



# LIVINGSTON, MONTANA

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## Trails & Active Transportation Plan

**Adopted April 19, 2022 by Livingston City Commission**

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**Make No Small Plans**

That is the famous quote of one of the pioneers of urban planning, Daniel Burnham. The Livingston Trails and Active Transportation Plan follows his lead as it is not a small plan. This plan contains big ideas and many projects to help the existing and future residents of Livingston exercise their freedoms to move about their community by whichever mode of transportation and recreation they choose.

The projects, programs, and policies recommended in this plan represent what the Plan’s Steering Committee and people of Livingston told us they desired. Achieving all of those recommendations will take time and energy by not only the City, but the many other organizations around Livingston.

Be bold! Pursue these recommendations with purpose. Yes, it will take time. But the results of this Plan’s recommendations will provide that freedom of mobility and ensure people are safer when exercising those freedoms.

**Note: The City Commission adopted the Trails and Active Transportation Plan at its April 19, 2022 meeting. This formal adoption included incorporating the Plan as an Appendix to the City’s Growth Policy Update.**



### Acknowledgments

This Plan is not possible without the dedication of its Steering Committee members, who met numerous times throughout 2021, attending workshops and the community bike ride, and helped get the word out about the survey and focus groups.

Steering Committee members are:

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- Jeanne Marie Souvigney, City of Livingston Parks and Trails Committee
- Torrey Lyons, City of Livingston Planning Board
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Health & Equity



## 1. Introduction & Call to Action

The human body is designed to move under its own power. We are the most efficient species on Earth when it comes to walking. The bicycle is proven to be one of the world's most efficient machines.

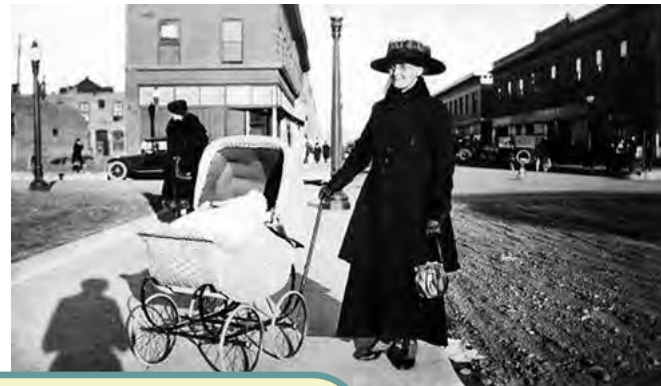
Some of the earliest moments we celebrate in a child's life are those first steps or that first time a parent lets go of the bicycle seat to allow a child to experience that first real sense of freedom.

Unfortunately, as former CDC Director of Environmental Health Dr. Richard Jackson said, "We have engineered physical activity out of our lives." Human beings have walked ever since their first days on Earth and the bicycle pre-dates the automobile by more than a hundred years. Yet, these modes have been made inconvenient, uncomfortable, and unsafe due to the ways in which we design our street systems and place many critical destinations along high-speed, auto-oriented routes. It has led to people choosing to drive short distances for trips that could be made walking or bicycling.

The people of Livingston, Montana, seek to change that. This Trails and Active Transportation Plan sets out the goals and objectives to achieve a new vision for transportation and recreation in this city of more than 8,000 people. The need for this plan was recognized in the *2019 Strategic Plan* with a goal to "Foster community resilience by facilitating access to health & wellness resources, enhancing multimodal connectivity and providing stewardship of our natural environment." It was then supported by numerous elements of the City's 2021 Growth Policy Update.

It is through this lens that the plan is developed, albeit in an era of a global pandemic when humans are rethinking many of the ways in which we move about and interact with friends and neighbors.

Today, Livingston residents are provided a connected and safe road system where they can reach their destination once they leave their home in their automobile. This plan's recommendations would offer that same level of certainty for those who wish to travel or recreate via walking and bicycling.



### What's Old is New Again

Walking and bicycling are modes of transportation that pre-date the automobile. Today, Livingston maintains a footprint that can make these modes of travel as prevalent as they were more than a century ago.

*Images: Yellowstone Gateway Museum*



Achieving this equity symbolizes true freedom of movement—from that child riding a bike to school with their friends to older adult being active and able to get around without having to drive.

The geography of Livingston should make walking and bicycling easy. As the crow flies, the widest point between the Yellowstone River and the foothills on the northwest side of town is 1.25 miles. This is a distance—20 minutes of walking—where studies show people are willing to walk for their errands and exercise. From its southwestern tip to its northeastern tip, Livingston is approximately three miles across—a convenient distance for bicycling.

Even with suitable distances, there remain significant barriers. The railroad tracks represent a physical, emotional, and economic barrier for Livingston's people. Park Street is a US Highway that serves as a detour for I-90 during weather-related closures. While expensive to address, overcoming these barriers is vital for the future of Livingston and worth the investment to achieve its goals.

### Vision

The Vision for the Trails and Active Transportation Plan was developed to guide how the plan and its recommendations would unfold. A group of eight steering committee members made substantial commitments of time to provide input to the plan. Committee members were asked to think forward to the year 2030 and imagine a magazine report wanting to profile Livingston. The focus of the story was how the town, in just a short time, became one of the most walk- and bike-friendly small towns in the West.

What would the reporter learn? What accomplishments would they showcase? What would the steering committee show and tell them?

The results of that exercise are summarized on the next page in Figure 1-1. They were used to compile the Vision statement and goals for making trails and active transportation a safe, connected system for all of Livingston's people to use in all seasons.

### Walk and Bike Sheds

The distances within Livingston are ideal for most people to walk or bike, if given safe and comfortable infrastructure by which to do so.

People often choose to take a trip on foot or by bike based on the most difficult intersection or barrier they have to overcome. This is why finding safe ways to cross major barriers like the railroad tracks and Park Street (US 89) are critical to achieve the goals of the *Trails and Active Transportation Plan*.



Figure 1-1: Vision Statement & Goals

## A Vision for the Trails and Active Transportation Plan

The Livingston Trails and Active Transportation Plan is a robust, timeless plan that has staying power beyond all of us, with specific goals, funding options, and commitment to maintenance. Through its implementation, the City, its people, and its partners will:

- Create a city of safe routes for people who walk, bike, and hike,
- Connect all neighborhoods to all schools, important destinations, and community gathering places,
- Construct a system that is safe and accessible for people with assistance needs,
- Prioritize routes for implementing year-round maintenance and management practices,
- Reconfigure streets and overcome major barriers; and
- Develop an extended trail system that connects to county roadways, trails and public lands.

Link Walking and Bicycling Routes to Destinations	Build Context-Appropriate Trails	Invest in a Safe, Year-Round Experience	Overcome Major Barriers	Enact Policies & Incentives
<ul style="list-style-type: none"> <li>• Complete the sidewalks in and around Livingston.</li> <li>• Construct and designate bike facilities to form a network.</li> <li>• Create walking and bicycling routes away from busy roads.</li> <li>• Focus on looping and connecting routes.</li> <li>• Balance what we have with what we can maintain.</li> <li>• Update Safe Routes to School routes, focusing on alternatives to busy roads.</li> <li>• Prioritize decisions around low-income neighborhoods.</li> </ul>	<ul style="list-style-type: none"> <li>• Plan and provide convenient recreational trails, particularly in open spaces.</li> <li>• Consider both short recreational trails as well as longer trails.</li> <li>• Make the trail along the Yellowstone River a highlight for the community.</li> <li>• Refrain from abandoning rights of way that could be used for future trails.</li> <li>• Develop Interpretive Trails through shared spaces.</li> <li>• Build context-sensitive trails that fit the setting—paved vs. unpaved.</li> <li>• Provide landscaping and shelter along trails for year-round use.</li> </ul>	<ul style="list-style-type: none"> <li>• Add fencing or other buffer along sidewalks/trails adjacent to busier roads.</li> <li>• Improve arrival and departure practices around schools for the safety of those accessing them on foot or by bike.</li> <li>• Upgrade sidewalks, ramps and other infrastructures for ADA compliance.</li> <li>• Add or improve lighting along bicycling and walking routes for extra safety at night and in winter afternoons.</li> <li>• Ensure year-round maintenance and enforcement of snow plowing/clearing and sweeping, including partnerships with other organizations.</li> </ul>	<ul style="list-style-type: none"> <li>• Create safe crossings across major traffic arteries.</li> <li>• Make Park Street safe for walking and bicycling along and across.</li> <li>• Create multiple ways to cross the railroad tracks to connect the people of Livingston.</li> <li>• Identify open rights of way for use as micro-path connections and pocket parks.</li> </ul>	<ul style="list-style-type: none"> <li>• Explore downtown parking policies to encourage more people to walk and bike.</li> <li>• Enforce prohibitions on impediments like large RVs and trailers parked on the streets.</li> <li>• Promote proper placement of garbage/recycling cans along routes so they don't impede those walking and bicycling.</li> <li>• Understand the need to maintain what we have combined with what is added.</li> <li>• Ensure that the City's night skies ordinance is considered in any future lighting along paths and roadways.</li> <li>• Work with businesses to make them more bike-friendly.</li> </ul>



### Seasons Come and Go

Even in its early days as a railroad and ranching town, the Livingston area was not an easy place to live year-round. Winters can be harsh, the winds even harsher. The days are short for many months each year. It's easy to see why a transportation mode like driving can be so appealing, even for short trips.

Making active transportation, as well as year-round recreation, appealing is a major goal of this plan. There are models in larger cities in the United States and in countries across the world of how places can achieve higher rates of walking and bicycling in winter months. This plan outlines practices in design, snow management, and partnerships to make Livingston a safe and accessible city for active modes—at all times!

The notion of “at all times” applies to conditions beyond the weather. People must go to work or school during dark hours of the day. People who walk and bike should not have to overcome long detours or other conditions when navigating construction zones. Making the healthy choice the easy choice despite all these factors will help Livingston change that paradigm to engineer physical activity back into people's lives.

### Recent Initiatives

The Livingston Growth Policy Update was finalized as the *Trails and Active Transportation Plan* began. In it are two primary goals that impact this plan:

- Establish Livingston as a community recognized for its parks and trails system.
- Improve pedestrian and bicycle safety within the City.

The Trails and Active Transportation Plan builds upon these goals to give the City and its people more focused direction on how to achieve them. It also links these goals to other Growth Policy Update themes of housing, land use, economy, natural resources, and inter-governmental coordination.

Initiatives at the Park County level also spurred action for the City. The formation of the Park County Active Transportation Coalition to promote these modes was established on the heels of other City and County efforts, most notably the Park County Active Transportation Plan. The Coalition is now incorporated into Park County Environmental Council's structure after being started by the County. A summary of the plans used to inform the Livingston Plan is included in Chapter 2: Livingston's People & Context.

### Bad Weather?

There's an old joke among people who bike in winter: “There's no such thing as bad weather, only bad clothing.”

While walking and bicycling during the harshest times may be reserved for those most dedicated, increasing walking or bicycling in Livingston is attainable in all seasons with a combination of infrastructure and maintenance initiatives that can make the healthy choice the easy choice.



### Changing Paradigm for Walking & Bicycling

The *Trails & Active Transportation Plan* was developed in the midst of a changing attitude toward transportation. The challenge is, that in the eyes of many, people who walk and bike are viewed as an impediment to traffic instead of legitimate road users.

A national movement called Vision Zero is emerging to change the paradigm for transportation safety and investments. MDT adopted its Vision Zero initiative in 2014; however it does not fully align with the industry-accepted definition of Vision Zero. MDT’s Vision Zero is primarily an advertising campaign targeting road user behaviors, with engineering as a component rather than the primary focus.

By contrast typical Vision Zero efforts recognize the design of transportation systems either induces user error or can compound the effects of user error. (Figure 1-2)

This is seen when motor vehicle speeds are prioritized over safety, which happens frequently. Many surface streets have travel lanes wider than those on the interstate while sidewalks (if they exist) are built to a minimum widths. People who walk or bike are oftentimes forced to go thousands of feet out of their way to access a safe crossing of major roads. Montana’s roadway design guides and standards still bolster this philosophy despite incorporating other modern features such as protected bike lanes. This Plan looks at active transportation through that Vision Zero lens and provides references to federally-endorsed design guides (see Appendix) to change that approach. A key method is managing motor vehicles speeds and safely incorporating walking and bicycling into transportation infrastructure.

By aligning the recommendations with Vision Zero, the people of Livingston stand to make a better case for its own streets, as well as to MDT about the needs of pedestrians and bicyclists wishing to travel along or across MDT-managed routes within Livingston. This Vision Zero philosophy is incorporated into project recommendations (Chapter 4), recommended policy updates (Chapter 7) and other day-to-day practices like snow management and construction zones.

Figure 1-2: Foundational Principles of Vision Zero

Traditional Approach	Vision Zero Approach
Traffic deaths are <b>INEVITABLE</b>	Traffic deaths are <b>PREVENTABLE</b>
<b>PERFECT</b> human behavior	<b>VS</b> Integrate <b>HUMAN FAILING</b> in design
Prevent <b>COLLISIONS</b>	Prevent <b>FATAL AND SEVERE CRASHES</b>
<b>INDIVIDUAL</b> responsibility	<b>SYSTEMS</b> approach
Saving lives is <b>EXPENSIVE</b>	Saving lives is <b>NOT EXPENSIVE</b>

**Vision Zero lays out the following tiered levels of responsibility:**

**FIRST, THE DESIGNERS OF THE SYSTEM ARE RESPONSIBLE** for the design, operation and use of the transportation system.

**SECOND, ROAD USERS ARE RESPONSIBLE** for following the rules of the transportation system.

**FINALLY**, when some road users inevitably fail to follow the rules due to lack of knowledge, discipline, ability, or understanding of the system, **DESIGNERS MUST TAKE NECESSARY STEPS** to ensure that the resulting crashes do not result in people being killed or seriously injured.

[http://visionzeronetwork.org/wp-content/uploads/2017/01/MinimumElements\\_Final.pdf](http://visionzeronetwork.org/wp-content/uploads/2017/01/MinimumElements_Final.pdf)





### The City is Not Alone

While the City of Livingston led this Plan, it does not mean the City is alone in finding and applying the resources necessary to achieve a trails and active transportation network that is safe and accessible at all times. Nor does it mean these recommendations are expected to be implemented all at once. The Action Steps for Implementation identified in Chapter 10 provide the game plan for achieving this.

There is great community spirit within the people of Livingston and that same spirit should be engaged to implement the plan, find funding to achieve it goals, and work together to find solutions on a day-to-day basis that keep the sidewalks, bike routes, and pathways usable for everyone.

A goal of the Trails and Active Transportation Plan is to identify the many organizations who can contribute to implementation of the plan. Small towns like Livingston will always be constrained by staff and budget resources. People recognize that and are willing to donate their time and money to overcome limitations.

The themes of the Plan are intended to put Livingston ahead of its peer cities in Montana in funding pursuits by providing insights into the impacts of active transportation on a community's physical, environmental, social, intellectual, and economic health. The data and recommendations should position the City to make a more reasoned argument for increased funding, utilizing existing funding on plan recommendations, and supporting design flexibility from agencies such as MDT on the routes it manages.

By examining the health-specific factors in building a culture of active transportation, the City can broaden its pursuit of funding to health-focused organizations. Instead of simply saying "please give money because walking and bicycling is healthy," this plan outlines how it is healthy, who stands to benefit most among Livingston's population, and how those pursuits are achieved through a lens of equity and inclusiveness to people of all ages, all abilities, all races and ethnicities, and all income levels.

### An Active, Interested Community

Volunteers from the Park County Active Transportation Coalition organized to clear snow from the 89-South pathway in March 2021.

*Image: Park County Active Transportation Coalition*



### High Priority Projects

The Plan identifies nearly 32 possible trail, sidewalk, and bikeway projects within the City. These projects were generated through input from Steering Committee members and the public, as well as field review and analysis by the Plan’s consultant. This resulted in a list of 12 top tier priority projects totaling nearly 9 miles of sidewalks, bikeways, and trails. Those projects are listed in Figure 1-3 at right and illustrated in the Figure 1-4 map on the next page. Chapter 4: Priority Projects provides details on these projects and the recommended design options for them.

The combined cost estimate for Livingston’s top tier projects is approximately \$1.7 million, not including 5th Street railroad crossing upgrades currently under consideration by MDT (Project E at right).

Yes, this is a large number for a small city. Implementing these projects will require City leadership and innovative funding policies and pursuits. The City’s partners at Park County, MDT, and local advocacy organizations can assist in providing input on projects and helping the City identify possible state and federal funding sources.

Projects that did not make the list of high priority projects are summarized in Chapter 5: Other Projects, along with recommended street crossing upgrades. Chapter 6: Trails Master Plan includes a map of recommended routes within the City and in unincorporated Park County.

While these lower tier projects are not the City’s highest priority projects, that does not mean the City and its partners should ignore opportunities to complete all or portions of them. New development or special funding sources may emerge that allow for implementation of these projects.

The recommended street crossing upgrades are primarily on MDT-managed routes. Upgrades such as Rectangular Rapid Flashing Beacons and the associated curb ramps and crosswalks can be pursued as individual projects or could be batched together in a grant pursuit, use of federal funds available to the City, or a request to MDT.

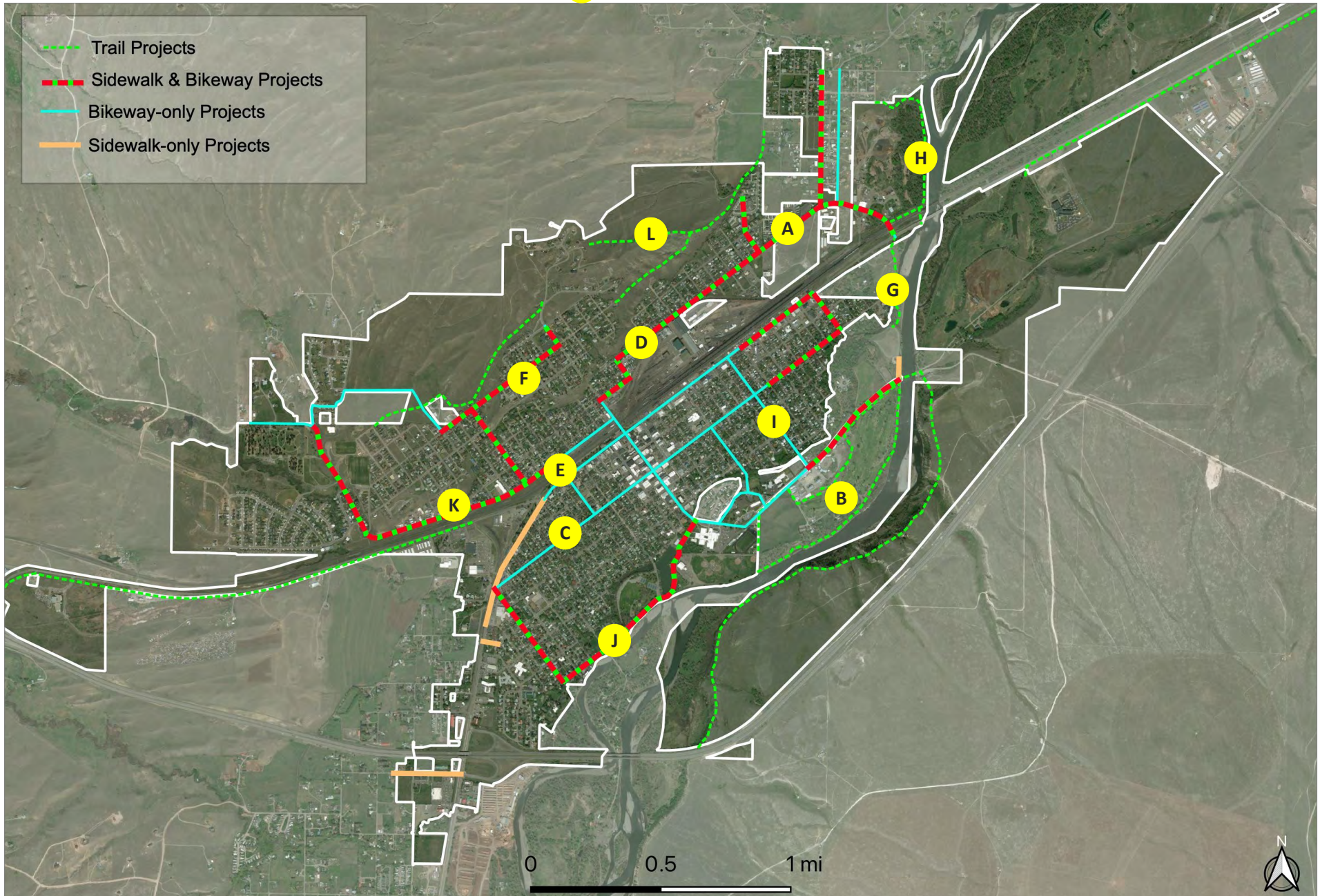
Figure 1-3: Top Tier Projects

Top Tier Projects, in order of priority ranking	Cost Estimate
<b>A. Gallatin/Bennett, N St to Park (0.6 miles)</b> - Sidewalks and bikeway	<b>\$200,000</b>
<b>B. Yellowstone River Trail, north side, Baseball/Softball Complex to Mayor's Landing (0.9 miles)</b> - Shared use pathway	<b>\$90,000 to \$150,000</b>
<b>C. Lewis/O St Crosstown Bikeway, Park to O St (1.7 miles)</b> - Sidewalks and bikeway	<b>\$10,000 to \$150,000</b>
<b>D. Gallatin/C/Chinook, Main to N St (0.8 miles)</b> - Sidewalks and bikeway	<b>\$120,000</b>
<b>E. 5th, Front to Park (0.1 miles)</b> - Widen sidewalk to pathway width	<b>TBD</b>
<b>F. Summit, 7th to Main (0.4 miles)</b> - Sidewalks	<b>\$75,000 to \$90,000</b>
<b>G. Yellowstone River Trail, Mayor's Landing to O Street Connector (0.4 miles)</b> - Shared use pathway	<b>\$140,000+</b>
<b>H. Yellowstone River Trail, north side, US 89 to Whiskey Creek Road (0.6 miles)</b> - Shared Use Pathway and bridge underpasses.	<b>\$250,000</b>
<b>I. H St, Park to Lewis (0.5 miles)</b> - Bikeway with speed management treatments	<b>\$40,000 to \$200,000</b>
<b>J. River Dr, 12th to Main/View Vista (0.8 miles)</b> - Sidewalks and bikeway	<b>\$250,000</b>
<b>K. Front, 5th to Star Road (0.8 miles)</b> - Sidewalks and bikeway	<b>\$150,000 - \$200,000</b>
<b>L. North Hills Trails, East, Green Acres to Summit/Water Tower (1.2 miles)</b> - Hiking/biking trail	<b>\$50,000</b>

Note: Cost estimates are in 2021 dollars and for construction only. The volatility in the construction industry and with materials will also impact costs upon project implementation.



Figure 1-4: All Ranked Projects with Top Tier Projects Listed in Figure 1-3 **X**



### Who Walks and Bikes in Livingston?

Throughout this Plan you will find profiles of the people of Livingston who walk and bike. People were asked to tell a short story of why they walk or bike and provide a picture of themselves participating in this mode.

The goal of these profiles is to dispel common myths about the characteristics of those who choose to recreate or travel via active modes. It's not just one type of person who bikes and not every bicyclist wears spandex. Those who walk are a combination of those who may not have other options due to age, disability, or socioeconomic status, as well as those who simply enjoy taking the time to walk for recreation or to nearby destinations.

#### In their own words

#### Betsy

Not since I was a kid have I lived where I can bicycle or walk to many of the places I need to go. In Livingston, I have come to enjoy biking or walking to do many of my errands—or just to get to the river or the park because, how can you not want to be in a park?

Becoming comfortable on my bike on city streets took a bit, but I soon learned which ones are easier to travel. And, I have discovered that, if I'm not on my bike or my feet, I miss so much: like the sweet dogs fenced in yards looking for a pat, the beautiful flowers blooming in gardens and alleys around town, or the waves and hellos I get from folks sitting on their porches. You just have a different feeling about your town when you see it in slower motion, and not from behind the windshield.



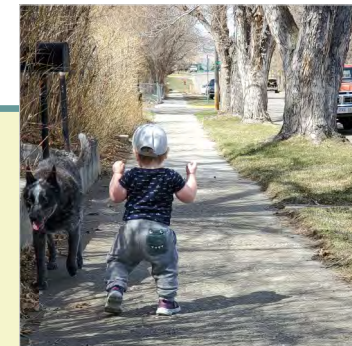
#### In their own words

#### Martha

I take my baby son, my dog, and myself for walks *almost* everyday for exercise and to take in some fresh air.

It is about 8 blocks to our nearest park at G Street, and about 11 to downtown. We live in a part of town that does not have many ADA ramps, has missing sections of sidewalk, and has damaged sidewalks where they do exist.

Fortunately, our neighborhood does not have too much traffic. As such, we do a lot of our walking in the streets. It would be safer to walk on a nice sidewalk, but that isn't very feasible with a stroller on the south-east end.



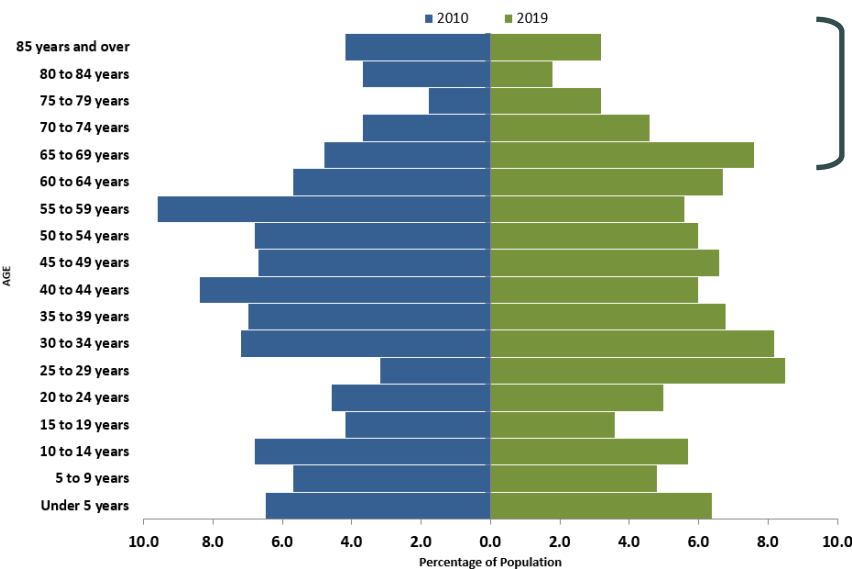
## 2. Livingston's People & Context

The Trails and Active Transportation Plan is for the people of Livingston—those who live here today and future generations. Census data from 2010 and 2019 indicate Livingston's population is aging. The proportion of the population over age 65 grew from 18.2% of the population to 20.4% in 2019 estimates. The population pyramid below shows the percent of the City's population by age range.

The aging of the population is predicated on the large population sector known as Baby Boomers, who are now in retirement age. This has prompted organizations like AARP to jumpstart initiatives like age-friendly communities to encourage local leaders to implement the types of changes that make communities more livable for people of all ages, especially older adults.

Livingston's working age adult population remained relatively unchanged during that timeframe, comprising just more than 59% of the population.

Figure 2-1: Population Pyramid for Livingston—2010 & 2019



**Older Adults (age 65+):** 18.2% in 2010; 20.4% in 2019  
 Older adults are seeking walkable and bikeable communities because they want to lead an independent lifestyle as they approach retirement age and ultimately retire. Older adults are concerned about their safety while walking and bicycling in terms of self-defense, traffic exposure, and the risk of falling. Older adults tend to outlive their ability to drive by 7-10 years and risk isolation if they don't have safe walking, bicycling and/or transit options available to them.

**Working Age Adults (age 20-65):** 59.2% in 2010; 59.4% in 2019  
 The life of a working adult is complicated. They are seeking greater work/life balance while also considering the needs of the family, both elders and offspring. While a daily commute may require driving due to distances and job access in a larger, nearby city, working adults are seeking ways to walk and bike when in their own neighborhood or small city.

**Youth (age <19):** 23.2% in 2010; 20.5% in 2019  
 Youth seek to explore the world around them and express their free will in these years. With increasing demands on the family and most households having both parents in the workforce, youth are being asked to be more independent. Walkable and bikeable communities allow for this to occur in a safe environment.



OF LIVINGSTON'S WORKING AGE ADULTS  
 COMMUTE LESS THAN 10 MINUTES  
 TO GET TO WORK.

THIS IS A TARGET POPULATION FOR INSPIRING  
 MORE WALKING AND BICYCLING TRIPS.



The growth in percentage of Livingston’s population above age 65 has come at the expense of its youth population, which declined as a percentage of the City’s overall population but still comprises more than 1 in 5 residents.

### Demographic Data

Other key demographic data was drawn from the US Census Bureau’s 2019 American Community Survey data for Livingston. The data highlighted at right shows some of the key indicators related to active transportation in Livingston.

A major shortcoming of transportation data and travel modes in the United States is the fact that the Census only asks about a person’s journey to work. On average, a person takes 10 trips throughout a normal day with a commute trip accounting for two of those trips. Nothing is known about mode choice for the other 80% of trips.

Currently, nearly 11% of Livingston’s people commute to work via active modes, with walking being the primary active mode of choice at 8.8% of the population. One notable element of the walk to work mode share is the difference between men and women, with 11.2% of females walking to work compared to 8.0% of men walking to work. Bicycling accounts for 1.8% of commute trips among Livingston’s people.

Other key populations to understand non-motorized transportation and recreation needs are those who are too young to drive (under 15) and those who are reaching an age where driving becomes more difficult (over age 75). This comprises more than 1 in 4 people in Livingston. More than 7% of the City’s population lives in a household with no access to a vehicle.

Nearly 1 in 8 people in Livingston has some type of disability with 57.2% of those over the age of 65 reporting a disability. Beyond infrastructure such as curb ramps and sidewalks, the needs of people with disabilities should be considered in all infrastructure. For example, people with disabilities may more easily travel by bike or have an adaptive or recumbent bike to use.

Figure 2-2: Select Census Data for Livingston



Source: US Census, American Community Survey (2019)



### Crash Data

Unlike driving, walking and bicycling are experienced through a person’s senses. Because of this, the perception of safety is often-times a more important factor than the actual safety of a system.

The table at right shows Livingston’s history of pedestrian and bicyclist crashes at a rate normalized per 10,000 people for years 2009 through 2018. In comparing Livingston’s data to peer cities in Montana, the City performs very well in terms of crash rate per 10,000 people. Various local factors play into these figures, including presence of major traffic routes through town, driver compliance, tourism, and population demographics.

Just as commute mode share data has its limitations, so does the common crash data used by transportation planners and engineers to inform the design of facilities. The presence or absence of a crash is not the only indicator of safety. Unlike motor vehicle crash data, where it is assumed every road is usable by drivers, emerging studies show the design of transportation infrastructure may suppress walking and bicycling. For example, a road that has high speeds and no facilities or crossings for walking and bicycling may have a low number of crashes or none at all. This isn’t because it’s designed to be safe; rather it’s because few people walk or bike there because it’s not safe to do so.

There is also a documented history of underreporting of bicyclist and pedestrian crashes, per Federal Highway Administration. If a bicyclist is involved in a crash that does not involve a motorist, then that crash is not reported whereas a single motor vehicle crash that causes injury or property damage greater than \$1,000 is reported. A bicyclist who runs into a ditch, breaks a collarbone, and destroys a \$1,100 bicycle will never show up in crash reports compiled by police and MDT and used to inform road design.

