



6.0 THE PLAN

The success of the *Heritage Trail* system is dependent on many different factors. Perhaps the most important factor is broad-based community support from both public and private interests all working together to achieve a common vision. Even with the support of the majority, however, a well-conceived plan backed by real policies and programs is required to ensure implementation. In fact, during the development of the original *BikeNet* plan, and again during the process to develop this plan update, the most often expressed concern was that “the plan wouldn’t be implemented.”

This Chapter is organized into three sections: Policy, Programs, and Facilities. Each section lists specific goals followed by implementation-oriented recommendations for action.

6.1 POLICY

One of the keys to making *Heritage Trail* a reality is to create a sound set of local standards, policies, regulations, and ordinances that support the ongoing development of trails and bikeways. In recent years, transportation policy at the national and state level has become much friendlier to non-motorized transportation, but more could be done locally.

POLICY IMPLEMENTATION GOAL 1. Adopt local government policies, processes and standards that encourage and enhance non-motorized transportation.

Action 1. Adopt and implement the *Heritage Trail Plan*.

The process of developing, writing and producing the *Heritage Trail Plan* is a relatively minor part of the plan’s ultimate success. First, the Billings City Council and the Yellowstone County Commission should formally adopt the *Heritage Trail Plan*, and by reference *Heritage Trail* should become part of the *Billings Urban Area 2000 Transportation Plan* and the *Yellowstone County Comprehensive Plan*. However, ultimate success will come only with implementation, which will require persistent, on-going effort. Planning ideas must become reality in the form of adopted policies, ordinances and standards that create equitable ways for developing and funding trails that can be applied consistently and predictably.

Action 2. Designate City of Billings staff member(s) to be responsible for the coordination of non-motorized transportation.

A City employee should be designated as the first point of contact for planning and coordination of non-motorized transportation projects and programs.

ON-GOING STAFF RESPONSIBILITIES RELATED TO NON-MOTORIZED TRANSPORTATION

1. Implementing and promoting *Heritage Trail*.
2. Evaluating existing and proposed facilities and programs for compliance with the intent of the *Heritage Trail Plan*.
3. Reviewing plans of proposed subdivisions to insure continuity of existing and proposed trails and bikeways.
4. Reviewing plans of public and private construction projects to ensure non-motorized transportation is accommodated consistent with the intent of the *Heritage Trail Plan*.
5. Coordinating all public trail and bikeway related projects.
6. Securing funding from federal, state, local and private sources for trails and bikeways, and for education and promotion of non-motorized travel.
7. Maintaining a comprehensive data collection program of non-motorized transportation activities.

Action 3. Revise and update local subdivision and site development policy to include incentive-based criteria for trail and bikeway development.

City/County Code currently provides only vague guidance for developers and City/County staff on when and how trails and bikeways should be implemented with new development. In order to preserve corridors and ultimately build a community-wide interconnected trail network, zoning and subdivision regulations should be updated to establish a clear set of expectations for developers that Staff can effectively enforce. It is recommended that new regulations be adopted which require that all new development or significant redevelopment include provisions for non-motorized transportation consistent with the *Heritage Trail Plan*. With these new regulations, some bonus or incentive should be offered for developments that incorporate high quality bicycle and pedestrian amenities beyond the minimum requirements.

EXISTING CITY OF BILLINGS CODE

Sec. 23-711. Bikeways.

(a) Bikeways based upon the adopted bikeway plan shall be provided when deemed necessary in the opinion of the city-county planning board and the city administrator.

(b) Bikeways shall be designed according to the state of the art manuals.

ZONING & SUBDIVISION POLICY RECOMMENDATIONS

The intent of including provisions for non-motorized transportation in zoning regulations is to ensure that all new developments and significant redevelopment includes these facilities in the appropriate design and location. As with any effective regulations, the requirements of applicants should be as clear and concise as possible to minimize confusion and conflict about what is desired, and where.

■ **Statement of Purpose**

The City Code and Zoning Regulations should include a statement that those policies will guide the zoning officer, planning board and/or zoning commission in making decisions related to non-motorized transportation.

■ **Requirement for Preliminary Plat or Site Plan Review**

1. **Trip Generators** - for all new subdivisions or site developments, plan submittals and/or the required traffic study should identify all trip generators within ½-mile radius of the perimeter of the proposed development.
2. **Trail & Bikeway Connectivity** – submittals should also include the locations of all existing and proposed trails and bikeways within the proposed development and within 1-mile of the development.
3. A written or schematic description of the proposed connections between the development and the trip generators and trails and bikeways should be required.

■ **Development Standards**

Zoning Regulations should be updated to refer specifically to and require compliance with the adopted *Heritage Trail Plan* and its related design standards. The *Heritage Trail* design standards should provide a set of criteria for achieving a desired level of non-motorized transportation improvements.

■ **Incentives**

While design standards will detail the minimum required improvements, they are limited in their ability to influence where private developers will choose to create a new development or redevelopment. Zoning regulations should be crafted to provide incentives that would encourage development in areas targeted for growth, e.g., in-fill development, and for providing amenities beyond the minimum requirements. Potential incentives can take the form of releases from certain requirements or bonuses for design that is particularly beneficial. Examples include:

- Increase in allowable lot coverage
- Decrease in required number of motor vehicle parking spaces
- Reduction in setback requirements
- Credit toward traffic signal contribution
- Sign area increase
- Increased lot density
- Accelerated or streamlined application review/approval
- Right-of-way exchange for park dedication or narrower roads



Action 4. Institutionalize funding for construction and maintenance of trails and bikeways.

Historically, major trail projects in the Billings area primarily have been funded with grants. While grant funding for transportation enhancements such as trails is considerably greater under TEA-21 than in the past, it still cannot be counted on

STRATEGIES TO INSTITUTIONALIZE FUNDING

1. Require that a percentage of all new public works construction projects, public or private, be earmarked for non-motorized transportation.
2. Trail and bikeways bond issue.
3. Local option tax earmarked for trails and bikeways.
4. Development impact fees

consistently to fund a significant trails program. To insure development of trails and bikeways on a community-wide scale, funding for trails and bikeways should be institutionalized in that trail funding is made an intrinsic part of public works and land development, as is funding of public streets and utilities.

Action 5. Develop and adopt a comprehensive set of local guidelines and standards for design, construction and maintenance of trails and bikeways.

Design standards for multi-use trails and on-street bikeways have significantly developed and evolved over the last 8 to 10 years since *BikeNet* was adopted. This evolution is generally due to the much larger body of constructed projects that are now in place across the country. Billings should draw on this collective experience to develop and adopt a set of design and maintenance guidelines and standards that are based on nationally accepted standards but tailored to local conditions. An integral part of these design standards should be standards for new subdivision and site development projects.

(The Billings Public Works Department has contracted for the development of a set of trail and bikeway design standards. Any reference in this document to design standards should be considered as a reference to the most recent version of the City of Billings design standards for trails and bikeways.)

Action 6. Require that all site development projects and subdivision plats be reviewed by the City of Billings, or Yellowstone County where appropriate, for compliance with the *Heritage Trail Plan*.

A policy should be adopted that gives City/County staff the authority to review and approve all new site developments and subdivisions. City/County staff should work with the developer to plan for and accommodate non-motorized transportation needs. In addition to

dedication and construction of specifically planned trail segments, City/County staff should consider site design elements, circulation, access, etc., relative to their impact on alternate modes. A review checklist should be developed for use by City/County staff and the developer during the review process.

GUIDELINES FOR NEW DEVELOPMENT

Perhaps the biggest impediment to walking and bicycling is automobile-oriented zoning and development practices that create segregated land uses with relatively long distances between origin and destination. New developments should be designed with non-motorized modes of transportation as a primary consideration, not an afterthought. Following are recommended practices that should be incorporated into zoning regulations in order to encourage the development of walkable, bicycle-friendly and transit oriented communities:

- Provide locations for neighborhood-scale commercial development within residential areas.
- Provide for higher density residential development and mixed-use zones to create “village centers.”
- Keep automobile-oriented development in zones near arterial roadways.
- Allow a high level of lot coverage (higher density) for properties with high pedestrian, bicycle, and/or transit access.
- Allow accessory dwellings, a variety of home occupations, and a mix of office and residential uses on the same lot or in the same building.
- Encourage clustering of uses in development and set aside open space for parks and trails.
- Allow and encourage the development of alleys.
- Discourage gated access and perimeter walls around subdivisions.
- Limit the use of cul-de-sacs and dead-end streets. If used, trail connections should be provided between cul-de-sacs and adjacent streets.
- Require that contiguous sidewalks, trails and bikeways be incorporated into new residential and commercial subdivisions.
- Provide direct bicycle and pedestrian access to adjacent residential areas and to nearby (1/4 mile for walking and 2 miles for cycling) activity centers, such as schools, parks and commercial areas.
- Trails and bikeways should connect to adjacent properties that are likely to be subdivided in the future to ensure that a contiguous non-motorized transportation system develops over time.
- Require direct pedestrian access between adjacent commercial properties.
- Preserve natural drainages for use as trail corridors.



Action 7. Require that all public infrastructure and utility projects be reviewed by the City of Billings, or Yellowstone County where appropriate, for compliance with the *Heritage Trail Plan*.

A policy should be adopted that requires City/County staff to review and approve the design of all public infrastructure and utility projects. By completing a preliminary review early in the design process, opportunities to include non-motorized enhancements can be identified. Ultimately, City/County staff should evaluate each project to make sure that the design meets the intent of the *Heritage Trail Plan*.

Action 8. Encourage enforcement of existing parking and traffic laws.

“Most surveys report that traffic safety is the major factor deterring individuals from bicycle commuting.”
-- *National Bicycling and Walking Study*

Effective enforcement of traffic laws creates a safer environment for all road users. As much as motorists, pedestrians and cyclists too must follow the rules of the road. Motorists that drive aggressively and are disrespectful of non-motorized users’ right to the road create dangerous situations that can lead to accidents and injuries, but they also create a situation that discourages some people from even attempting to use non-motorized

transportation. Likewise, cyclists and pedestrians that ignore traffic laws (wrong way riding, jaywalking, red light running, etc.) breed contempt with motorists and do nothing to foster respect between user groups. Therefore, the Police should consistently enforce traffic laws that impact bicycle and pedestrian safety, including issuing citations and/or warnings to pedestrians and cyclists.

