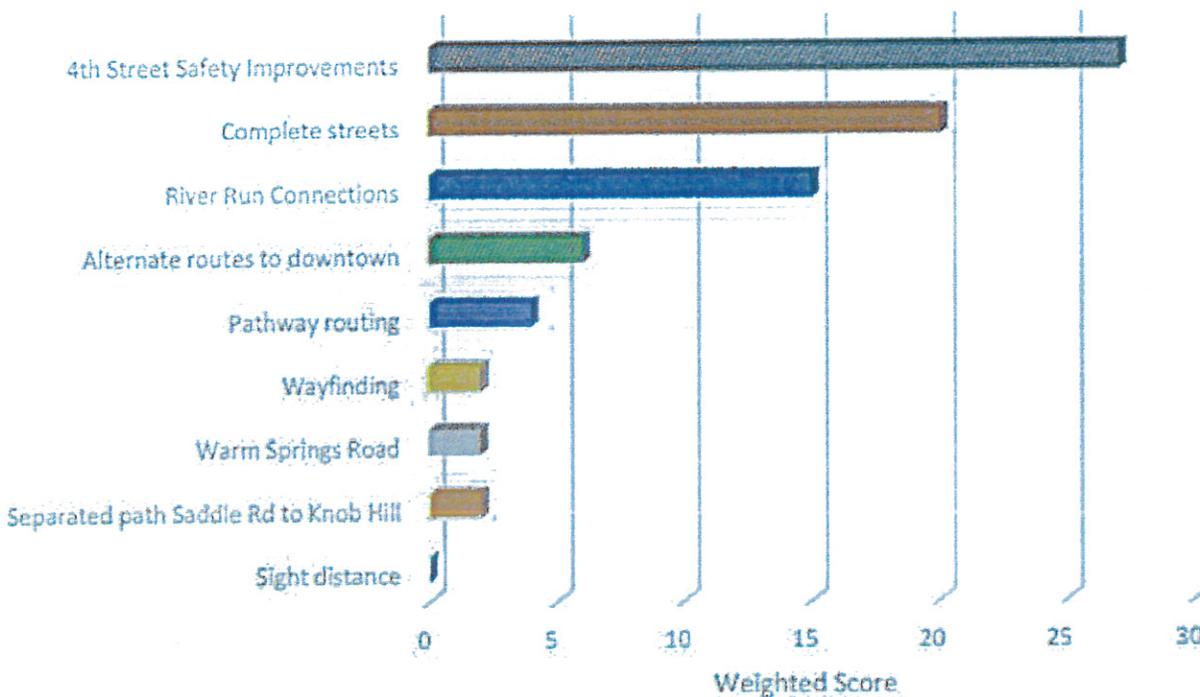
Answered: 171 Skipped: 44



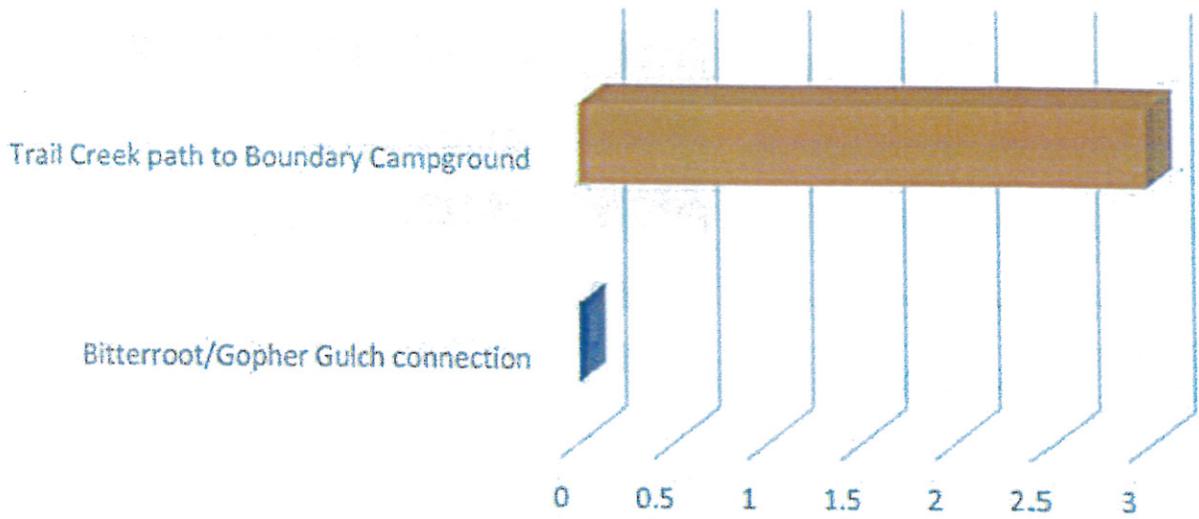
## Bike Advocacy and Shop Owner Meeting Results North Valley Projects