Further, people who are hit by a motorist while walking or bicycling but receive only minor injuries may be more likely to prioritize getting to medical care than reporting the crash to local authorities.

**Figure 2-3: Crash Data for Montana Cities with Population 4,000 to 10,000**

City	Population (2019 5-yr Estimate)	Pedestrian Crashes	Bicyclist Crashes	Total	Crashes per 10,000 pop.
Hamilton	4,723	22	45	67	141.9
Lewistown	5,885	17	15	32	54.4
Sidney	6,416	23	8	31	48.3
Havre	9,786	23	14	37	37.8
Belgrade	8,685	13	17	30	34.5
Glendive	5,126	10	6	16	31.2
Whitefish	7,714	7	17	24	31.1
Dillon	4,261	8	5	13	30.5
Miles City	8,487	20	3	23	27.1
Laurel	6,834	6	11	17	24.9
Columbia Falls	5,429	4	7	11	20.3
<b>Livingston</b>	<b>7,575</b>	<b>6</b>	<b>7</b>	<b>13</b>	<b>17.2</b>
Polson	4,918	6	1	7	14.2

Source: US Census, American Community Survey (2019), MDT Crash Data (2009-2018)

Note: There are limitations to pedestrian and bicyclist crash data. These modes have higher percentages of unreported crashes and state motor vehicle laws prohibit some bicyclist crashes from being reported. Emergency Room admission data, if available, may show the greater magnitude of overall crashes involving pedestrians and bicyclists but will not identify the location of the crash.



### What People Say

Past and ongoing planning efforts have consistently pointed to interest among Livingston's people for more robust investment in trails and active transportation.

**Growth Policy Update (2020).** The Community Survey for the Growth Policy update identified the five most popular transportation policies:

- Build a new separated grade crossing on the west side of town;
- Design improvements for people with disabilities;
- Invest in sidewalk and street improvements in older parts of town;
- Design pedestrian-friendly transportation improvements; and
- Develop a community wide interconnected trail system in town.

### Livingston Parks and Trails In Our Community Survey (2019).

Nearly 350 people completed this survey, which documented attitudes and opinions about parks and trail use. Some notable findings included:

- Widespread use of parks and trails across all seasons, with more than 43% saying they use them weekly during winter;
- The four most popular activities among respondents were: Walking, nature walks/hiking, walking a dog, and bicycling;
- 69% said health, wellness, and fitness is the most important function that should be considered when designing enhancements and/or improvements to the parks and trails system;
- 78% said walkable and bike-friendly development was the most important principle to consider when planning the parks and trails system; and
- Natural surface trails were preferred to paved surface trails.

**Park County Active Transportation Plan (2016).** For the entirety of Park County, *Active Transportation Plan* was adopted in 2016 and noted broad support for active transportation investments. Survey input was received from 400 people through this plan.

- 59% want to see improved hiking/biking trails, and walking paths;
- 70.4% were satisfied with their access to trails while 49.4% said they were dissatisfied with the number of trails; and
- Increasing the number of trails was the highest rank singular improvement people identified.

Figure 2-4: Sample Results of Growth Policy Update Visual Preferences Survey



### How do you define community character?

*"The streets are safe, everything is close enough to walk (which needs to be improved), public spaces and 'third places' are enhanced to create more interactions that define our unique community."*

*- One response to a question on Community Character provided through the public input on the Growth Policy Update*





### Livingston’s Planning Context

This is not the first time trails and active transportation have been explored through a plan in Livingston, but it is the first time there has been a plan focused on the subject.

A key component of the Trails and Active Transportation Plan is to use past planning efforts to inform the specific projects, programs, and policies for walking and rolling in Livingston. This chapter contains a summary of the existing plans and major projects.

### Plans and Projects

**Growth Policy Update.** Improving pedestrian and bicycle safety and creating a complete and well-maintained transportation network are the two transportation goals in the adopted Growth Policy. They are supported by the recommendations contained in the Trails and Active Transportation Plan.

There are several supportive policy goals beyond the transportation section of the Growth Policy. A primary theme regarding land use is to promote infill and redevelopment of brownfields. These goals, when enacted, take advantage of existing infrastructure such as sidewalks, streets, and pathways. These strategies offer the greatest potential to create active transportation trips and greater return on investment.

Other goals, as identified in Figure 2-5, also expand choices and increase active transportation. Any new employment that is located within Livingston offers a chance for a local resident to reduce commute costs by walking and bicycling to work. The goal for identifying and improving non-motorized gateways means those who enter the City by automobile will recognize the safety and mobility of people using active modes is a higher priority than vehicle speeds.

Chapter 7: Land Use & Policy Recommendations provide specific transportation policies the City of Livingston can adopt to achieve the goals established in the 2021 Growth Policy.

**Figure 2-5: Key Growth Policy Goals That Promote Trails & Active Transportation**

#### Goal 8.1: Improve pedestrian and bicycle safety within the City.

Ensure trail and sidewalk connectivity within and around the City.

Make streets safe for all modes of transportation when planning for future developments and rehabilitation of existing transportation infrastructure.

Develop a Safe Routes to School Travel Plan for the City.

Review & update the land use plan to reflect the ability of the transportation system to maintain an acceptable level of mobility.

#### Goal 8.2: Create a complete and well-maintained transportation network within the City.

Develop additional grade-separated crossings to serve areas of planned growth.

Require road and multi-use trail and/or sidewalk connections to existing and future developments.

Ensure that bicycle, pedestrian, and trail connectivity is evaluated in all requests for modification or abandonment of public rights-of-way or access easements.

#### Other Sections that Support Trails & Active Transportation

##### Goal 2.1: Preserve and enhance Livingston’s unique community character

By identifying key non-motorized entry points and investing in them, the City will make it clear that people who walk and bike are a priority.

##### Goal 3.1: Prioritize infill over expansion

Infill means that existing infrastructure, such as sidewalks and pathways are maximized in terms of usage and return on investment.

##### Goal 3.5: Encourage the responsible growth of Livingston

If measuring new development according to the principles of Smart Growth, then new development must be walkable and provide a variety of transportation choices.

##### Goal 3.5: Rehabilitate brownfields for new development

By doing this, Livingston can control how new development occurs in these centrally-located parcel to maximize active transportation opportunities.

##### Goal 6.1: Strengthen and diversify...employment opportunities

Every job gained within Livingston means a city resident is more likely to be able to walk and bike to work and have additional income to spend locally due to a less burdensome commute.



**Livingston Zoning & Subdivision Regulations.** An outcome of the Growth Policy Update is likely to be changes to the zoning ordinance and subdivision regulations. The Trails and Active Transportation Plan includes a review and recommendations to the subdivision regulations as the City works toward these updates. A key recommendation is formally adopting the Trails Master Plan map (see Chapter 6) by reference in the City's code so trail easements are made a condition of approval of new development where these future trails are proposed.

The City's existing zoning closely aligns with the growth area map in terms of Livingston identifying undeveloped areas on the east and west sides of town for higher density residential development.

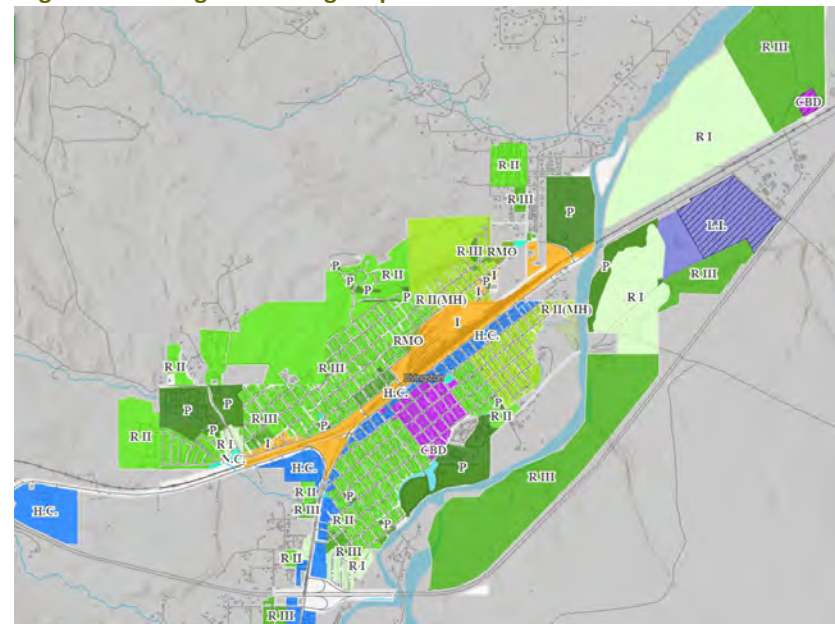
If realized, higher density development would help generate additional demand for trails and active transportation but needs linkages to planned and existing commercial, recreation, and educational land uses. As this growth occurs it is likely that internal sidewalk and bikeway networks will be built in subdivision, but this may still leave gaps connecting to, along, and across major routes.

The City's subdivision regulations provide little direction for walking and bicycling routes. The current policy defines arterials, collectors and local streets strictly from a motor vehicle movement standpoint. Arterials are those main arteries of traffic that typically carry higher volumes of motor vehicles at higher speeds.

These arterials are also where key destinations are located and where people who walk and bike desire to go when traveling by those modes for non-recreational purposes. Collectors work to distribute traffic between arterials and local residential streets but oftentimes serve as a type of arterial for active transportation trips if they are parallel to major routes.

Policy recommendations included in this plan include defining what different types of streets mean for walking and bicycling, in addition to motor vehicle traffic. Through this, the City can better evaluate transportation impacts for all modes, as well as recreational access to trails, when reviewing and approving new subdivisions.

**Figure 2-6: Livingston Zoning Map**



**Parks and Trails Master Plan.** The purpose of the Parks and Trails Master Plan (2012) was to assess and inventory park and trails, as well as existing facilities and programs and develop a master plan to guide future development of parks and trails.

Public input sessions were conducted to guide the process. The input included widespread support for additional trails and active transportation.

The plan states that “balanced park systems require space for both active and passive recreation, designed to meet the needs of current and future residents, all tied together by trails and pathways into a cohesive system.”

The park facilities identified in the plan are considered primary destinations for active transportation trips. A resident of Livingston should be able to access parks within the City by walking or bicycling instead of driving.

To accomplish this, the plan identifies existing trails, proposed trails, and potential shared roadways for bicycling. These routes form the basis for the assessment of such facilities that are explored in more detail for the Trails and Active Transportation Plan. Major trails identified as existing or planned include:

- Bozeman Trail Connector
- Bozeman Trail/Jondrow Spur Trail
- City Water Plant Trail
- Front Street Trail
- KPRK Trail
- Livingston Ditch Trail
- Livingston Depot Center Trail
- Mayor Landing, Myers’ Riverview Trail, Yellowstone Bridge
- Sacajawea-Mayor’s Landing Levee Trail
- Shared Roadway Connectors

The total estimated costs of these trail and bikeway investments was nearly \$2 million.

**Figure 2-7: Sample Trails & Bikeway Assessment in the Parks & Trails Master Plan**



**Northwest Livingston Infrastructure Project.** The Northside Transportation Plan, which focused primarily on vehicular traffic, spawned the initiative to examine and fund major infrastructure projects in northwest Livingston, most notably an underpass of the railroad on this side of town. The cross sections proposed a shared use pathway on only one side of these roads, which may not be adequate to properly provide for safety, mobility, and access for non-motorized users.

If a pathway is built along one side of major arterials, then a sidewalk should be built on the other side along with frequent crossing points for bicyclists and pedestrians to access destinations easily accessible to motorists. A pathway on only one side of an overpass or underpass may be adequate as long as no major trip generators are developed on the opposite side to create out-of-direction travel for people using active modes. Any efforts to move to more detailed design for a railroad underpass or overpass should incorporate design guidance from sources identified in this Plan's Appendix.

**ADA Transition Plan.** The City completed an Americans with Disabilities Act Transition Plan in February 2019 to meet federal requirements. A Transition Plan and related self assessment is required as part of the 1991 passage of ADA, which is considered Civil Rights Law in the United States.

The goal of the Transition Plan is to identify existing barriers to accessibility for people with disabilities. It's relationship to active transportation is within the public rights of way that contain sidewalks and curb ramps.

Beyond annual investments to upgrade curb ramps, the following improvements are identified in the Transition Plan's Action Log for accessibility improvements to meet ADA requirements:

- O Street Connector Trail
- Increase sidewalk width on 5th Street Railroad Crossing
- Accessible connector trail to Big Hill
- Accessible connector trail to Small Hill
- Accessible crossing to Katie Bonnell Park

**Figure 2-8: Northwest Livingston Infrastructure Project Schematic**



**Figure 2-9: ADA Transition Plan Map Showing Sidewalk Compliance Status**



**Slow Roll Bike Audit.** As part of the Growth Policy Update, the Park County Environmental Council partnered with the Livingston Bicycle Club in March 2021 to audit the City's bike routes.

The purpose of a bike audit is to evaluate the level of safety and comfort people feel while pedaling. The audit covered all of Livingston with stops at Lincoln High School, Green Acres, Northside Hill, and the Star Addition. The audit leaders documented participants' experience in the realms of overall group reflections, safety, access, and comfort.

The audit report notes participants demonstrated that "neighborhoods (especially the Northside) feel disconnected from one another." It notes that while people generally have positive opinions of bicycling or walking within their neighborhood, "getting to and from each neighborhood (or into town from these areas) does not feel comfortable, convenient, accessible or safe."

### Part of a Larger Vision

The Livingston Trails and Active Transportation Plan grew out of a call to action from residents of Livingston as well as momentum created by the 2016 Park County Active Transportation Plan (PCATP) and the Park County Environmental Council's Active Transportation Coalition (ATC).

**PCATP.** The objective of formalizing the PCATP is to create thoughtful interrelationships with community priorities and opportunities as well as to maximize resources already available. This document serves as an effort to focus on how Park County and the Park County Fairgrounds and Parks Board can function better to serve its population through four priority areas.

- Healthy and Safe Alternative Transportation Promotion
- Parks, Trails and Recreation Network Opportunities
- Effective Collaboration and Management
- Positive Economic Competitiveness

The Plan identifies a 27.6 mile shared use pathway along US 89 from where it currently terminates in Livingston to Miner.



### Slow Roll Bike Audit

Volunteers from the Park County Environmental Council's Active Transportation Coalition organized bike audits in 2021 to assess conditions throughout the City.

*Image: Park County Active Transportation Coalition*



**Active Transportation Coalition.** The ATC is a group of citizens and county officials working to make Park County more walkable, bikeable and transit-friendly. Organized by the Park County Environmental Council, the ATC has spearheaded pop-up demonstration projects to pilot various bicycle and pedestrian infrastructure, programs, and policy improvements.

Examples are the Livingston Farmers Market protected bike lanes, cross-walks, haybale roundabout, and bike valet; Park Street red flag project; and curb extensions. The Park County Environmental Council facilitates the ATC and helps work to enhance safety and sustainability in local transportation.

The ATC leads and participates in local events, such as the Slow Roll Bike Audit, trail clean-up, and hosting special events where nationally-recognized speakers are brought to Park County to motivate residents and officials to improve transportation options.

**Building Active Communities Initiative.** More than 30 communities across Montana participated in the Building Active Communities Initiative (BACI), a project of the Montana Department of Public Health and Human Services, from 2012-2018.

The mission of that initiative was to encourage policy and environmental changes to help make communities safer, more accessible, and inviting places for people to walk, bike, or take public transportation (if available).

In 2015, Park County sent a team of five leaders to the BACI Action Institute. Subsequently, the team spearheaded the development of the Park County Active Transportation Plan and the formation of the Active Transportation Coalition.

In 2017, Park County and the City of Livingston sent a joint team of seven leaders to the BACI Action Institute where Vitruvian Planning's Chris Danley was the main speaker. After attending the Institute, the team conducted a series of pop-up demonstration projects aimed at improving unsafe pedestrian environments.

Figure 2-10: Park County Active Transportation Coalition Mission



In 2018, the City of Livingston hosted the BACI Action Institute and sent another team of City-County leaders.

These educational and skill-building opportunities for City leaders, coupled with significant public outreach efforts, have led the City of Livingston to this point; the development of the Livingston Trails and Active Transportation Plan. This is the right time, the right people are engaged, and the public is interested in improving the walking and bicycling environment in Livingston.



### The Human Touch

A human curb extension, showcased during the BACI efforts, in Livingston, show how street space can be reallocated for safety to reduce pedestrian crossing distance and increase visibility.

*Image: Cathy Costakis*



### In their own words Laurel Rhodes

I'm obsessed with riding my bike. I ride it everywhere and like riding my bike for a purpose like running errands, getting groceries, and running my business by seeing my veterinary patients in their homes. It's fun because I'm taller, faster and cooler in the breeze I make. I feel good supporting my physical and mental health as well as the environment. One of the joys of living in a small town is I can bike pretty much wherever I need to go.

The biking improvement I hope to see is a paved path all the way to Livingston Healthcare hospital bike rack.

The other place I would really appreciate additional paved paths is at 7th and Park St. Currently the bike path parallel with Park St curves and goes up the railroad side with an option to cross the highway at the top of the hill. It would be so much safer and easier to access Spurline, Woods Rose, Radio Shack and Wispwest if there were paved paths on the opposite sides of Park and 7th.



### 3. Public Engagement

The Livingston Trails and Active Transportation Plan was not only informed by the public but literally built through public engagement. Multiple opportunities in a variety of formats—steering committee, focus groups, surveys, bike rides—were offered for people to engage throughout the process. Offering participation in a variety of forms was used to gain ample input in terms of number of inputs via survey responses and diversity of input via focus groups.

Public involvement should focus on the authenticity of the input rather than the volume of input. Instead of fixating on the number of people who attend meetings or take surveys, the goal of the engagement process was to garner authentic input and ensure that the results of surveys and meetings reflects the needs of all people in Livingston. Those who may be most reliant on a safe system of walking and bicycling routes may not have the time or resources to provide input. This is why the plan sought to engage organizations and people who work with vulnerable populations.

#### Steering Committee

The project garnered the support and direction of an active Steering Committee tasked with making sure the input was authentic and identifying organizations that merited individual outreach.

This group of Livingston Planning Staff and representatives from the public served as a sounding board for the project’s approach and key informants about the community. The Steering Committee met five times throughout the planning process. The Steering Committee participated in a walking meeting in April 2021. They explored different areas of the community and hosted discussions about different barriers to connectivity. Other meetings were held via Zoom. The Steering Committee meetings provided critical direction on the elements of the plan that should be prioritized. These critical issues included connectivity, access for a diversity of users, the railroad barrier, connections for the North side of town and safe routes to school.

Figure 3-1: Building a Plan Through Engagement



STEERING COMMITTEE MEETINGS



ORGANIZATIONS INVOLVED IN  
FOCUS GROUP MEETINGS



SURVEY RESPONSES



MILES WALKED AND BIKED BY  
CONSULTANT TEAM MEMBERS



PARTICIPANTS IN JULY 2021 PUBLIC MEETING,  
COMMUNITY BIKE RIDE & LOOKING GLASS ACADEMY





### Focus Groups

The Steering Committee helped identify organizations to participate in focus groups during spring of 2021. Six emphasis areas were identified for discussion among focus groups and one-on-one interviews. Figure 3-2 identifies the interests and representation of participants.

The robust conversations dug into core priorities for the community. They identified the biggest barriers for residents and visitors to safely move throughout the community and access important destinations such as schools, Yellowstone River, and commercial districts. When we discussed what the vision of the plan should be, focus group participants shared that all neighborhoods deserve to have safe and easy access to a non-motorized network to access community destinations and services. Participants consistently identified schools as priority destinations and all neighborhoods should be connected, including the North side of the community.

The focus groups emphasized the importance of connectivity with complete infrastructure that is safe and separated from traffic. The network should be comfortable for all abilities and easy for families to navigate. The river was identified over and over again as central to the identity of the town and a huge amenity. Therefore, focus group participants strongly supported connecting and expanding trails along the river as a continuing strategy.

Participants also envisioned barriers like the river and railroad tracks being removed by constructing bridges to safely move walking, biking and rolling citizens to the other side. Finally, focus group participants envisioned an in-town network that would connect to longer routes and loops outside of town.

Perhaps the strongest theme heard across all focus groups was the emphasis on safety. Participants stressed the need to have clear and consistent guidance on standards (width, surface, wayfinding etc.) of trails, pathways, sidewalks and bike lanes so users can safely move through the network. Whenever possible it is preferred that paths are separated from traffic and that crossings are controlled and clearly marked with traffic calming integrated into the design.



**Figure 3-2: Focus Group Attendees**

Focus Group (Attendees)	Organizations / Representation
<b>Conservation &amp; Environment</b> (5)	Montana Freshwater Partners Upper Yellowstone Watershed Park County Environmental Council Gallatin Valley Land Trust
<b>Schools &amp; Youth</b> (5)	Livingston School District Big Brothers Big Sisters Farm to School Community School Collaborative
<b>Community Interests</b> (8)	Fairgrounds and Parks Board Parks and Recreation Board Historic Preservation Board Tree Board Park County Community Foundation Local Resident Integrated Trail Lab Arthur M Blank West Foundation
<b>Local Businesses</b> (8)	Chamber of Commerce / Visitor Center MSU Extension Service Economic and Community Development Downtown Business Owner Livingston Depot Real Estate Business Improvement District Business Owner
<b>Health &amp; Healthcare</b> (7)	Livingston Healthcare Foundation Livingston Healthcare LiveWell49 Park County Health Dep Livingston Food Resource Center Park County Senior Center Learning Partners Community Health Partners
<b>Vulnerable Populations</b> (7)	Livingston Parks and Trails Committee Montana Independent Living Project Human Resource Development Council Stafford Animal Shelter (2) Active Transportation Coalition Counterpoint

The conversations often highlighted the importance the network plays in health and wellness. The benefits are physical, mental, and emotional and when these habits are built during youth they pay lasting dividends. Having access to outdoor places and nature is also an economic engine as many tourists focus trips on the opportunity to explore on bike or foot.

People with disabilities must also benefit from these investments. Ensuring that access and inclusion is open to all users (ability, age etc.) supports all citizens' health and well-being.

The pride of the community and strength of its partnerships was evident when the participants spoke of creating a brand that reflected the history and uniqueness of Livingston. There was energy to create a wayfinding and amenity theme that would celebrate the community and add to the sense of place.

Community members agreed that one entity cannot create this network alone and it would take public-private partnerships and a diversity of funding streams to implement and maintain the trails and active transportation system year-round. This idea fueled excitement to access grants, volunteers, and local government funds and other funding mechanisms to tackle both small and large projects.

One of the key focus group questions was discussing what should the plan prioritize. The participants generated a long list of community priorities, and four overall themes consistently emerged in the conversations. Additionally, two key themes related to health and access emerged. They are highlighted in Figure 3-3.

**Health & Wellness.** To help emphasize a theme of health, two focus groups were conducted with stakeholders from the health community and organizations representing vulnerable populations. They included representatives from seven different organizations such as healthcare, public health, and organizations representing seniors, people with disabilities, and low-income residents (see Figure 3-2). Each group identified themes already discussed above, including safety, connectivity, maintenance of facilities, and wayfinding.

**Figure 3-3: Key Priorities from Focus Group Meetings**

### Youth Need Safe Routes

to school and the ability to use the network from all parts of the community, notably the North side of town.  
Provide supportive education and training.

### Fill Gaps in Existing Infrastructure

by creating better connections in underserved areas, improving and increasing railroad crossings, and ensuring infrastructure is accessible.

### Prioritize Safety

through speed management and traffic safety.  
Clearly identify spaces for people who walk and bike and provide wayfinding for them.

### Prioritize Access to Community Resources

Including food outlets, health services, recreation facilities, downtown business, schools, and open space.

### Improve Physical and Mental Health

with investments that provide safe and comfortable access to nature, as well as food, healthcare, and jobs.

### Promote Access in All Realms

by identifying not only physical infrastructure needs, but access to things like proper clothing, education, route identification, and restrooms.



Focus group participants agreed there is clear evidence supporting the benefits of “outdoor movement” both for physical and mental health. They felt access to nature and wildlife also has benefits for mental health both for adults and children.

In addition to these benefits, focus group participants also identified the need to access jobs and basic needs, such as food and healthcare, as critical to support health and wellbeing.

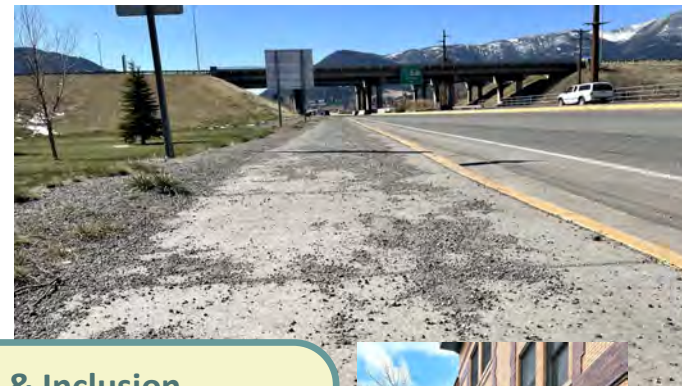
**Access & Inclusion.** Focus group participants were clear on a variety of strategies that would be helpful to make Livingston a more welcoming place for all people. Focus group participants pointed to residents who did not own a car that need to access grocery stores and work at restaurants in southwest Livingston off Park Street.

They said these residents often “walk on the railroad tracks” due to missing sidewalks or lack of maintenance in the winter in order to access needed destinations. Other participants noted that some residents lack access to proper clothing (i.e., warm coats, hats, and gloves) or gear (i.e., bicycle, basket, light etc.) or infrastructure enhancements (i.e., bike repair stations and bike racks) and education on how to maintain a bicycle.

Narrow sidewalks and sidewalks with no curb-cuts make it very difficult for people using assistive devices, such as wheelchairs or walkers, or even child strollers, to get to where they need to go.

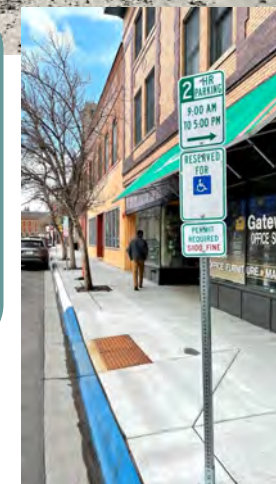
Several focus group participants suggested that informational group walks for individuals that may be more hesitant and need more social support to better understand the safest, most accessible, and connected routes could increase safety and usage of the walking and bicycling network for vulnerable users such as seniors and individuals with disabilities.

Locating public bathroom facilities at key areas in the city would be helpful, especially senior populations wanting to get out and walk or roll. In addition, having clearly identified rules for trails, such as places where dogs need to be on a leash, may improve safety and comfort for more vulnerable users.



### Access & Inclusion

Beyond constructing facilities that are accessible for all people, keeping those routes clear of snow and debris makes the space usable instead of forcing people into unsafe situations, such as using the railroad tracks to access destinations.



### July 2021 Public Involvement Events

The week of July 26 was identified as a full week of on-the-ground public involvement and field evaluation by the consultant team. By this time a preliminary list of projects had been identified and mapped via input from past plans, the Steering Committee, Focus Groups, and the Public Input Survey (see next section).

Three public involvement events were conducted to bring different perspectives together to inform the Plan's content.

**Looking Glass Academy.** A two-day workshop on the key design elements of walking and bicycling infrastructure was conducted on July 28 and 29 at Park County High School. Twelve people took part in this workshop, including representatives of the City, Park County, Montana Department of Transportation (MDT), and Park County Environmental Council.

The goal of the workshop was to build local capacity for implementing the Plan once the consultant's efforts are complete. The workshop focused on things like how people who walk and bike experience streets through their senses and in ways not experienced by motorists.

Federal design guidance was highlighted as part of the workshop to help participants gain an understanding of the many tools available, including many that may not be a part of an agency like MDT's design manuals.

The course included formal presentation modules coupled with walk audits around Livingston to evaluation specific streets and identify likely design needs to make them safer for active transportation.

**Public Meeting.** A public meeting was held at the Civil Center the evening of July 29, 2021. Maps of the draft trails, sidewalks, and bikeways were displayed with participants asked to comment on them and add routes for the Plan to incorporate.



#### Time to Hula!

The Looking Glass Academy showcases people as the “design vehicle” for walking and bicycling facilities. By using simple tools like a hula hoop. Participants begin to understand the human bubble that is present when we walk. Each person's bubble is approximately 3-feet wide, which means a sidewalk that is built to a minimum width of 5-feet is not wide enough for two people to walk side by side.



Fifteen (15) people attended the public input meeting, which was formatted for drop-in discussions. Much of the focus was on the trails map and identifying linkages in a trails system both within the City and surrounding unincorporated areas of Park County.

Participants provided additional input on where they would like to see safer crossings of various streets in Livingston, including Park Street, Highway 10, Gallatin Street, H Street, and others.

The consultant team utilized this input to conduct additional field evaluations on Livingston's streets and trails on July 30.

**Community Bike Ride.** The week culminated in a Community Bike Ride the morning of Saturday, July 31, 2021. The goal of the bike ride was to showcase locations where projects were identified and discuss the opportunities and challenges with each of those locations.

The six-mile ride began at the Yellowstone Gateway Museum and continued to six stops along a route that included Summit Street, Front Street, 5th Street, Lewis Street, River Drive, Park Street, and Gallatin Street.

Participants were asked to summarize their experience while on the ride as well as their daily routines involving these routes. They were asked to identify how projects at these various locations would improve safety and mobility for Livingston residents.

The ride also provided an opportunity for participants to observe other people walking and bicycling around Livingston. This led to discussions about equity, family bonding, health, and economic development.



### Multimodal Input

A diverse perspective of people of different ages and abilities was gained by providing three different avenues for input on the Trails and Active Transportation Plan. The Community Bike Ride allowed people to see the exact locations where projects were proposed in addition to the input received on project maps provided at the public meeting.



### Input Survey

A public input survey was posted online and in hard copy format. It received 311 responses over a two-month period in summer 2021. It is important to note this is a public input survey and not a statistically-valid survey, which means input priorities may be skewed based on the distribution of the survey. This is why survey results are vetted and combined with input from the Steering Committee, focus groups, and consultant team to validate the responses and represent the needs of those who may not have known or had access to the survey.