Action 9. Encourage cooperation between local governments and departments to plan and implement multiple-use and multiple benefit projects.

Funding for trails is scarce. To make that funding go farther, it is important that local government agencies and departments work together to identify projects that address multiple needs. Often other public works, utility and land development projects provide ideal opportunities for construction of trails and bikeways allowing the limited trail funding to be leveraged.

Action 10. Adopt revised roadway design standards to accommodate and encourage shared use of rights-of-way by bicycles, pedestrians and motorized vehicles.

AASHTO states, “to varying extent, bicycles will be used on all highways where they are permitted.” Therefore, all new road construction or major re-construction projects should include accommodations for bicycles and pedestrians. While bicycles and cars can safely share the road on low-volume residential streets, significant improvements in the form of bike lanes



and/or off-road paths are needed along high-speed or high-volume arterials. City and County roadway design standards should be revised and formally adopted to require improvements for non-motorized transportation modes with all new construction.

Action 11. Develop public bicycle parking facilities and require the development of private bicycle parking facilities with new construction.

The lack of secure parking is frequently cited as a reason that people choose not to use their bikes for basic transportation: “I would ride to work if there was a safe place to lock my bike.” Therefore, providing bicycle parking facilities is an essential part of an overall effort to promote bicycling. Public parking should be constructed at all public facilities, including schools, parks, government buildings and transit stops. New commercial development should be required to provide convenient bicycle parking with the furthest bicycle parking rack no further away from the building entrance than the nearest car parking space.

BICYCLE PARKING BASICS

Bicycle parking should be:

- Visible
- Accessible
- Easy to Use
- Convenient
- Plentiful

Action 12. Encourage development of trails in multi-use corridors, including particularly ditches, canals, utility rights-of-way and railroads.

The desire of trail users, particularly cyclists, is for long, continuous and relatively uninterrupted routes. The rights-of-way of the historic irrigation canals and drains that crisscross the Yellowstone Valley are natural corridors on which to build trails. Likewise, utility corridors and easements should be utilized for their mutual benefit for trails.

Action 13. Monitor state and national policy, programs, and plans.

Local trails programs and funding sources are affected by policies implemented at the state and national level. The City of Billings and Yellowstone County should monitor state and national policy developments to insure that local programs are not adversely impacted and to take advantage of new opportunities.

Action 14. Create a Heritage Trail Interpretive Task Force to oversee implementation of interpretive elements of the *Heritage Trail Plan*.

It is recommended that a task force be created to oversee the implementation of the interpretive elements of the *Heritage Trail Plan* and to ensure that connections are provided to historical and cultural areas. Additional discussion on these interpretive elements and task force responsibilities is included in Section 6.5.



POLICY IMPLEMENTATION GOAL 2. Encourage public involvement in the planning and implementation of the *Heritage Trail* system.

Action 1. Work with independent trail and bicycle advocacy groups and outlying communities.

The City should work with independent non-profit organizations that advocate for the development of trails and bikeways, such as BikeNet, Yellowstone River Parks Association, Blue Creek Trails & Parks Association, and others. The City should also coordinate efforts with outlying communities, such as Laurel, Shepard and Huntley, to provide connections to these communities. The City should coordinate its efforts with these groups to ensure that efforts are not duplicated.

(Note: After the completion of the *BikeNet* plan in 1994, a citizen's advisory committee was formed to oversee the implementation of *BikeNet*. The group, which was named BikeNet, included local government officials, city and county staff, and representatives from bicycling interest groups. This group has since become an effective advocacy group for trail development, and in 2002 achieved status as an independent 501(c)(3) non-profit corporation.)

Action 2. Encourage trail advocates to serve on government boards.

Trail advocates should be encouraged to serve on local government boards and councils where they can influence local policies and decision-making as it relates to trail development, such as the City Council, Planning Board, Zoning Commission, Traffic Control Board and others.

Action 3. Inform the public of non-motorized transportation issues and opportunities.

If the public is expected to be involved and effective in non-motorized transportation planning, advocacy and decision-making, then it must be informed. The City of Billings and Yellowstone County should be responsible for informing the public of non-motorized transportation trends and issues, of developments in state and national transportation policy, and of opportunities where citizens can be involved in the on-going effort to plan and implement trails and bikeways.

Action 4. Pursue public-private partnerships in the planning and implementation of non-motorized transportation elements.

The most successful projects are those that achieve a win-win solution for all parties. This is most often accomplished when public agencies and private parties create partnerships early in the development process. Public-private partnerships should be pursued and encouraged.



6.2 PROGRAMS

The central and most visible part of the *Heritage Trail* system is a network of constructed trails and bikeways, but the long-term goals of the plan will not be achieved through facility improvements alone. There are many institutional, cultural and social factors that influence people's mode choice. So an equally important component to the long-term success of *Heritage Trail* is a comprehensive menu of education and promotional programs. Also, the public including the cyclist, the pedestrian, and the motorist, needs to be educated to use transportation facilities properly and legally.

PROGRAM IMPLEMENTATION GOAL 1. Adopt a policy requiring the City of Billings and Yellowstone County to partner with community organizations and other agencies to sponsor programs that promote and encourage the use of non-motorized transportation.

Action 1. Partner with the community on education and encouragement programs.

The best way to promote non-motorized transportation is to achieve grass roots-level buy-in by enlisting the assistance and enthusiasm of the many community organizations throughout the Billings area, including youth organizations, cycling and running clubs, schools, neighborhood task forces, police and sheriff organizations, service clubs, and many others.

Action 2. Partner with the medical and health community.

The City of Billings and Yellowstone County should work with Billings' large medical community to develop programs that promote the health and wellness benefits associated with walking and cycling.

Action 3. Partner with the schools.

School age children, particularly at the elementary and middle school level, are some of the most frequent users of non-motorized transportation modes. The City and County should work with schools to develop programs that encourage bicycling and walking among this age group and that encourage the continued use of alternate modes into high school and adulthood. Cycling skills and rules-of-the-road classes should be incorporated into the elementary school curriculum that promote safe and proper behavior among young cyclists and pedestrians. The City should work with schools to develop field trip outings and other programs to explore the historical and interpretive components of *Heritage Trail*.

Action 4. Partner with MET Transit.

The City should work with MET Transit to promote the mutual benefits of bicycling and mass transit. Some MET buses are currently fitted with racks that allow cyclists to place their bikes on buses. Currently limited to two bikes per bus, the bus racks are frequently full, indicating

the potential to expand this program. Lock-and-ride facilities at bus transfer stations should be developed and promoted.

Action 5. Partner with museums.

The historical and interpretive aspects of *Heritage Trail* present a unique opportunity to work with local museums and cultural organizations to develop programs that celebrate the rich history of Billings and the Yellowstone Valley.

Action 6. Co-sponsor or coordinate bicycle events.

Collaborate with community organizations and businesses to improve public awareness of non-motorized transportation. Events such as the highly successful Ales for Trails not only raise money for beneficial projects but they create an overall supportive atmosphere for trail and bikeway development.



Ales for Trails 2003

Action 7. Establish a consistent community-wide *Heritage Trail* signing and information system.

Including maps and attractive, easily identified directional and informational signing, a consistent way of identifying trails and primary on-street bikeways should be developed. Consistent identification of bicycle and pedestrian friendly routes will encourage their use.

Action 8. Develop a postcard Improvement Identification Program.

Improvement Identification Forms should be distributed through the Planning Department, local bike shops, and local bicycling, running and trail clubs, in order to solicit suggestions, input on maintenance needs, safety concerns and other issues.

Action 9. Develop corporate and service group programs.

Adopt-a-Trail or Sponsor-a-Trail programs should be implemented and marketed to local businesses and service groups as a way to fund and maintain trails. For those wishing to contribute smaller amounts, sponsorship opportunities should be developed for trail segments and various trail amenities such as benches, trailhead improvements, interpretive sites, etc.



Action 10. Work with law enforcement.

The City of Billings and Yellowstone County should communicate regularly with local law enforcement agencies to encourage enforcement of traffic laws that impact bicycle and pedestrian safety. Also, law enforcement personnel should be recruited to participate in education programs in the schools.

Action 11. Encourage bike shops to provide bicycle skills and repair instruction.

The City and County should work with local bike shops to develop programs for training in bicycle repair and in on- and off-road riding skills.

Action 12. Develop and maintain a program of data collection and opinion surveys on non-motorized transportation.

In order to inform future transportation decision making, City/County staff should organize, coordinate and maintain a comprehensive program of data collection and public opinion surveys that monitors trail and bikeway usage, user preferences, ownership rates, accident trends, etc. Monitoring of data should include regular analysis and comparisons of local statistics to national trends in order to identify areas for improvement.

If you can't measure it,
you can't improve it.

Action 13. Work with private businesses and public and private institutions to share parking and restroom facilities.

The City and County should work to develop a community-wide network of bicycle-friendly businesses and institutions that are willing to share parking and restroom facilities in order to encourage wider use of non-motorized transportation. Facilities could include post offices, banks, government buildings, MetraPark, Chamber of Commerce, hotels and motels, hospitals, etc.

Action 14. Encourage entrepreneurial activities near the trails.

The City of Billings and Yellowstone County should encourage local entrepreneurial businesses related to trail activities to develop near the trail network, such as bike and rollerblade rentals or food vendors.

6.3 FACILITIES

This section outlines planning processes and facility recommendations to implement a comprehensive system of trails and bikeways that goes beyond providing simple connections between points A and B. *Heritage Trail* is intended to enhance the community by providing transportation links, but also by tying neighborhoods together with natural and cultural features. As with the plan document itself, the proposed system should be ever-changing. As the community expands and grows, the plan should be regularly updated to reflect changing conditions, attitudes and opportunities.

FACILITY IMPLEMENTATION GOAL 1. Improve non-motorized transportation facilities through planning, design and improvement projects.

Action 1. Address non-motorized transportation modes as an integral part of transportation planning.

Alternate transportation modes, particularly bicycles and pedestrians, should be considered in the design of all public infrastructure projects.

Action 2. Involve citizens in transportation project planning.

Public input should be solicited in the planning and design development of all public transportation infrastructure projects. This is a critical step if the community at-large is to have a sense of ownership and commitment to the *Heritage Trail* system.

Action 3. Adopt planning guidelines and design standards for the design, construction and maintenance of trails and bikeways.