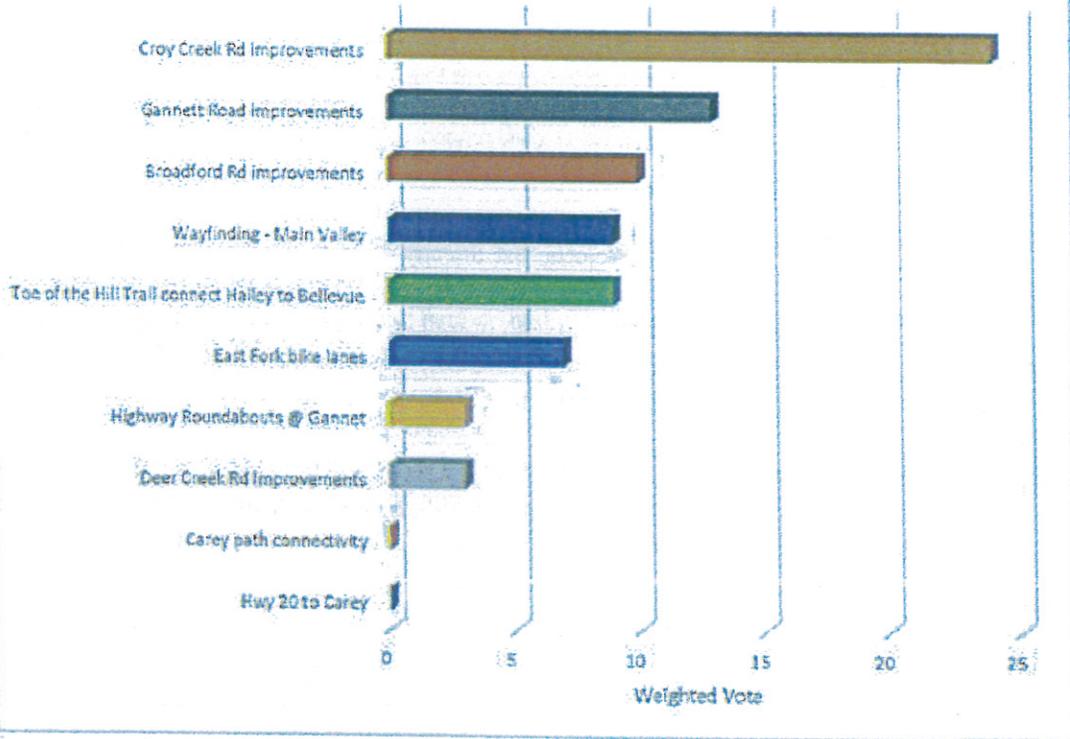
## Bike Advocacy and Shop Owner Meeting Results Ketchum Projects