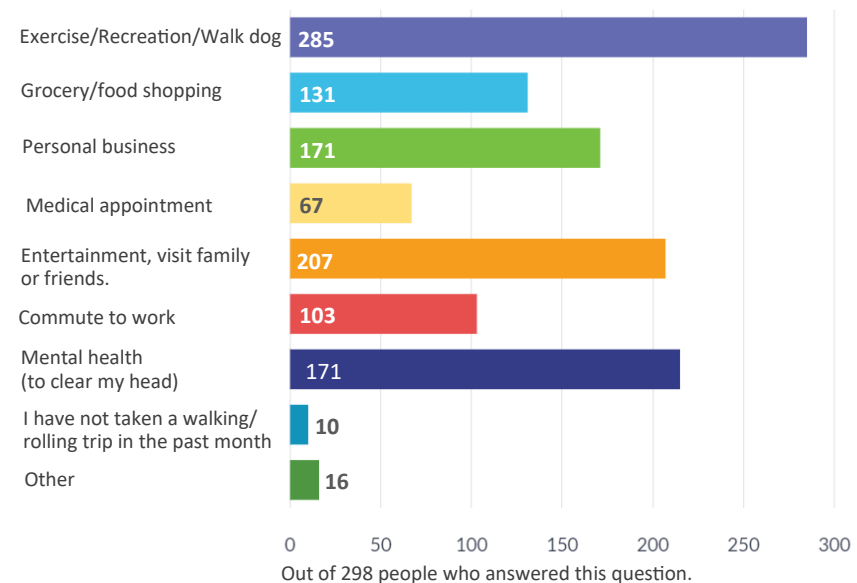
More than 300 responses is considered a strong level of input for a city the size of Livingston. The geographic distribution of those who took the survey was dominated by areas south of the railroad tracks, with southwest having 75 people and southeast with 62 responses. Areas north of the railroad tracts had notably fewer responses, with 48 from the northwest, 16 from the northeast sector, and 16 from the northside hills. Responses from County residents living outside City limits accounted for 51 responses.

Other key demographics of those who took the survey include:

- 50.5% of respondents were between the ages of 35 and 54, compared to that age range comprising 25.1% of residents.
- More females took the survey than males, by a 2-to-1 margin.
- 37.0% of respondents work at a location outside their home and in Livingston
- 11.4% telework from their home in town compared to only 3.8% doing so before the COVID-19 pandemic.

A key element of the survey was trying to determine the degree to which people walk or bike for various purposes. Figure 3-4 represents survey responses related to purposes for walking and bicycling. People could choose several options. Nearly every respondent said they walk or bike for exercise, outdoor recreation, and activities like walking their dog. Nearly 2 out of 3 said they walk for mental health and for personal business.

**Figure 3-4: Why People Walk and Bike**  
**For what purposes do your walk, roll, or bike in Livingston?**  
**People chose all that applied.**



**Interest and Confidence.** Understanding the type of interest and confidence people have in walking and bicycling helps Livingston understand how facilities are being used. It also reveals how many people may not feel confident taking a trip via active modes. Survey results indicate input was received from a very active and recreation-oriented group of people. More than 70% of respondents noted their interest and confidence in walking at a rapid pace, for recreation. More than 1 in 5 said walking is how they get around.

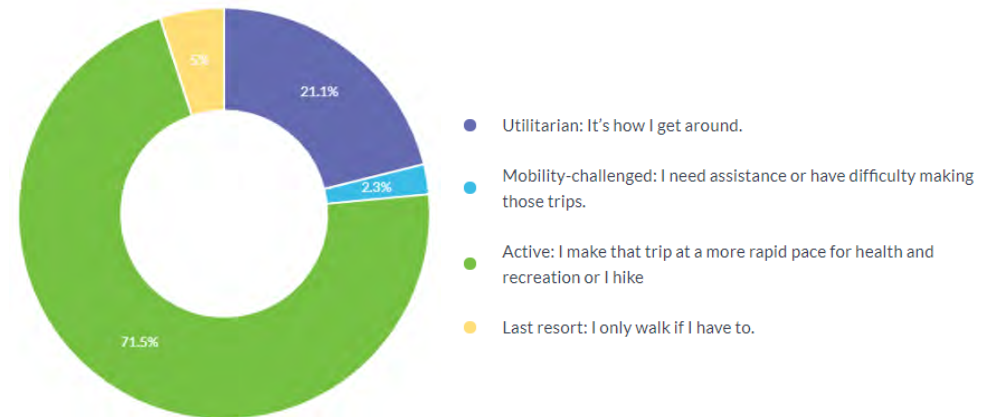
These inputs point to a need to connect people from their neighborhoods to pathways and trails via sidewalks and safe crossings. Such investments yield greater activity and address the access and safety needs of utilitarian trips and people with disabilities.

For bicycling, it is important to understand the various levels of confidence when it comes to sharing streets with motorists. Understanding the level of interest and confidence by those who are either somewhat confident or interested, but concerned, showcases those who do not desire to share lanes with motorized vehicles.

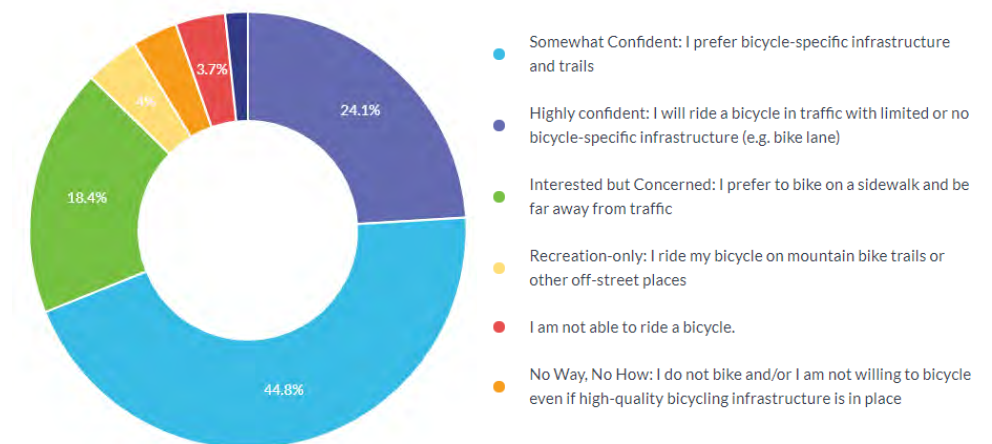
- **24.1% identified as highly confident bicyclists** who will ride in traffic with limited or no bicycle-specific infrastructure.
- **44.8% of identified as somewhat confident bicyclists**, preferring bicycle-specific infrastructure and trails.
- **18.4% said identified as interested but concerned bicyclists**, preferring to bike on sidewalks and be far away from traffic.

The more than 63% who identified as “somewhat confident” and “interested but concerned” should be the target group of riders on which to focus investments. A limiting factor in Livingston will be the lack of opportunities to retrofit many streets with in-street or separated bike lanes. Therefore, it is important to provide a combination of separated pathways and apply speed management techniques to narrow streets, to ensure motor vehicle speeds and volumes are low enough that people are comfortable sharing that space with motorists.

**Figure 3-5: Walking Interest & Confidence**  
When deciding whether or not to walk or roll (use a wheelchair or other mobility device) in Livingston, how would you describe your level of interest or confidence in that walk?



**Figure 3-6: Bicycling Interest & Confidence**  
When deciding whether or not to ride a bicycle in Livingston, how would you describe your level of interest or confidence in taking that trip?



**Making Investments.** The survey asked people to provide input on specific reasons for walking and bicycling, as well as locations in Livingston where they felt changes were needed to increase comfort, safety, and access. Key inputs in these areas are summarized in Figure 3-7.

The lack of facilities dominated the input on reasons why people chose to not take a trip via an active mode. Many expressed concerns over traffic safety and speeds, as well as barriers like the railroad tracks that are difficult to overcome.

Respondents indicated features such as trees and buildings that provide shade were the most satisfying aspects of walking and bicycling in Livingston. This is important to consider as the City grows and approves new subdivisions. These responses suggest policies for street design should include street trees between the curb and sidewalk, just as they do in the older parts of the City. Research also shows street trees help manage traffic speeds and make streets safer for all modes of transportation.

For children, respondents support a comprehensive Safe Routes to School program in combination with street design to promote lower motorist speeds. They also desired more opportunities to socialize with other families via active modes.

In terms of the most desired investments for walking, respondents identified the existing 5th Street railroad crossing as one in need of improvements. They also identified filling sidewalk gaps on Front Street north of the railroad tracks and along Park Street through the remainder of downtown.

The most desired places for additional trails and pathways were the north hills area and water tower, as well as filling gaps along the Yellowstone River between Miles Park and Mayor's Landing. People also supported constructing the Mayor's Landing Bridge.

Bike routes are desired, along with pathways, along major roads. An additional railroad crossing, as well as pedestrian needs at the 5th Street crossing, received ample support.

**Figure 3-7: Other Survey Priorities**

#### Top Reasons to Not Take a Trip by Walking or Bicycling

1. Lack of adequate pathways and crossings
2. Traffic safety or speed concerns
3. Barriers are too much to overcome

#### Most Satisfying Aspects of Walking & Bicycling

1. Shading by trees and buildings
2. Walking or rolling to retail, restaurants, parks, etc.
3. Personal safety.

#### Top Priorities for Making it Safer for Children

1. Safe Routes to School program
2. Street design to promote lower vehicle speeds
3. More opportunities to walk/role with other children/parents

#### Most Desired Walking Infrastructure Investments

1. 5th Street Railroad Crossing Upgrade
2. Front St/Star Road Sidewalks
3. Park St Sidewalks, I St to O St

#### Most Desired Trail/Pathway Investments

1. Water Tower Area & North Hills
2. Miles Park to Mayor's Landing
3. Mayor's Landing Bridge

#### Most Desired Bike Route Investments

1. US 89/Park Street/Hwy 10 Pathway Connections
2. 5th Street Railroad Crossing Upgrade
3. Another Railroad Crossing



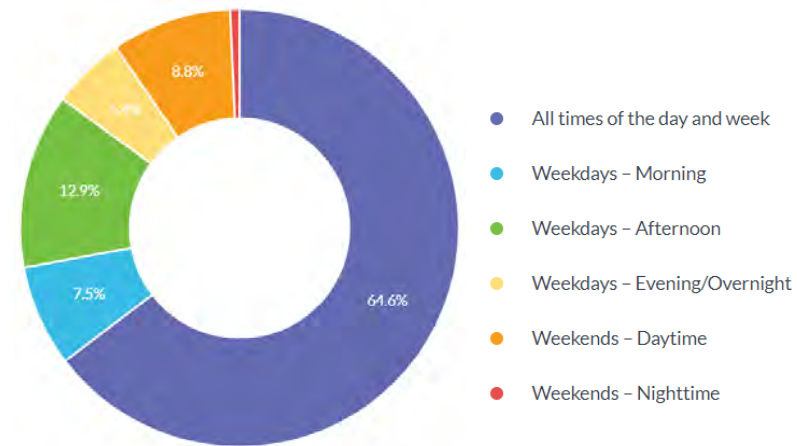


**When do people walk, roll, and bike?** Figures 3-8, 3-9, and 3-10 reflect input on the times of week and times of year that people walk, roll, and bike. Nearly two-thirds of respondents said they engage in active transportation all times of the day and week (Figure 3-8). Weekday afternoons received the most responses when it comes to specific times, which indicates the survey bias toward recreation-based respondents.

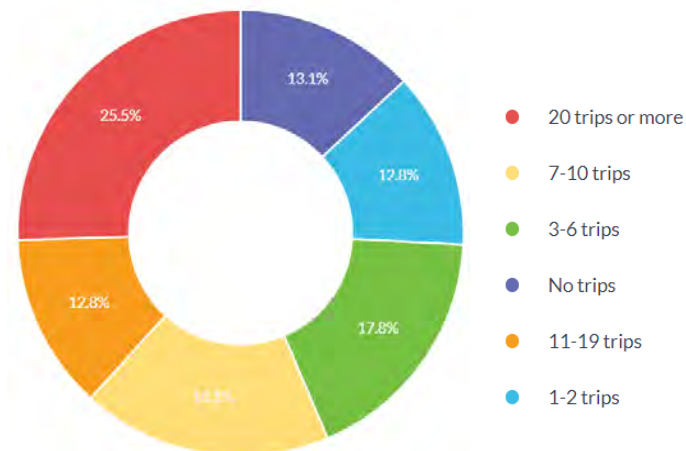
A key theme in discussions on goals for the plan is ensuring active transportation routes are safe and accessible at all times of year. As expected and shown in Figure 3-9, more than 50% of survey respondents said they make more than 20 trips per month via active modes during summer. Another nearly 16% said they make between 11 and 19 trips in a typical summer month.

The survey inputs indicate this desire for year-round maintenance to keep routes clear of snow and debris. More than 1 in 4 respondents said they make more than 20 trips via active modes in a typical winter month (Figure 3-10).

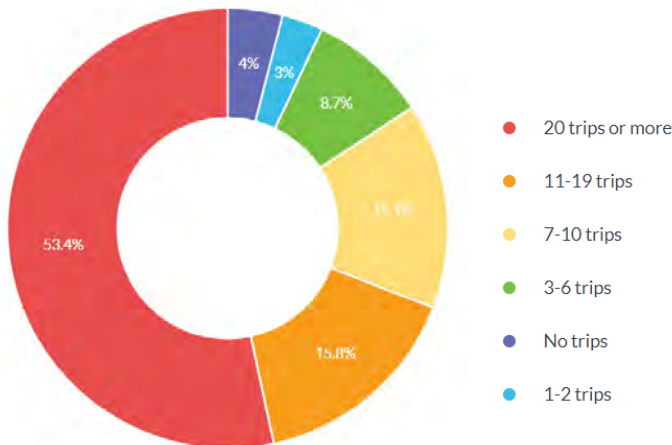
**Figure 3-8: Active Transportation By Time of Day/Week**  
When do your walking, rolling or bicycling trips typically occur?



**Figure 3-10: Active Transportation in Winter**  
In an average winter month, how many trips did you make a one-way walking, rolling, or bicycling trip of more than five minutes in Livingston?



**Figure 3-9: Active Transportation in Summer**  
In an average summer month, how many trips did you make a one-way walking, rolling, or bicycling trip of more than five minutes in Livingston?



### 4. Priority Projects

There are 23 sidewalk and/or bikeway projects and more than 20 trail and pathway alignments identified through input for the Trails and Active Transportation Plan. In order to streamline the plan implementation and provide the City with a focused list of projects to pursue, the 23 sidewalk/bike projects were prioritized along with nine trail/pathway projects.

This chapter details the 12 projects that were ranked and determined to be in the top tier of 32 projects. Twenty projects that ranked lower are summarized, along with recommendations for specific street crossings, in Chapter 5: Other Projects.

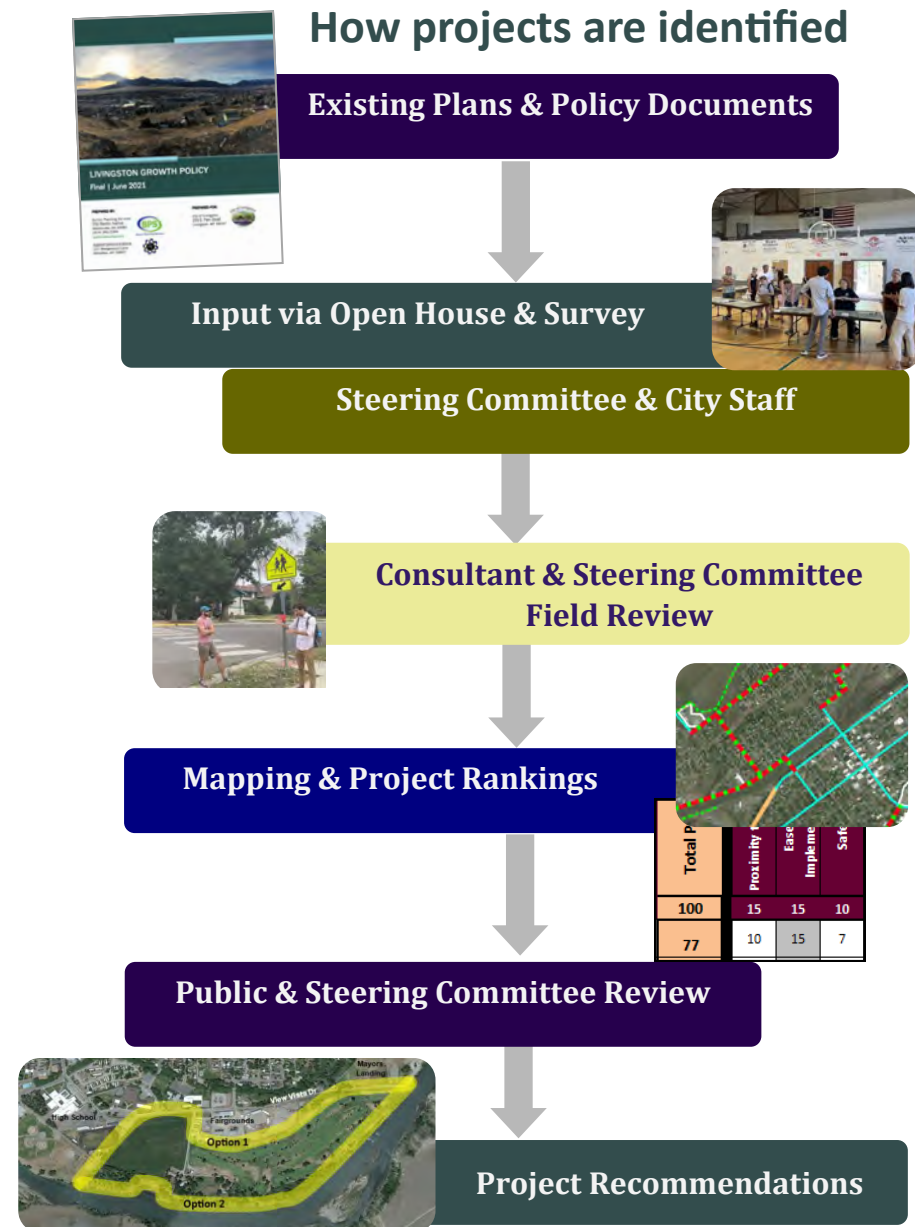
#### Identifying Projects

The list of 32 projects were identified through past plans, public input, Steering Committee recommendations, and consultant field review. Figure 4-1 at right shows how this occurred. Public input identified places where people would like to walk, roll, and hike as well as the routes that would allow them to do this more often.

Sidewalk projects are intended to fill gaps in the system. Bikeway projects consist primarily of adding signage, pavement markings, and speed management treatments to existing streets. This is due to limited opportunities for full bike lanes. Trails are considered single track routes while pathways are for shared uses and may be paved.

Those suggestions were combined with projects or project-related themes contained in past City and Park County plans and verified through the Steering Committee. Once the consultant team refined the list and identified likely projects and project termini, the projects were mapped and are illustrated in Figure 4-3 (page 36). Note additional trails and pathways were identified through the planning process but were not included in the project ranking due to alignments fully outside City limits or other feasibility constraints. All identified pathways and trails are included on the master plan map contained in Chapter 6: Trails Master Plan.

Figure 4-1: Project Identification



### Ranking Projects

The 32 projects were subject to a ranking process that incorporated several criteria identified and weighted by Steering Committee input. The goal of the ranking was to perform a multi-criteria evaluation on the different project types in order to provide a general order of priority for implementation.

The criteria shown in Figure 4-2 illustrate how projects were scored. The maximum points available for each criteria ranges from 5 to 15 points for a maximum score of 100 points per project.

Steering Committee members identified how they would score projects based on several possible criteria. Their inputs were averaged to identify the relative weight of each criterion, which is reflected in the maximum number of points available for that factor.

Projects were scored based on this weighting. Based on the initial ranking, the Steering Committee was allowed to assign up to 5 additional points to projects they saw as a priority or where other project intangibles not reflected in the ranking criteria suggested

the project warranted a higher score. Full details on project scoring and detailed ranking are included in the Appendix.

### Top Tier Projects

The consultant team used the outcomes of this ranking process to identify the top tier of 12 projects that constitute short-term priorities for Livingston and its partners. Those are the projects that have the most detailed information. The remaining 20 projects are more illustrative and identified in the next chapter.

While the 12 top tier projects are listed in order of priority, it does not necessarily mean the top priority project is completed first, as implementing some projects may take more time due to budget and property impacts. The City and its partners should begin pursuing funding for the top priority projects under each project type (sidewalk, bikeway, pathway/trail).

The top tier projects are listed in Figure 4-4 on the next page, followed by the detailed project descriptions that can be used to help formulate grant applications and other funding requests.

Figure 4-2: Project Ranking Criteria

Sidewalk & Bikeway Criteria	Max. Points
Proximity to Schools	15
Fills Gap in System	15
Population in Need	15
Proximity to Downtown, Healthcare and/or Social Services	15
Proximity to Parks or Natural Areas	10
Bus Route Access	10
Traffic Exposure	5
Access to Food	5
Ease of Implementation	5
Steering Committee Priority	5

Trails & Pathway Criteria	Max. Points
Proximity to Parks, Trails, Natural Areas	15
Fills Gap in System	15
Population in Need	15
Proximity to Downtown, Schools, Food Outlets and other Community Assets	15
Provides Alternative to On-street Route	10
Ease of Implementation	10
Topography & Related Challenges	5
Environmentally-sensitive Area	5
Presence of Existing Parking/Amenities	5
Steering Committee Priority	5



Figure 4-3: Ranked Projects with Top Tier Projects X

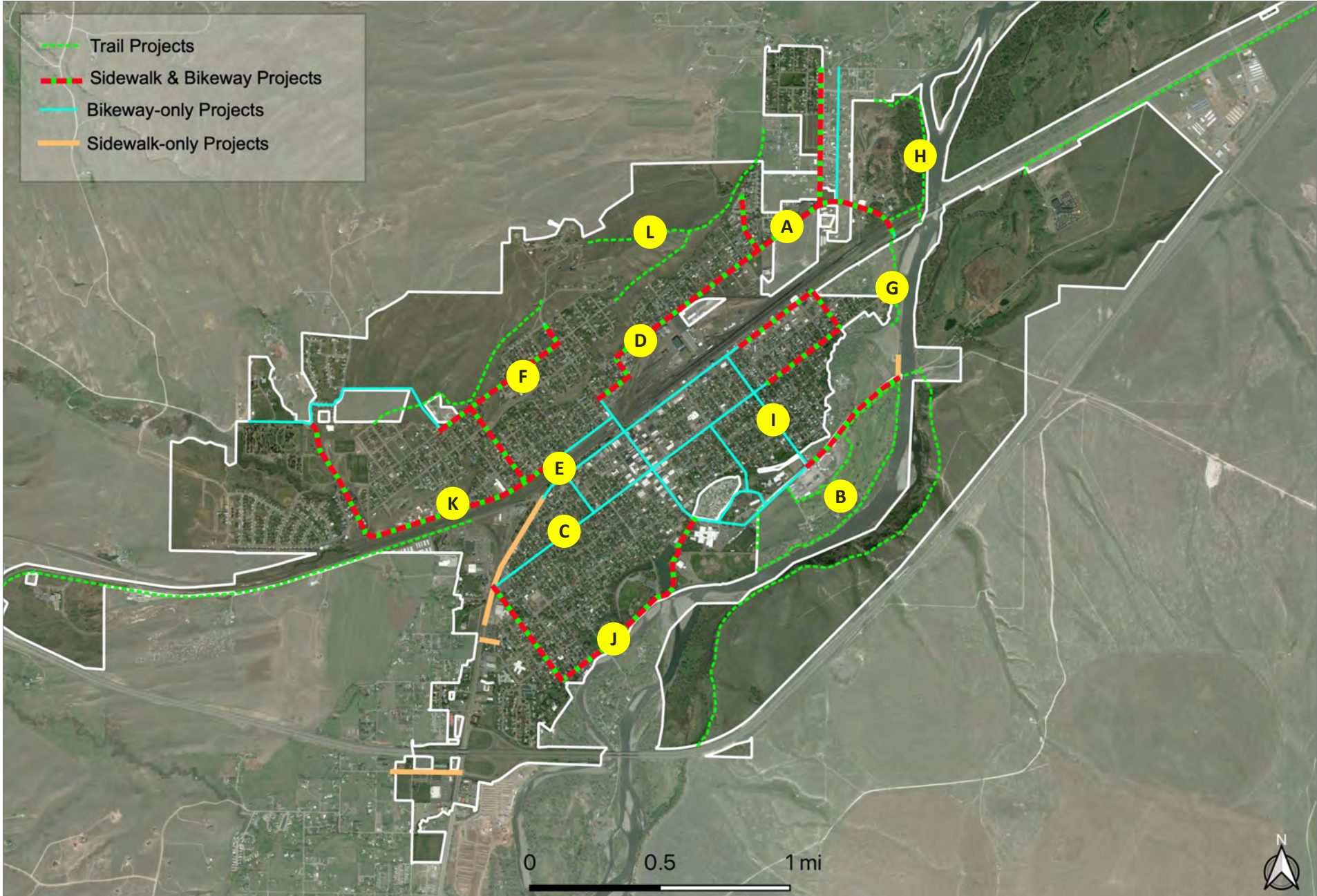


Figure 4-4: Top Tier Projects for Short-Term Implementation

Top Tier Projects, in order of priority ranking	Type	Length	Description	Cost Estimate
A. Gallatin/Bennett, N St to Park	SW+BW	0.6	Add sidewalks on north side, sign as bikeway & consider speed management features.	\$200,000
B. Yellowstone River Trail, north side, Baseball/Softball Complex to Mayor's Landing	PW	0.9	Construct compacted surface shared use pathway. Optional alignments along river or fairgrounds.	\$90,000 to \$150,000
C. Lewis/O St Crosstown Bikeway, Park to O St	SW+BW	1.7	Sign as bikeway, fill sidewalk gaps & apply speed management features.	\$10,000 to \$150,000
D. Gallatin/C/Chinook, Main to N St	SW+BW	0.8	Rebuild sidewalks, sign as bikeway & apply speed management features.	\$120,000
E. 5th, Front to Park	SW+BW	0.1	Rebuild sidewalk to pathway width across railroad.	TBD
F. Summit, 7th to Main	SW+BW	0.4	Add sidewalks on one side, acquire land for link between 5th and 7th.	\$75,000 to \$90,000
G. Yellowstone River Trail, Mayor's Landing to O Street Connector	PW	0.4	Construct compacted surface shared use pathway.	\$140,000+
H. Yellowstone River Trail, north side, US 89 to Whiskey Creek Road	PW	0.6	Construct compacted surface shared use pathway and underpass of bridges.	\$250,000
I. H St, Park to Lewis	BW	0.5	Sign as bikeway, upgrade Geyser to possible mini-roundabout & apply speed management features.	\$40,000 to \$200,000
J. River Dr, 12th to Main/View Vista	SW+BW	0.8	Add sidewalks/walkway on north side, sign as bikeway.	\$250,000
K. Front, 5th to Star Road	SW+BW	0.8	Add sidewalks on north side, sign as bikeway & consider speed management features.	\$150,000 - \$200,000
L. North Hills Trails, East, Green Acres to Summit/Water Tower	TR	1.2	Build single track trails with street connectors.	\$50,000

SW = Sidewalk Project; BW = Bikeway Project; PW = Pathway Project (8-10 feet wide); TR = Trail Project (single track)

Cost estimates are in 2021 figures and include construction estimates only.



### A. Gallatin/Bennett, N St to Park - Sidewalks + Bikeway

Construct sidewalk or alternative pedestrian walkway along the north and east side of Gallatin and Bennett to connect to Park Street. Sign and designate as a bikeway. Curbing exists from N Street to Miles Street, which makes sidewalk and curb ramps construction easiest in this section. From Miles Street to Park there are options on the north/east side for an extruded curb walkway that would extend the shoulder and allow for stormwater to flow through breaks in the curbing. This would reduce the cost and improve the ease of implementation through the current section that lacks curbing. A pedestrian signal at Park to link to the O Street Connector presents other traffic challenges and needs to be discussed with MDT. The dotted lines show an option along the railroad, river and Veterans Bridge that would help people avoid the Park intersection altogether.



#### Project Details

- **N Street:** Consider a Rectangular Rapid Flashing Beacon, with crosswalk and curb extension, to connect to Kate Bonnell Park.
- **Park Street:** This intersection would benefit drivers, pedestrians and bicyclists by adding a full traffic signal. Pedestrian-only signals may introduce other complexities related to speed and sight distance from the east.
- **Railroad/River Connector:** Getting pedestrians and bicyclists through this area may be better served by a pathway along the railroad, under the bridges, and O Street Connector link. Shown as a dotted line, and included as part of project H.
- **Bikeway Designation:** To add bike lanes would require prohibiting on-street parking along the route with existing curb. It is feasible based on limited usage of on-street parking east of G Street. The route may be signed as a bike route before any walkways are built. It may include the addition of shared lane markings and other speed management features such as curb extensions at intersection.
- **Long-term:** If options arise along the railroad property on the south side, then consider a shared use pathway and enhanced crossings at Miles and Garnier.

Cost Estimate: \$ 200,000

Project Length: 0.6 miles



An expanded shoulder with an extruded curb walking on the north/east side may be a short-term option from Miles Street to Park Street.

#### Influences

- No existing pedestrian access to north side of tracks
- Northside neighborhoods & new housing
- Kate Bonnell Park
- O Street Connector
- Park Street

#### Challenges

- Railroad crossing (See Project H)
- Lack of curbing east of Miles Street
- Slopes on north/east side along city property
- MDT coordination on Park St./Bennett intersection



### B. Yellowstone River Trail Baseball/Softball Complex to Mayor's Landing - Pathway

NOTE: Pathway alignments are conceptual and do not reflect detailed design or alignments to the degree that impacts to individual properties or structures can be known.

Identified in the 2007-2008 Livingston/Park County Trails Plan, this project fills gaps in the pathway system by acquiring easements and construct a 10-foot wide unpaved shared use pathway to connect Mayor's Landing to the existing pathway along the Yellowstone River. When combined with other projects to extend pathways north of Park Street, it would allow a non-motorized, off-street option to get to the various recreational and educational facilities on the western terminus of this project. It would also link to the "festival street" and River Drive route. Two route options can be explored:

- **Option 1** is primarily a public land option along existing properties owned by Park County or School District. A portion of Option 1 may be built alongside View Vista Drive.
- **Option 2** is more ideal as it fills the gap along the Yellowstone River but will require negotiating easements with private property owners.



#### Project Details

- **Pathway Surface:** Continue with unpaved surface with compacted gravel to ensure ADA compliance. Ideally, a shared use pathway is 10-feet in width but may be 8-feet in constrained sections. A pathway narrower than 8-feet may not be appropriate for bicyclists to use.
- **View Vista Drive:** This route is identified as a sidewalk project, but is ranked in the lower tier. Constructing a walkway along the north side may be part of Option 1 or an interim pathway connection. This would provide for additional safe routes to school, especially when combined with other pathway projects to link areas north of the railroad tracks.
- **Crossings:** If completed along the Option 1 route, then consider enhanced crossings, with features such as Rectangular Rapid Flashing Beacons, crosswalks, and curb ramps at East Side Street. An H Street pathway connection may be considered through the Fairgrounds property.
- **Long-term:** Both options can be considered for implementation as they serve different locations and different purposes. Option 1 may be best-suited as a paved route with Option 2 as an unpaved route to continue the design theme along the river.

Cost Estimate: \$ 90,000 - \$150,000

Project Length: 0.9 miles

#### Influences

- County Fairground & work with Fair & Parks Board
- River, as well as existing pathways and sidewalks
- Schools, recreation facilities, fairgrounds, dog park
- Planned pathway river crossing
- Civic Center

#### Challenges

- Private property
- Alignment along the river bank
- Fairgrounds property



### C. Lewis/O St Crosstown Bikeway, Park to O St - Bikeway

The Lewis/O Street Crosstown Bikeway is a suitable bicycling alternative to Geyser due to lower volumes of traffic and potential for fewer stops signs. Upgrading this route as a bikeway can begin with special signage, wayfinding, and shared lane markings (low estimate). The City may consider speed management features, such as traffic filters, curb extensions, chicanes, and speed humps at points along the route to help slow traffic and clearly denote it is a bike priority corridor (high estimate). There are sidewalk gaps on Lewis, east of M Street and along O Street from Lewis to Park and prioritized as a separate sidewalk project ranked in a lower tier. The City may pursue sidewalk requirements for property redevelopment or advisory shoulders (see more in the Appendix design guide section). Speed management features can also reduce speeds and make these segments safer for using the street for walking.