The City of Billings and Yellowstone County should adopt guidelines and standards for design, construction and maintenance of trails and bikeways. Once adopted, these standards and guidelines should be fully integrated into the planning of new roadway facilities and land development projects.

Action 4. For all roadway classifications, adopt new roadway design standards that incorporate non-motorized transportation modes as a primary design consideration.

It must be recognized that bicyclists and pedestrians will use all streets, including arterials because they provide the most direct route to major destinations. As such, all streets should be designed to accommodate bikes and pedestrians unless specifically prohibited.



Action 5. Encourage the use of traffic calming and neighborhood traffic management strategies in the development of neighborhood streets.

Establish traffic planning programs and implement appropriate improvements to insure that traffic volumes and speeds remain low on local residential streets. This will encourage the use of neighborhood streets for bicycling and walking.

Action 6. Adopt the following non-motorized facility classifications:

- On-Street Bikeways (Primary, Secondary, Arterial Bikeways)
 - Bike Routes
 - Bike Lanes
- Hard-Surface Multi-Use Trails
 - Connector Trails
 - Park Trails
- Soft-Surface Trails
 - Park Trails
 - All-Terrain Bike, Cross-country Ski, and Equestrian Trails
- Regional Connectors
- Greenways

Refer to Section 6.4 for detailed descriptions of each of the facilities.

Action 7. Implement a system of designated and signed on-street bikeways.

A designated system of signed primary on-street bikeways is recommended. This primary system is recommended on an approximately 1-mile grid, and should, as much as possible, avoid the use of principal arterials.

Action 8. Preserve potential corridors for future use.

A policy should be adopted to preserve designated Greenways for non-motorized use. Greenways include active and abandoned rail corridors, utility rights-of-way, and natural areas including the Rimrocks, the Yellowstone River, Canyon Creek, and other creeks, ditches, and drainage ways.

Action 9. Complete a periodic trails and bikeways inventory and capital improvement plan similar to the plan for citywide curb, gutter and sidewalk improvements.

This inventory should extend into the county with a particular emphasis on providing safe school routes. A policy should be adopted to consider non-motorized transportation needs prior to initiating construction of street, curb, gutter and sidewalk improvements.



Action 10. Include priority trail and bikeway projects in 5-year Capital Improvements Plan (CIP).

Trail and bikeway projects should be considered in the development of the City's plan for upcoming capital improvement projects.

Action 11. Work with canal and ditch companies to construct trails along canal and ditch rights-of-way.

Because the agricultural canals, ditches and drains in most cases pre-dated the urbanization of Billings, the canal rights-of-way do not typically follow the linear, right angle-type alignments of our current street system. Instead, they were designed to follow the natural contours of the Yellowstone Valley. This makes them particularly attractive as pedestrian and bicycle corridors since they lack steep grades. Throughout the planning process, the public expressed as one of its highest concerns, the desire for the City to negotiate an agreement with the Ditch companies that would allow the development of trails along these corridors.

Action 12. Identify and improve opportunities for trail use by equestrians.

Appropriate trail corridors and natural areas should be identified for equestrian use. Horses are an integral part of Billings' western heritage, and throughout the planning process there was an expressed public interest to see more opportunities available for equestrian users. Accommodations for equestrians should be incorporated into trails and trailhead amenities where appropriate.

6.4 ROUTE CLASSIFICATIONS

The *Heritage Trail Plan* provides an update to the facility classifications included in the *BikeNet Plan*. The purpose of updating these classifications is to be consistent with national standards. The following classifications are based primarily on the *Park, Recreation, Open Space and Greenway Guidelines*, a project of the National Recreation and Park Association and the American Academy for Park and Recreation Administration.

ON-STREET BIKEWAYS

On-street Bikeways are paved segments of roadway that serve as a means to safely separate bicyclists from vehicular traffic. These facilities would commonly serve bicycle commuters, fitness enthusiasts and competitive athletes. They include bike routes and bike lanes. Bike routes are shared portions of the roadway that provide separation between vehicles and bicyclists, such as paved shoulders. Bike lanes are designated portions of the roadway for the preferential or exclusive use of bicyclists. Bike lanes should be used in situations where traffic volumes are heavy enough to warrant clear separation between bicycles and vehicles and bike routes (paved shoulders) should be used in all other situations. The following on-street designations correspond to the routes shown in the Trail & Bikeway Plan Map, included in Appendix E.



www.pedbikeimages.org / Dan Burden

Principal Vehicular Arterial

Some arterial streets are not conducive to bike travel, even for expert riders, because of high traffic volumes, high speeds, narrow curb lanes or a combination of these factors. On-street bike travel should not be encouraged on these facilities. Principal vehicular arterials are shown in yellow on the Trail & Bikeway Plan Map.

Arterial Bikeways

While arterials are usually the least desirable routes for on-street bikeways, in some cases where lower volumes and travel speeds exist, and where sufficient pavement width exists, bike travel can be accommodated on arterials. In addition, where no alternative route exists, arterials must be considered for bike routes. Typical users of arterial bikeways generally will be more advanced in ability and will be more concerned with efficiency and continuity of routes than with the quality of the riding environment. These routes are shown in orange on the Trail & Bikeway Plan Map.

Primary Bikeways

Primary bikeways should provide relatively direct and continuous connections between neighborhoods and other major trip generators. Typically, they will follow streets classified as minor arterials or collectors. When possible, primary bikeways should connect to off-street routes. Bicyclists using primary bikeways will typically include a complete range of users from children and basic riders to advanced cyclists. Therefore, route selection must give equal consideration to directness, traffic volumes, and environmental quality. Primary bikeways are shown in red on the Trail & Bikeway Plan Map.

Secondary Bikeways

Secondary bikeways are shorter in length and typically follow routes classified as local streets. These routes are intended to provide safe routes, particularly for children, that link neighborhood residential areas with schools, parks, and neighborhood commercial centers. These routes are shown in purple on the Trail & Bikeway Plan Map.

HARD-SURFACE MULTI-USE TRAILS

Connector Trails

Connector trails are multi-purpose trails that emphasize safe travel to destinations throughout the community. The focus of connector trails is as much on transportation as it is on recreation. In general, connector trails are located within existing road rights-of-way and utility easements or along artificial drainage ways. Connector trails are intended to accommodate walkers, bicyclists, in-line skaters, wheelchair users and when appropriate horseback riders.



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The type of trail used and its design should reflect the anticipated magnitude of commuter use. In some situations, the use patterns of connector trails will dictate separate, adjacent paths for different user types.

Park Trails

Hard-surface park trails are multi-purpose trails located within greenways, parks, and natural resource areas. The focus of this type of trail is primarily on recreational value and interaction with the natural environment. However, park trails can also be used for commuting purposes.

This type of trail would allow for relatively uninterrupted movement through city parks and development areas. Abandoned railroad beds, utility rights-of-way, and scenic and historic routes provide the greatest opportunity for park trails. An example would be a trail around an inner-city lake or along a riverfront.



www.pedbikeimages.org / Dan Burden

As with connector trails, the design should reflect the anticipated magnitude of recreational use. In some situations, use patterns will dictate separate paths for pedestrians, bicyclists and if

necessary in-line skaters. All existing hard-surface multi-use trails (connector and park trails) are shown as solid green lines on the Trail & Bikeway Plan Map (Appendix E), and proposed hard-surface multi-use trails are represented by dashed green lines. It should be noted that the proposed multi-use trails shown in the Trail & Bikeway Plan Map are proposed corridors only and do not represent actual alignments.

SOFT-SURFACE TRAILS

Park Trails

Similar to hard-surface park trails, soft-surface park trails are located within greenways, parks, or natural resource areas. They will be used specifically for recreational purposes and are generally suited for lighter use patterns than hard-surface park trails. They are the preferred alternative for areas that require minimum impact to natural surroundings, such as within nature preserves. Solid black lines on the Trail & Bikeway Plan Map represent existing soft-surface trails.

All-Terrain Bike, Cross-Country Ski, and Equestrian Trails

All-terrain bike, cross-country ski, and equestrian trails are similar to park trails in that they emphasize a strong relationship with the natural environment, although for somewhat different reasons. They are most often located within natural resource areas, greenways, community parks and special use facilities, such as golf courses. Since regional and state parks often develop and maintain these types of trails, the need for them at the local level is often limited. The following defines some of the considerations with respect to each of these trail types.



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Off-road mountain biking has become a very popular activity that appeals to a wide range of age groups and varying skill levels. Given its relative infancy, trail standards to meet the needs of mountain bikers has continued to evolve.

Cross-country skiing trails come in a variety of types and widths to accommodate two different styles: diagonal or traditional and skate-ski. Diagonal style requires a set track, while skate-ski style requires a wider packed and groomed



surface. Trail lengths vary considerably, with loops ranging from a few to 10 or more miles. Since quality and safety are important to all skiers, a few well-groomed trails are preferable to extensive but poorly maintained ones.



www.trailsandgreenways.org/photos

As previously discussed, horseback riders can be incorporated into connector or park trails. However, it may also be desirable to develop trails specifically for horseback riding. Equestrian trails are usually grass or woodchip surfaced with varying lengths. In some instances, cross-country ski trails provide an opportunity for horseback riding during the summer.

REGIONAL CONNECTORS

Regional Connectors provide a connection between an urban area and an outlying community. It may be any one of the trail types listed above and should serve as an additional and separate designation when applicable. This classification is not included in the *Park, Recreation, Open Space and Greenway Guidelines* or the *BikeNet Plan*, but is included as an additional route classification in the *Heritage Trail Plan*. An example of a regional connector would be a trail that would provide a connection between Billings and Laurel.

GREENWAYS

Greenways are corridors of protected open space managed for conservation and recreation purposes. They often follow natural land or water features, and link nature reserves, parks, cultural features and historic sites with each other and with populated areas. Greenways can be publicly or privately owned, and some are the result of public/private partnerships. They often contain trails or paths that are used for walking, bicycling, or other forms of recreation, exercise, or transportation. Trails and greenways often follow abandoned rail corridors, canals, and utility rights-of-way.



www.cityofseattle.net/parks/BurkeGilman/bgtrail.htm

The classification of greenways corresponds to that of “Conservation Corridors” in the *BikeNet Plan*. “Conservation Corridors” include corridors of natural, scenic, cultural, or resource management value.