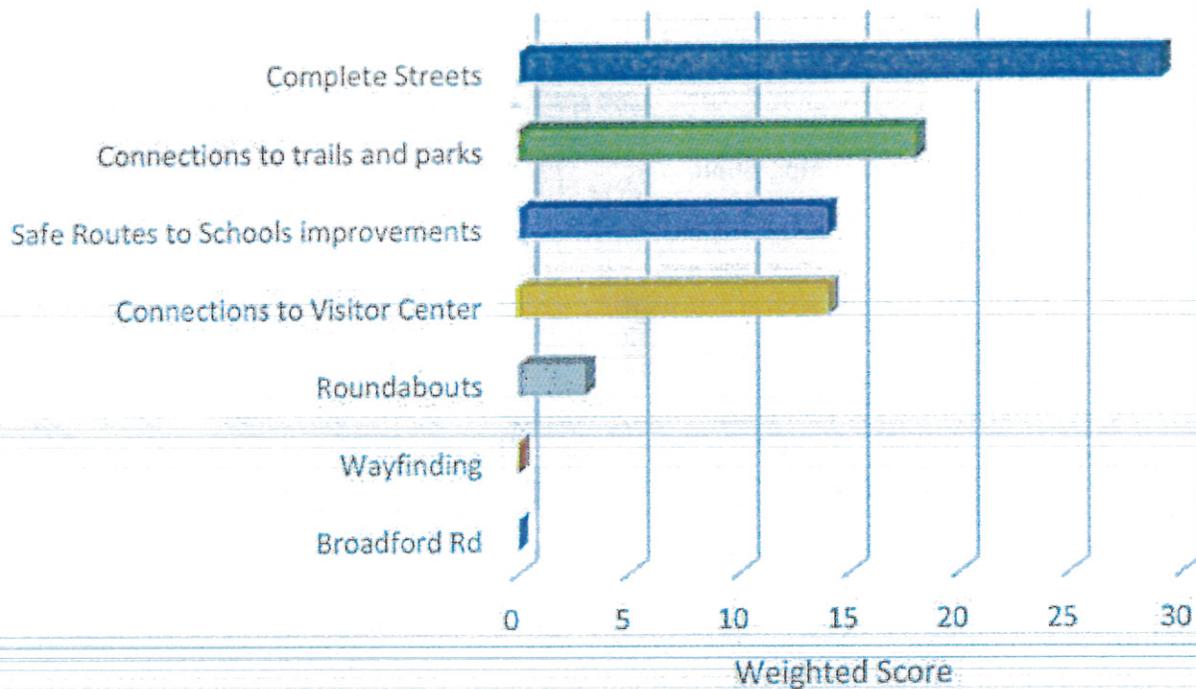
## Bike Advocacy and Shop Owner Meeting Results Sun Valley Projects