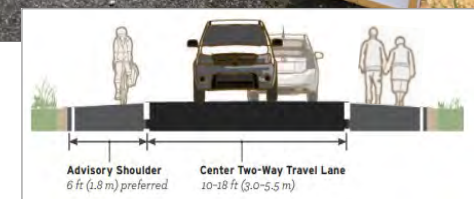


#### Project Details

- **Park Street (west side):** Coordinate with MDT for enhanced crossing at 12th & Park (existing crosswalk). This may include Rectangular Rapid Flashing Beacon (shown in crossings map, project E).
- **5th Street:** This intersection is a priority to raise visibility for bicyclists and pedestrians and slow speeds for vehicles approaching Lewis on 5th. Consider curb extensions and raised crosswalks.
- **B St to C St:** Consider street enhancements to make this a place for Open Street events and street fairs given the uses at the Lincoln School. Add curb extensions and consider traffic filter at C St.
- **H St:** Place signage on H Street to indicate a bikeway crossing is ahead so motorists are more aware. Install enhanced crossing with Rectangular Rapid Flashing Beacon (crossing map, project N) and street-facing push button for bicyclists. Work with MDT to consider a raised intersection to help slow vehicles on H.
- **Downtown:** Add bike parking or bike corrals in corner areas where parking is not allowed in the street.
- **Long-term:** Explore additional locations for adding curb extensions, Rectangular Rapid Flashing Beacons, and raised crossings as bicyclist use increases or problematic crossings are identified.

Cost Estimate: \$ 10,000 - \$150,000

Project Length: 1.7 miles



Advisory shoulders are a federally-endorsed road striping treatment to create a center drive aisle in order to create advisory bike or walking lanes on either side. They can be applied with or without on-street parking.

#### Influences

- Residential neighborhoods & nearby schools
- Shopping along Park Street (west)
- Downtown
- 5th Street Crossing & O Street Connector

#### Challenges

- Park Street crossing and MDT coordination
- H Street speed management techniques
- Advisory lane and other speed management treatments will need education for road users and property owners along Lewis





### D. Gallatin/C/Chinook, Main to N St

This project, that when combined with the Gallatin/Bennett walkway project (A), will provide a complete, accessible sidewalk route and bikeway north of the railroad tracks between Main Street and Park Street. Where sidewalks exist, the project includes fixing sidewalk cracks and heaves, constructing ADA-compliant curb ramps, and speed management features. Bikeway improvements include route signage and wayfinding. Bike lanes are an option if on-street parking is prohibited.



**Cost Estimate: \$ 120,000**      **Project Length: 0.8 miles**

#### Project Details

- **Main St:** This may include Rectangular Rapid Flashing Beacons.
- **Gallatin/C:** Fill short sidewalk gap on north side at curve.
- Apply speed management techniques, such as curb extensions, median islands, landscaping and public art.
- **Long-term:** Pursue shared use pathway on railroad property side of the street.

#### Influences

- Residential neighborhoods
- Only continuous route north of railroad tracks

#### Challenges

- Determining appropriate speed management techniques
- Evaluate Montana St as alternative route option.

### E. 5th, Front to Park



This 400-foot segment has existing sidewalk but is commonly used by pedestrians and bicyclists to cross the railroad tracks. MDT is developing a project to upgrade this railroad crossing. It should include a 10-foot pathway on the east side and sidewalks on the west side, with crossing gates for pedestrians and bicyclists.

**Cost Estimate: TBD**      **Project Length: 0.1 miles**

#### Project Details

- **Sidewalks:** The west side sidewalks are desirable since there is likely to be this one opportunity in a generation to add them. It will provide a more direct route to planned Front Street sidewalks, west to Star Road.
- **Crossing:** Avoid chicanes or similar fencing that forces bicyclists to dismount to cross. This is a challenge, and considered discriminatory, to force bicyclists with disabilities to dismount as they may not be able to dismount and walk their bike through tight turns.

#### Influences

- Residential neighborhoods & nearby school
- Access to/from northside of tracks

#### Challenges

- Coordination with railroad and MDT on safe crossing treatments.
- Identifying on-street treatments for bicyclists who prefer road to pathway.



### F. Summit Street, 7th to Main - Sidewalk + Bikeway

Summit Street lacks a formal connection between 5th Street and 7th Street even though it is used as a pathway today. If this connection was formalized via acquisition of an alignment and construction of a pathway, it would provide a critical active transportation network linkage to North Hills neighborhoods. The combined bikeway route of 7th and Summit allows for a gentler grade on which to bike. Montana Street does not have sidewalks; constructing them along Montana would create other feasibility issues due to terrain. Sidewalk gaps exist east of 5th Street and along Main Street from Summit Street to Reservoir Street. This connection may warrant additional analysis of the Main/Summit intersection to include enhanced crossings with Rectangular Rapid Flashing Beacons and street-face push buttons for bicyclists.



#### Project Details

- 5th to 7th Connection:** While pathways exist, land will need to be secured to complete this connection. This does not require the connection to be straight along a conceptual Summit Street alignment, but it must not create major out-of-direction travel for users.
- Main Street:** A short sidewalk gap exists on the west side of Main along the church frontage. This should be filled with the Summit Street project or before.
- Trail Linkage:** With trails planned in the adjoining foothills, consider a north-south single track trail linkage from the cul-de-sac on Summit, east of 7th.
- ADA compliance:** The connection between 5th and 7th should be designated as a shared use pathway (SUP) and a firm and stable surface created for use by people with disabilities.
  - A SUP running slope may deviate from the 5% running slope requirements for sidewalks. FHWA identifies acceptable grades as:
    - 8.3 percent for a maximum of 200 ft;
    - 10 percent for a maximum of 30 ft; and
    - 12.5 percent for a maximum 10 ft.

Cost Estimate: \$ 75,000 - \$90,000

Project Length: 0.4 miles



The desire lines created by people who walk and bike on the Summit Street alignment between 5th and 7th indicate the demand for it to be a formalized connection. It requires land acquisition and consideration for a paved, ADA-compliant surface as it would be a necessary walking route to connect to North Hills Neighborhoods.

#### Influences

- Residential neighborhoods planned park
- Connection to future trails in North Hills
- Most suitable bicycling route along 7th to Summit to Main

#### Challenges

- Property acquisition or easement between 5th and 7th
- Terrain



### G. Yellowstone River Trail, Mayor's Landing to O Street Connector - Pathway

Identified in the 2007-2008 plan, this pathway provides a critical linkage to the O Street Connector for destinations such as Mayor's Landing, Schools, and other pathways. This includes access to neighborhoods north of Park St. It is envisioned as an unpaved shared use pathway and should be 10-feet in width. Some land acquisition is required, as is a bridge over Fleshman Creek. There is a City easement along the Q Street alignment that would allow a connection to neighborhoods north of Fleshman Creek (dotted line).



### H. Yellowstone River Trail, O Street Connector to Whiskey Creek Rd - Pathway

Also part of the 2007-2008 plan, this pathway represents the most suitable link for northside residents to access the pathway system. It is envisioned as an unpaved shared use pathway and should be 10-feet in width. The City controls the land in this area downstream from the railroad bridge to a border along Whiskey Creek Road. There is ample clearance under the Veterans Bridge and railroad bridge to accommodate pedestrian and bicyclist height. A pathway connection to Bennett St. is desirable to an unsignalized crossing of Park Street.

**Cost Estimate: \$ 140,000+**    **Project Length: 0.4 miles**

#### Project Details

- **Creek Crossings:** The alignment closest to the river allows for a single bridge to span Fleshman Creek. If the pathway is moved away from the river banks, it may require two bridges. Detailed design would identify other environmental factors that could influence the one-bridge route.
- **Q Street Alignment:** This connector requires a bridge over Fleshman Creek and an additional footpath to connect to the main pathway. M Street alignment could be pursued, but would require easement.

#### Influences

- Existing pathways and parks
- KPRK property

#### Challenges

- Bridges and property acquisition/easement
- Floodplain

**Cost Estimate: \$250,000**    **Project Length: 0.6 miles**

#### Project Details

- **Veterans Bridge:** A pathway along the south side may require additional retaining walls next to the bridge. Work with MDT to determine proper pathway placement between bridge abutments and river.
- **City Property:** The Wastewater Treatment Facility is located off the river and may have influence on the pathway alignment. Notable clearing of foliage and debris is necessary to secure a safe pathway alignment.

#### Influences

- Pathway link to north side neighborhoods, including Green Acres
- Access to/from northside of tracks

#### Challenges

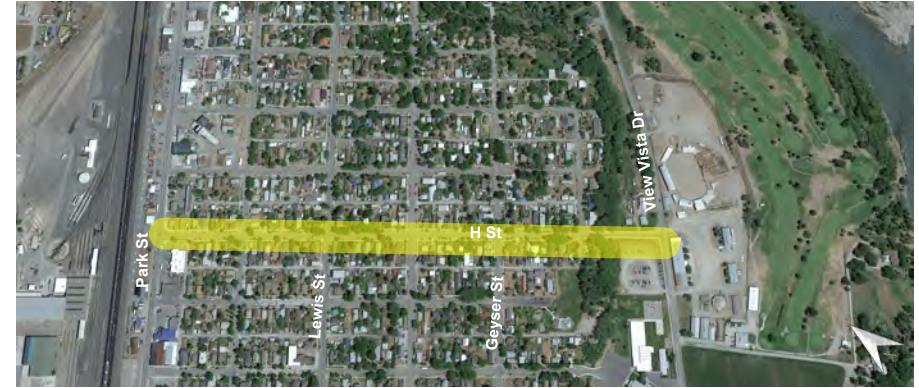
- Coordination with MDT and railroad for bridge underpasses
- Floodplain



### I. H Street, Park to View Vista - Sidewalks + Bikeway

This project is primarily a bikeway project as it serves as the only connector to View Vista Drive in the east sector of Livingston and provides a linkage to the planned Lewis Street Crosstown Bikeway. There is a sidewalk gap from Butte Street to View Vista.

Speed management techniques, such as curb extensions, should be considered at all intersections with enhanced crossings at Lewis. Other features, such as landscaping and public art can be considered. A mini-roundabout should be explored at the Geysler/H intersection as there is ample right of way. In lieu of a roundabout, the Geysler/H intersection should have curb extensions or other speed management features applied given it has highway-scale turning radii on all four corners while being signed as a school crossing.



#### Project Details

- **Park Street:** Construct directional instead of diagonal ramps crossing H Street.
- **Lewis Street:** Enhance crossing of H, as identified in the Lewis Street Crosstown Bikeway, to include Rectangular Rapid Flashing Beacons (crossing map, project N) with push buttons curbside facing the street for bicyclists.
- **H St:** Place signage on H Street to indicate a bikeway crossing is ahead so motorists are more aware. Consider enhanced crossing with Rectangular Rapid Flashing Beacon. Work with MDT to consider a raised intersection to help slow vehicles on H Street.
- **Butte St to View Vista:** Fill sidewalk gap on at least one side. Consider extruded curb walkway in lieu of full curb, gutter, and sidewalks.
- **View Vista Dr:** Install enhanced crossing with crosswalks if pathway is built along Fairgrounds route.
- **Long-term:** Explore options for the City to take control of this street from MDT so it can control its own destiny on the route.

**Cost Estimate: \$ 40,000 - \$200,000**

**Project Length: 1.7 miles**



High speed turn radii at H Street and Geysler Street create out-of-context conditions for this residential area that is also marked as a school crossing. There is sufficient right-of-way for a mini-roundabout to be evaluated. In lieu of that, the intersection needs speed management features, such as curb extensions or median islands.

#### Influences

- Residential neighborhoods & school crossings
- East side connection to the river & fairgrounds
- Lewis Street Crosstown Bikeway

#### Challenges

- Balancing the needs of pedestrians and bicyclists with special event traffic headed to fairgrounds
- Determining appropriate speed management techniques



### J. River Drive, 12th to View Vista - Sidewalks + Bikeway

River Drive is a key corridor linking the people of Livingston to the many recreational opportunities along the river, as well as several schools. It can also serve as an alternative route to Geyser. Despite being less than a mile long, this project has four different segments to consider when designing for people who walk and bike. Those descriptions are included below. The most constrained section is along Sacajawea Park where constructing a walking path on the north side may impact parking unless a route can be built behind the trees on the park side. Segment 3 represents a reimagining of this space to be more of a “festival street” with gates or bollards on each end that can close the street for events such as the Farmers Market. This may be incorporated into the site planning for the Civil Center project. Way-finding should encourage people to access this route and the many destinations along it.



#### Project Details

- Segment 1 - 12th St to McGee Drive:** Complete sidewalks (approx. 800 feet) and curb ramps on the north side of the street. This section of the street has curb along the frontage and the most notable sidewalk gap is along the Ninth Street Park frontage.
- Segment 2 - McGee Drive to Yellowstone Street:** Examine impacts on parking to designate walking path on the south side of the tree line or construct pathway north of the tree line in the park. Path may be a natural compacted surface.
- Section 3 - Yellowstone Street to Miles Park Rd:** This section could be reimagined as a “festival street” that integrates the north side of the Civic Center property and the shore along the Sacajawea Park Lagoon. This would create a shared street plaza in this area. Construct a gate or removable bollards on either end would close the streets during events.
- Segment 4 - Miles Park Rd to Main/View Vista:** Construct pathway on south side along forest and school frontage. May be an extruded curb pathway to lessen impacts on drainage.
- Long-term:** Explore options for the City to take control of this street from MDT so it can control its own destiny on the route.

**Cost Estimate: \$ 250,000+**

**Project Length: 0.8 miles**

#### Influences

- River, parks and recreation facilities
- Schools and neighborhoods
- Existing pathways and 12th Street sidewalk project.
- Tourism

#### Challenges

- Changing cross sections on existing streets
- Sacajawea Park Frontage
- Configuring parking during special events, with consideration of pedestrian access and safety



### K. Front Street, 5th Street to Star Road - Sidewalks + Bikeway

The Front Street project fills sidewalk gaps, replaces damaged sidewalks, and upgrades curb ramps along the north side of this nearly one-mile section of street. Sidewalks exist from 5th to 10th, which leaves a 2,300 foot gap in sidewalks between 10th St and Star Road. Curb ramp replacements are needed for ADA compliance from 10th to 5th along Front, as well as a crossing upgrade for people crossing 5th Street. The crossing upgrade should include a curb extension, crosswalk, and Rectangular Rapid Flashing Beacons (RRFB). While right-of-way exists to construct sidewalks behind the curb ramp 10th to Star, there are currently private properties using that public right-of-way for landscaping and to store automobiles. Bike lanes are possible with prohibiting on-street parking but may not be feasible due to existing parking utilization. Bikeway upgrades include wayfinding and shared lane markings.



#### Project Details

- 5th Street:** Construct upgraded crossing of the north leg of 5th due to lack of stop control. Include curb extensions and RRFBs. Project would connect to existing sidewalk across railroad on east side of 5th and possible pathway upgrade with MDT crossing project.
- 7th Street:** Consider raised crosswalk since this is near a school and 7th is a popular vehicle route to neighborhoods to the north.
- Pathway Connection:** There are opportunities for pathway connections up the hill to North 10th Street and the Livingston Ditch.
- Long-term:**
  - Explore options for the City to take control of this street from MDT so it can control its own destiny on the route.
  - The pathways and trails map shows a conceptual shared use pathway along the south side of Front, which is predicated on placing the pathway on railroad right-of-way.
  - Explore pedestrian underpass or connection across Park Street in vicinity of 10th Street.

**Cost Estimate: \$ 150,000 - \$200,000**

**Project Length: 0.8 miles**



#### Influences

- Only continuous street in this sector of town
- Washington School
- 5th Street railroad crossing
- Neighborhoods in this sector of the City

#### Challenges

- Determining speed management treatments
- Property owner use of public right-of-way where sidewalk gaps exist
- On-street parking limiting prospects for a bike lane



### L. North Hills Trails, East, Green Acres to Summit/Water Tower - Trail

NOTE: Trail alignments are conceptual and do not reflect detailed design or alignments to the degree that impacts to individual properties or structures can be known.

Single track trails are recommended in this section of the North Hills along two conceptual alignments—the ridgeline that runs east off of Ridgeway Drive and the unimproved Summit Street right-of-way. The trails would provide linkages to northside neighborhoods and potentially to the Green Acres subdivision area. The Summit Street right-of-way was platted with the original town site and was not created in consideration of existing terrain. Some of the land is city-owned but private property negotiations are needed to secure easements and identify final alignments. There are informal footpaths at the ends of streets that stub into this area that could be formalized when trails are built. Some may require access agreements with the Livingston Ditch Company. These trails were part of potential routes identified in the 2007-2008 Livingston/Park County Trails Plan.



#### Project Details

- Summit Street Alignment:** As noted, the Summit Street right-of-way is in line with the existing street, irrespective of terrain. Identifying the most suitable trail route along this general alignment would inform where the trail is feasible and inform any potential land swap with private property owners.
- Ridgeline:** Following the ridgeline from the end of Ridgeway Drive creates the most accessible and scenic route for this trail. It is in private ownership and easements would need to be negotiated and secured.
- Lettered Streets:** Identify most suitable streets to provide connections from their terminus to these trails.
- Trailheads:** Management of trailheads is important as use grows to reduce conflict with neighboring properties. Identifying a trailhead for parking access is recommended.
- Long-term:** Work with Livingston Ditch Company to formalize existing informal footpaths and stub street connections to these trails. This could be done in conjunction with a grant to help upgrade the ditch for maintenance and safety reasons. The City and/or County would likely pursue an indemnification agreement for this public access so the ditch company is not held liable for actions related to public access.

Cost Estimate: \$ 50,000

Project Length: 1.2 miles

#### Influences

- North Hills neighborhoods
- Need for recreational opportunities on north side
- Growth pressures
- Irrigation ditch

#### Challenges

- Private property along portions of or within potential alignments
- Terrain



## 5. Other Projects

The 20 projects that ranked in the middle and lower tier of projects are identified in Figure 5-1 (next page) along with conceptual design considerations. They are part of the overall project network shown in Figure 4-2 in the previous chapter. These may be considered long-term projects for implementation. Since less analysis was done on these projects due to their lower ranking, there are no cost estimates. Coordination with Montana Department of Transportation (MDT) is required for improvements along or across streets under their control.

Livingston will have a network of trails and active transportation facilities once this full system is upgraded or gaps addressed. The map of these 32 projects shows connections that will allow people to reach destinations and existing pathways in a safer manner.

**Be Opportunistic.** Just because a project is ranked in the middle or lower tier does not mean a chance to complete the project should be ignored. New development along these routes, along with sound growth policies, should ensure developers construct new or upgrade existing facilities along their frontage.

Projects to fill sidewalk gaps along Park Street may be prompted by MDT projects related to corridor changes or maintenance. The City can begin working with MDT to identify crossing upgrades as shown later in this chapter in Figure 5-6.

Livingston may consider a citywide bikeway signage and marking project that could address basic recommendations on the bikeway routes before implementation of other speed management features. These routes may also be candidates for temporary installation of things like curb extensions created with tubular markers or pop-up projects.

Trails included in this list, as well as on the Trails Master Plan map should have easements or construction of pathways and trails as a condition of new development (see Chapter 6. Trails Master Plan).



### Be Opportunistic

Just because a project is considered a lower priority doesn't mean opportunities won't arise to fill gaps in the system or require incremental upgrades as properties redevelop.

Projects like Park Street sidewalks (above) will require MDT coordination and the City, as well as advocates, can help prompt MDT to incorporate sidewalks or other alternative pedestrian walkways into Park Street when there is a resurfacing or other major project.

Projects like the Loves Lane sidewalk (left) were once thought to be a City-led project but now may come about as a result of development.





Figure 5-1: Other Projects. Middle and Lower Tier

Projects, Alphabetical By Tier		Type	Length	In Past Plans?	Description
Middle Tier	12th, River Rd to Park	SW+BW	0.4	No	Add sidewalks on both sides, designate bikeway & apply speed management features
	E St/Sleeping Giant, Lewis to View Vista	BW	0.5	Yes	Designate bikeway & apply speed management features
	Highway 89 Pathway, Myers View Trailhead to I-90 (MDT)	PW	1.8	Yes	Build paved shared use pathway
	Yellowstone River Crossing, Meyers Alignment	PW	0.1	Yes	Construct pathway bridge over Yellowstone River
	Lewis, H St to O St, and O St, Lewis to Park	SW+BW	0.6	Yes	Add sidewalks on north side east of M, designate bikeway
	North Hills Trails (West) Scenic Trail Rd to High Ground Av	TR	0.6	Yes	Build single track trails, including HRDC Ravine, to access existing city/county land.
	Park St, Hwy 10 to Geyser (MDT)	SW	0.6	Yes	Add sidewalks on north/west side
	Park St, I St to O St (MDT)	SW+BW	0.4	Yes	Add sidewalks on south side, designate bikeway & consider speed management features
Lower Tier	Park St, 7th to I St (MDT)	BW	1.3	Yes	Designate bikeway & consider speed management features
	5th, Park to Lewis	BW	0.2	Yes	Designate bikeway & apply speed management features
	7th, Front to Montana	SW+BW	0.3	Yes	Add sidewalks on east side, designate bikeway & apply speed management features
	Garnier/Old Clyde Park, Gallatin to City Limit	BW	0.7	Yes	Designate bikeway
	Highway 10 Pathway, Park to Printing for Less complex (MDT)	PW	1.6	Yes	Build paved shared use pathway, could be unpaved
	Miles, Gallatin to Maple	SW+BW	0.4	No	Add sidewalks on one side, designate bikeway & apply speed management features
	N St, Gallatin to Wineglass Ln	SW	0.2	No	Add sidewalks on east side
	Loves Lane, Pronghorn to Park	SW	0.1	No	Add sidewalk on south side
	Scenic Trail/Prairie Dr, Summit to Star	BW	0.7	No	Designate bikeway & apply speed management features
	Star, Front to Prairie	SW+BW	0.5	Yes	Add/replace sidewalks on east side, designate bikeway
View Vista, H St to Mayor's Landing	SW+BW	0.5	Yes	Add walkway on north side, designate bikeway & apply speed management features	
Yellowstone River Trail, South side, Meyers Lane to I-90	PW	2.1	Yes	Build unpaved single track trail	

SW = Sidewalk Project; BW = Bikeway Project; PW = Pathway Project (8-10 feet wide); TR = Trail Project (single track)



### Street Crossings

Creating safe crossings of major roads and along walk and bike to school routes should be pursued independently of corridor-level projects identified previously in this chapter. Crossing upgrades generally require a more detailed level of analysis as it is unwise to simply stripe crosswalks without considering other factors.

While the top tier projects must have crossing needs included in their design and construction, Figure 5-2 shows where enhanced crossings should be considered independent of these routes.

Several are recommended across MDT-managed routes and require that agency's approval. Existing school crossings on Park Street would be the first place MDT should upgrade to provide children more than paint and signs. Downtown crossings of Park Street, especially at Main Street and 2nd Street, are also needed.

Crossing Gallatin to provide access to Katie Bonnell Memorial Park is another crossing to increase safety for people going to the park and is worthy of short-term consideration by the City. Additionally, crossings of Main at River near the schools and the school crossing on View Vista between the schools are worthy of short-term attention. Designated school crossings along Geyser are also candidates, as is the north leg of 5th Street at Front.

**Rectangular Rapid Flashing Beacons (RRFBs).** Most pedestrian crossing upgrades identified for Livingston can be addressed through use of an RRFB. Shown on the next page, an RRFB contains a push button that activates yellow flashing LED lights to warn drivers of a pedestrian's intention to cross. They are most suitable along two- or three-lane roadways at speeds of 30 mph or less. Federal Highway Administration (FHWA) research shows RRFBs can reduce pedestrian crashes by 47%. A pair of RRFBs can cost \$10,000 to \$15,000.

Park Street, from Mountain View Lane to Bennett, has conditions that make RRFBs a suitable option for intersections that lack full traffic signals. Intersections like Bennett and four/five-lane sections of Park Street are not recommended for RRFBs.



### Crossing Upgrades

People decide to walk or bike based on the worst situation they have to overcome. This is oftentimes the crossing of a major road.

Streets in Livingston where pedestrians are most at-risk crossing are Park Street, Gallatin Street, and Geyser Street, as these are the routes with some of the highest volumes of traffic. Upgrades can include Rectangular Rapid Flashing Beacons and Pedestrian Hybrid Beacons.



RRFBs are also used for pathway and bikeway crossings with those used at on-street bikeway crossings having a connected push button facing the street from the curb for bicyclists.

Currently RRFBs require what's known as "interim approval" from FHWA because they are not yet formalized in traffic engineering standards. Luckily, MDT has received interim approval from FHWA for their use in Montana and this interim approval covers local agencies. This means the City of Livingston is allowed to use them on City-managed streets and they are approved for use on MDT-managed streets.

**Pedestrian Hybrid Beacons (PHBs).** These signals are a step up from RRFBs in that they require a full stop by motorists when pedestrians have the "WALK" signal and corresponds with solid red lights. Once pedestrians get the countdown signal, the red lights flash for motorists. Motorists may proceed if they first come to a complete stop and the crosswalk is clear.

FHWA studies show PHBs reduce pedestrian crashes by 55%. Because most types of PHBs require more complex signal control devices and signal pole and mast arms, their costs can be \$50,000 and higher. The image shown in the bottom right is a more economical example that's on a single pole but is not appropriate for streets wider than two lanes.

In Livingston's context, PHBs are most suitable for areas of routes like Park Street where it is more than two lanes wide. The general threshold for justifying a PHB is 20 pedestrians or bicyclists per hour willing to cross without protection of a signal device. Traffic engineers are allowed more leeway within federal guidance to deviate from these recommended thresholds when compared to the thresholds that are required to be met with full traffic signals.

Figure 5-2 on the following page shows where RRFB and PHB crossings may be considered, along with recommended signage treatments for pedestrian crossings, bicyclist and pedestrian crossings, and school crossings.

### Rectangular Rapid Flashing Beacons

Reduce pedestrian crashes by

# 47%

Source: FHWA



### Pedestrian Hybrid Beacons

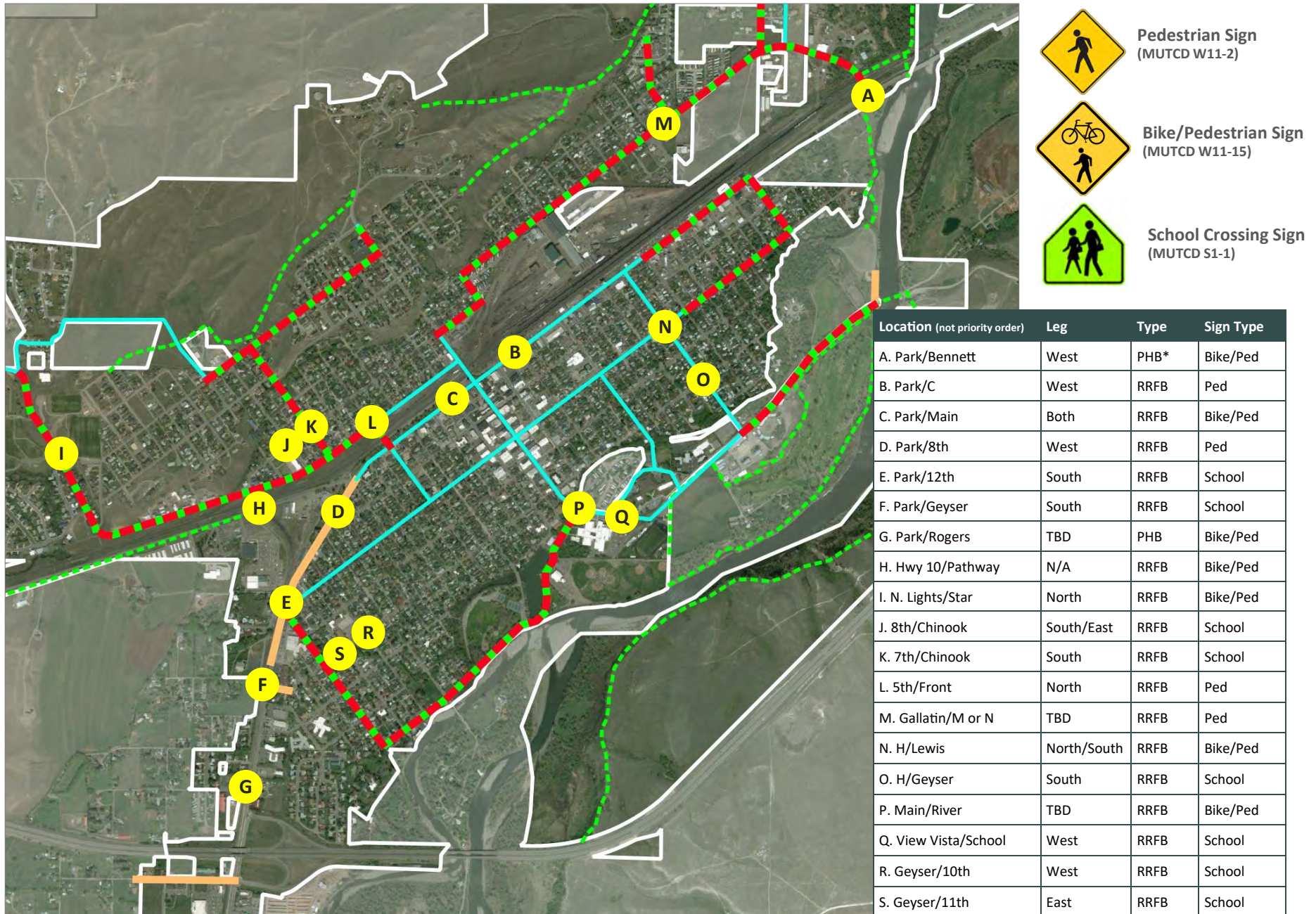
Reduce pedestrian crashes by

# 55%

Source: FHWA



Figure 5-2: Enhanced Crossing Recommendations



Pedestrian Sign  
(MUTCD W11-2)



Bike/Pedestrian Sign  
(MUTCD W11-15)



School Crossing Sign  
(MUTCD S1-1)



\* Full signal preferred or consider PHB if pathway link under bridges is not a short-term option.

### Railroad Crossings

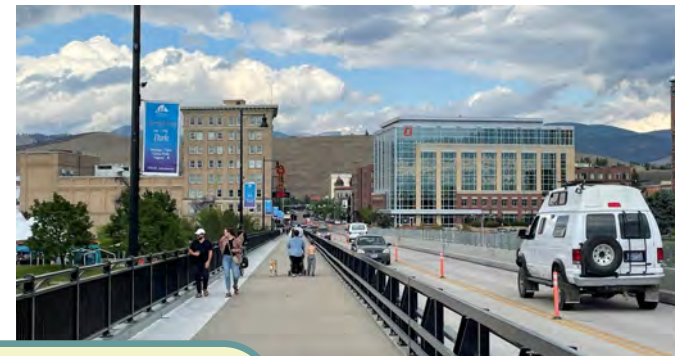
Whatever the timeline for the construction of an additional railroad crossing in Livingston, the design considerations for active transportation should recognize these investments occur infrequently. There's only one chance to get it right. A common design approach is to first layout all the needs for motorists, then add bicyclist and pedestrian facilities to the side. The result of this is frequently a maximizing of space for drivers and minimizing of space for pedestrians.