6.5 HISTORICAL AND CULTURAL OPPORTUNITIES

Multi-use trails offer a unique opportunity for users to explore the community and its rich historic, cultural and natural resources. The Yellowstone Valley and the City of Billings offer countless opportunities for interpretation that may be lost if not recognized and preserved. The philosophy and identity of *Heritage Trail* is the offering and interpretation of our past to those who use our trail system. Through interpretation, we can enrich the lives of those who experience our community by leaving a lasting impression of our history.



Peter Yegen Jr. Yellowstone County Museum

The National Parks Service defines cultural resources as “sites, structures, districts, and objects significantly associated with or representative of earlier people, cultures, and human activities and events.” The Yellowstone Valley is rich with these opportunities that continue to be threatened with growth and development. Trails offer a wonderful opportunity not only for preservation of these resources but for interpretation of them as well.

INTERPRETIVE OPPORTUNITIES

It is the intent of the *Heritage Trail Plan* to identify appropriate interpretive sites and set the stage for an interpretive master planning process that will identify additional sites and implement interpretative amenities throughout the trail system. Deciding what to protect and interpret is a difficult task. Most interpretive opportunities will fall within one of the following categories:

Visitors retain:

- 10 percent of what they hear
- 30 percent of what they read
- 50 percent of what they see
- 90 percent of what they do



1. ***Historical Significance*** – The events and figures of the past that have shaped local, state, or national history.
2. ***Architectural or Engineering Significance*** – The evolution of building style structure and the unique application of engineering principles.
3. ***Ethnic Significance*** – The life and traditions of people or regions, such as agriculture, hunting, festivals, and religious celebrations.
4. ***Archaeological Significance*** – The material remains of past human cultures.
5. ***Natural Significance*** – The natural features that shaped human habitation and influence such as the Yellowstone River or the Rims.
6. ***Economic Significance*** – The value of trail corridors in terms of increased tax revenues, tourism, and economic development.

Protection and interpretation of historic, cultural and natural resources after they have been identified and defined are important next steps. Protection methods should be based on the following principles:

- It is better to preserve and restore than destroy and rebuild
- Rehabilitation should be compatible with the exiting historic fabric and style of surrounding buildings and landscapes
- New construction should use materials, techniques, and designs that respect the character and value of the existing buildings, landscapes, and settings
- Not all sites should be fully accessible to the public

INTERPRETIVE MASTER PLAN

The development of an Interpretive Master Plan for the *Heritage Trail* is the next step in planning and implementing interpretive opportunities throughout the community. The Interpretive Master Plan will help explain the significance of the resources to others and will improve public acceptance of preservation and interpretation strategies.

Interpretation is "...a communication process designed to reveal meanings and relationships of our cultural and natural heritage to the public (visitors) through first-hand experiences with objectives, artifacts, landscapes, or sites."

-- *Interpretive Master Planning*



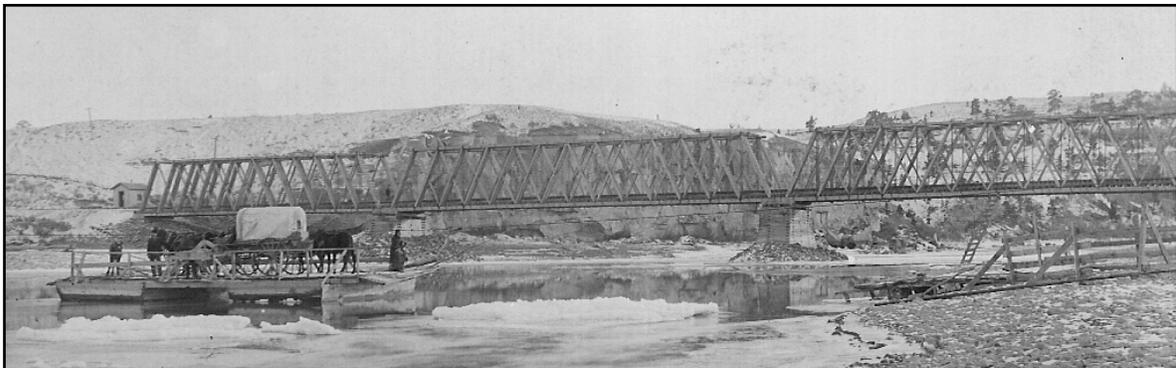
Peter Yegen Jr. Yellowstone County Museum

It is recommended that a task force be created to develop an Interpretive Master Plan and oversee the implementation of the interpretive elements into the *Heritage Trail*. This task force would be responsible for researching potential historic, cultural and natural resources, as well as providing recommendations for the continuity and evolution of their interpretation. Additional duties of this task force might also include education and the preservation of these elements.

Historic, cultural, and natural resources can be explored through guided tours, self-guided tours, interpretive signage, audio interpretation, and photo opportunities. Additional interpretive media options include maps, brochures, kiosks, and web sites. It may also be desirable to provide various interpretive themes throughout the community, such as:

- River Ecology and the Story of the Yellowstone River Valley
- Wildlife of the Yellowstone Valley
- Plant Communities of the Yellowstone Valley
- Geology of the Yellowstone Valley

There are several resources available to aid in the identification of local interpretive opportunities including, *Billings A to Z* and *Pieces & Places of Billings History*. In addition to these books, there are countless individuals with unique stories that add to the color and interest of our community.



Peter Yegen Jr. Yellowstone County Museum



The following lists include potential historic, cultural, and natural sites that can be accessed or viewed from many points along the *Heritage Trail* corridors. They also include various facilities to which connections should be provided as part of the trail and bikeway network. These lists are by no means complete and are intended as a starting point for the development of an Interpretive Master Plan.

Natural Areas

- The Yellowstone River
- Beartooth Mountains
- Riverfront Park
- Alkali Creek
- Four Dances Nature Area
- Pryor Mountains
- Big Horn Mountains
- Lake Elmo - Holling Lake
- Canyon Creek
- Two-Moon Park

Historic & Cultural Resources

- Boothill Cemetery
- Face-on-the-Rims
- Black Otter Trail
- Chief Plenty Coup State Park
- Pompey's Pillar
- The Steamboat Josephine
- Coulson Townsite
- NP Steam Switch Engine #1031
- The Gilsdorf House
- Maverick Hose Company's Fire Bell
- Heffner Stone Quarry- Heffner Steps
- Mavity Law Enforcement Memorial
- James J. Hill Plaque
- Memorial Lane
- Tracy's Landing
- Pictograph Cave State Park
- Sacrifice Cliff
- Chief Joseph & the Canyon Creek Battle Site
- The 7th Cavalry Guidon Trooper- Sculpture
- Immel-Jones Site
- Luther S. "Yellowstone" Kelly's Gravesite
- Ferry Ring
- The First Church (Congregational Church)
- Yegen Brothers Sign
- Zimmerman Trail
- James Webb Memorial
- John Losekamp Memorial
- Myers Trail
- Community Christmas Trees
- Pioneer Park- The George Washington Trees

Facilities

- Western Heritage Center
- Billings Parmly Library
- Yellowstone Art Center
- BBWA Canal
- Alberta Bair Theater
- Daylis Stadium
- Women's History Museum
- Peter Yegen, Jr. Yellowstone County Museum
- Railroad Depot
- Moss Mansion
- Billings Logan International Airport
- Cobb Field
- Metra Park
- Zoo Montana



ADDITIONAL CULTURAL AND HISTORICAL INFORMATION

State and Local Contacts

<p>Peter Yegen Jr. Yellowstone County Museum 1950 Terminal Circle Billings, MT 59105 (406) 256-6811</p>	<p>Western Heritage Center 2822 Montana Avenue Billings, MT 59101 (406) 256-6809</p>
<p>Dept of Parks, Recreation and Public Lands City of Billings www.ci.billings.mt.us/Living/parks.php (406) 657-8371</p>	<p>Friends of Chief Plenty Coups Association Box 100 Pryor, MT 59066 (406) 252-1289 www.nezperce.com/pcasn.html</p>
<p>Frontier Heritage Alliance 1004 Big Goose Road Sheridan, Wyoming 82801 www.frontierheritage.org</p>	<p>Museums Association of Montana c/o Montana Historical Society P.O. Box 201201 Helena, MT 59620-1201 www.montanamuseums.org</p>
<p>Montana Fish Wildlife & Parks 2300 Lake Elmo Drive Billings, MT 59105 (406) 247-2940 www.fwp.state.mt.us/default.aspx</p>	<p>Yellowstone River Parks Association (YRPA) c/o D.A. Davidson, Hart Albin Building 208 North Broadway Billings, MT 59101 www.yrpa.com</p>
<p>Carbon County Historical Society Archives 224 N. Broadway Avenue Red Lodge, MT (406) 446-3667</p>	



National Contacts

National Park Service US Department of the Interior PO Box 37127 Washington, DC 20013-7127	National Conference of State Historical Preservation Officers 444 North Capitol Street, NW Suite 332 Washington, DC 20001 202.624.5465
National Alliance of Preservation Commissions 444 North Capitol Street, NW Suite 332 Washington, DC 20001 301.663.6149	National Alliance of Statewide Preservation Organizations c/o Historic Massachusetts, Inc. 45 School Street Boston, MA 02108 617.350.7032
Advisory Council on Historic Preservation 1100 Pennsylvania Ave. NW Washington, DC 2004 202.272.0533	Cultural Council of American Indians, Alaska Natives and Native Hawaiians c/o Shoshone-Bannock Tribal Museum PO Box 306 Post Falls, Idaho 83203
National Institute for Conservation of Cultural Property 3299 K Street, NW Suite 403 Washington, DC 20007 202.625.1495	National Trust for Historic Preservation 1785 Massachusetts Avenue, NW Washington, DC 20036 202.673.4000
Historic American Buildings Survey www.cr.nps.gov/habshaer/ 202.343.9625	Historic American Engineering Record www.cr.nps.gov/habshaer/ 202.343.9625
Interagency Resources Division 202.343.9500	National Register of Historic Places www.cr.nps.gov/nr/ 202.343.9563
National Historic Landmarks www.cr.nps.gov/nhl/	Preservation Assistance Division 202.343.8174
Tax Credit Information 202.343.9573	Certified Local Government Program www2.cr.nps.gov/clg/index.htm 202.343.9505

6.6 SITE AMENITIES

Site amenities offer a wonderful opportunity to enhance the character and identity of the *Heritage Trail*. Often overlooked, site amenities can offer trail users points of rest, interpretation, and contemplation resulting in a positive trail experience while providing continuity throughout the trail system. It is the intent of the *Heritage Trail* to offer suggestions on appropriate site amenities that fit the character that is unique to the Yellowstone Valley.