## Bike Advocacy and Shop Owner Meeting Results Main Valley Projects



## Bike Advocacy and Shop Owner Meeting Results Hailey Projects

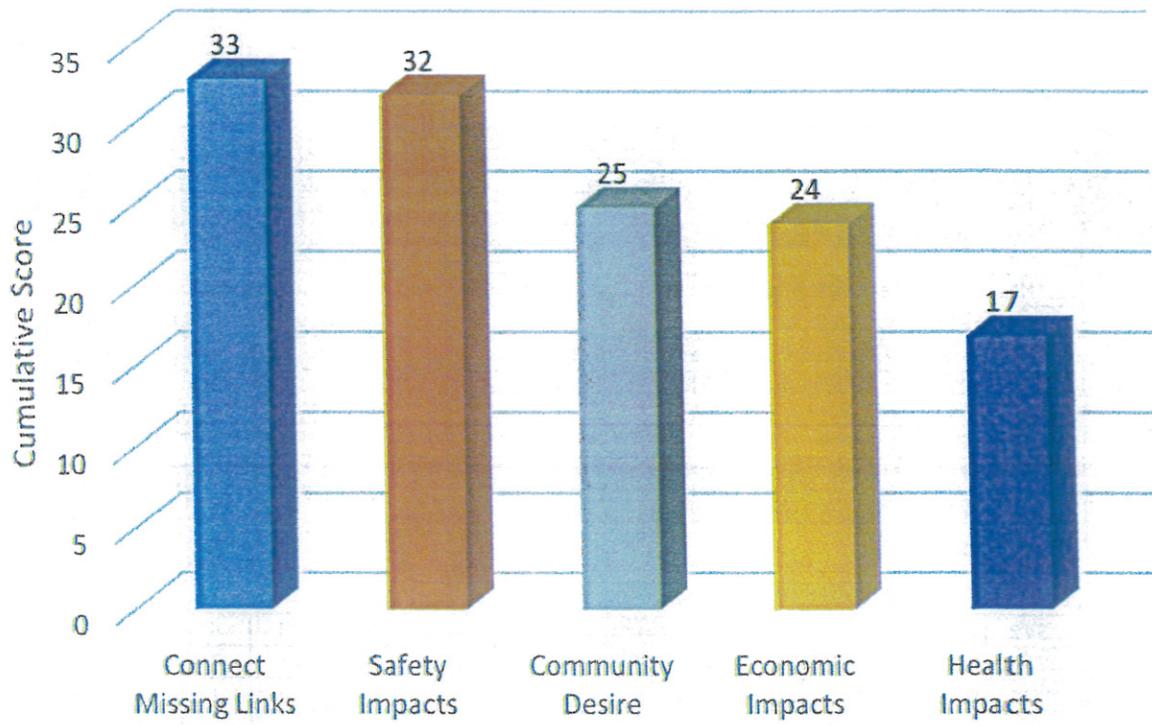


**4. Economic Impacts** – Most all projects have some economic impact, but those that have more direct economic impact with respect to tourism or local business economy were given higher ratings.

**5. Health Impacts** – Projects that directly address the recommended high priority areas from the Health Impact Assessment were given the highest rating of 5. This includes projects in the Hailey area due to high overall youth population and high number of SNAP recipients, senior citizen friendly designs in West Ketchum/Sun Valley area, and connections with economic centers in Bellevue/Carey.

These five criteria were also lightly weighted according to the results of the “prioritization criteria ranking” exercise that was conducted with the Government and Resort Group Stakeholder Meeting during the Community Workshop.

## Government and Resort Meeting Prioritization Criteria Ranking Results



The sum of all of the weighted ratings determined the final score for the project, and the maximum final score is 100. Although assigning a score from 1 to 5 for each project can be somewhat subjective, this method gives a general idea of the overall impact and benefit of the project to the community.

Relative cost and complexity of each project was also rated on a scale of 1 to 5. Although a project may be costly or difficult, it may still be worthy of implementation if the needs and benefits are great. Factors that were considered in the difficulty ranking included the need to acquire right-of-ways, easements, or property; the number of jurisdictions or property owners involved; and physical limitations such as extreme topography, wetlands, or stream crossings.

The following tables show the identified projects, priority ranking, relative cost, and relative complexity.

## PROJECT PRIORITIZATION MATRIX

	PROJECT ID	PROJECT NAME	CONNECTS MISSING LINKS	SAFETY IMPACTS	COMMUNITY DESIRE	ECONOMIC IMPACTS	HEALTH IMPACTS	OVERALL PRIORITY SCORE
		weighting factor	4.7	4.7	3.75	3.75	3	
NORTH VALLEY	N1	Connect WRT to Harriman Trail with Separated Pathway	5	4	5	5	3	89
	N2	Improve Surface of Harriman Trail	1	3	4	3	4	57
	N3	Biking Improvements over Galena Summit	1	4	5	4	3	66
	N4	Improvements around Galena Lodge	1	5	3	5	4	70
KETCHUM AREA	K1	4th Street Safety Improvements	3	5	5	5	4	87
	K2	River Run Connections	2	1	4	4	3	53
	K3	Pathway Routing Improvements in Downtown	5	5	4	4	3	86
	K4	Ketchum Downtown Sidewalks/Complete Streets	5	4	5	5	4	92
	K5	Alternate Routes to Downtown	5	3	4	3	3	73
	K6	Site Distance Improvements	1	5	3	2	4	59
	K7	Separated Path Saddle Road to Knob Hill Inn	5	3	3	2	3	65
	K8	Warm Springs Road Improvements	3	5	2	2	3	62
	K9	Wayfinding	3	3	2	2	3	52
SUN VALLEY AREA	SV1	Trail Creek Path Surface Improvements	3	4	5	5	3	79
	SV2	Trail Creek Path to Boundary Campground	3	4	4	3	3	68
	SV3	Boundary Campground to base of Trail Creek Pass	1	3	4	2	3	50
	SV4	Bitterroot/Gopher Gulch Connection	2	1	1	1	3	31
MAIN VALLEY	M1	East Fork Bike Lanes and Intersection Improvements	3	4	4	3	3	68
	M2	Deer Creek Road Improvements	3	2	3	3	3	55
	M3	Croy Creek Road Improvements	3	4	5	4	3	76
	M4	Broadford Road Improvements	3	4	5	3	3	72
	M5	Bike Lanes along SH-75	3	3	2	2	3	52
	M6	"Toe of the Hill" connection Hailey and Bellevue	3	1	4	3	3	54
	M7	Wayfinding	3	3	2	2	3	52
HAILEY AREA	H1	River Street roundabouts	3	4	3	5	3	72
	H2	Connections to the Visitor's Center and Skate Park	5	4	4	5	4	88
	H3	Hailey Downtown Sidewalks/Complete Streets	5	4	5	5	4	92
	H4	Connections to Trails and Parks	3	3	5	3	5	73
	H5	Safe Routes to School Improvements	4	5	5	3	5	87
	H6	Wayfinding	3	3	2	2	3	52
SOUTH VALLEY AREA	S1	Roundabout at Gannett Road and SH-75	2	3	3	2	3	51
	S2	WRT and Street intersection improvements in Bellevue	3	4	1	3	5	63
	S3	Gannett Road Improvements	2	4	4	2	3	60
	S4	SH-20 Pathway Improvements to Carey	2	2	3	2	3	47
	S5	City of Carey Pathway Connectivity	5	3	2	3	5	71