Any new or upgraded railroad crossings should be designed as a shared use pathway with a width of at least 14 feet on any bridge structure that includes railings. The shared use pathway may be 10-feet wide in other areas and include either a five-foot buffer from the curb or a vertical barrier if there is less than a five-foot buffer from the curb. Additional crossings may be considered for active transportation uses only and do not have to include automobile use.

The design needs identified above are consistent with the AASHTO *Guide for the Development of Bicycle Facilities* (2012) that was developed with input from agencies like MDT. The 14-foot width on a structure with railings is to account for shy distance from the railing as such vertical elements results in a reduction of effective width by 18 inches per side.

Given a major structure like a railroad crossing will likely have active transportation infrastructure on one side, design considerations must be given to how people who walk and bike will cross this road on either side of the structure in order to access their destinations. These crossings, whether full signals for all road users or treatments such as RRFBs and PHBs, should be designed into the project.

Regarding existing railroad crossings, recommendations for the 5th and Bennett crossings are included previously in this section. Any future rebuild of the Main Street crossing will be costly and may involve some tradeoffs. The goal should be a shared use pathway width as noted above, but narrower dimensions may be necessary to account for various realities associated with this crossing.



**Pathway Width & Vertical Barriers**  
 Vertical barriers reduce the effective width of a pathway. This is why bridges like those in Missoula (top) and Pocatello, Idaho (middle), are 14-feet in width to account for shy distance from these railings.  
 Additionally, when there is not horizontal separation of at least 5-feet from a road, a vertical barrier is needed to provide safe separation from motor vehicles (bottom).



## 6. Trails & Pathways Master Plan

The trails planning effort is intended to merge the findings of the City Parks & Trails Master Plan with Park County's Active Transportation Plan and Trails Plan into a combined map of potential trail routes. A systems-level approach includes on-street active transportation linkages to these trails that comprise the full Livingston Trails and Active Transportation Plan. The City and County should update land use policies to adopt this map by reference to ensure easements are secured when land develops or redevelops.

Trails are a general term for off-road facilities but may constitute a single track unimproved route or a shared use pathway. Trails are typically unimproved routes in a natural setting while pathways can be paved or unpaved and are oftentimes wide enough for people to walk and bike side-by-side.

Figure 6-1 on the following page shows the pathways and trails identified through this Plan for both the City and County to officially adopt as part of their policies to secure easements. The pathways and trails are labeled as follows:

- **Existing trails.**
- **Priority trails**, which are those that were ranked as projects for short-term implementation.
- **Illustrative trails**, which are identified for both long-term implementation and to secure easements along their general alignments.
- **Outside City Jurisdiction trails**, which link to trails within Livingston but are fully outside existing city limits.

As noted on the map, these alignments are conceptual and do not reflect detailed design or alignments to the degree that impacts to individual properties or structures can be known. The City and County should be flexible in securing alignments when properties develop to allow for site plans to serve both the public and private needs of the development. While this flexibility is inherent to the process, alignments should not deviate greatly from their intended

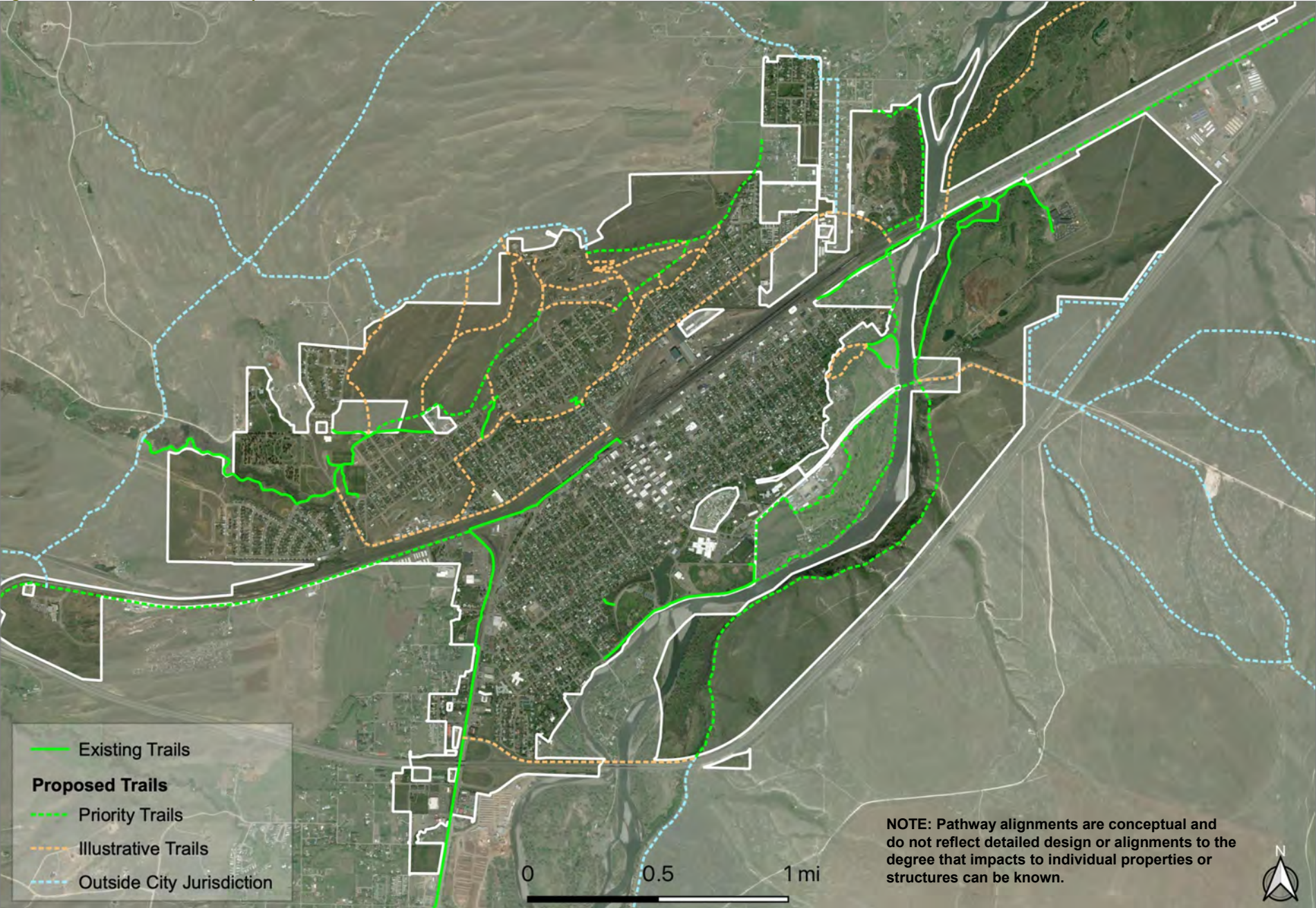


### Trails & Pathways

The plan for trails in and around Livingston is based on the premise that an interconnected system of trails, sidewalks, and bike routes will allow people to walk, roll, and bike for recreation and transportation. Trails and pathways range from traditional single tread trails (top) to wider shared use pathways along rivers and streams (middle) to paved sidepaths along major roads such as Highway 89 (bottom).



Figure 6-1: Trails Master Plan Map



purpose. For example, a pathway planned along the Yellowstone River should not be allowed to be routed away from the river in order for housing lots to front the river. Additionally, the City and County should work with developers to secure trailhead locations within some developments for people to access the trail.

### Types of Pathways & Trails

The design of trails and pathways is more complex and nuanced than the design of sidewalks and bikeways. This is because these facilities may exist in natural areas or along roadways. They may be paved, left in a natural state, or improved with natural but engineered surfaces. Widths may vary based on context, topography, and function.

The City and County may pursue development of specific pathway and trail design standards to ensure consistency across jurisdictions and provide clear expectations for the public and developers.

**Shared use pathways (SUP).** These pathways provide for people who walk, hike, or bike. Due to that, they must be at least 10-feet in width (eight-feet in constrained areas). SUPs may be paved or unpaved. If unpaved, the surface must be firm and stable with gravel no larger than 3/8-inch aggregate gravel on a compacted surface in order to be compliant with ADA requirements. Pathways along the Yellowstone River are considered SUPs.

**Sidepaths.** Sidepaths are shared use pathways along roadways. The same width requirements apply, as does AASHTO design guidance that states a vertical barrier should be included if a SUP is adjacent to a major road (Park Street/US 89, Highway 10) but is not separated by five feet or more from the top of the curb. Intersections with streets require curb ramps and marked crosswalks that match the width of the pathway, as well as ADA-related treatments.

**Trails.** Trails are used for hiking or biking and are typically built in natural areas and are sometimes referred to as footpaths. They may be of a single or double tread width. These trails are typically 3-ft (single tread or track) to six-ft (double tread or track) and surfaces

Single Tread Trail



Double Tread Trail or SUP



Sidepath with Buffer



Sidepath with Vertical Barrier





are comprised of dirt, gravel, soil, mulch, leaf litter, etc. Routes such as the Hopa Mountain Trail are considered single tread trail. The Bitterroot Trail may be considered a double tread trail and could be classified as a SUP.

The tread width of trails is oftentimes dictated by the context in which they exist. More natural or constrained environments often dictate a single tread design while areas along gentle streams and rivers may be double tread.

### City/County Collaboration

In order to avoid duplication of resources, Livingston and Park County should pursue a Memorandum of Agreement (MOA) to define roles and responsibilities for pathway and trail management. There is no need to buy two pieces of the same equipment for trail maintenance if one jointly-held piece of equipment can address current needs.

Additionally, identifying which jurisdiction is best suited to pursue and handle indemnification agreements for trails and pathways along or through private property is also advised. Generally, the liability insurance a public agency holds for parks and recreation facilities will apply to pathways and trails. Determining roles for individual pathway and trail alignments that are located within both jurisdictions is also advised so there is a clear expectation of responsibilities for maintenance and public communication.



Funding a full-time position for a regional trails and active transportation coordinator may be considered for continued City and County collaboration. This role could also be defined within an existing or future city or county staff member's job description if these duties did not warrant dedicating a full-time employee. The job duties could include project management, pursuing easements, and identifying grant opportunities.

### Development Policies

Chapter 7. Land Use Policy & Recommendations addresses ways in which the City and County can adopt the trails plan map by reference in subdivision regulations as a way to require dedication of constructed trails or easements as a condition of approval of development.

It is advised that the City and County policies are similar in their requirements in order to keep development interests from choosing one over the other if one agency happened to have a more lenient policy.



### City & County Roles

Many of the identified trails in this plan require joint efforts between the City of Livingston and Park County. Even routes that are primarily within the City, such as the connection from Miles Park to Mayor's Landing, have a county influence due to land ownership. These two agencies should pursue joint agreements and formalize other roles so there is little confusion over the roles and responsibilities of each.



## Stairs

The 2nd Street right-of-way between Gallatin and Chinook, along the west side of the Yellowstone Gateway Museum, could be an ideal location for a public stairway to provide pedestrian and bicyclist access along this route. These public stairways are common features in cities with terrain like Livingston's where full street connections were not built. Cities with similar stairways include Juneau, Alaska; Wallace, Idaho; and Lewiston, Idaho.

A public stairway would provide a more suitable option for walkers than the current walking trail and constructing the stairway with a "bike channel" (see images at right) would allow bicyclists to more easily walk their bikes up the stairway.

These projects are often overlooked due to concerns about ADA compliance. It is not the expectation of ADA that a grade be made fully compliant with switchback ramps next to the stairway. The designation of a comparable accessible route rather than an accompanying series of ramps fits within the intent of ADA. The City may pursue connections like the 7th Street and Summit Street sidewalks/pathway projects as suitable comparable routes for people using mobility devices, then sign and designate them as such.

## MDT Right-of-way & Bridge Underpasses

Montana Department of Transportation's (MDT) right-of-way along Highway 10 and Highway 89 is wide enough to accommodate the shared use pathways identified along those routes. As with the development policies, adopting this plan helps formalize the City's intent to pursue pathways within this right-of-way and for MDT to incorporate that into future project considerations.

Additionally, the right-of-way along the I-90 corridor, including the interchange ramps are identified as potential pathway linkages in the master plan map. This is important to adopt as the City's intent so MDT can incorporate a pathway alongside any future replacement of the I-90 bridges and alongside interchange ramps.

### Stairway to Gallatin

The 2nd Street right-of-way provides an opportunity for a public stairway to improve pedestrian and bicyclist access to the neighborhoods atop the hill.

Stairways can be built with bike channels that allow bicyclists to easily walk their bikes up stairway. There are several examples, including the two shown below. The one at right is in Missoula.



Figure 6-2: Pathway Concepts for MDT Right-of-way

### Pathways within State DOT Right-of-way: Opportunities in Livingston & Examples from Other States

Meyers Lane Underpass



I-90 Bridge



I-90 off-ramp right-of-way



Highway 10 Right-of-way

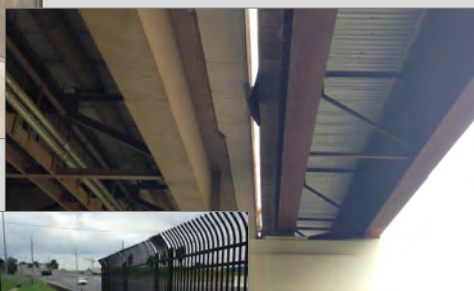


Veterans Bridge



Shared Use Pathway alongside I-15 over the Snake River in Blackfoot, ID.

Shared Use Pathway added to existing Hwy 129 expressway bridge over the Tennessee River in Knoxville, TN.  
Top Image: Underside of structure;  
Bottom Image: Pathway view.



Shared Use Pathway retrofit under Highway 55 bridge over the Boise River in Eagle, ID.

Shared Use Pathway within interstate right-of-way along off-ramp in Linthicum Heights, MD.



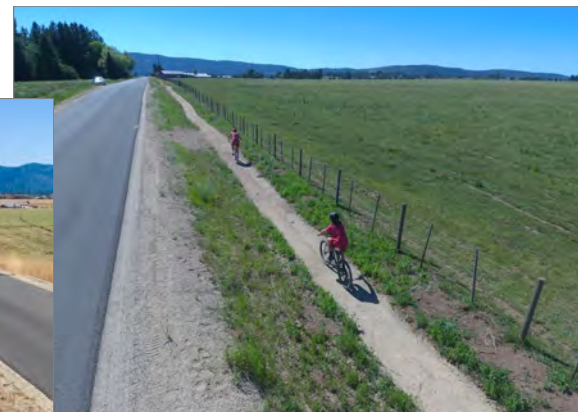
### Singletrack Sidewalks

Eagle, Colorado, and Valley County, Idaho, have programs to construct what are known as singletrack sidewalks—typically unpaved non-motorized pedestrian and bicycling trails constructed next to public roads. These facilities are located within existing right-of-way as a way to provide an active transportation option to destinations that are not linked by traditional sidewalks and pathways.

The images below are from recent construction of singletrack sidewalks by the non-profit organization, Valley County (ID) Pathways. They are designed to withstand weather conditions and stormwater runoff and avoid impacting existing stormwater facilities. The surface is 3/8-inch compacted gravel, which can be used by people who use mobility devices such as wheelchairs.

In 2019, Valley County, Idaho, amended its Code of Ordinances to include a section on Singletrack Sidewalks. The ordinance require a Memorandum of Understanding with a local organization for maintenance of these pathways and liability insurance. It includes the following design stipulations:

- Trails will generally be 24 to 48 inches in width.
- Should meander within the right-of-way around drainage, and obstacles, etc.
- Shall not inhibit roadway drainage or obstruct operability of the road.
- Constructed of a permeable natural surface but can be paved where appropriate.



### Singletrack Sidewalks

Roads in Livingston and Park County that lack sidewalks but have enough right-of-way to consider other options can benefit from singletrack sidewalks. These pathways run within existing roadway right-of-way to create an active transportation option for rural areas. They can be used to connect existing trails, sidewalks, and bikeways.

*Images: Valley County Pathways*



## 7. Land Use & Policy Recommendations

Infrastructure is a singular, though essential, element of a comprehensive approach to active transportation. In this plan there are a number of identified projects that, when implemented, will create a more complete network for walkers and bicyclists.

However, these projects will take considerable time to fund, design, and construct. As the City and its community partners work to address identified infrastructure needs, other efforts can further improve Livingston streets and trails by making changes and improvements through land use strategies and related policies.

The first section of this chapter focuses on big picture land use strategies that can be discussed among Livingston's leaders and citizens. The second section provides detailed recommendations for updating existing City code to align with goals of the Growth Policy Update and improve conditions for people who walk, bike, and use trails.

Sometimes a land use decision does more for active transportation access than infrastructure. The City and Park County control decisions on the location of offices, recreation facilities, and social services.

These infrastructure investments can be made through a lens of how the most people can access them without having to use a motor vehicle. Other public agencies, such as the school district, can also consider these factors with support from the City and County.

Other policies, such as zoning, help steer desirable land uses to areas that are walkable and bikeable. Mixed-use and dense development create more market demand for walkable and bikeable destinations and can shorten trip lengths.

Street design policies can ensure new streets have the same safe features as the original streets of Livingston and include speed management features such as curb extensions built by new development.

The Livingston Food Resource Center is a testament to how land use decisions can influence walkability as much as infrastructure investments. The profile below explains. While many land use



### Back to the Future

Livingston's most walkable and bikeable streets didn't come about as a result of profound policy and strict zoning ordinances. They were built the way they were because people had to get around without a motorized vehicle.

The United States has spent more than 100 years making such historic streets practically illegal by eliminating trees, mandating excess street widths, and promoting free or subsidized parking.

Livingston's street design policies should be organized to ensure new streets are built with the same features as historical streets.



decisions come about due to influences external to city policies, the City of Livingston can help promote and sometimes incentivize decisions like those the Food Resource Center made in its location decision.

### Land Use Strategies

Ensuring the Growth Policy Goals and Objectives become actual policies is crucial to achieving the City's vision. The specific Growth Policy goals pertaining to active transportation are identified in Chapter 1.

Unlike goals and objectives, policies are oftentimes the behind-the-scenes instructions and requirements that define how a city grows, manages, maintains, and operates. By amending and strengthening Livingston policies, many of the existing infrastructure shortfalls identified in the Active Transportation Plan can be prevented in other parts of the City as it grows. The themes identified in this first section help illustrate how the City can accomplish some of its Growth Policy goals while the specific policy changes identified in the next section help make those goals the law through changes adopted by the



#### A Profile in Walkability

### Livingston Food Resource Center

The original Livingston Food Pantry, established in 2006, was housed in a converted automobile repair garage located on North M Street in Livingston. Like food pantries in many towns, it was in a rather depressed part of town and difficult to access. There was no public transportation, no sidewalks nor marked crosswalks, and no traffic control such as stop lights. It was an unsafe location that had many barriers to anyone on foot, on a bicycle, or in a wheelchair. Even if you had automotive transportation, there was no place to park.

When the decision was made to pursue the development of a new food pantry facility in Livingston it was quickly decided that accessibility was a key determinate of its location. A high percentage of the food pantry's clients—people in need—do not own cars, or are not able to drive. This made “walkability” an important factor in identifying a new location.

A study was conducted to determine how many people, who the pantry served in the prior 12-month period, lived close enough to reach the pantry on foot, within five minutes. A circle was drawn around the old pantry location and the preferred location for the new pantry; anyone living inside the circle could walk to the site within five minutes. At the old site there were 25 people living inside the circle. At the new location there were 115. Plus, the new location had sidewalks, safe crosswalks, and traffic control.

When the new food pantry was completed in January 2015, the number of people visiting the pantry for assistance more than doubled – and included many people in need who had never used the pantry before, just because they couldn't get to it.

*Images: Livingston Food Resource Center*



Planning Board and City Commission.

Active transportation policies help match the daily mobility needs of residents to land uses. This also occurs through strategic planning and investment in particular locations within the City. Examples include goals pertaining to infill and brownfields.

Further, some policies lead to faster, tangible changes in walking and bicycling habits of residents and begin to build momentum towards a city where residents walk and bike for utility purposes as much as for recreation. Others will require patience and time as implementation will be gradual and benefits therefore delayed.

The following section is intended to illustrate policy actions that, if taken, can improve active transportation participation rates among Livingston residents.

Each of the policies are presented as suggestions to pursue in concert with street infrastructure and design changes enacted by the City, MDT, and other community partners.

If the policies are implemented, the results should include:

- Land uses that stimulate walking and bicycling trips due to appeal and proximity;
- Significant increases in students and parents walking and bicycling trips;
- Reduction of local vehicle trips and peak hour congestion, particularly at key intersections and rail crossings;
- Reduced household expenses resulting from fewer vehicle trips;
- Improved local air quality resulting from fewer vehicle trips and idling;
- Numerous health benefits gained from walking and bicycling; and
- General heightened awareness among drivers of the presence of pedestrians and bicyclists.



#### In their own words

#### Alison Shannon

I live just a mile from work and love my 5-minute ride. Our community is small, often times biking is faster when getting across town during those busy morning commuting hours, and I get a little pick me up before getting to the office.

My husband (boyfriend since high school) has a similar story: Biking was the affordable option and he fell in love with it like I did.

I grew up just outside Boston, MA. Commuting by bike is a lifestyle. As a kid I either had to take the bus or bike to school, once I could drive my dad made it clear I could bike or buy my own car, well I already enjoyed biking so I kept it up.

We take long overnight bike trips, once even from Boston, MA to Hamilton, Ontario, for my husband's grandmother's 90th birthday. But we mostly did it because it was more affordable. Our son Emmett quickly fell in love with it as well, first being toted around in a trailer, then a trainer bike attached to ours and now his own.

We purchased a car at 28 years old. It still is used, mostly for adventuring on weekends. My husband uses the commuter bus from Livingston to Bozeman to get to work and when the weather is nice he bikes the 37 miles home.



**School Operations.** A city the size of Livingston typically sees above average walk and bike rates to and from schools. This is due to the general scale of the city and lower volumes of traffic, which contribute to a feeling of safety, and central location of campuses.

Transporting kids to school means choosing one of the few rail crossings or paying an additional fee for bussing. Essentially, for many students living in Livingston, walking or bicycling to school is simply not an option due to the distance, limited and potentially hazardous crossings, and lack of existing infrastructure.

Fortunately this can be changed by revisiting and reversing how elementary schools are organized. As has been the policy of the school district for a generation, elementary schools do not serve traditional Kindergarten through 5th grades. Instead, the three elementary schools serve two to three grades only with Washington Early Foundations Center serving Pre-K and

Kindergarten (blue dot), BA Winans Elementary serving 1st-2nd grades (red dot), and Eastside Elementary serving 3rd-5th grades (yellow dot). This policy is set by the Livingston School District.

Such a policy means that unless a child lives near the campus for the two to three years they would attend, attending three different schools from Kindergarten through the 5th grade is typical.

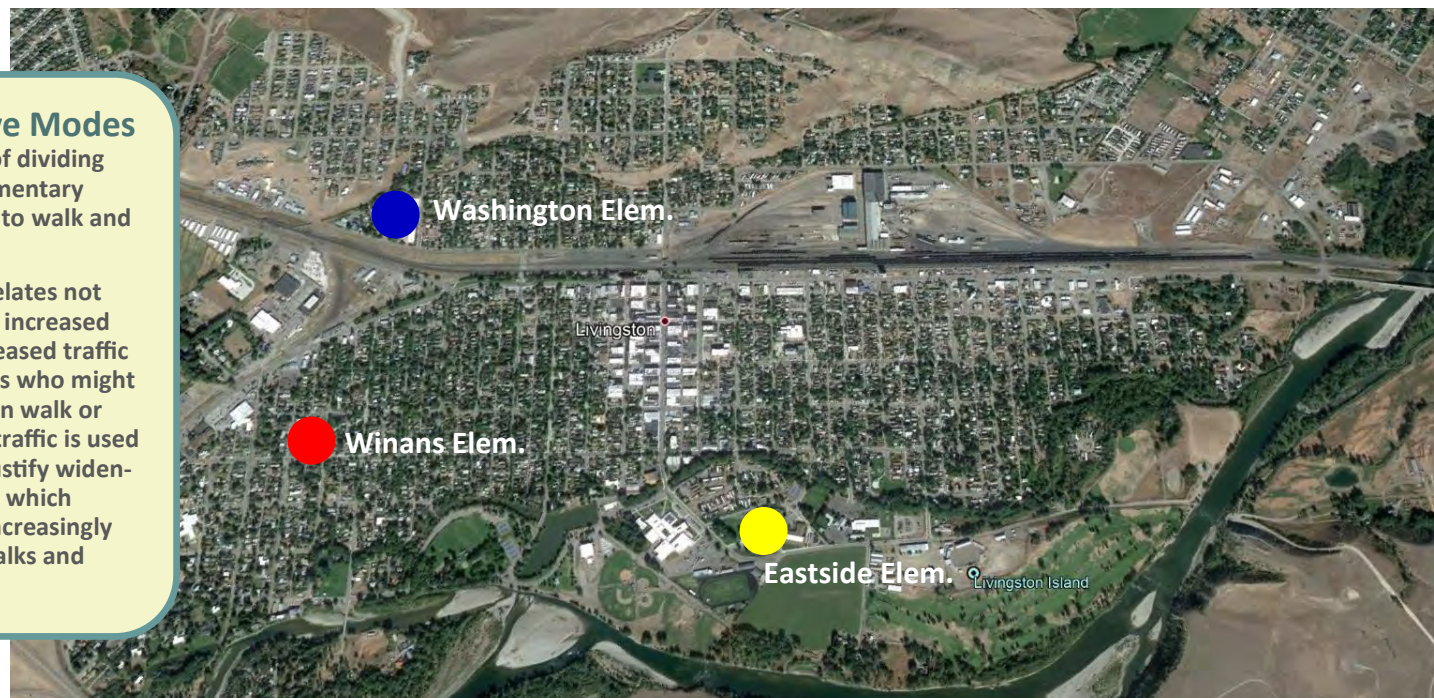
As currently configured, many Livingston students are required to travel more than a half-mile to school and in some instances, required to cross an active rail crossing or use the Main Street underpass which is limited for bicyclists and subject to flooding.

If children are allowed to do that, students then need to cross Park Street, which is a heavily-trafficked state highway. All of these factors contribute to a limited number of students participating in active transportation to and from school.

### Schools Limit Active Modes

The long-standing policy of dividing children among three elementary schools limits their ability to walk and bike to school.

The other effects of this relates not only to health, but also to increased motor vehicle traffic. Increased traffic raises fears among parents who might otherwise let their children walk or bike to school. Increased traffic is used by agencies like MDT to justify widening intersections or roads, which oftentimes makes them increasingly unsafe for anyone who walks and bikes.





Beyond limited walking and bicycling rates, the issue has additional implications. For parents, transportation to each campus can be arduous, particularly for those living on the north side of the rail corridor. In households with children enrolled in the 1st grade or above and located in north Livingston, all schooling takes place on the south side of town. These frustrations were expressed when Park County Environmental Council conducted school surveys in fall 2021.

By reverting the three elementary schools back to Pre-K through 5th grade, or some similar version, students will instantly be closer to the school campuses for up to seven years rather than two to three.

Simply stated, local school policy is causing negative direct traffic and active transportation effects that can be reversed. That's not to say it's an easy policy change, as other factors and politics are involved. But it is likely the single-most important policy change that could be made to reduce reliance on automobile trips to and from schools.

**Other Impacts of School Policy.** The proximity to school matters and is a fundamental element of a successful walking or bicycling environment. If students are not walking and bicycling, it means they are being driven to school or bussed. With bussing costing families additional fees, many choose to drive their kids themselves.

This action adds significantly to morning traffic. Many vehicle trips are occurring in Livingston unnecessarily, which induces congestion and vehicle miles traveled, and increases household costs. Such traffic also registers in vehicle counts and intersection delay, both being used to determine capital improvement projects for roadway widening.

Students typically walk at a pace of 3 miles per hour. This translates into a 10-minute walk to cover a half-mile of distance. While some students and their parents or guardians are willing to walk farther than such a distance, using this as a guide demonstrates an



**Traffic Inducing Traffic**

*Cartoon by Ian Lockwood, PE*



important fact in the city: If the school district reverted back to having three conventional elementary schools, the vast number of students would be within the half-mile walk shed, as illustrated below.

Furthermore, by doing so, the vehicle congestion seen at the limited rail crossings and Park Street intersections should decline as travel behaviors change and the need to make a crosstown trip is eliminated. With the likely increase in active transportation trips made by students, household incomes could see a modest increase as vehicle trips or bussing fees are reduced.

Health impacts derived from walking and bicycling would also occur bringing additional physical activity into the lives of participants. This is important since most US children do not meet daily physical activity recommendations set forth by the CDC and walking or bicycling is one way to help attain that activity.

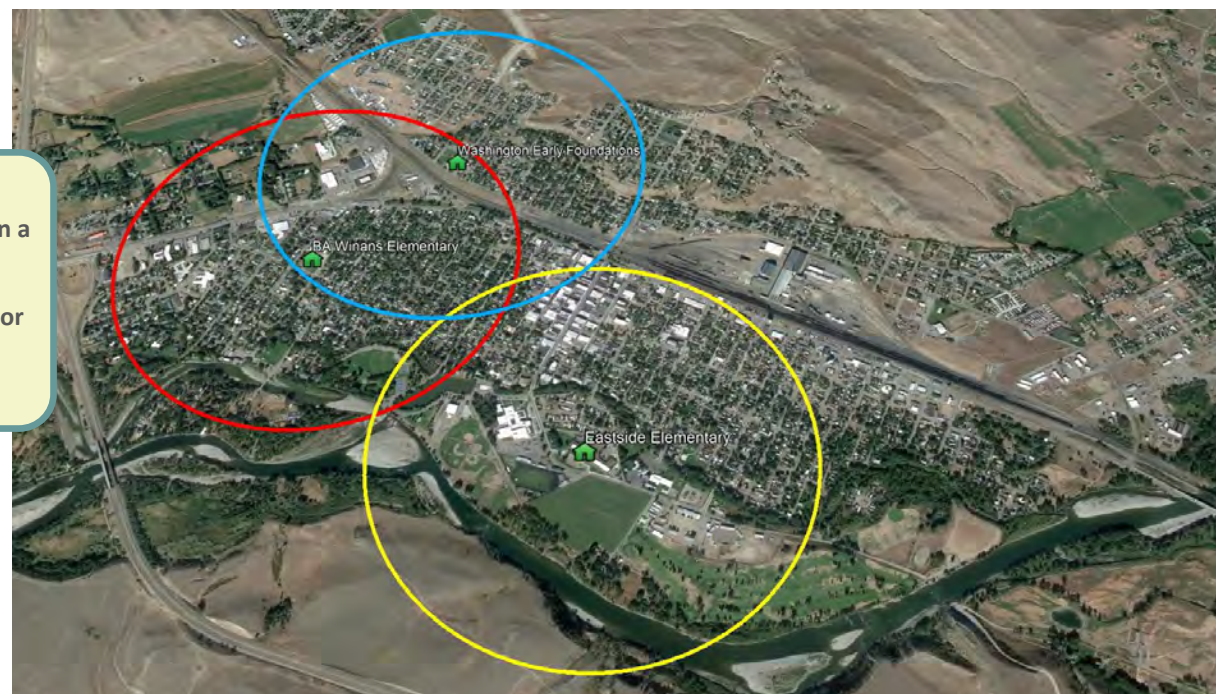
According to the US Census, approximately 600 children live in Livingston and are Pre-K through 5th grade age. With residential land use patterns being what they are, it appears roughly two-thirds of students live within the half-mile radius of one of the three schools.