Amenities such as benches, bollards, and signage utilizing materials such as wood timbers and natural stone are recommended to promote and enhance the identity of *Heritage Trail*.

TRAILHEADS

Trailheads offer a unique opportunity to present the trail system to the public. They are transition points and are typically the first impression of the trail system to the public. Because of this, special attention should be considered when designing and developing trailheads. A typical trailhead plan with parking is shown in Figure 6.6.1 and a typical trailhead plan without parking is shown in Figure 6.6.2.

A typical trailhead design should consider:

- Circulation for vehicles, pedestrians and potentially animals
- Appropriate parking areas
- Restrooms, signage, screening, and landscaping
- Connector trails to the main trail for alternate use
- Safety and security

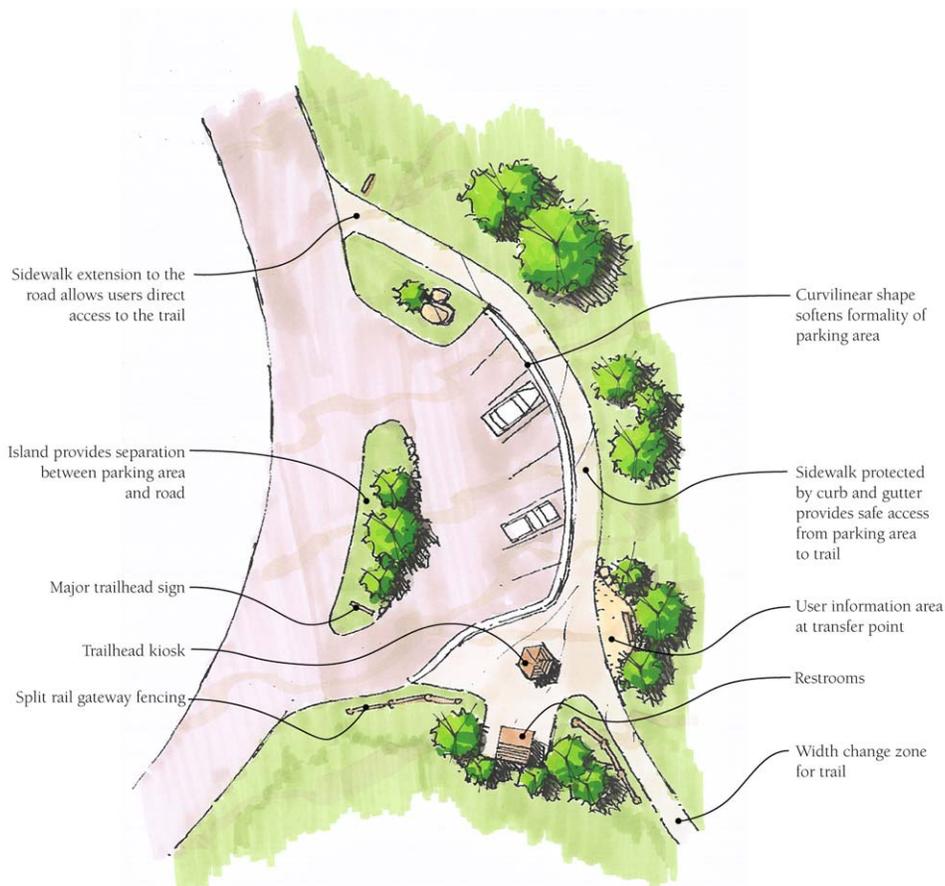


Figure 6.6.1 Typical Trailhead Design with Parking

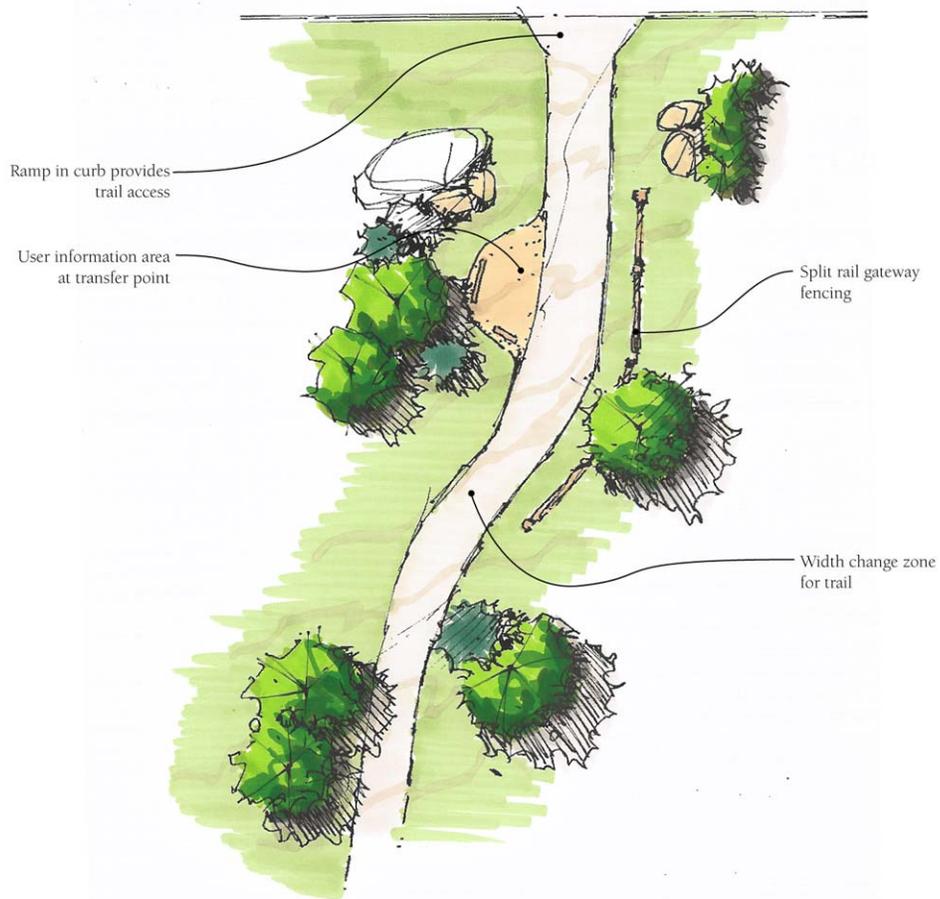


Figure 6.6.1 Typical Trailhead Design without Parking

The placement of signage at all trailheads and transition points provides continuity throughout the trail system. An example of a *Heritage Trail* sign to be placed at all major trailheads is shown in Figure 6.6.3 and recommended specifications for the standard *Heritage Trail* sign are shown in Figure 6.6.4. *Heritage Trail* signage should also be placed at transition points and various locations along the length of a trail. Additional signing recommendations are included in the following sections.

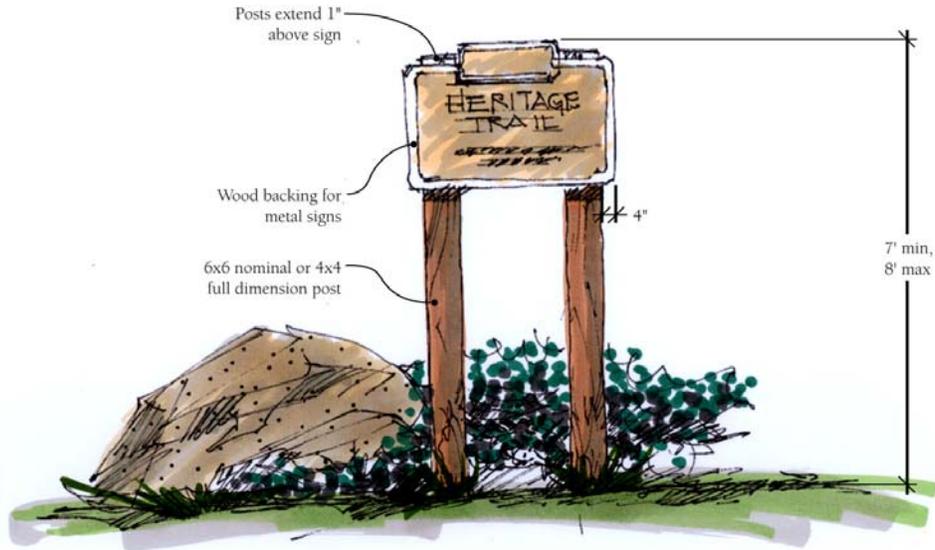


Figure 6.6.3. Major Trailhead Sign

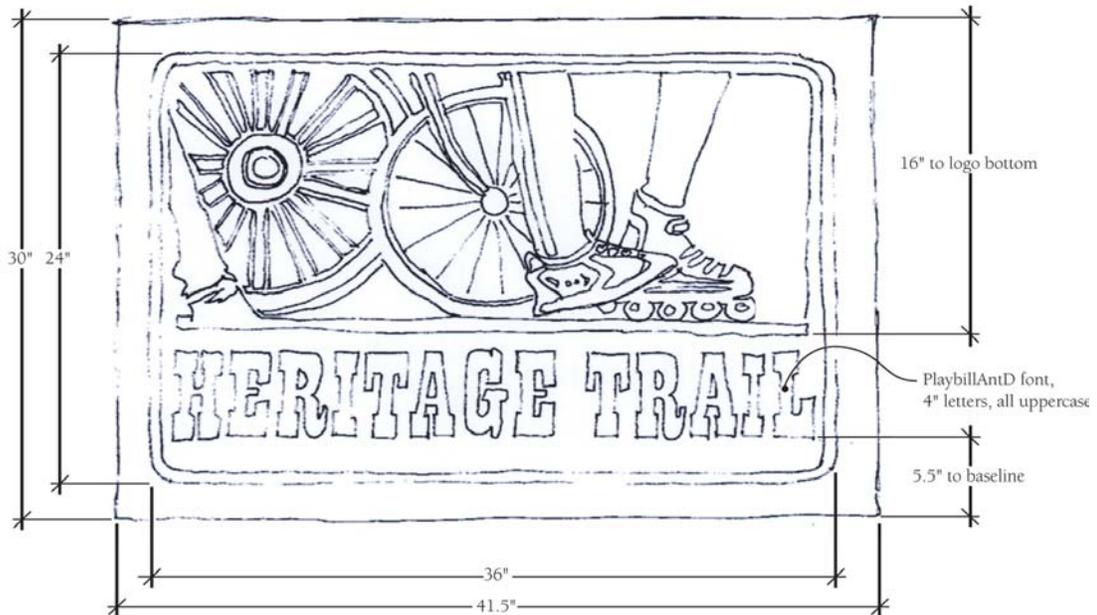


Figure 6.6.4. Recommended Specifications for *Heritage Trail* Sign

BENCHES

Benches offer a wonderful opportunity to enhance trail identity and allow community participation. Location, style and comfort are important considerations when selecting and implementing benches.