## PROJECT DIFFICULTY RATING

	PROJECT ID	PROJECT NAME	RELATIVE COST	RELATIVE COMPLEXITY	OVERALL DIFFICULTY SCORE
<b>NORTH VALLEY</b>	<b>N1</b>	Connect WRT to Harriman Trail with Separated Pathway	5	5	10
	<b>N2</b>	Improve Surface of Harriman Trail	3	3	6
	<b>N3</b>	Biking Improvements over Galena Summit	5	3	8
	<b>N4</b>	Improvements around Galena Lodge	3	4	7
<b>KETCHUM AREA</b>	<b>K1</b>	4th Street Safety Improvements	3	3	6
	<b>K2</b>	River Run Connections	2	2	4
	<b>K3</b>	Pathway Routing Improvements in Downtown	3	4	7
	<b>K4</b>	Complete Streets	4	4	8
	<b>K5</b>	Alternate Routes to Downtown	3	2	5
	<b>K6</b>	Site Distance Improvements	4	3	7
	<b>K7</b>	Separated Path Saddle Road to Knob Hill Inn	3	4	7
	<b>K8</b>	Warm Springs Road Improvements	4	3	7
	<b>K9</b>	Wayfinding	1	2	3
<b>SUN VALLEY AREA</b>	<b>SV1</b>	Trail Creek Path Surface Improvements	3	3	6
	<b>SV2</b>	Trail Creek Path to Boundary Campground	3	2	5
	<b>SV3</b>	Boundary Campground to base of Trail Creek Pass	4	4	8
	<b>SV4</b>	Bitterroot/Gopher Gulch Connection	2	4	6
<b>MAIN VALLEY</b>	<b>M1</b>	East Fork Bike Lanes and Intersection Improvements	4	4	8
	<b>M2</b>	Deer Creek Road Separated Path and Underpass	4	4	8
	<b>M3</b>	Croy Creek Road Improvements	3	4	7
	<b>M4</b>	Broadford Road Improvements	4	4	8
	<b>M5</b>	Bike Lanes along SH-75	1	5	6
	<b>M6</b>	"Toe of the Hill" connection Hailey and Bellevue	1	3	4
	<b>M7</b>	Wayfinding	1	2	3
<b>HAILEY AREA</b>	<b>H1</b>	Roundabouts	5	5	10
	<b>H2</b>	Connections to the Visitor's Center and Skate Park	2	2	4
	<b>H3</b>	Complete Streets	4	4	8
	<b>H4</b>	Connections to Trails and Parks	3	4	7
	<b>H5</b>	Safe Routes to School Improvements	2	2	4
	<b>H6</b>	Wayfinding	1	2	3
<b>SOUTH VALLEY AREA</b>	<b>S1</b>	Roundabout at Gannett Road and SH-75	4	5	9
	<b>S2</b>	WRT and Street intersection improvements in Bellevue	3	4	7
	<b>S3</b>	Gannett Road Improvements	4	2	6
	<b>S4</b>	SH-20 Pathway Improvements to Carey	4	5	9
	<b>S5</b>	City of Carey Pathway Connectivity	3	2	5

## 6.2 IMPLEMENTATION STRATEGIES

What is more important than the Master Plan itself, is whether or not it can and does get implemented. There was a lot of momentum behind creating this Master Plan, and the hope is that this continues into the future. Strategies that should be used to help implement this Master Plan include building organizational capacity, achieving small victories early, and doing the homework required to further investigate project feasibility.