Walking and bicycling rates among students living within this distance can reach between 25-50%. This translates into a possible raw number of 100-200 (25% of 400 and 50% of 400) students who could regularly participate in active transportation.

If combined with improved infrastructure, the rates of walking or bicycling to school could increase substantially. As the city grows, the northeast portion of Livingston will likely need an elementary school. If such a campus is built, the proximity to the neighborhood will further reduce families' need to drive to school and higher participation rates among K-5 students can be realized.

### School Walksheds

A change in school policies could mean a majority of Livingston's elementary school age children would be within what is considered a suitable walking or bicycling distance from their school campus.



**Land Uses North of the Railroad.** The current land uses north of the railroad tracks in Livingston are dominated by residential neighborhoods. With few exceptions for light industrial, municipal, or religious institutions, commercial and retail outlets do not exist.

This reality, coupled with the school issue, means most walking and bicycling trips generated from the north are due to lack of vehicle access or recreation. To generate a greater interest in walking or bicycling, a combination of infrastructure improvements and land uses that attract users is necessary.

The number of residents on the north side may not meet requirements of grocers but could meet demand for owners of a smaller footprint market. Other land uses such as small restaurants, social club like a brewery or coffee shop, or other neighborhood-scale businesses may be feasible. This type of development would most likely succeed in a single planned development rather than piecemeal one-off structures and parcels.

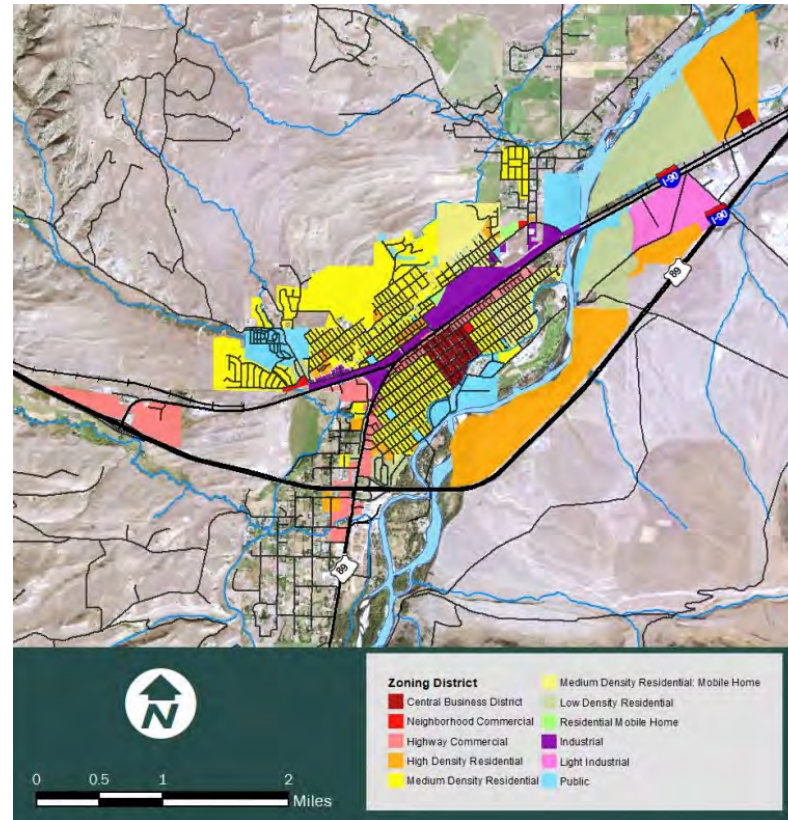
As noted earlier in this chapter, there are some decisions that are directly controlled by the City, County, and school district. Private land use decisions will be either market-driven or require incentives.

New development could spur utilitarian walking and bicycling trips and give residents on the north side of the city reasons beyond recreation to participate in active transportation.

Zoning for and promoting this type of a development could lead to reduced demand for crossing the railroad tracks. The current zoning map (Figure 7-1) shows limited pockets for such development north of the railroad tracks.

**Sidewalk Requirements.** While every motorist in Livingston enjoys the convenience of pulling out of their driveway and having a road to connect them to their destination, the same cannot be said for someone wishing to use a sidewalk from their home.

**Figure 7-1: Livingston Zoning Map**



Source: 2021 Growth Policy Update



Sidewalks were not constructed with the new development in several areas of Livingston. If sidewalks are not required at the time of development, especially with larger projects, the opportunity is lost and the public is left to address the shortfall at a later date, likely costing even more money and more complexities as residents may be less supportive of sidewalks after the fact.

In the pictured examples in Figure 7-2, both developments were built between 2005 and 2007. Sidewalks were not mandated or were granted a waiver by either the City or the County. Fast forward to today, and these neighborhoods have residents now asking for safe walking infrastructure.

Now, instead of the developer funding the sidewalks up front, it is Livingston residents and current decision makers who need to determine how to pay for this infrastructure. This may be done through policy mechanisms such as sidewalk utility fees, but those take more political action and are not without controversy.

While sidewalks add to the overall costs of a project, without them being required by land use policies the system is left incomplete. The convenience of a connected system that every motorist enjoys is denied for those who wish to travel by walking or rolling. Safety is compromised when such gaps are in place as people are forced to use unprotected shoulders or move within mixed traffic.

Recent development projects in Livingston do not reflect the previous policies and projects are being built with solid sidewalk systems from the outset. The neighborhoods pictured below serve as reminders for current and future generations of what can result without implementation of walking infrastructure from the development stage.

These decisions are not made in a vacuum, as adding costs for new development via sidewalks that are buffered from the street and have trees like they do in older parts of Livingston, may be viewed as policies that conflict with affordability goals.

**Figure 7-2: Recent Developments or Individual Parcels Lacking Sidewalks**



This is why other methods, such as fee in lieu programs or a sidewalk utility fee may be explored, in addition to land use policy changes. In some cases, the city may incentivize developers who are meeting goals for affordable housing by contributing to certain infrastructure costs, such as sidewalks.

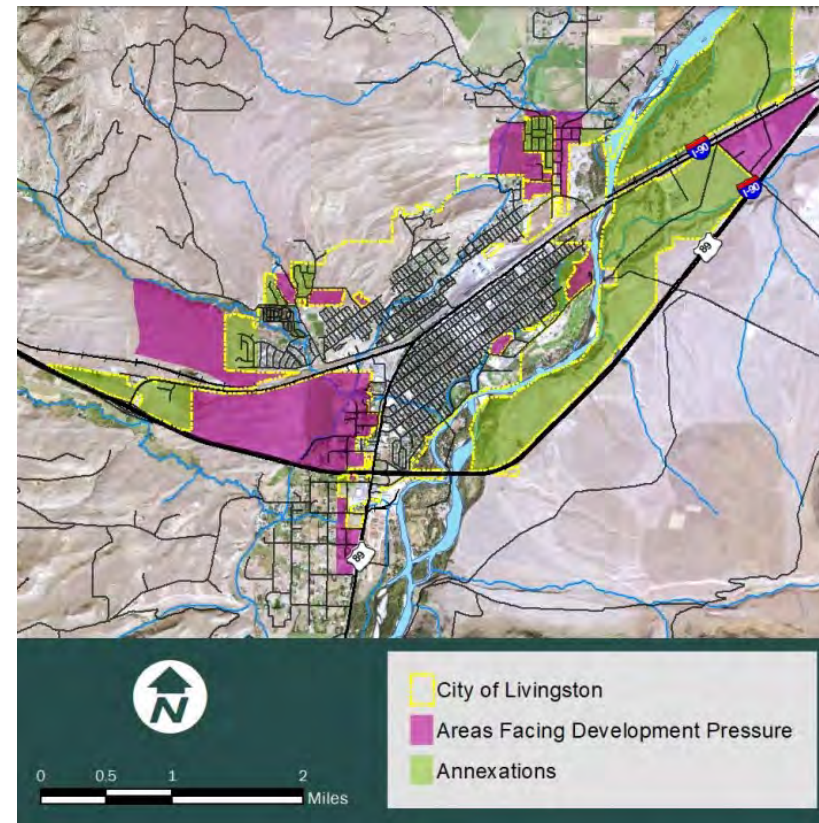
**Future Growth Areas.** Most of the land uses needed by everyday residents of Livingston are concentrated in a few key locations. These are on the south side of the railroad tracks and Park Street. Furthermore, as was expressed in many discussions, the City is currently facing a void of needed business types such as apparel stores, general department stores and the like, after the shuttering of Shopko. The transition of downtown over many years has led to few businesses offering everyday wares for residents. Accessing current businesses is a challenge for those living north of Park Street and the railroad as well as on the far east side of town.

Not only is travel by foot or wheel difficult from existing north side residents, future growth is largely taking place in the north or slated to occur east of the river, which presents another obstacle. With new neighborhoods comes greater demand to cross at key intersections until the non-residential land uses are developed in closer proximity. The two largest pockets of areas facing development pressure and recent annexations are south of the railroad tracks (Figure 7-3).

To mitigate this reality, improving the crossings of the rail corridor and Park Street will be imperative and north-south infrastructure connecting neighborhoods to city centers is vital. Zoning for a mixture of land uses within currently zoned residential areas is another method worth considering. Reducing the crossing demand and shortening travel distances from homes to needed services is ideal.

In addition to zoning tools, the City could explore public/private partnership opportunities to attract such land uses sooner than what the general development market may bear. An example could be a rental agreement using City owned land. Such an agreement could significantly reduce monthly costs to a retailer in exchange

**Figure 7-3: Recent Annexations and Areas Facing Development Pressure**



Source: 2021 Growth Policy Update



for the potential for reduced revenues possible in comparison with other more predictable locations. Some degree of City involvement may be necessary to attract retailers to the north side of Livingston given the distance from the highway and bulk of rooftops that exist on the south part of the city.

**Promote Recreation While Growing Utility.** Livingston is a community with numerous trails, paths, and recreational opportunities. These attractions and facilities translate into many residents taking advantage of them and regularly participating in active transportation. The input survey appeared to showcase this.

This foundation of active transportation trips for recreational purposes is viewed as an opportunity to grow participation in utilitarian trips. As policy and land use changes occur over time and infrastructure improvements are completed, a correlating increase in people walking and bicycling for purposes other than recreation should follow.

A walk to the grocery store or market, a bike ride to a local employment center, or using any active mode for an evening meal with friends, are all examples of what is to come in Livingston with the natural and pursued changes sought by residents.

In the meantime, bolstering the momentum that exists in the recreational space can help persuade residents to take active transportation trips for other purposes. To do this, the community as a whole can examine and augment offerings at the existing parks, improve access to trails and trailheads, invest in wayfinding to depict the sense of time to reach destinations, organize events like walks or bike rides through town, and possibly expand recreational opportunities into locations where such facilities are at a minimum.

These relate to decisions within the control of the City and County. Questions that should be answered are:

- Are the park sites distributed equitably in all parts of the City?
- Do the offerings at park sites match the desires of adjacent populations?
- Are the recreational outlets dated or are new forms of recreation sought?
- How do the facilities at schools address the needs of the community?
- If a person wanted to ride a bike to a park or other facility, can they safely lock up the bike or are they left without such necessities?

### Advance Recreation, Equitably

In the short term, promoting active transportation for recreation or to reach recreation destinations is the key to creating a willingness for utilitarian trips.

Increasing walking and bicycling trips can be gained by ensuring park sites and trails are equitably located through Livingston and are accessible via safe active transportation routes from nearby neighborhoods.



**Upgrade Gateway Corridors.** In an ideal world, corridor projects like those MDT may pursue on Park Street and Highway 10 would be evaluated like any other land use decision. There are other governance and policy limitations that prevent that, but looking at highway projects as land use decisions can assist Livingston’s elected leaders, staff, citizens, and advocates to strongly suggest MDT design these routes in consideration of MDT’s 2015 Context-Sensitive Solutions guide, City policies, and adopted plans.

The Growth Policy Update chapter on Population and Community Character includes the following:

- Strategy 2.1.1.1: Identify key roadway and non-motorized entry points – or Gateways – into Livingston.

A zoning overlay district for gateway corridors is something the City can pursue for all identified gateway routes. The gateway to Livingston off of US Highway 89 and I-90 on the southwest side of the City generally lacks refined design treatments to suggest it is a key gateway to the City and Yellowstone National Park. There is a

great amount of visual clutter from highway signs, utilities, and other roadway infrastructure. The effects of this are amplified for people walking and bicycling, as they are subject not only to these visual detractors, but also noise and emissions.

The City should work to ensure other entry points to Livingston along US Highway 89 to the northeast and Highway 10 to the west are not subject to transportation engineering and land use decisions that create a gateway similar to US Highway 89 around Exit 333.

Additionally, the City should pursue coordination with Park County, MDT, and the National Park Service to reimagine the Exit 333 area as a safer and more attractive entry point for Yellowstone National Park-based travelers and visitors to Livingston.

Converting interchange ramps to roundabouts at Exit 333 would provide opportunities to enhance visual appeal and safety, as well as providing context-appropriate public art in the interior circle island of the roundabouts.

### Gateway Corridors

The Exit 333 area of Highway 89 can be reimaged to remove visual clutter and enhance the safety and aesthetics for people who walk, bike, and drive. The roundabout outside Grand Canyon National Park on Arizona Highway 64 in Tusayan (below) is a great example of how roundabouts can include public art and make a gateway more inviting and fit the context of a community.

*Image: Tusayan, Arizona - National Park Service*



### Subdivision & Zoning Policies

The first section of this chapter addresses larger, overarching approaches to align land use and school policies to promote walking and bicycling. This section includes specific policy-based recommendations for the City of Livingston to include in its Code of Ordinances. Documents such as the Trails and Active Transportation Plan, as well as the Growth Policy Update, are only as good as the policy changes that occur once they are adopted.

**Growth Policy Update.** The overall content of the Growth Policy Update, when implemented, will support greater trails and active transportation opportunities for the people and visitors of Livingston. Goals to promote infill and compact development, address climate change, enhance air quality, and promote a mix of housing are supported through the recommended policy changes.

The proposed ordinance changes included in this chapter are focused on implementing the goals, objectives, and strategies contained in the Transportation chapter of the Growth Policy Update. The key elements of that chapter related to ordinances are shown in Figure 7-4 at right.

Figure 7-6 on pages 75 through 78 outline specific policy-based changes for the City to enact to achieve these and other goals. Historically, zoning and subdivision ordinances focus on the movement and needs of motor vehicle traffic and do little to put people who walk and bike on equal footing.

The recommendations contained in this chapter are generated to put Livingston at a leading edge of policies for small cities to ensure a balanced assessment occurs when land develops.

The railroad and MDT are major influences on the safe movement of pedestrians and bicyclists in Livingston. It is desirable that any redevelopment or zoning actions on railroad parcels be subject to the requirements set forth for other private landowners as it pertains to pathways and sidewalks.

Figure 7-4: Growth Policy Update Strategies

Ordinance-based Recommendations
Strategy 8.1.1.1: Adopt an ordinance requiring sidewalks on new developments within City limits.
Strategy 8.1.1.4: Create a process to explore connectivity between City trails and parks to the larger outlying trails network.
Strategy 8.1.1.5: Consider installing outlets for pedestrians and bicyclists in cul-de-sacs and dead-end streets.
Strategy 8.1.2.1: Explore developing roadway standards that accommodate bike/auto/pedestrian and transit.
Strategy 8.2.3.1: Ensure zoning ordinance and subdivision regulations require multi-use trail and/or sidewalk connections to existing and future development.
Strategy 8.2.3.2: Require that right-of-way is dedicated to the City during the subdivision review approval process.
Objective 8.2.4: Ensure that bicycle, pedestrian, and trail connectivity is evaluated in all requests for modification or abandonment of public rights-of-way or access easements.
Strategy 8.2.7.2: Ensure that all transportation modes are provided for when constructing new roadways, including: sidewalks, bikeways, and vehicular and public transit rights-of-way.





**Recommended Ordinance Changes.** Several Growth Policy Update strategies show the need for bolstered policies in the City's subdivision and zoning ordinance language. A lesson learned from recent history is that when developers do not build sidewalks with their properties, it is Livingston residents and current decision makers that are left to determine how to pay for the infrastructure.

While sidewalk costs as part of development do add to the overall costs of a project, omitting them as part of a development puts a greater burden on taxpayers in future years. When sidewalk segments are built along the frontage of new development it makes it easier for a public agency to fill the gaps.

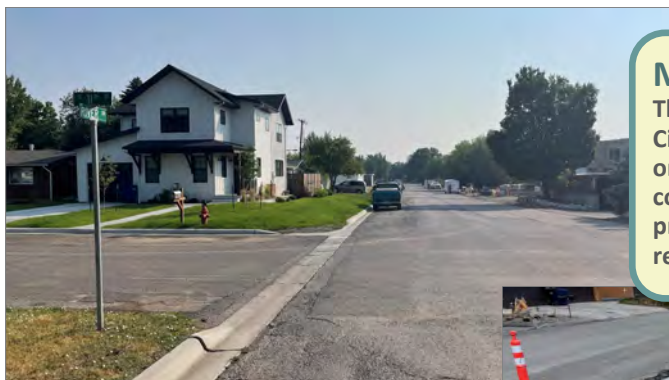
Recent development projects in Livingston do not reflect the previous policies and projects are being built with solid sidewalk systems from the outset. However, the current Livingston subdivision regulations are ambiguous about sidewalk requirements. The policy recommendations found on the following pages include recommendations for this and other active

transportation needs. If properties subject to these ordinances already have sidewalks, then they should be required to upgrade the sidewalks to meet current policies for width, fix any driveway crossings that have cross slopes greater than 2%, and upgrade curb ramps to meet current ADA requirements.

Additionally, Livingston's current ordinances make no reference to the need for new development to dedicate an easement or construct pathways. The Trails and Active Transportation Plan includes a Trails Master Plan map that can be adopted by reference in the City's and County's ordinance so policies related to requiring sidewalk construction also apply to trails.

For bikeways, the City should reserve the right to designate new routes if proposed public streets provide connectivity from arterials, collectors, or other bikeways to pathways or other generators within the development.

Addressing policy with block length maximums will promote greater active transportation. Shorter block lengths typically lead to



### Mind the Gaps

The Trails and Active Transportation Plan recommends filling the sidewalk gaps along River Drive. The City's policies should reflect these identified needs by either requiring new development (such as the one shown at left) to construct sidewalks along the frontage or provide a fee in lieu deposit for the cost of sidewalks that can be used by the city to fill gaps in the system at a later date. Requiring properties to upgrade curb ramps as a condition of approval is also advised, like was done in the redevelopment of the hospital site (below).



greater accessibility throughout an area for pedestrians and bicyclists. Shorter block lengths increase opportunities for crossings and provide more direct routes for pedestrians – and they limit traffic speed. Shorter block lengths also tend to disperse traffic, resulting in fewer roads that are congested by automobiles.

Connectivity requirements are advised in the form of regulating block lengths in new developments to be consistent with the original street grid patterns established in Livingston.

These policies are already in the process of being updated to require blocks that are 366 feet by 466 feet to match the original townsite. Policies should also be added to specify maximum block lengths and conditions under which blocks may be longer than 466 feet.

Where block lengths are longer, the City should examine individual development applications for recommended mid-block crosswalks. In addition, we recommend that cul-de-sacs and dead-end streets be strongly discouraged unless required by topography and other constraints. When that occurs, micropath should be required to provide active transportation access and may serve as secondary emergency service access points. Micropaths should also be required on lot lines if there are nearby trail or pathway connections.

**Other Policy Pursuits.** Create a Special Improvement District in which the costs of building sidewalks in the existing gaps are distributed across the properties that front the new sidewalk. The City then assesses the property owners their share annually, for a period of up to 20 years. This spreads the costs of sidewalk construction, as opposed to the property owner paying the entire cost at the time of construction.

Allow new developments to pay a fee-in-lieu of building sidewalks on only one side of the street. Those fee in lieu funds would then be used to complete the existing sidewalk gaps.

Figure 7-5: Traditional Street Grid vs. Suburban Street System

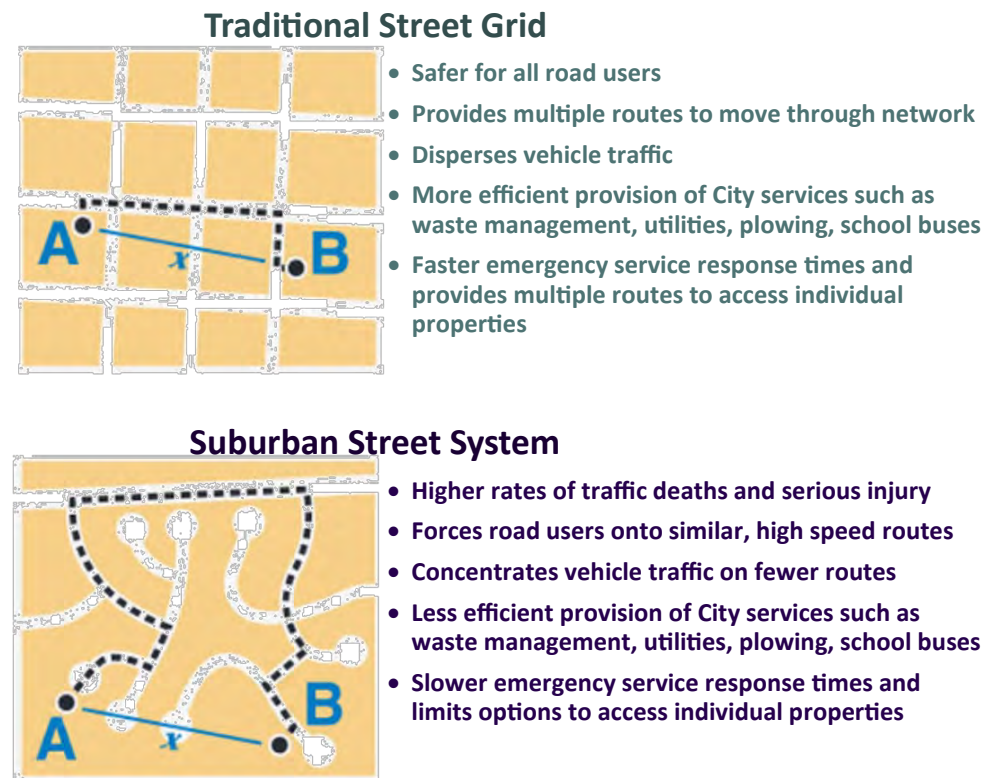


Figure 7-6: Ordinance Recommendations

Section of Ordinance	Assessment
<b>Chapter 26 - Streets and Sidewalks</b>	
<b>Section 26-6. - Marking or painting on sidewalks, curb or pavement.</b>	This policy may come in conflict with pop-up projects and other demonstration projects recommended in this plan. Consider revising to clarify purpose of marking a sidewalk for valid transportation uses.
<b>Section 26-10. - Permit for sidewalk installation or repair.</b>	Add requirements to comply with the Manual on Uniform Traffic Controls Devices, Section 6, for pedestrian circulation and accessibility. Sidewalks must have signed detour routes and the detour route must be comparable to the closed sidewalk from an accessibility standpoint (e.g. if the closed sidewalks has curb ramps, then the detour route must have ramps). In general, sidewalks closed for repairs should have barricades that cover the full width of the sidewalk and are detectable to people who are blind or vision-impaired.
<b>Section 26-11. - Ice, slush and snow upon a public sidewalk is a nuisance.</b>	State that publicly-operated plows will not plow sidewalks from streets onto sidewalks or block curb ramps. Amend to state property owners are responsible for the natural snowfall on sidewalks. Specify that property owners who are clearing parking lots shall not deposit snow so that it blocks sidewalks, curb ramps, and walkways that provide access within the property.
<b>Article VI—Bicycle/Pedestrian Path. Section 26-93. - Definitions.</b>	Update definition for “bicycle/pedestrian path” for new pathways or a general description of them. Consider adding electric-assisted bicycles to definitions, as well as e-scooters, specifying which types of e-bikes are allowed. Ones with throttles are typically prohibited and speed limits are established for all e-bikes. Add definitions for pathways and trails with reference to Trails Master Plan map contained in this plan, once adopted.
<b>Article IX. - Construction and Repair—Public Rights-of-Way. Section 26-102. - Design standards for existing rights-of-way.</b>	Repeat this language in the Subdivision Ordinance to define street cross sections for new streets.
<b>Section 26-107. - Driveway construction—permit and supervision.</b>	Add that driveways along streets where sidewalks are present or planned shall provide a Pedestrian Access Route (PAR) of at least four-foot wide with a cross slope no greater than 2%. Exceptions may be granted for 3-foot wide PAR within a driveway crossing if constraints exist with regard to other site-specific factors. Existing driveways subject to reconstruction must conform to these requirements.
<b>Sec. 26-111. - Width of sidewalks.</b>	Extend expectations for Park Street sidewalk widths to be 10 feet wide from 12th Street to N Street and may be granted 8 feet in width as an exception due to site-specific constraints. Add language for 10-foot wide sidewalk along the south side of Front Street/Gallatin Street corridor, including of segments on Main, Chinook, C, Bennett etc. Add language for pathway expectations along Highway 89 and Highway 10 (10 feet, paved, within existing right-of-way). Repeat sidewalk width language in the Subdivision Ordinance to define sidewalk expectations for new streets.
<b>Section 26-114. - Sidewalk construction—cost borne by owner of abutting property.</b>	Consider adding language to spell out options for citizens to apply for a hardship case, recognizing that incomes vary and a person’s individual ability to pay for such improvements will vary. This will ensure equitable application of the policy. A sidewalk utility fee would nullify this policy, if enacted.



Figure 7-6, continued: Ordinance Recommendations

Section of Ordinance	Assessment
<b>Chapter 28 - Subdivision Regulation</b>	
<b>Definitions: STREET TYPES</b>	Add language for each street type as to their use by pedestrians and bicyclists. Arterial streets also serve as arterials for people who walk and bike due to connectivity and land uses along them. Collectors designated for motorists often function as arterials for people who walk and bike as they also contain land uses they desire and may provide alternative routes to arterials.
<b>Section I. General Provision - I-C. Purpose.</b>	“The purposes of these regulations are to promote the public health, safety, and general welfare by regulating the subdivision of land...to lessen congestion in the streets and highways.” Recommend changing that component of the Purpose statement to read: “to provide safe and efficient transportation for all modes.” The public health and safety component is important to address the needs of pedestrians and bicyclists. However, the purpose to “lessen congestion” can be counter to that goal. Congested traffic, while not seen as desirable, is safer for all road users due to lower speeds associated with it.
<b>Section III. Major Subdivisions</b>	Requirements for multi-modal transportation analysis should be included in this section, stipulating that such traffic studies evaluate level of service and/or quality of service for pedestrians, bicyclists, motorists, and public transit. The software packages used by traffic engineering firms to perform these analyses have level of service measures for all modes. Avoid prescribing a motorist level of service since improved motorist level of service can be detrimental to the safety of pedestrians and bicyclists. Level of service should be considered as a measure to debate the pros/cons of transportation features. For example, if achieving motorist level of service “C” corresponds to level of service “F” for a pedestrian, then it may not be deemed desirable in consideration of the Growth Policy Update.
<b>Section III. Major Subdivisions - III -B-6 Governing Body Decision and Documentation</b>	Impacts on public health and safety are identified here. Add language about conditions and safety for pedestrians and bicyclists, as well as trail users.
<b>Section VI. Design and Improvement Standards - VI-A-8. Streets and Roads</b>	<p>A.Design, part (vi) notes “local streets must be designed so as to discourage through traffic.” This can result in lack of connectivity and is counter to present-day research showing that well-connected streets are safer for all road users and reduce motor vehicle congestion. Suggest changing this language to say “local street must be designed so as to discourage motor vehicle traffic speeds greater than 20 mph, then stipulate in a separate table what these features may include, such as curb extensions, chicanes, speed humps, raised intersections, etc.</p> <p>B. Improvements, part (i) does not identify pathways and trails. Add these features to this section.</p> <p>Table 1: Street Design Standards for Subdivisions stipulates a 64 feet street versus historic streets that have 66 feet of right-of-way. The curb-to-curb dimensions are the same with each at 38 feet but sidewalk space is reduced. If a curb-to-curb section is reduced to 36 feet it would provide for two, 8-foot wide parking lanes and two, 10-foot wide motor vehicle or general purpose lanes. These 10-foot lane widths are adequate for local, residential streets, according to federal design guidance from AASHTO. This would reduce impervious surface and the City’s long-term maintenance burdens due to less asphalt to maintain. It would also provide more land for private development. A more aggressive approach would reduce curb-to-curb sections to 34 feet in width, providing for two, 7-foot parking lanes and two, 10-foot travel lanes, which would reduce impervious surfaces even more.</p>



Figure 7-6, continued: Ordinance Recommendations

Section of Ordinance	Assessment
<b>Chapter 28 - Subdivision Regulation</b>	
<b>Section VI. Design and Improvement Standards - Add Section/Subsections on Sidewalks</b>	<p>“City standard sidewalks (including a concrete sidewalk section through all private drive approaches) must be constructed in all developments on all public and private street frontages, except for alleys. Sidewalks on both sides of the streets must be installed by the owner of the subdivided property concurrent with installation of streets, curbs, and gutters. The developer shall install sidewalks adjacent to public lands, including, but not limited to, parks, open space, and the intersection of alleys and streets or street easements. New subdivisions shall provide connections between the subdivision’s existing or proposed primary trails. In addition, those subdivision regulations should include a reference to the sidewalk specifications included in Section IV of the City of Livingston Public Works Design Standards and Specifications Policy. If sidewalks exist along the property, they must be upgraded to meet current policy and ADA standards.”</p>
<b>Section VI. Design and Improvement Standards - Add Section/Subsections on Trails and Pathway</b>	<p>The current regulations lack language pertaining to dedication of pathways and trails. Reference Trails and Active Transportation Plan’s Trails Master Plan map (once adopted) as the guide. Ideally, developers would be required to construct these pathways through their subdivisions in the same way they do streets. This could be left to discussions with the City on preferred alignments and adjustments to the trails master plan map to help provide for suitable development options without deviating from the intended purpose of the pathway or trail (e.g. a pathway along the river should not deviate from the river unless other major factors or constraints exist).</p> <p>Stipulate desired widths for trails as 5-ft wide footpaths and shared use pathways as 10-ft wide paved or unpaved routes with at least two-feet of prepared shoulder to facilitate drainage and preserve pavement life (if paved). Actual easement widths may be greater and can be evaluated on a case-by-case basis.</p> <p>Identify a desire for “micropath” connections linking streets to arterials where motor vehicle access control is more rigorous. Micropaths may also provide connections between properties or at the end of streets to pathways, parks, and other active transportation generators.</p>
<b>Section VI. Design and Improvement Standards - Add Section/Subsections Bikeways</b>	<p>Developments that extend streets identified in this plan as a bikeway should be built to continue the same type of treatments, where applicable. The City may evaluate streets proposed within subdivisions as new bikeways, especially if some streets provide connections from other pathways to new pathways or other activity generators (e.g. trailhead, park).</p>
<b>Section VI. Design and Improvement Standards - Add Section/Subsection on Block Lengths</b>	<p>Block lengths on the original Livingston streets are 366 feet by 466 feet. This pattern should be reinforced for new streets to align with the Growth Policy Update. Language, derived from Missoula and Bozeman codes, would read: “Blocks must be designed to assure traffic safety and ease of circulation, to accommodate the special needs of the use contemplated to accommodate pedestrians, bicyclists and transit users as well as motor vehicles. Block length must not be designed, unless otherwise impractical, to be more than 466 feet in length or less than 366 feet in length. Block lengths may be longer than 466 feet if necessary due to topography, the presence of critical lands, access control, or adjacency to existing parks or open space. In no case may a block exceed 1,320 feet in length.”</p>
<b>Section VII. Mobile Homes - VII-D-2. Streets</b>	<p>Add language stating streets must be designed to provide safe pedestrian and bicyclist access and circulation. This may not always mean sidewalks are required but street design treatments should work to self-enforce speeds no greater than 20 mph given people using all modes may share the same space. Features such as speed humps and narrower street widths can promote this desired target speed.</p>



Figure 7-6, continued: Ordinance Recommendations

Section of Ordinance	Assessment
<b>Chapter 30 - Zoning</b>	
<b>Article II—Definitions: “Street”</b>	Definitions under “street” acknowledge it “as a public way for motor vehicle traffic.” Revise to identify legal use of streets for pedestrians and bicyclists, with the sidewalk being part of the street right-of-way. Remove “fast or heavy traffic” from arterial street definition as there is no requirement that an arterial route be fast or include heavy traffic; add what functions the various street types serve for pedestrians and bicyclists.
<b>Article II—Definitions: Bikeways, Pathways, and Trails Pedestrian Access &amp; Circulation Routes</b>	Add definitions for these features as zoning ordinances are updated to require consideration or improvements of these facilities ( <i>or reference Section 26-93</i> ). Add definitions for pedestrian access routes (PAR) and pedestrian circulation routes (PCR) to align with ADA requirements. PAR are walkways where a minimum of 4-feet (5-feet preferred) is clear of obstacles and has a cross slope no greater than 2%. PCR’s are any prepared area for pedestrians and should be kept clear of protruding objects and ensure signs have bottom edges no lower than 80 inches.
<b>Section 30.46. - Building design standards.</b>	“Promote Buildings that Reflect Pedestrian Scale. Human scale shall be an integral part of all buildings.” This is a great acknowledgment of how the history of Livingston is centered on people and their needs. Add language to address how the pedestrian interacts with buildings facing the street in terms of restricting doors that open onto sidewalk space. Suggest that sidewalk-level windows provide visual appeal and prohibit the “blacking out” of windows by tinting or other advertisements.
<b>Section 30.50 - Signs: “Projecting signs”</b>	Consider adding language about pedestrian-oriented signage that is perpendicular to the building space and hangs over a sidewalk so people who use sidewalks can easily identify the business. This would not prohibit signs on the façade of buildings that face motor vehicle traffic, but would be in addition to those in identified districts (e.g. downtown).
<b>Section 30.50 - Signs: Height</b>	Sign heights must not overhang a pedestrian access route and pedestrian circulation route must not be lower than 80 inches off the surface of the sidewalk or other type of walkway/path. This mostly applies to traffic signs. Permanent business signs will adhere to this due to other features of the code restricting permanent signs to 8’ minimum height.
<b>Section 30.74 - Variances</b>	Stipulate that variances related to sidewalks and upgrades for ADA compliance will not be considered on properties abutting arterials and collectors.
<b>Other Sections to Add (Ordinance Chapter TBD)</b>	
<b>Abandonment of Public Rights of Way</b>	Create a policy on methods to evaluate proposed right-of-way abandonment to ensure opportunities for trail, pathway, or micropath linkages are considered. In lieu of full abandonment, a defined process could assess a reduction in the width of the existing open right-of-way or a land swap of that right-of-way to help provide a more suitable or desirable connection.
<b>Gateway Corridor Treatments</b>	Gateway corridor regulations that promote greater aesthetics for transportation corridors should also enhance the experience and safety for people entering Livingston by bike and on foot. Treatments such as frequent, safe pedestrian crossings at gateway corridors showcase that Livingston is a town that values safety and wants motorists to slow down when moving through the City. Pathway corridors can include signage and other features similar to what roadways typically include to help promote bicycle tourism.