Typically, benches should be located at all primary and secondary entry points and at regular intervals along the trail. Typical design standards include one bench every two miles on rural trails, one bench every half mile on suburban trails and



Photo by Land Design, Inc.

benches placed as necessary on urban trails. Actual locations will vary based on usage and alignment opportunities.



Photo by Land Design, Inc.

Bench style is dependent on trail character, funding and maintenance. All benches should be vandal resistant, securely fastened to the ground to eliminate the possibility of theft, and have a unique style which is the same or similar throughout the trail system. One option for benches would be the use of sandstone slabs (see photo). Design standards include an 18” bench height with a minimum seat depth of 15”.

SIGNAGE

Signage is an important amenity to the trail system as it provides critical information to trail users. Signs should be clear, concise and legible and made of materials that are suitable to the trail character and durable enough to stand up to public use. As shown in Figure 6.6.5, utilizing natural sandstone for bollards/signage for example is an opportunity to tie the unique character of the Rims to the trail system.



Figure 6.6.5 Stone Bollard

Trail signage can be broken down into six categories: informational, directional, regulatory, warning, event, and interpretive. Informational signs orientate users on the trail system and provide an overview of the trail and associated facilities. Informational signs can also identify trail distances in the form of mileage markers, and average time required to travel along a particular section of trail or a specific trail facility. Examples of typical informational signs in the form of mileage markers are shown in Figure 6.6.5 and 6.5.6.

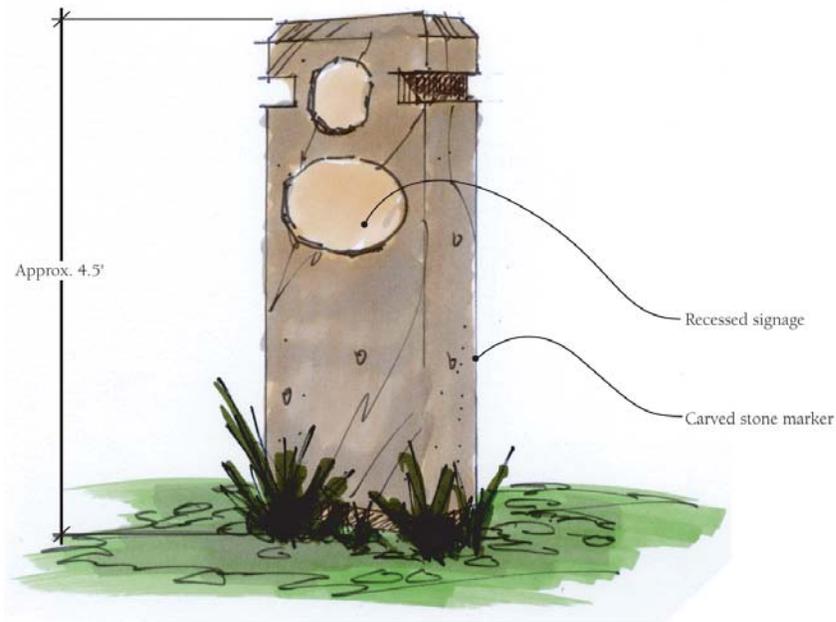


Figure 6.6.6. Typical Informational Sign

Directional signs provide trail users with information necessary to choose a particular travel route. Typical directional signs utilize graphic symbols with brief descriptions. Signs may

include information such as arrows indicating direction of travel with supporting text “this way” or “keep to the right”. Figure 6.6.7 shows an example of a typical directional sign.

Regulatory signs identify rules, laws, and regulations that apply along trail corridors. Examples include speed limit, hours of operation, and pass with care. Warning signs are used to caution trail users about potential hazards such as a narrow bridge or steep slope. Refer to the current City of Billings *Design Standards for Trails and Bikeways* for additional guidance on appropriate use and placement of regulatory and warning signs on trails.

The final two categories of trail signage are event and interpretive signage. Event signs offer wonderful opportunities to present information about special events happening both on the trail and within the community. Interpretive signage offers information about significant cultural and natural features along the trail.

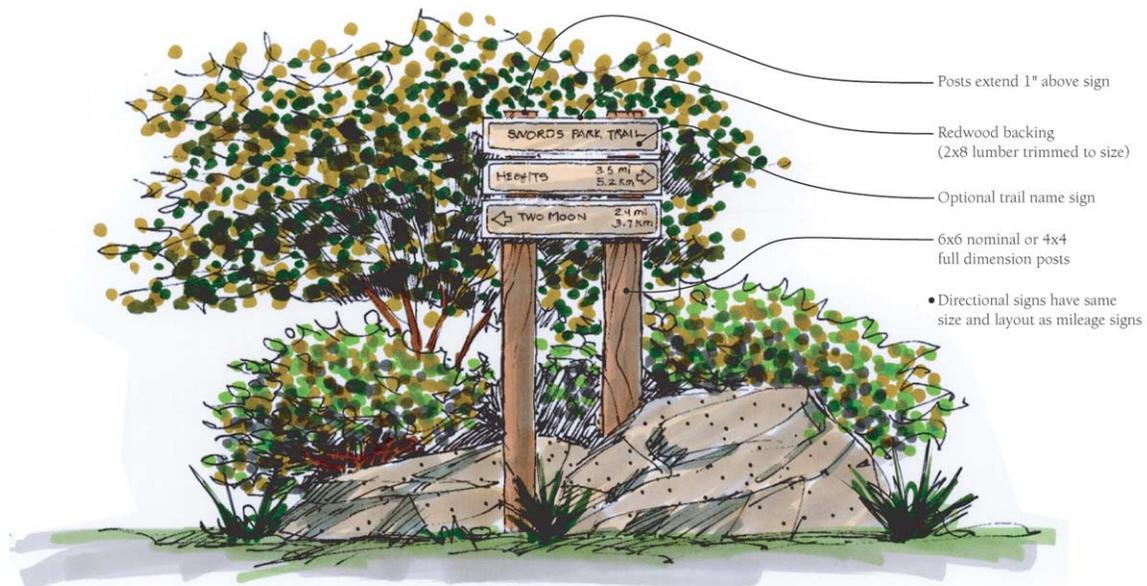


Figure 6.6.7 Typical Directional Sign

ADDITIONAL SITE AMMENITIES

Other site amenities to consider include:

- Bicycle Racks
- Shelters
- Restrooms
- Lighting



- Public Art
- Trash Cans

Site amenities also offer the opportunity for community participation. Memorial benches, corporate donations of shelters, and local business advertising on signage can all be ways to allow the community to participate in the implementation of our trail system with a true sense of pride and ownership.

6.7 LANDSCAPE RECOMMENDATIONS

Trail development often occurs in areas rich in aesthetic character allowing for great experiences for trail users. Whether it is an opportunity to enjoy the fall colors along the Yellowstone River or experiencing the spectacular views of the Greater Yellowstone Valley, landscape plays an important role in how a trail “feels”. There are locations, however, where trail alignments occur in less pleasing areas where well designed landscaping can add to a positive trail experience.

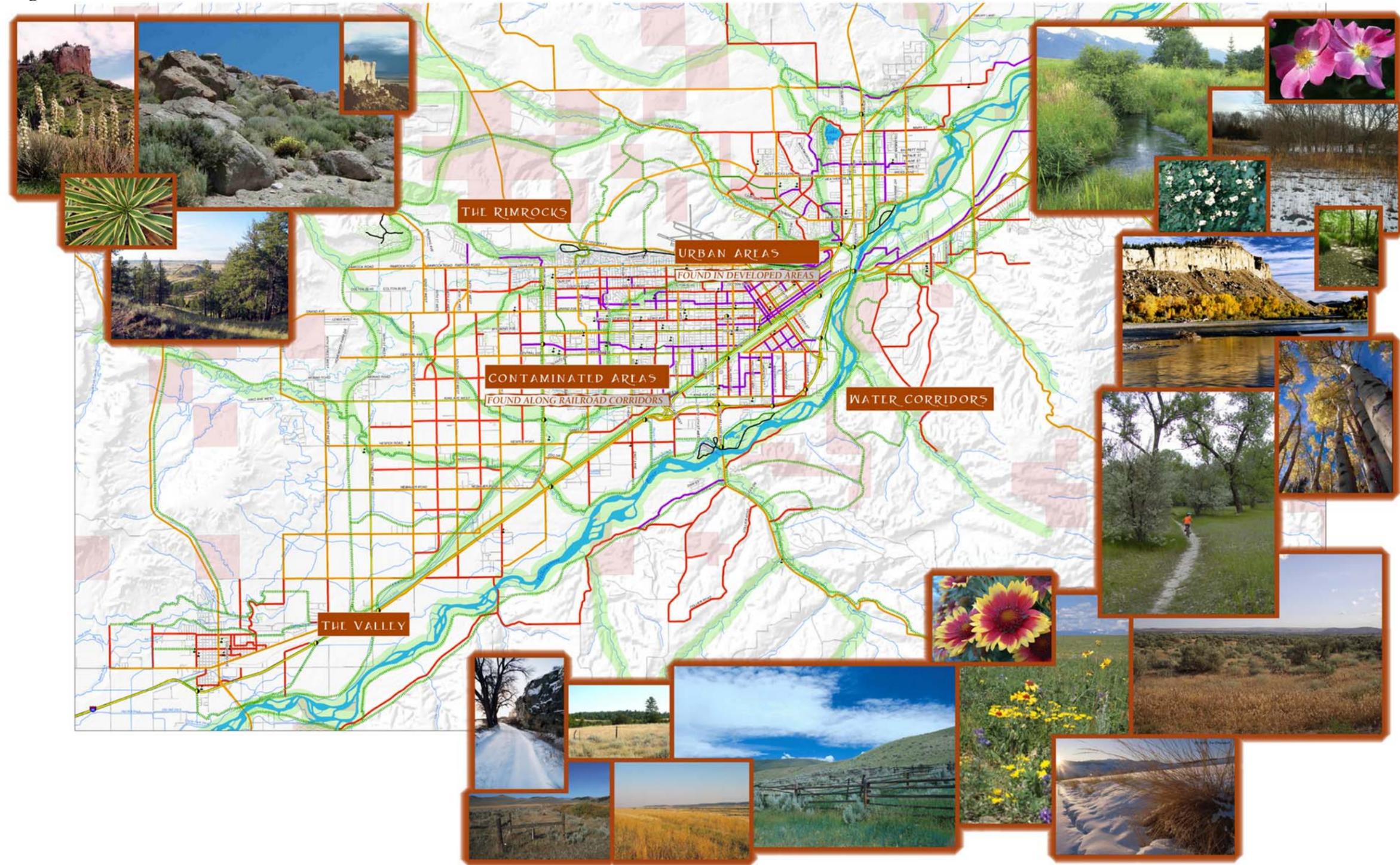
Author Kevin Lynch writes on the importance of understanding landscape from the perspective of the trail user, “Since (the) landscape is usually experienced by a moving observer, it is not the single view that is important as much as the cumulative effect of a sequence of views.” Landscaping can serve several purposes along trail corridors including defining outdoor spaces, creating shade, directing circulation and providing screening from adjacent property owners. Other important considerations include soil conditions, plant selection, water requirements, maintenance requirements and initial and long-term costs.