### Build Organizational Capacity

In order to capitalize on the benefits of coordinated and collaborative efforts between the municipalities and organizations within Blaine County, it is recommended that a group or committee that is dedicated to overseeing the implementation of this Master Plan be formed. This could be an extension of the existing working group for this Plan or a sub-committee of the existing regional transportation committee. At a minimum, it should include representatives from Blaine County, Ketchum, Sun Valley, Hailey, Bellevue, Carey, Blaine County Recreation District, and Mountain Rides. Representatives from local advocacy groups, state organizations, and other interested citizens could also be included.

#### Resources that could be shared between organizations through group collaboration include:

**Human Resources** – As projects are implemented, one organization can take the lead with support from the others. This frees up staff time in the supporting organizations allowing them to possibly take the lead on other projects.



Working group kick-off meeting.

**Physical and Material Resources** – Land and/or equipment could be purchased and shared between organizations. An example given during the Community Workshop was a street sweeper currently owned by BCRD that could be used by the county to maintain gravel-free riding surfaces on county roads.

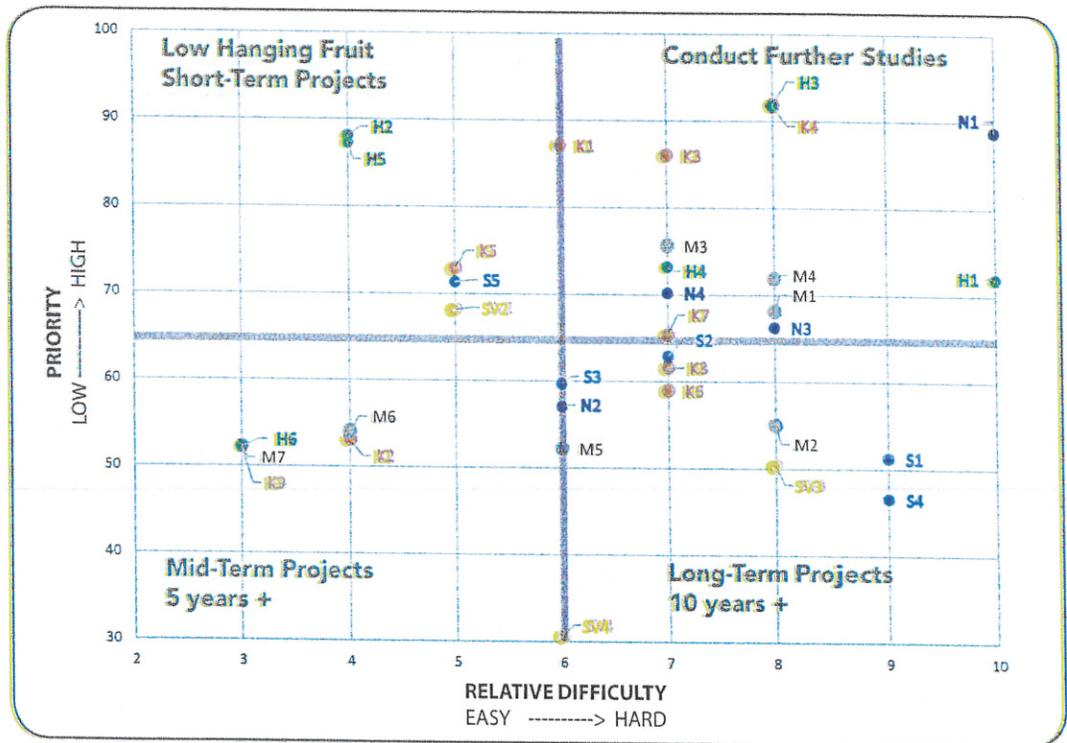
**Financial Resources** – Several organizations can come together to fund projects and apply for grants. This helps leverage funds, and projects with broad support are often more likely to receive grant funding.