## 8. Programs

A variety of programs will help promote more walking and rolling in Livingston in combination with infrastructure investments. While the City of Livingston can support some of the recommended programs, other community partners may be better positioned to manage them. This chapter outlines several programs the City and its partners should pursue. They were identified through a combination of public input, the project steering committee, and the plan's consultants.

Several organizations help communities with resources and tools to organize events or programs. More can be obtained through their websites than can be documented in a single plan.

### Sidewalk & Pathways Maintenance

Keeping sidewalks and pathways clear and accessible year-round is an expressed goal of the Livingston Trails and Active Transportation Plan. This can be done through a combination of public and private efforts that focus on priority routes, such as crossing the railroad tracks, accessing grocery stores, school walk routes, and paved shared-use pathways.

**Winter Maintenance.** With an average annual snowfall of 53 inches, the presence of snow blocking curb ramps, sidewalks, and pathways creates mobility challenges and accessibility issues for people walking and rolling on the sidewalks. It is common practice for cities to require property owners to remove snow from sidewalks.

Livingston's current code of ordinances states:

- Chapter 26, Section 11: "Ice, slush or snow remaining upon a public sidewalk is hereby declared to constitute a public nuisance and shall be abated by the owner or tenant of the abutting private property within twenty-four (24) hours after such ice, slush or snow has been deposited."

Where there are buffers between sidewalks and the curb, this is a valid expectation since the snow can be shoveled to the buffer or



### Active in All Seasons

If walking and bicycling are to be viewed as transportation modes vital to the people of Livingston, the City and its partners must work to ensure sidewalks, bikeways, and pathways are maintained throughout the year. Keeping major routes clear of snow is key in winter, as is conducting neighborhood clean-up days to clear seasonal obstructions like leaves and overgrown shrubs from sidewalks.



onto a person's front yard. Where there are no sidewalk buffers, this can become a challenge as Livingston only allows snow to be placed in the street in the downtown area.

While there is not an expectation that the City clear snow from every sidewalk, there are some adjustments that could be made to City policies and snow management practices to ensure a safer, more accessible sidewalk system in winter. Several recommended approaches are outlined below to improve conditions during winter.

- **Amend Ordinance for Plowed Snow:** Moscow, Idaho, has similar annual snowfall amounts as Livingston and modified its ordinance that requires property owners to remove snow to state, "This duty applies to natural snowfall; it does not extend to snow displaced onto sidewalks by City snowplows after an owner has removed natural snowfall." This recognizes that snow plowed onto sidewalks is difficult to remove by property owners and the City's plowing crews should not be plowing snow from streets onto sidewalks.

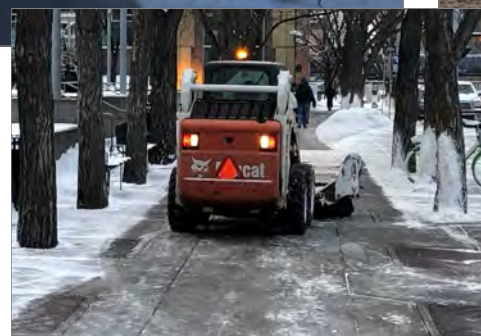
- **Curb Ramp Access:** When plowing operations on the streets have ceased, the City should begin clearing snow that was plowed to block access to curb ramps. This is a duty under the Americans with Disabilities Act, as Federal Highway Administration states: "Public agencies' standards and practices must ensure that the day-to-day operations keep the path of travel on pedestrian facilities open and usable for persons with disabilities, throughout the year. This includes snow removal."
- **Priority Routes:** Cities have met the above requirement through identifying priority routes that they, or partners, actively clear of snow regardless of property owner responsibility or action. The City may work with the schools, downtown businesses, and others, to identify a priority network of routes that the City will work to keep clear of snow to ensure access. All sidewalks and pathways along these routes that are not adjacent to public property (e.g. Veterans Bridge, 5<sup>th</sup> Street Railroad crossing, I-90 interchange underpass) should be cleared by a public agency.

### Snow Management & Equity

Cities are required by law, under the Americans with Disabilities Act (ADA), to keep sidewalks clear and accessible. This includes snow removal and snow management policies and practices.

Snow plowed from city street to sidewalks creates safety issues that force people into the street. Snow that is plowed so it blocks access to curb ramps and crosswalks should be removed from those locations once main plowing operations have ceased.

The City may create a program to remove snow from high priority sidewalk routes, such as school walk routes. Outreach to business organizations can help keep commercial area sidewalks clear of snow.



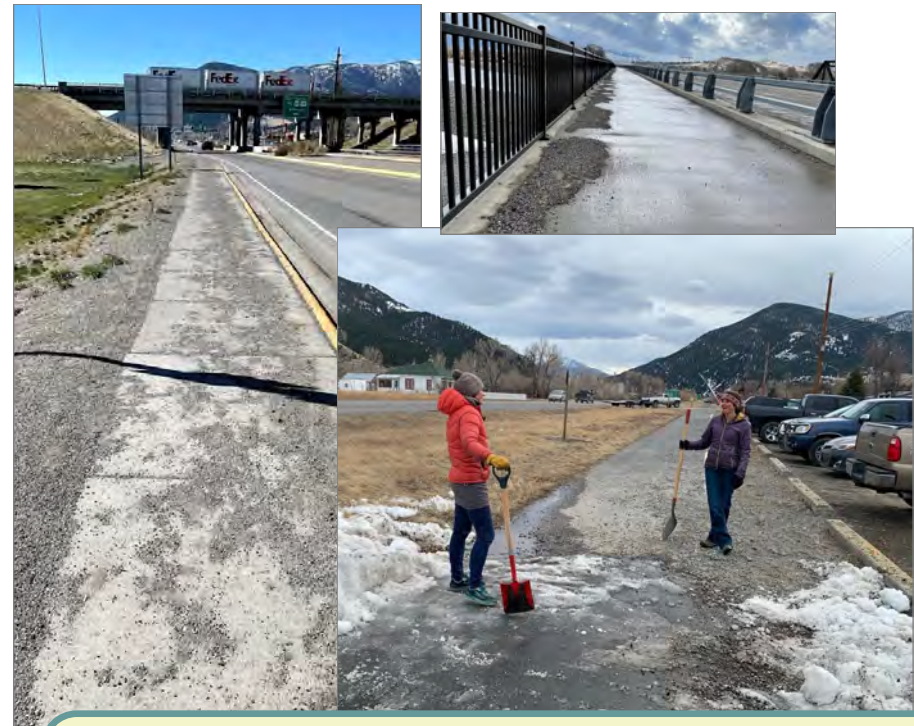


- **Highway 89 Pathway:** The pathway serves as both a walking and bicycling route to key destinations within the city limits. Park County Environmental Council organizes volunteers to clear the pathway. The City may assist in moving heavier amounts of snow, especially those that may be mounded at street crossings due to plowing.
- **Ponding & Icing:** Other sidewalk and pathway access issues emerge after a snow event occurs. Curb ramps may become blocked by ponding water and ice due to snow build-up in gutters that keeps water from flowing to storm drain inlets. City crews can inventory locations that are routinely problematic and address these locations once the snow begins melting.
- **Property Owners:** Messaging to property owners should state snow cannot be shoveled or plowed from driveways and parking lots in a manner that results in it blocking sidewalks, crosswalks, pedestrian push buttons, or curb ramps. Policies may be updated to specify this expectation.

**Other Seasonal Maintenance.** The end of the winter season often means debris is left covering sidewalks and pathways due to snow management. It was noticed during field work in April 2021 that the sidewalks along Highway 89 near I-90 and the Veterans Bridge pathway had notable build-up of debris. These should be cleared by a combination of City, MDT, and volunteer forces.

Springtime also means new growth of shrubs that may impede the functional sidewalk width. Sidewalk passage can become difficult or uncomfortable as shrubs and trees grow on private property abutting sidewalks. Tree branches should be trimmed to minimum heights of at least 80 inches and shrubs kept from encroaching into the sidewalk space.

Code enforcement of these items is primarily complaint-driven, but clearing of these sidewalk obstructions could be a volunteer-based program with City endorsement. Oftentimes, a property owner's failure to clear shrubs or trim tree branches is due to other



### Cleanup

The after effects of winter weather mean sidewalks and pathways are often-times impacted by debris from snow plowing and ice buildup. Spring cleanup days can work to clear sidewalks and major pathways of this debris. To comply with ADA, public agencies such as MDT and the City should clear debris from sidewalks and pathways that are along public property such as bridges and interchanges.



circumstances in life—such as age or income—that limit their abilities to effectively address these. Service clubs, scouts, and other non-profit groups may organize seasonal sidewalk clearing events to address priority routes and help those areas in need. These efforts would bolster the City’s existing Adopt-A-Trail program, which has seven teams that have adopted parks or trails in the City.

### Wayfinding

A comprehensive wayfinding strategy for Livingston is recommended for all modes of transportation to and within Livingston, as well as for trail and pathway users. Visitors to Livingston are looking for key destinations, while those staying in town and wishing to walk the city may not know the most direct or suitable routes. Ideally, a coordinated system of wayfinding signage that establishes a clear, recognizable brand for signage directing people to key destinations within Livingston should be developed

in coordination with downtown merchants, the chamber of commerce, and other key partners.

There are several options to coordinate wayfinding for sidewalks, bikeways, pathways, and trails.

- Welcome visitors to the community;
- Guide visitors and residents to businesses, attractions and other destinations;
- Direct visitors and residents to trailheads and other recreational spots; and
- Establish a clear, positive, unique and recognizable sign design, elements of which are included in every sign installed through the program to establish a common theme or brand.

**Pedestrian and Bicyclist Wayfinding.** Where wayfinding for active modes differ from wayfinding for drivers is that time is more relatable than distance for people who walk and bike. Many do not know how long it takes to walk or bike two miles, but if you can put



### Wayfinding Strategies

Wayfinding is as much about helping people find their way as it is branding for a community. Motorist-scale wayfinding helps drivers find key destinations, such as downtown, historic districts, and public parking. Oftentimes, the same branding is used for pedestrian wayfinding that helps people reach more specific locations once they have arrived.

The images at left show these types of wayfinding sign families at a pedestrian or bicyclist scale. Changeable panels or lettering allows the signage to evolve as a community changes.



that in terms of 40 minutes of walking and 6 minutes of bicycling, then the choice on which mode to use becomes more intuitive.

The images in this section show various types of time-based wayfinding for active modes. These signage types are generally placed at key junctions on designated bikeways and key walking routes. Their design theme may be consistent with other vehicular wayfinding or may be viewed more as a traffic control sign.

**Pathway and Trail Wayfinding.** Wayfinding is a key component of complete and effective trails and trail networks and should be part of the planning process when new trails are designed and constructed. Proper signage along a trail maintains user safety, cuts down on user conflict, and keeps users informed and connected while they utilize the trail.

Signage features in a pathway or trail setting can be designed to be consistent with local context and character, as existing signage along Livingston’s trails already reflects. Trail junctions should be clearly marked with signs and distances so people can make the right decision on how to proceed. It is advisable that the City work with Park County and other cities within the county to develop a consistent set of trail and pathway wayfinding signs as the area’s system grows.

### Bicycling and Walking Audits

Bicycling and walking the routes planned for improvements are a key element of a project design process as well as a way to better engage the community. Walk and bike audits are also popular events by advocacy groups to assess conditions, introduce people to the best routes for walking and bicycling, and assess policy outcomes. Park County Environmental Council conducts bike audits and did them most recently as part of the Growth Policy Update to assess the city’s bicycling network. These recreational audits should continue. Additionally, the City is recommended to incorporate formal road safety audits into project design processes and ask MDT for those same audits on state-managed routes.



### Distance-Based Wayfinding

Another type of wayfinding is focused on providing information to pedestrians and bicyclists as they travel along sidewalks, bikeways, and pathways. They can complement other types of wayfinding but these are oftentimes designed to be traffic control-type signs so they are easily recognizable to road users.

Putting an approximate time is more valuable to people who walk and bike than distance alone since those who do not routinely walk or bike may not know how fast they move via those modes.



**Safety Audits.** Road safety audits are a routine part of a project planning, design, and construction process and it is advised for the City of Livingston to incorporate such audits into future projects led by the City, MDT, and private consultants. In 2020, the Federal Highway Administration published its *Pedestrian and Bicyclist Road Safety Audit (RSA) Guide and Prompt List*. As FHWA notes in this guide, “An independent and multi-disciplinary team conducts the assessment with the intent of improving safety—and may be focused particularly on pedestrian and bicyclist safety. The RSA Team considers how roadway, traffic, environmental, and human factors impact safety, within the context of mobility, access, surrounding land use, and aesthetics.”

By conducting a formal RSA, the team can document more subtle elements of the built environment and examine concepts before they are fully designed. A typical RSA process involves collecting data on traffic volumes and crashes, as well as in-the-field assessment of things like sidewalk widths, crossing needs, crosswalk design, ADA compliance, design users, bike lane widths, trail crossings/connections, and other features.

Potential RSA members should include city, county, state maintenance and engineering staff with jurisdictional authority; local transit and school transportation officials; local health department representatives to ensure safe passage of non-motorized users of all ages from children, seniors, and mobility assisted; traffic enforcement; and city government officials. Safety audits should be done at different times of day and year, and include people of varying ages and abilities.

**Community Audits.** Audits like those conducted by PCEC also help inform overall community needs and project specifics. A formal RSA can be complemented by a community-based audit to gain other perspectives on the proposed investments. Taking elected officials for walks or bike rides is also a valuable tool to help them relate to the conditions pedestrians and bicyclists experience on the street.



### Safety Audits & Community Audits

Safety audits are conducted by public agencies as they plan or design a project. They typically include subject-matter experts, planners, engineers, and community advocates to measure and assess features in the road environment.

Community audits can serve a similar purpose but may be more qualitative in their outcomes and outreach. They can be used to assess general conditions and understand how people feel using a facility.

The two methods can be combined to create a more inclusive involvement process and design outcomes.

FHWA Pedestrian and Bicyclist Road Safety Audit Guide and Prompt List:  
[https://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/docs/fhwasa20042.pdf](https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa20042.pdf)



For example, a community bike ride was held as part of the public engagement for the Trails and Active Transportation Plan. The purpose of the ride was to take people to the locations of key project recommendations, discuss the specific recommendation, and gain feedback on how to refine that recommendation. Seasonal audits may also be desirable to assess conditions like seasonal maintenance needs and observe user behavior.

### Trail Orientation & Ambassador Program

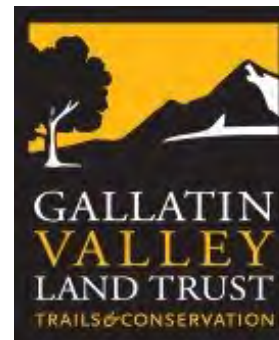
Trail usage will increase both as population and trail mileage grow in the region. Non-profits, with support from the City and Park County, can consider various types of trail education campaigns aimed at helping users understand trail etiquette and leave no trace principles. School programs can build capacity for trail usage and ambassador organizations can help lead field trips for city schoolchildren on the area's trail. Trail Ambassador programs allow volunteers to station at trailheads on busy dates to help visitors and others learn about trail opportunities, how trails are built, and how trails can be properly maintained by users.

### Counting Program & Intercept Surveys

While motor vehicle counts are common part of a City or MDT's processes, the counting of people using sidewalks, bikeways, and trails is often left to volunteers. The City should work toward requiring development-based traffic studies to include counts for all modes of transportation, as well as evaluation of the quality of service or level of traffic stress for pedestrians and bicyclists to be included with motorist level of service analysis.

Knowing how many people are using a sidewalk or bikeway before and after an investment is important to track so decisionmakers know the impacts of their investment decisions.

To supplement these actions, volunteers groups can be organized to conduct counts and intercept surveys at various locations throughout Livingston. This will help understand both the volume of users and why they are using the active transportation network.



### Trail Usage

Helping people know how to be good stewards of trails and pathways helps keep them in safe condition and builds respect for the system. Counting trail users and understanding their needs, desires, and reasons for using the trails informs decisionmakers, public agencies, and other organizations on how to improve or expand trail systems. Permanent counters (outlined with the yellow box below) can be installed on paved pathways and provide year-round user data.



For example, current counts for pedestrians along Gallatin/Bennett where there are no sidewalks may be limited due to a lack of facilities. But there are worn paths adjacent to the curbs showing demand. It would be expected that pedestrian usage would increase when sidewalks are completed between N Street and Park Street.

Nationally, organizations conduct counts of pedestrians and bicyclists at intersections during the same week each year in September. This time of the year is chosen because it reflects suitable weather conditions and prevailing transportation patterns during the school year. Counts are typically done during two-hour peak period times and the day of the week can vary based on anticipated usage. For example, pedestrian and bicyclist trips to parks and trailheads are highest on weekends, while school walk/bike trips are highest during morning arrival periods.

Similarly, counts at trailheads can occur on peak weekends to understand seasonal variations in use. Peak periods of arrival are chosen and may include an intercept survey to understand where people are coming from and how they are using trails.

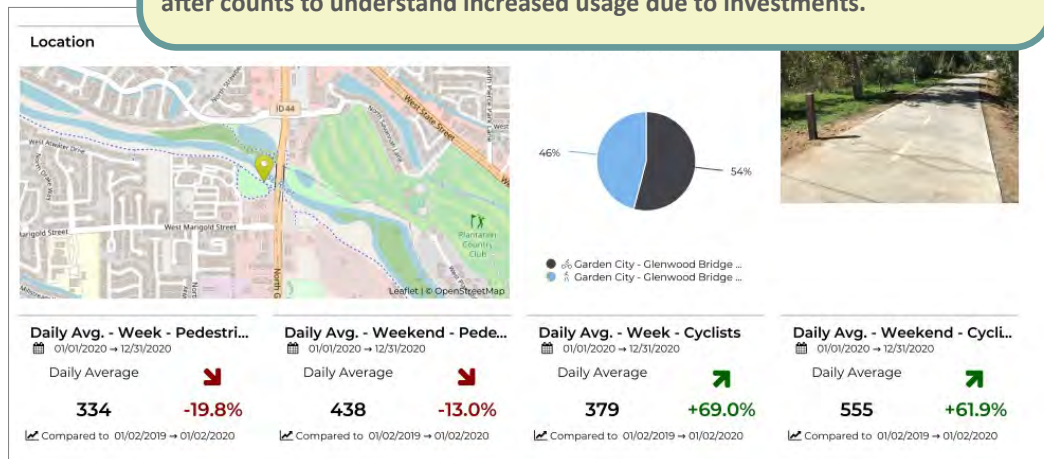
The City, County and other local partners may seek funding for automated trail counters that can be placed at entry points to popular trails. These infrared counters are portable so they can be moved to different locations throughout the year. Automated counters may be useful in some select sidewalk environments but are not as accurate in those settings.

### Safe Routes to School

The policy section of this plan addresses the challenges in increasing rates of walking and bicycling to school in Livingston due to school zone attendance policies. That does not mean that programs to promote safe routes to school should be abandoned.

### Counting People

Automated counters link to software programs that allow for detailed analysis on trail usage, as shown below. Additionally, on-street counts can be taken through the use of publicly-accessible forms through the National Bicycle and Pedestrian Documentation Project. People sit at key locations for two hours and count users by mode and sometimes the direction they are traveling. These counts can be used to provide data on existing usage as well as before/after counts to understand increased usage due to investments.



**STANDARD SCREENLINE COUNT FORM**

Name: \_\_\_\_\_ Location: \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_

Weather: \_\_\_\_\_

Please fill in your name, count location, date, time period, and weather conditions (fair, rainy, very cold). Count all bicyclists and pedestrians crossing your screen line under the appropriate categories.

- Count for two hours in 15 minute increments.
- Count bicyclists who ride on the sidewalk.
- Count the number of people on the bicycle, not the number of bicycles.
- Pedestrians include people in wheelchairs or others using assistive devices, children in strollers, etc.
- People using equipment such as skateboards or rollerblades should be included in the "Other" category.

	Bicycles		Pedestrians		Others
	Female	Male	Female	Male	
00-15					
15-30					
30-45					
45-1:00					
1:00-1:15					
1:15-1:30					
1:30-1:45					
1:45-2:00					
Total					



The Safe Routes to School National Partnership and National Center for Safe Routes to Schools have several resources available to school districts, cities, and non-profits to help promote safer walking and bicycling to and from school. The Safe Routes to School approach consists of what known as the 6-E's:

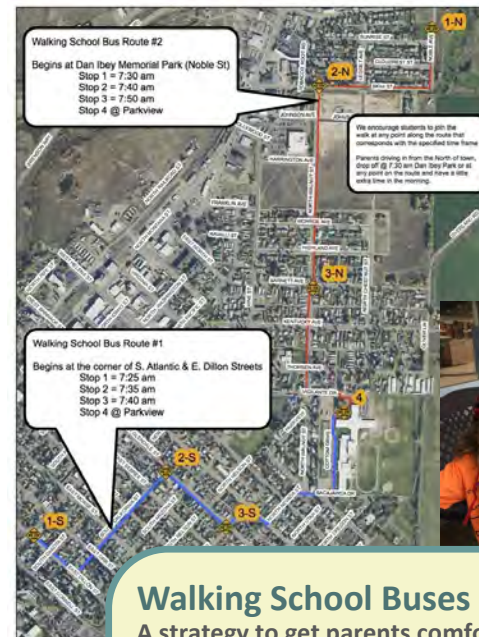
**Engineering.** The degree to which Livingston's streets provide direct or sole access to a school was considered in how projects were ranked. By creating physical improvements to streets and neighborhoods, it makes walking and bicycling safer, more comfortable, and more convenient.

**Engagement.** All Safe Routes to School initiatives should begin by listening to students, families, teachers, and school leaders and working with existing community organizations, and build intentional, ongoing engagement opportunities into the program structure.

Bike rodeos, art contests, and other interactive engagements can help build knowledge of what it means to walk and bike to school. This engagement also helps identify specific walk and bike routes that parents feel are safest or problematic when deciding to let their children walk or bike to school.

**Equity.** Ensuring that Safe Routes to School initiatives are benefiting all demographic groups is important so the focus is not on those neighborhoods or schools with greater means. Particular attention must be paid to ensuring safe, healthy, and fair outcomes for low-income students, students of color, students of all genders, students with disabilities, and others, are part of the effort.

**Encouragement.** Closely tied with engagement, generating enthusiasm and increased walking and bicycling for students through events, activities, and programs helps build momentum. Having classes track how far they walk or bike (to/from school or just through course of a routine week) helps them understand the possibilities and freedom that comes with traveling and having fun using these modes.



### Walking School Buses & Bike Trains

A strategy to get parents comfortable with letting their kids walk or bike to school is to form walking school buses or bike trains. These are where parents organize set times and routes for kids to go to school together.

The diagram on the left is the walking school bus route in Dillon, Montana. They conduct it three days a week and pickup times are listed on the diagram. Bike Trains are a similar strategy to get kids used to biking to school. Kids ride single file in a group along a bike route or a sidewalk with parents or volunteers chaperoning them.



**Education.** Providing students and the community with the skills to walk and bicycle safely helps them navigate those situations in all aspects of life. Educating them about benefits of walking and bicycling, and teaching them about the broad range of transportation choices can help build greater stewards of a safe transportation system for future generations.

**Evaluation.** Knowing which methods are working is important to make the case to decision makers and grant funding sources. By assessing which approaches are more or less successful, ensuring that programs and initiatives are supporting equitable outcomes, and identifying unintended consequences or opportunities to improve the effectiveness of each approach, Livingston and its partners can make sure a safe routes program is successful and sustainable.

### Bike/Walk to School and Work Events

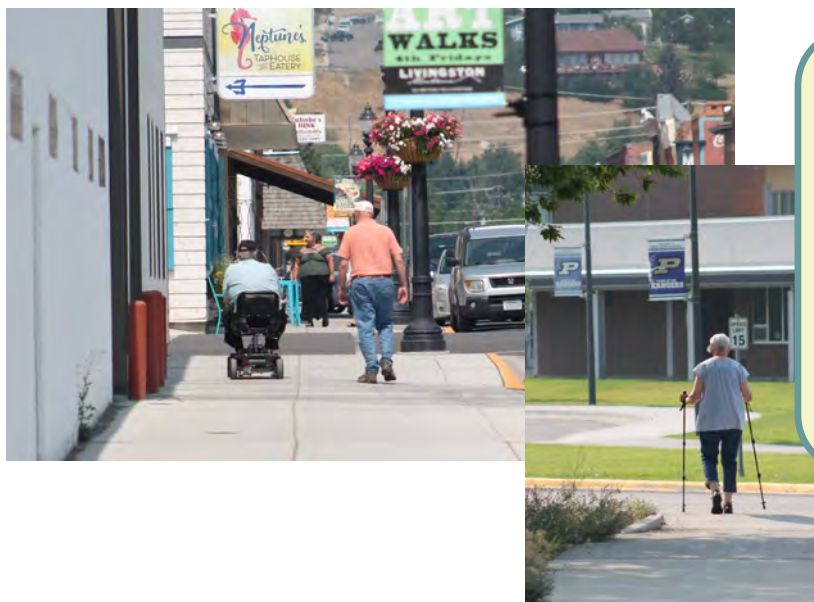
The National Center for Safe Routes to School is the coordinating

organization for Walk to School Day held every October and Bike to School Day held each May. These events are used to encourage families to celebrate the benefits of walking and biking and to increase local leader commitment and visibility for traffic safety and community quality of life. The center provides resources and tips for conducting these events and tracks participation in the program across the United States.

Each May, the League of American Bicyclists organizes Bike Month and Bike to Work Day. For bike to work day, employers are encouraged to promote people commuting by bike and some communities station people along popular routes to provide coffee and breakfast to commuters. Places like Missoula have commuter challenge weeks or months to work with employers to see which ones have the most participation in commuting to work via active modes.

### Safe Routes for Seniors

Safe Routes for Seniors (SR4S) programs develop a series of neigh-



#### The Needs of Older Adults

Older adults have different concerns when deciding whether or not to take a walk. The risk of a fall and related hip injury can be at the top of mind for some and may deter them from being active. Sidewalk cracks and heaves, as well as icy surfaces, create unstable conditions.

The City, Park County Senior Center, and local non-profits can work with Livingston's older adult population to identify safe routes and conduct community audits with them to identify senior-specific needs when the City is planning infrastructure upgrades.





neighborhood route maps that links older adults to destinations for groceries, recreation, and socializing. Identifying gaps in the routes or problem locations, such as sidewalk trip hazards and lack of curb ramps, can help with input to city projects and implementation of its ADA Transition Plan. Active aging is important for the health of older adults and SR4S programs help empower older adults to take an active role in identifying their transportation needs, program elements, and safe routes that can provide them with increased independence and improve their quality of life as they age. A SR4S program can be coordinated with other Senior Center activities, as well as Fit and Fall Proof classes that take place in the area or through the Park County Senior Center.

### Kidical Mass Ride

Kidical Mass is a play on words of the critical mass bike rides that occur in many larger cities to raise awareness of bicyclists. A Kidical Mass ride is a family-friendly event, much like a bike parade, that promotes bicycling as a fun, family-friendly activity. Families are encouraged to be creative in decorating their rides and wearing costumes (ones that are safe to bike in) on a short route around a community. They are typically organized to start at school or parks and may include police escorts, particularly at major street crossings.