It is the intent of the *Heritage Trail* to provide guidance for appropriate planting throughout the trail system as sections of the trail are constructed. With many sections of proposed trails located in areas with little to no supplemental water, native plants are recommended. If non-native plants are selected, they should be considered drought tolerant with a non-invasive root structure and hardy to zones 3-4. *Heritage Trail* identifies three “zones” differentiated by soil type and geographic locations within the Billings area.

- Water Corridors- silty soils
- The Valley- clay soils
- The Rimrocks- sandy soils

The following plant palettes, as shown in Figure 6.7.1, provide guidance on appropriate plantings that fit their location and can survive with little maintenance.

Figure 6.7.1 Plant Communities





WATER CORRIDORS

Grasses

- American Sloughgrass
- Prairie Sandreed
- Canada Wildrye
- Thickspike Wheatgrass
- Western Wheatgrass
- Slender Wheatgrass
- Reed Canarygrass
- Canada Bluegrass
- Prairie Cordgrass

Woody Vegetation

- Rocky Mountain Juniper
- Peachleaf Willow
- Sandbar Willow
- Narrowleaved Cottonwood
- Plains Cottonwood
- White Clematis
- Boxelder
- Rose Woods
- Green Ash
- Buffaloberry
- Golden Current
- Common Chokecherry
- Redtwig Dogwood
- Skunkbrush
- Snowberry
- Wild Grape

THE VALLEY

Grasses

- Blue Gramma
- Thickspike Wheatgrass
- Western Wheatgrass
- Prairie Junegrass
- Sandberg Bluegrass
- Green Needlegrass



Wildflowers

- Arrowleaf Balsamroot
- Paintbrush
- Blanket Flower
- Lupine
- Larkspur
- Coneflower
- Prairie Smoke
- Blue Flax
- Yarrow

Woody Vegetation

- Prairie Rose
- Big Sagebrush
- Fringed Sagebrush
- Winterfat

THE RIMROCKS

Grasses

- Blue Grama
- Prairie Sandreed
- Bluebunch Wheatgrass
- Prairie Junegrass
- Indian Ricegrass
- Sandberg Bluegrass
- Needle-and-thread

Woody Vegetation

- Ponderosa Pine
- Limber Pine
- Quaking Aspen
- Rocky Mountain Juniper
- Mountain Mohogany
- Golden Current
- Common Chokecherry
- Redtwig Dogwood
- Silverberry
- Sandcherry
- Skunkbrush Sumac
- Snowberry
- Silver Sagebrush



- Fringed Sagebrush
- Rabbitbrush
- Winterfat
- Shrubby Cinquefoil

There are additional zones such as urban areas and contaminated areas that will require site specific attention.

It is the recommendation of the *Heritage Trail* that landscaping at a minimum include site grading to mitigate construction activities encountered through trail construction and seeding of disturbed areas with a seed mix that includes some, if not all, of the recommended grasses. Additional landscaping is recommended as construction and maintenance budgets allow.

ADDITIONAL LANDSCAPING RECOMMENDATIONS

The trails edge should include a mowed shoulder (2-3 feet min.) on each side of the trail. This maintained shoulder offers an alternative lane for pedestrians, in particular joggers, who may prefer not to use the paved trail surface. It is important to note that woody vegetation including trees and shrubs should be kept at least 5 feet from the edge of the trails edge to reduce root damage to the trail.

Safety and security are also important factors when developing landscape along trail corridors. Visibility of 100 feet both forward and backward on all points along the trail is recommended, as well as adequate site distances on approaches to bridges and intersections. Trail users should have clear vision through an area before entering or committing to a particular route.

LANDSCAPE MAINTENANCE PLAN

The development of a maintenance plan should be designed and implemented as each trail segment comes on-line. Coordination with adjacent landowners and local jurisdictions such as the Parks, Recreation, and Public Lands should also take place to ensure long-term vitality of the trail landscape. If maintenance costs are prohibitive for the development of landscaping along trail corridors, alternative programs such as “Adopt-a-Trail” can be implemented to ensure the long-term success of individual projects.



6.8 REFERENCES

1. *Bicycle Parking Guidelines*. Association of Pedestrian and Bicycle Professionals. <http://www.apbp.org>.
2. *Bicycle Parking: The Basics*. Bicyclinginfo.org: Pedestrian and Bicycling Information Center. <http://www.bicyclinginfo.org>.
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4. *Greenways, a Guide to Planning, Design, and Development*. Charles A. Fink and Robert M. Searns. The Conservation Fund 1993.
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8. *National Bicycling and Walking Study*. U.S. Department of Transportation. Federal Highway Administration. 1992.
9. *Park, Recreation, Open Space and Greenway Guidelines*. A Project of the National Recreation and Park Association and the American Academy for Park and Recreation Administration. James D. Mertes, PhD, CLP and James R. Hall, CLP. December 1995.
10. *Pedestrian and Bicycle Planning: A Guide to Best Practices*. Victoria Transport Policy Institute. June 2003.
11. *Pieces & Places of Billings History: Local Markers & Sites*. Joyce M. Jensen. 1994.
12. *Twenty-Year Bicycle and Pedestrian Access Master Plan: Model Ordinances for the Enhancement of Bicycle and Pedestrian Access to Transportation Facilities*. Maryland Department of Transportation. October 2002.

7.0 IMPLEMENTATION

7.1 PLAN RECOMMENDATIONS

This chapter makes recommendations designed to enhance the bicycle and pedestrian environment in the Billings area. Using the existing network and project evaluation criteria, future priority bicycle and pedestrian facility projects were selected.

7.2 PROJECT SELECTION AND PRIORITIZATION

Ideally, the *Heritage Trail* would be implemented in its entirety all at once. The realities of funding availability, however, make it necessary to consider the plan as a combination of many projects, both small and large, which ultimately will result in total implementation of *Heritage Trail*.

Many bicycle and pedestrian facilities are developed in conjunction with larger projects such as street reconstruction or widening. The priority of the more significant project often determines when a bikeway project will be accomplished. Many other bicycle and pedestrian projects are closely linked to or are a result of development. These projects are often not needed until development actually occurs and construction of such projects is dependent upon funding provided by the new development. The following project evaluation criteria should be used to rate priority projects for the implementation of facilities that are not related to street reconstruction or development projects.

PROJECT EVALUATION CRITERIA

Safety

The opportunity for conflict between motorized and non-motorized traffic should be minimized whenever possible. Safety concerns were evaluated and included in the project prioritization process. In general, those projects that would remove bikes and pedestrians from roadways that have narrow shoulders, blind curves, high traffic volumes, or high speeds would receive a higher level of priority.

Safety was ranked as *high* (1), *medium* (2), or *low* (3). Projects received a *high* level of priority related to safety if they would provide an alternate route to a roadway that is a high safety concern as described above. A *medium* level of priority was assigned if the project would provide an alternate route to a roadway that is a moderate safety concern. Projects that would not provide a reasonable alternate route to a roadway were given a *low* level of priority related to safety.



Connectivity & Accessibility

A bicycle and pedestrian transportation network should provide direct connections to important origins and destinations, and whenever possible, facilities should be located where they can provide convenient access to all users. Origins and destinations include residential neighborhoods, parks, schools, and business and retail centers. An effective non-motorized transportation system should also provide connections with other transportation modes, such as public transit routes. Connectivity and accessibility are measures of the distance a facility is from a specified trip origin and destination and the ease by which this distance can be traveled, respectively.

Connectivity and accessibility were ranked as *high* (1), *medium* (2), or *low* (3). A project with *high* connectivity would be one that would provide several connections between primary origins and destinations; a project with *medium* connectivity would provide at least one connection between an origin and destination; and a project with *low* connectivity would not provide any connections between origins and destinations. A connection is defined by the origin or destination being within ½ mile of any point along the facility.

Route Continuity

The proposed network should minimize missing links. By eliminating gaps in the overall network, bicycle and pedestrian facilities can better serve all segments of the community. If gaps exist in the bicycle network, they should be signed well, and should not include traffic environments that are unpleasant or threatening to facility users, such as high-volume or high-speed motor vehicle traffic with narrow outside lanes. Good quality routes should be direct and smooth flowing with little waiting time and have minimal increased (detour) distance compared to the most direct route.

Continuity was ranked as *high* (1), *medium* (2), or *low* (3). A project with *high* continuity would be one that would provide a continuous route between two or more existing facilities; a project with *medium* continuity would provide a connection to one existing facility; and a project with *low* continuity would not provide a connection to any existing facilities.

Aesthetics and Recreational Value

Bicyclists and pedestrians are more inclined to use facilities that provide a comfortable and attractive route, especially for recreational trips. The goal of this criterion for evaluation is to give some priority to those projects that would provide a more enjoyable and visually pleasing recreational experience (i.e., along the Rimrocks or Yellowstone River). Trails that link park facilities were given more priority than those that simply follow transportation corridors.