**Information and Intellectual Resources** – Information with respect to bicycle and pedestrian facilities is collated within this Master Plan, but there is likely additional information, skills, or technologies that could be shared between organizations to help make things happen.

## Achieve Small Victories Early

It is easy to become overwhelmed by the amount of work implementing a comprehensive bicycle and pedestrian plan can take. Focusing on high priority but relatively easy to construct projects early in the process helps to keep energy levels high and momentum behind the Master Plan.

The following figure presents the information in the prioritization matrix in a graphical form. The horizontal axis represents relative ease for project implementation and the vertical axis represents relative project priority. The ease of implementation takes into account the relative costs and relative difficulty ratings shown in the priority matrix.



Projects that land in the upper left quadrant are considered the “low hanging fruit”—projects that are high priority and are easy to implement. These projects should be the initial focus with targeted completion of selected projects within three years. Projects include:

- A comprehensive wayfinding plan. This Master Plan should include sign placement details, as well as designs for bike, pedestrian, and auto oriented signs that are coordinated among the jurisdictions.
- Improvements to the surface of the separated path along Trail Creek Road in Sun Valley.
- Extending the path along Trail Creek to Boundary Campground.
- Safe routes to school improvements in Hailey, especially connecting the Glenbrook Drive path to the WRT.
- Pathway connectivity in the City of Carey.

## Doing the Homework

It is not enough to simply focus on a few easy but impactful projects while putting the rest of the projects on the shelf. The next strategy is to complete detailed studies that are needed to get other high priority projects off the ground.

Projects that land in the upper right quadrant of the graph are high priority projects that are relatively difficult to complete and warrant further in-depth studies. Examples include:

### County or Countywide Projects:

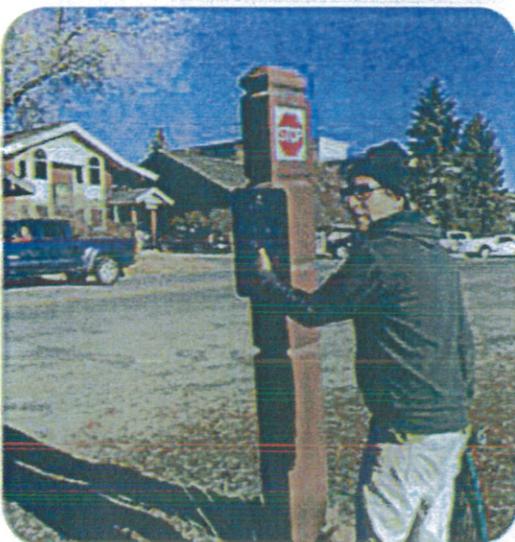
- Concept Plan and Feasibility Study for adding a separated path along Broadford Road from Hailey to Bellevue.
- Concept Plan and Feasibility Study for connecting the WRT and Harriman Trails.
- Concept Plan and Feasibility Study for extending bike lanes and separated paths over Galena Summit.
- ITD Coordination for pedestrian safety improvements around Galena Lodge.

### Ketchum Projects:

- Concept Plan and Feasibility Study for Ketchum 4th Street Pedestrian Corridor safety improvements.
- Update to the Ketchum Main Street Traffic Study with current population and development projections to evaluate the feasibility of a road diet on Main Street.
- Concept Plan and Feasibility Study for Rerouting WRT through Ketchum.
- Complete Streets Improvement Plan.