Kidical Mass rides are often organized to celebrate a holiday or the opening of a new trail or bikeway. Participating organizations may create stations along the route for kids to engage in art contests and other interactive features to help them enjoy the ride.

### Pop-Up Demonstration Projects

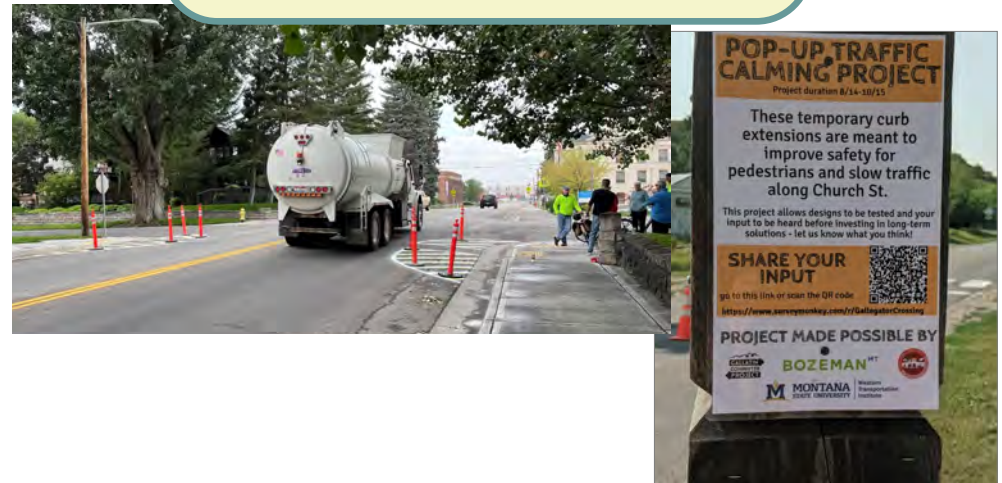
Pop-up demonstration projects are a way to introduce safety projects to a neighborhood before full-scale investments are made. Another term for this is “tactical urbanism.” Pop-up demonstration projects can include things like temporary bike lanes protected by hay bales or planter boxes, as well as using temporary materials like tubular markers to create curb extensions or neighborhood traffic circles. This straw-then-sticks-then bricks approach allows projects to be tested, evolve, and proven worthy before final investment.



### Popsicles & Pop-Ups

A Kidical Mass ride (above) around Livingston is a way for kids and parents to engage in becoming more active and understand the safe routes that families can use to access places within Livingston.

Traffic safety improvements, such as curb extensions and protected bike lanes, can be tested on the streets before full implementation. As shown below, the possible dimensions for a curb extension at an uncontrolled crossing are evaluated for dimensions in consideration of how large vehicle pass by them.



At one level, these projects allow neighborhoods to dream about the improvements they would like to see on their streets to make them safer for walking and bicycling. Because they are temporary, timelines can be set for application and the City can help conduct pre/post speed studies, traffic counts, and other evaluations.

At another level, it's a way for the City to test options for projects before investing in permanent materials. Creating curb extensions, protected bike lanes, or neighborhood traffic circles with temporary materials can help determine final dimensions for the design of a permanent project.

For example, curb extensions built with temporary materials allow a City to test turn radius for large vehicles like emergency services.

Pop-up demonstration projects can also be used to apply a traffic safety treatment to a road if funding the full-scale improvement

may take a year or more to implement. The Tactical Urbanism Guidebook, referenced in the Appendix section on Design Guides, showcases several options.

### Open Streets

Open Streets events are street festivals that close a street or combination of streets to allow for free movement of pedestrians and bicyclists; staging of events such as concerts, yoga, and in-street skate parks; and food vendors to celebrate a particular neighborhood or provide a locally-focused event to help promote walking and bicycling.

Missoula's Sunday Streets are a great Montana example and their 2021 Sunday Streets events were held along several blocks of the Franklin to the Fort neighborhood to highlight a pop-up demonstration project that was done to erect temporary traffic



### Open Streets Open Minds

Open Streets can take many forms, from street festivals to showcasing community investments. Missoula's Sunday Streets events in 2021 were a combination of both. With streets closed to motor vehicles, Sunday Streets Missoula put activity stations, food trucks, and in-street skateboarding on the streets of a 6-square block neighborhood that is the recent recipient of temporary neighborhood traffic circles and curb extensions. Volunteers kept look out at crossings of main roads and allowing local residents access to their property during the event.



circles and curb extensions in a neighborhood that lacks full-scale sidewalks and other traffic safety features.

### Bicycle Tourism

Livingston is located along two designated bicycle tourism routes: Adventure Cycling's Lewis and Clark Trail and the Rails to Trails Conservancy's Great American Rail-Trail. The Depot could become the hub for these efforts, along with rebuilding sections of the rail-trail in town where it is currently narrow and meandering.

The Lewis and Clark Trail was created to celebrate the anniversary of the Corps of Discovery's 1804-1806 historic journey. The designation of this route provides bicyclists the opportunity to follow the path of the explorers Lewis and Clark. The trail is part of a 4,500 mile network of mapped routes stretching from Washington to Illinois. This economic opportunity potential could be strengthened by mentioning that Park County has a 12-stop Lewis and Clark interpretive driving tour that extends from Bozeman Pass through Livingston to Sheep Mountain Fishing Access Site just east of town.

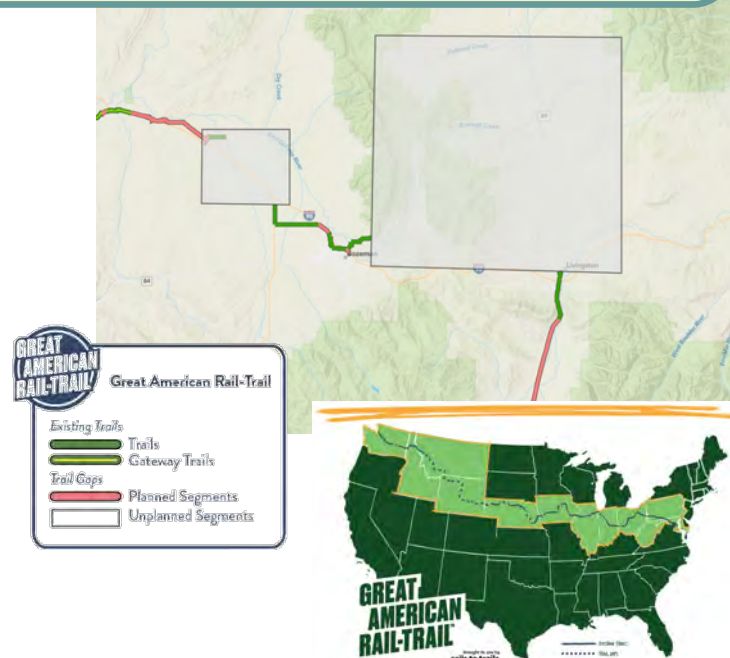
The Great American Rail-Trail is in its early planning and designation stages, but is envisioned as a coast-to-coast pathway that connects more than 145 existing rail-trails, greenways and other multiuse paths spanning more than 3,700 miles. The Depot Center Trail and US 89 Pathway are designated along the route with the section between Livingston and Gardiner identified as an existing gap. The segment between Bozeman and Livingston is shown as an unplanned section and the Highway 10 pathway identified in this plan is conceptualized as a linkage toward Bozeman for this segment of the planned rail-trail.

These designations indicate the potential for bicycle tourism potential in Livingston and there are several programs that can be organized to take advantage of it. These include:

- Bike Trail-Friendly Businesses that cater to long distance travelers by providing access to water, supplies, bike repair, and lodging/camping options.

### Gateway to Bike Tourism

The route of the proposed Great American Rail-Trail between Bozeman and Livingston is designated as an unplanned segment. The Highway 10 pathway identified in this plan can help fill a portion of that unplanned route. The Great American Rail-Trail, as well as Adventure Cycling's Lewis & Clark Trail that passes through Livingston, indicate the City could become a hub for bicycle tourism and related programs.



- Branding Livingston as a bicycle tourism destination, particularly as the gateway to Yellowstone National Park.
- Publishing other bike ride itineraries (e.g. one-day, three-day, five-day) rides along paved and unpaved roads.
- Identifying the existing impacts of bicycle tourism on Livingston through a bike tourism-specific study.

These actions not only provide a greater experience for bicyclists and help with the local economy, such actions are also great for positioning Livingston for grants to fund implementation of things like the Highway 10 pathway section of the Great American Rail-Trail.

### Bicycle-Friendly & Walk-Friendly Community Status

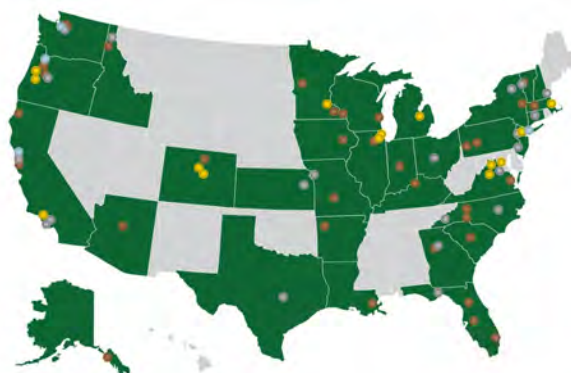
The League of American Bicyclists and the Highway Safety Research Center each have application-based designation programs for communities hoping to receive official status as bicycle-friendly and walk-friendly communities. These organizations have open application windows each year and communities are asked to fill out a survey to gauge their level of bike- or walk-friendliness. Designations are given at the Bronze, Silver, Gold, and Platinum levels. Some communities receive honorable mention.

Pursuing bicycle-friendly and walk-friendly status constitutes a

values statement by Livingston’s leaders to indicate their commitment. The organizations that review these applications provide feedback to cities on next steps to improve their rankings. Obtaining this status is also a positioning action that can be used to bolster Livingston’s standing when it pursues grants to implement projects or programs identified in the Trails and Active Transportation Plan.

Missoula (Gold), Bozeman (Silver), and Billings (Bronze) are designated Bicycle-Friendly Communities in Montana. There are no designated walk-friendly communities in Montana. Sandpoint and Coeur d’Alene, Idaho, are the closest walk-friendly communities to Livingston.

Businesses may pursue Bicycle-Friendly Business status through the League of American Bicyclist and they are not required to be in a Bicycle-Friendly Community. Billings has three Bicycle-Friendly Businesses and Bozeman has one. The City of Missoula is a Bicycle-Friendly business and both the University of Montana and Montana State University are designated as Bicycle-Friendly Universities.



## 9. Health, Equity & Inclusion

Over the past 30 years there has been increased interest in the connection between health and place. As the City of Livingston looks for ways to improve the wellbeing of its residents and the vitality of the community, it's essential to take a closer look at this connection and explore the wide range of design elements and tools that will lead to a more healthy, equitable, and connected community.

While increasing physical activity is a key outcome of a connected active transportation system, there are other impacts to a person's health when they are able to be more physically active. Mental health outcomes are improved, as are other dimensions of health such as social health, intellectual health, and economic health.

Montana Department of Transportation's (MDT) statewide Pedestrian & Bicycle Plan cites Montana Department of Public Health and Human Services data that "three in every four adults and seven in ten children in Montana did not meet physical activity recommendations." MDT's plan also states, "Walking and bicycling for transportation are part of a healthy lifestyle, which can help people stay at a healthy weight or lose weight."

Local data suggest similar trends. Data from the 2019 Park County Community Health Needs Assessment (CHNA) Summary Report and the 2019 Park County Youth Risk Behavior Survey (YRBS) show that both adults and youth in Park County are far from meeting recommended levels of physical activity.

The data in Figure 9-1 are derived from the two Park County Census tracts that include Livingston residents. The Centers for Disease Control and Prevention (CDC) aggregates health data to the Census tract level in its PLACES map.

The data show nearly 1 in 3 residents in Livingston's tracts have high blood pressure or obesity, while approximately 1 in 6 report their physical health and/or mental health as "not good."

Figure 9-1: Select Health Data for People in Livingston



REPORT HAVING POOR OR FAIR HEALTH



REPORT THEIR PHYSICAL HEALTH AS "NOT GOOD"



REPORT THEIR MENTAL HEALTH AS "NOT GOOD"



ARE DIAGNOSED WITH HIGH BLOOD PRESSURE



ARE DIAGNOSED WITH OBESITY

Source: CDC PLACES data for Park County Census Tracts 3 & 4



Main Street is the dividing line between the two Census tracts, with Tract 3 including Livingston residents northeast of Main Street and Tract 4 containing residents southwest of Main Street. In general, residents in Tract 3 show indicators of poorer health than those in Tract 4, with rates of poor physical health, obesity, and poor mental health being higher. These sectors include some of the lower income areas of Livingston and such health challenges are commonly more prevalent in lower income areas.

Given this data, projects identified in this plan within Tract 3 are more likely to have an impact on people's health as it would provide them with more active transportation and recreational options for walking and bicycling.

### Health, Safety & General Welfare

Promoting the health, safety and general welfare of a population is one of the most important and codified roles for a City to plan. This role is clearly indicated within Livingston's Zoning Ordinance, quoted below.

The meaning of these words within city codes has evolved over time. At the turn of the 19th century, the environment made people sick. It was during this Industrial Age that professions like public

health, planning, public works, social work and architecture collaborated to solve the myriad of public health issues related to unhealthy living conditions. These conditions were overcrowding, lack of sanitation, contaminated water and air pollution. The result was a widespread outbreak of infectious disease and multiple disciplines came together to solve it.

Projects like the development of sanitation and water systems were only part of the strategies developed to improve health; there were also policy solutions such as building and zoning laws. The words "public health, safety, and welfare" were written into community codes giving cities the legal authority to regulate private property for public health reasons.

These words stem from the roles states are afforded in the 10th Amendment to the United States Constitution. The 10th Amendment gives states all powers not specifically given to the federal government, one of which has been determined by case law to make laws relating to public health.

Montana's State Constitution reflects these themes in its section on Inalienable Rights, stating the people have "the right to a clean and healthful environment...and seeking their safety, health and



**"The purpose of this ordinance is to promote the health, safety, and general welfare of the community by regulating the height and size of buildings and structures, the percentage of lots that may be occupied, the size of setbacks and open space, the density of population and the location and use of buildings, structures and land for trade, industry, residence, or other purposes within the city limits."**

**- Livingston Zoning Ordinance: Sec. 30.11. - Purpose.**



happiness in all lawful ways.” The state then grants powers for health, safety, and general welfare to cities through its allowance of zoning, specifically in Title 76, Chapter 2, Section 301 on authorizing municipal zoning, “for the purpose of promoting health, safety, morals, or the general welfare of the community.”

While such policies have largely solved the health issues facing people more than 100 years ago, today the leading causes of death are chronic diseases such as heart disease, cancer, diabetes and mental health issues such as suicide. Disability, an aging population, and social isolation are also escalating public health concerns.

Health outcomes related to chronic and infectious disease in the 21st century are causing communities to redefine what “public health, safety, and welfare” means in our modern world. It is becoming well-understood that a person’s zip code may be a stronger predictor of their health than their genetic code.

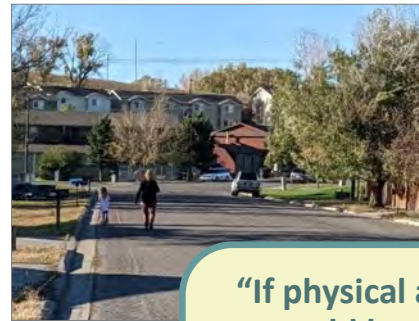
The Livingston Trails and Active Transportation Plan is a roadmap for creating modern-day policies and investments in the built environment to continue to promote the health, safety, and general welfare of the people of Livingston.

### Physical Activity

Being physically active is one of the most important things a person can do to improve health and wellbeing. For adults, as little as three 10-minute brisk walks, five days a week, can be enough to reduce the risk for developing a life-altering chronic condition such as diabetes.

Biking to work, a walk to have lunch, and then perhaps an after dinner walk with the family to the neighborhood park: each of these outings could be done in a car, reducing the opportunities for improving health and adding to traffic congestion and air-pollution. Even if a person never plans to walk or bike, it is better for that person and the community to have safe and convenient non-motorized options for those that need and want them.

Children need 60 minutes a day of activity to support health.



**“If physical activity were a pill every doctor would be prescribing it, every insurance company would be happy to pay for it, and every American would be taking it on a daily basis. The breadth of physical and mental health benefits is breathtaking.”**

**- Kenneth E. Powell, MD, MPH**



Walking to and from school are important times for them to get that activity. Being able to walk to a nearby park, to meet friends for an ice-cream cone, or bike to the soccer fields are all activities that not only give kids the physical activity they need but also are important activities to help develop navigation and decision-making skills, while building confidence and age-appropriate independence. Unfortunately, Park County is not alone. This is why the Surgeon General of the United States issued a 2015 Call to Action to Promote Walking and Walkable Communities.

### Mental Health

There is strong evidence that physical activity improves brain health. These benefits are outlined in the Physical Activity Guidelines for Americans and include improved cognition, improved quality of life, reduced risk of depression and anxiety, and improved sleep. Notably, the research shows children who are physically active perform better on academic achievement tests, have improved executive function (skills that enable children to control impulses, make plans, and stay focused), and have increased processing speed and memory, and reduced risk of depression.

In the 2019 CHNA Summary Report, 16% of Park County adults reported “fair or poor mental health” and nearly a quarter of adults reported “diagnosed depression”. Sadly, the 2019 Park County YRBS found that many youths are also suffering from mental health issues. High schoolers and middle schoolers were asked the question, “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?” The result was 39% of high schoolers and a quarter of middle schoolers answered “yes.” When asked if they had “seriously considered attempting suicide” in the past year, 22% of high schoolers and nearly 24% of middle schoolers responded by saying “yes”.

### Equity & Inclusion

MDT’s Pedestrian and Bicycle Plan recognizes the need for more equitable and inclusive investments in active transportation. It states, “these modes serve a key function in expanding the social and educational opportunities available to the state’s vulnerable populations who are frequently transportation disadvantaged, including senior citizens, children, the disabled community, minority populations, and low-income individuals and families.”



**“We are unable to operate a car for the first 16 years of our lives, yet we still build cities that require it. By giving children a way to travel independently, we liberate them, and liberate their parents from the role of chauffeur thwarted upon them.”**

**- Chris and Melissa Bruntlett,  
*Curbing Traffic: The Human Case for Fewer Cars in Our Lives***





MDT states further that providing pedestrian and bicycle facilities in communities where these populations are prevalent helps ensure mobility and promotes transportation equity.

Focus group participants and steering committee members said they wanted the Trail and Active Transportation Plan to prioritize areas of town where low-income residents live, which coincides with where there is a lack of sidewalks and other pedestrian and bicycle infrastructure.

As a result, projects in low income Census tracts were given more points and Steering Committee bonus points were applied to some projects north of the railroad tracks.

Researchers have also found that individuals in rural communities tend to have higher rates of chronic disease, more poverty, and more mental health concerns, including substance abuse, than urban residents. When researchers looked for the reasons to explain higher rates of chronic disease in rural areas, obesity was found to be a major contributing factor. When researchers tried to explain the mechanisms behind why obesity was higher in rural areas, one of those mechanisms was the built environment.

Given the health issues related to physical inactivity, weight, and mental health present in Park County, creating places that encourage people of all ages, incomes, and abilities to be more physically active is important.

### Activity-Promoting Places

Health is influenced by a variety of factors including our individual knowledge and skills, our family and social connections, our work and school environments, our neighborhoods and communities and the policies that affect our living conditions.

Livingston has made great strides in making the downtown core more walkable, however, there are significant gaps in connectivity and accessibility in other parts of town, particularly on the north and east side, along Park Street, and crossing the railroad tracks.

Making it safer, easier, and more convenient for all people to walk or bicycle for utilitarian and recreational trips is important for the “public health, safety, and welfare” of Livingston residents and visitors and should be considered when any new



**“Downtown is nice but as soon as you go to the outskirts—Albertsons, Town and Country—it is a problem.”**

**- Focus Group Participant**



plan, project, or policy is developed.

Adopting healthy behaviors, such as physical activity, is easier if our environment is built to support us in making healthy choices.

### Nature & Social Connectedness

Two important areas of research related to physical and mental health are: time spent in nature and time spent being socially connected. Although more research is needed, in many studies, particularly involving children and youth, researchers have found that time spent in nature positively influences mental health.

Researchers have also found that persons living in walkable, mixed-use neighborhoods have higher levels of social capital compared with those living in car-oriented suburbs.

Those living in walkable neighborhoods were more likely to know their neighbors, participate politically, trust others, and be socially engaged. People-to-people connectedness and neighborliness comes from creating a built environment which allows people to come in contact with one another. Spending time in nature, with people you enjoy, while being physically active is the trifecta for mental and physical health. Creating close to home environments where people can safely do that...priceless.



### Ridge to River

Formalizing trails on property and open right-of-way already under the control of the City of Livingston can help provide connections to nature and address equity concerns on the north side of Livingston. The North Hills trails (top) offer great vistas and unique opportunities for all people in the City but with easy access from neighborhoods on the north side. Expanding the pathway along the Yellowstone River within the City's Wastewater Treatment facility property (bottom) provides an opportunity to connect these neighborhoods to the existing pathway system south of the railroad tracks.



## 10. Implementation

Completion of the *Livingston Trails and Active Transportation Plan* is one step in creating a community that is accommodating to people who walk, roll, and hike. The implementation of the Plan requires a coordinated effort among officials from the City, Park County, non-profit organizations, community leaders, and citizen volunteers. Follow-up plans and studies, particularly for pathways, are often needed to refine design and alignments, as is occurring with Park County and the pathway bridge across the Yellowstone River.

This chapter identifies action steps for moving forward with the recommendations of the Plan, as well as potential funding sources and partners for proposed projects.

### 10 Action Steps for Implementation

Completing the 10 Action Steps identified in this chapter will help ensure development of the proposed trails and active transportation network in Livingston meets the goals of the plan, while providing the community assurance that it is a priority for the City.

The 10 Action Steps for Implementation are intended to serve as a barometer for short-term accomplishments related to this plan. The City and its partners should review these steps each year or two to determine the best approach to achieving them and celebrate successes. Some efforts will take several years to accomplish but the effort can begin in the first couple of years after adoption of the Plan.

The Action Steps also show that Livingston is not alone in its efforts to implement the plan, as many program and project efforts will require partnerships from agencies like Park County, and Montana Department of Transportation (MDT).

The City staff may wish to provide an annual report or update to the City Commission and others on its progress to implement the Plan to showcase progress as it occurs.



Exhibit 10-1: Action Steps for Implementation

Action	Partners	Timeframe
<p><b>1 Adopt the Plan</b></p> <p>Adopting the plan via resolution shows commitment to implementing it. Share it with the county and other partners in the area, including MDT, so they can incorporate the plan’s recommendations into corridor plans. These Action Steps should be incorporated into the City’s Strategic Plan.</p>	City of Livingston	Immediately
<p><b>2 Update Policies</b></p> <p>On the heels of the Growth Policy Update, the City should update its zoning and subdivision regulations to promote safer streets for all users and ensure trails identified in this plan are dedicated when development occurs along planned routes.</p>	City of Livingston Park County (for adoption of trails map)	2022-2023

Exhibit 10-1, continued: Action Steps for Implementation

Action	Partners	Timeframe	Action	Partners	Timeframe
<p><b>3</b> Begin design of top priority trail, sidewalk, and bikeway projects</p> <p>The City begins pursuing implementation of the highest ranking trail, sidewalk, and bikeway project. This entails identifying funding or pursuing grants, conducting concept or full design, and identifying a construction year when funding is confirmed.</p>	<p>City of Livingston MDT</p>	<p>2022-2023</p>	<p><b>4</b> Pursue safer crossings, starting with Park Street.</p> <p>Work with MDT to create safer crossings of Park Street, as identified in the Plan. Crossing treatments include Rectangular Rapid Flashing Beacons or Pedestrian Hybrid Beacons, high visibility crosswalks, crosswalk lighting, accessible curb ramps and push buttons, and a pedestrian underpass of the bridges east of Bennett.</p>	<p>City of Livingston MDT</p>	<p>Immediately</p>
<p><b>5</b> Organize maintenance programs</p> <p>City-based maintenance programs may take time to identify appropriate budget and staffing needs. The City should immediately begin efforts to clear crosswalk and curb ramp access when snow plowing occurs on the streets. The City can work with local partners to continue snow removal efforts on pathways and seasonal maintenance.</p>	<p>City of Livingston Non-profit partners</p>	<p>2022-2024</p>	<p><b>6</b> Create Wayfinding along City Streets</p> <p>Developing a wayfinding plan, complete with recommended locations and a sign family template is the first step, followed by pursuing funding through various organizations such as health-based foundations.</p>	<p>City of Livingston Park County Other Park Co. cities Non-profit partners Health organizations</p>	<p>2023-2025</p>



Exhibit 10-1, continued: Action Steps for Implementation

Action	Partners	Timeframe	Action	Partners	Timeframe
<p><b>7 Organize a landscaping, greenspace, and public art program</b></p> <p>Develop a strategic plan and related policies for enhancing existing sidewalk buffers, streetside spaces, trails, and trailheads with additional trees, landscaping, and public art.</p>	<p>City of Livingston Park County PCEC</p>	<p>2023-2025</p>	<p><b>8 Update and publish new route maps</b></p> <p>Create a new map showing the integrated network of existing trails and sidewalks (bikeways when designated) so people know how they can reach trails and pathways by active modes. Include future trails so people get an idea of the full vision for an interconnected system. Update as new project come online.</p>	<p>City of Livingston Park County</p>	<p>Annually, or as-needed.</p>
<p><b>9 Create dedicated funding programs</b></p> <p>Build up dedicated funding programs for sidewalk, bikeway, and trail implementation over a series of years. This may include a reserve fund to build up a fund balance over 3 or 4 years in order to amass enough money to implement a full project.</p>	<p>City of Livingston</p>	<p>2023-2027</p>	<p><b>10 Formalize partnership for trails with Park County</b></p> <p>An interconnected pathway system in and around Livingston requires organizational commitments by the City and County. A cooperative agreement or a memorandum of understanding (MOU) outlining expected roles and responsibilities creates consistent expectations for the public, reduces redundancy in trail management efforts such as equipment and human resources, and ensures trail routes are preserved through development.</p>	<p>City of Livingston Park County</p>	<p>2023-2024</p>



### Other Recommendations

The 10 Action Steps for implementation were identified by the Steering Committee as the highest priority near-term actions. There are other actions the City and its partners can pursue. They are listed in Figure 10-2 at right.

It is advised that the City revisit this list every one- to two-years to see if conditions have changed to warrant advancement of other strategies to implement the plan.

An update to the Trails and Active Transportation Plan should occur in approximately 10 years from adoption of this Plan. This will provide a re-examination of priorities and account for emerging trends in trail and active transportation given how quickly the field is evolving in terms of design treatments.

### Funding

The primary sources of funding available beyond the City of Livingston's budget come from a variety of federal programs, many of which are housed in federal transportation funding allocations from Congress. The programs below are existing within the federal programs and their future is contingent upon them remaining within existing federal funding programs.

Securing and managing federal funds for active transportation projects can be challenging for small cities given the extra requirements placed on these funds. Due to the additional requirements, projects funded with federal funds typically cost 15 to 20% higher than if local funds were used. They also take longer to develop in terms of design and construction approvals via MDT. The City should automatically increase any existing estimates by this 15 to 20% when pursuing federal grants and secure consultants who are accustomed to navigating the federal process.

**Surface Transportation Block Grant Urban Program.** Cities over 5,000 population are considered urban areas under federal transportation policy. This allows Livingston access to these funds that are distributed to the City from MDT for use on the urban

Figure 10-2: Other Recommended Action Steps

#### Other Recommended Action Steps

- Identify methods to enact a sidewalk fee-in-lieu program and a sidewalk utility fee to help fund projects to fill sidewalk gaps along main routes.
- Work with MDT for a joint agreement on plan recommendations and crossings on MDT-managed streets.
- Pursue Bicycle-Friendly and Walk-Friendly Community Status.
- Work with School District to discuss possible alterations to school zone policies to help increase walking and bicycling and reduce traffic crossing the railroad tracks.
- Conduct safety audits and community audits when new projects are developed.
- Identify possible Open Streets and Pop-Up Demonstration projects for bikeway and walkway routes prior to full-scale implementation.
- Develop trail and pathway design standards in cooperation with Park County.
- Endorse, via resolution, the use of FHWA-approved design guidance for pedestrian and bicyclist facilities. See Appendix.
- Work with Park County and others to consider hiring a full-time or part-time equivalent role for a jointly-funded trails and active transportation coordinator.



routes within the City. They can be used for a variety of street upgrades and changes, including the addition of sidewalks, speed management, and bikeway investments. The City also uses them for other critical maintenance and utility needs on those same urban-designated streets. The City has begun programming projects from the Trails and Active Transportation Plan into its CIP to utilize these funds to implement the plan's recommendations.

**Surface Transportation Block Grant Transportation Alternatives Program (TAP).** TAP is the most common federal funding program for active transportation facilities and administered through Montana Department of Transportation. In 2021, MDT received 41 applications for these federal funds, totaling approximately \$28 million. Only 15 of those projects were funded, totaling \$5.8 million. Individual project costs ranged from \$300,000 to \$1.1 million.

TAP requires a 13.42% match, meaning a \$100,000 project requires \$13,420 of that amount from the local jurisdiction. State match is available for pavement preservation or ADA-related upgrades on roadways under MDT's jurisdiction. The application deadline is typically in June of each year.

**Recreational Trails Program (RTP).** Montana State Parks administers RTP, which is a federally-funded grants program to support trails. Like TAP, it stems from federal transportation funds derived from fuel taxes collected from nonhighway recreational fuel use: fuel used for off-highway recreation by snowmobiles, all-terrain vehicles, off-highway motorcycles, and off-highway light trucks.

RTP applicants can include federal, tribal, state, county or city agencies, private associations and clubs. Examples of eligible projects include: urban trail development, basic front and back-country trail maintenance, restoration of areas damaged by trail use, development of trailside facilities, and educational and safety projects related to trails.

The application process is typically opened in November. In 2021, there were 42 projects funded for a total of \$1.6 million. Match is typically between 20-25% of project costs and the program may grant full or partial funding for applications (not including match).

**Federal Lands Access Program (FLAP).** FLAP is established to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators. Pedestrian and bicyclist facilities are eligible under this program.

FLAP also requires a 13.42% match on funding from applicants. The application process occurs in spring each year and information is available through Montana's FLAP program office, which is within the Federal Highway Administration division office in Helena.

**Montana Trail Stewardship Program (MTSGP).** This program is administered through Montana Fish, Wildlife, and Parks with state funds derived from light vehicle registration funds. In 2021, approximately \$1.2 million was distributed among 41 projects. Unlike federal funds, which are restricted to use by public agencies, non-profits are eligible for MTSGP and project awards may be full or partial. Eligible funding areas include:

- New trail and shared-use path construction;
- Rehabilitation and maintenance of existing trails and shared-use paths, including grooming of trails for motorized and nonmotorized winter recreation; and
- Construction and maintenance of trailside and trailhead facilities, including but not limited to bridges, fencing, parking, bathrooms, latrines, picnic shelters, interpretation, trail signs, and trailside weed management.