### Hailey Projects:

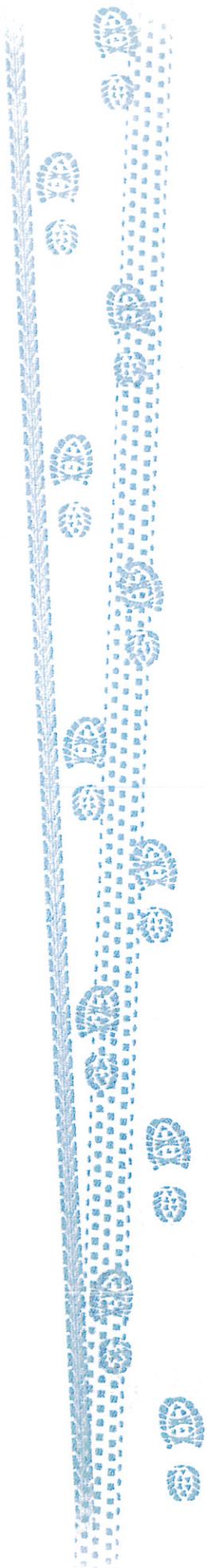
- Concept Plan and Feasibility Study for connecting the WRT and the Visitor Center in Hailey.
- Complete Street Improvement Plan—including sidewalk inventory and cost analysis of priority connections.



Additional elements of this Plan that could not be funded initially, but that should also be completed, include:

- Conceptual cost estimates, possible funding options, and responsibility parties for identified projects
- Recommended policies and procedures
- Education and safety programs

*A feasibility study should be completed for rerouting the WRT through Ketchum.*



## 6.3 HIA RECOMMENDATIONS

Recommendations from the Health Impact Assessment to enhance the suggested Plan range from design elements to programmatic improvements. As the Plan is implemented over time, residents and visitors will change their behaviors in numerous ways that will need to be understood and studied to determine appropriate actions. If more people walk for example, more crossings at intersections will take place, which means additional pedestrian/motorist interactions. Does that translate into additional crashes, fewer vehicles on local streets, or does “failure to yield” by drivers increase? It is this action and reaction result that will need to be monitored. Plan recommendations or monitoring steps are as follows:

### Monitor:

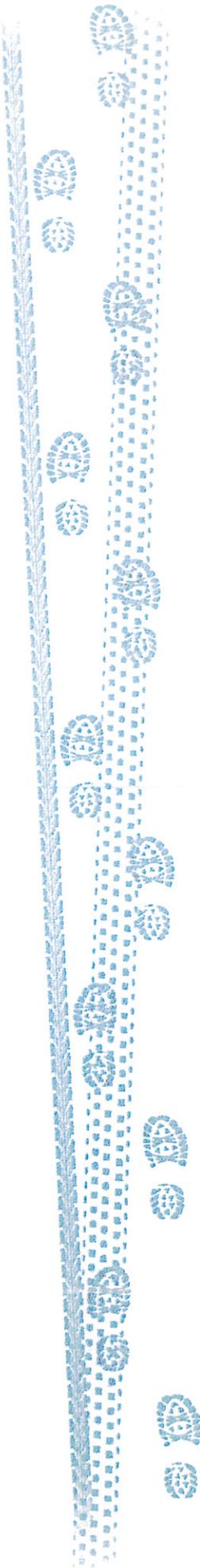
- o Usage at key locations within communities for on-road pedestrian and bicyclist facilities and at trailheads and major junctions of paved multi-use trails and natural trails. This should include data related to: gender, age range, type of user, and helmet use for bicyclists.
- o Work with St. Luke’s Wood River Hospital and other stakeholders to conduct regular intercept surveys of trail users to identify key health conditions and comfort using the system
- o Investment levels (by dollars/capita) for active transportation projects and programs
- o Community mental stress levels
- o Obesity rates amongst all population segments
- o Air quality changes and impacts
- o Ambient noise levels, specifically along major corridors
- o Car parking demand to determine if development regulations can be adjusted accordingly
- o Asthma rates amongst all population segments
- o Property values along major active transportation routes and downtown cores
- o Walking/biking customer proportion at local businesses
- o Walking/biking rates of school children to area school and recreation facilities
- o Use at fitness sites among walkers and bicyclists
- o Household transportation costs post Plan implementation

### Recommendations:

- o Insert additional bicycle and pedestrian awareness into drivers education
- o Ensure bicycle parking is available at community events like farmers’ markets
- o Ensure that all busses and major bus stops are outfitted with bike racks
- o Host annual bike rodeos at every elementary school in Plan area
- o Use symbol-based signage in areas with higher Spanish speaking populations
- o Explore a Silver Wheels program for area senior citizens

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