Aesthetics and recreational value were ranked as *high* (1), *medium* (2), or *low* (3). Projects that would be located within corridors along the Rimrocks, Yellowstone River, other waterways, or within parks or greenways were given a *high* level of priority. Those not located in the above corridors, but also not located along roadways, were given a *medium* level of priority. Projects that would be located within the right-of-way of roadways, railroads, etc. were given a *low* level of priority related to aesthetics and recreational value. It should be noted that, although it is an



important criterion to include in the prioritization of projects, aesthetic beauty is a matter of perception. Therefore, it is important to be consistent when comparing one potential project to another.

Travel Demand

Bicycle and pedestrian travel demand is based on several factors, including population, commuter mode split, the number of trip generators that can be accessed by a given facility, potential bicyclists or walkers, recreational trips, etc. Because alternate-mode travel demand forecasting is currently a difficult and time-consuming process, many transportation and advocacy groups consider this issue to be a high research priority, especially considering the amount of funding available through ISTEA for bicycle and pedestrian projects. However, there is not a clear consensus among these groups as to the ideal bicycle and pedestrian demand forecasting methodology.

Therefore, based on research of current methods, a simple process for determining bicycle and pedestrian travel demand has been developed for the purpose of evaluating and comparing potential projects. This process was developed specifically for the purpose of comparing potential projects and is not meant for design purposes. These bicycle and pedestrian travel demand forecasting guidelines consist of the following steps:

1. Define the bikeway or multi-use path corridor or section for analysis.
2. Define the area of influence from which the bicycle and pedestrian travel demand would originate or to which it would be destined. Through research of various methodologies, it was determined that ½ mile on either side of the facility is the common assumption for area of influence.
3. Use current Census data to determine the average mode split for the area of influence. For each of the Census tracts within this area, obtain the percentage of commuters that bike or walk to work and calculate the average. For simplicity, it is not necessary to account for the fact that not all of the census tracts will be entirely encompassed by the area of influence.
4. Determine the demand for the facility by multiplying the average mode split by the Average Daily Traffic (ADT) on the adjacent streets within the area of influence. It is recommended that the following approaches be taken for different facilities:

On-street Bikeways – Multiply the average mode split by the ADT on all arterials and collectors that are parallel to the proposed facility and within the area of influence.

Multi-Use Trails – Multiply the average mode split by the ADT on all arterials and collectors that would form an alternate adjacent route to the facility being analyzed. This step is somewhat subjective, and therefore it is important to be consistent when comparing one potential facility to another.



5. After the previous steps have been completed for each of the proposed bicycle and pedestrian facilities, the calculated travel demands should be taken into consideration when deciding which projects should receive priority. Bike and pedestrian travel demand was ranked as *high* (1), *medium* (2), or *low* (3) for each potential project based on the following conditions:

On-street Bikeways – Proposed on-street bikeways were given a *high* ranking if they had a travel demand greater than 1000 trips per day, a *medium* ranking if they had a demand between 500 and 1000 trips per day, and a *low* ranking if they had a demand of less than 500 trips per day.

Multi-Use Trails – Proposed multi-use trails were given a *high* ranking if they had a travel demand greater than 500 trips per day, a *medium* ranking if they had between 100 and 500 trips per day, and a *low* ranking if they had a demand of less than 100 trips per day.

Bicycle Compatibility Index (BCI)

As described in Section 5.2, the BCI is a measure of how well a roadway can accommodate efficient operation of both bicycles and motor vehicles. The BCI is an effective tool for evaluating existing roadways, as well as ranking the need for bicycle-related improvements. All roadway segments identified as primary bikeways in the *Heritage Trail Plan* were inventoried to determine the BCI level of service of each segment. A summary of the BCI entry data collected during this process is included in Appendix B and a summary of the calculations and results are included in Appendix C.

The results of the BCI calculations and resulting levels of service (LOS) were used as one of the criteria for prioritizing primary bikeways. Those facilities with the worst level of service should be rated with the highest level of priority for improvement. Therefore, facilities with BCI LOS E or F received a *high* (1) ranking, facilities with BCI LOS C or D received a *medium* (2) ranking, and facilities with BCI LOS A or B received a *low* (3) ranking.

Public Opinion

The transportation planning process must include opportunities for gathering public input. Bicyclists and pedestrians are the ones who best understand the challenges that might be limiting the use of non-motorized transportation. Input on non-motorized transportation improvements can be sought from local bike clubs, parent/teacher organizations, public surveys, etc. For the purpose of this project, public opinion was incorporated in the prioritization process through a survey at the third public meeting. The public was presented with the top 10 multi-use trail projects and the top 18 on-street primary bikeway projects, based on the above criteria. Each person was asked to choose three multi-use trail projects and three on-street bikeway projects that they feel should be priority. The total of all the rankings obtained from the public were then used in the overall project evaluation.



PROJECT EVALUATION PROCESS

Through a series of public meetings and steering committee meetings, a proposed network of on-street and off-street facility corridors were produced. In order to prioritize these proposed projects, it was necessary to divide the corridors into reasonable sections for analysis. These sections were used for the evaluation process only and do not necessarily reflect how the corridors would be constructed.

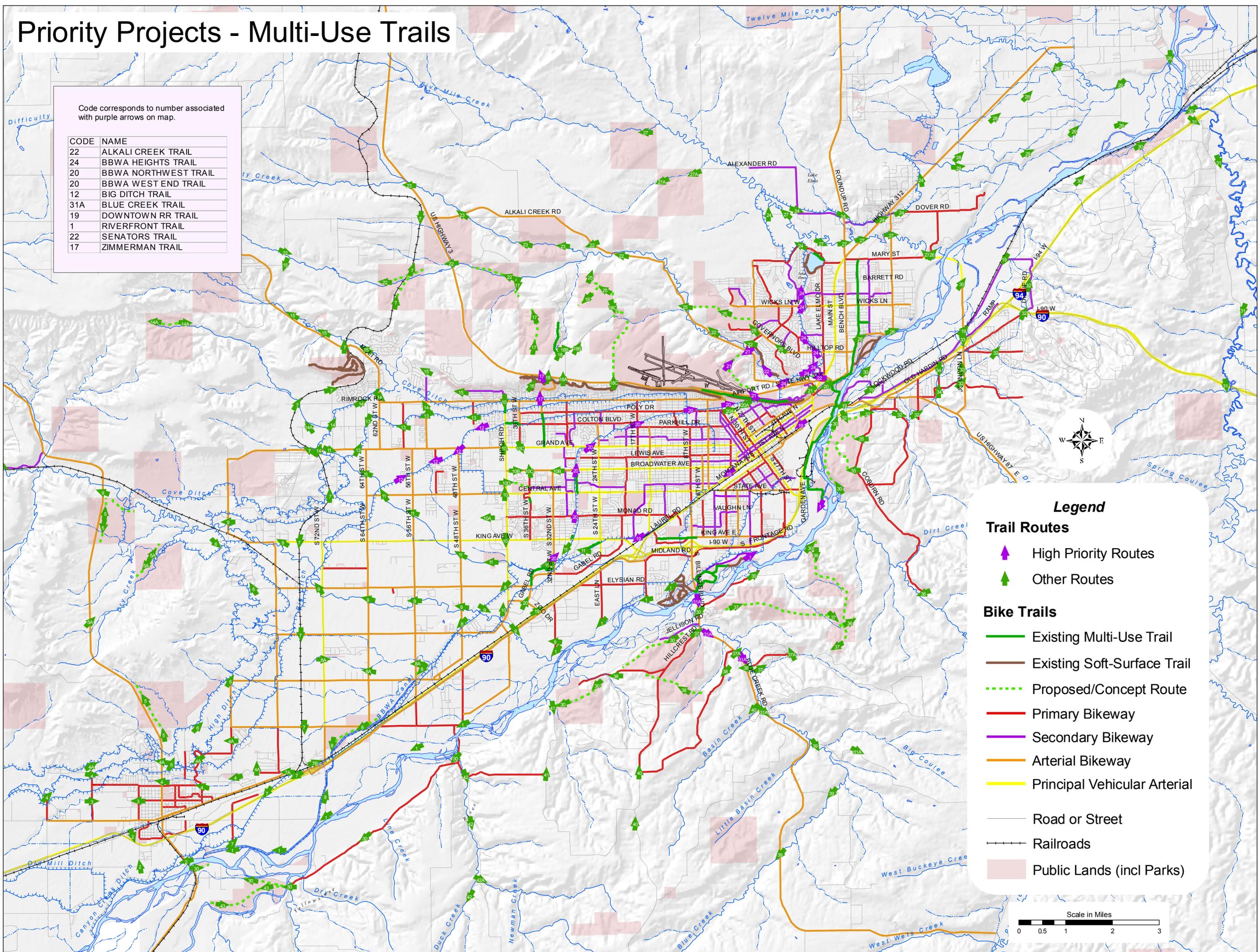
Because of the difference in characteristics between on-street and off-street facilities, the evaluation process was performed separately for each based on a different set of criteria. Off-street facilities, or multi-use trails, were evaluated based on safety, connectivity, route continuity, aesthetics, and non-motorized travel demand. On-street primary bikeways, were evaluated based on route continuity, non-motorized travel demand, and the bicycle compatibility index. The results of this analysis are shown in the project evaluation matrices, included in Appendix F and G for multi-use trails and primary bikeways, respectively. The overall rankings that are closest to 1.0 represent the projects that should be considered highest priority.

Each of the priority projects resulting from this analysis was then combined into longer, more reasonable sections for public input. The top 10 trail projects and the top 18 on-street bikeway projects based on these criteria were then presented to the public for its input, which was then incorporated into the overall priority ranking. The priority projects, as presented to the public are shown in Figure 7.2.1 and 7.2.2 for multi-use trails and on-street bikeways, respectively. The priority projects will be discussed in greater detail in Section 7.3.

Priority Projects - Multi-Use Trails

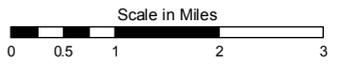
Code corresponds to number associated with purple arrows on map.

CODE	NAME
22	ALKALI CREEK TRAIL
24	BBWA HEIGHTS TRAIL
20	BBWA NORTHWEST TRAIL
20	BBWA WEST END TRAIL
12	BIG DITCH TRAIL
31A	BLUE CREEK TRAIL
19	DOWNTOWN RR TRAIL
1	RIVERFRONT TRAIL
22	SENATORS TRAIL
17	ZIMMERMAN TRAIL

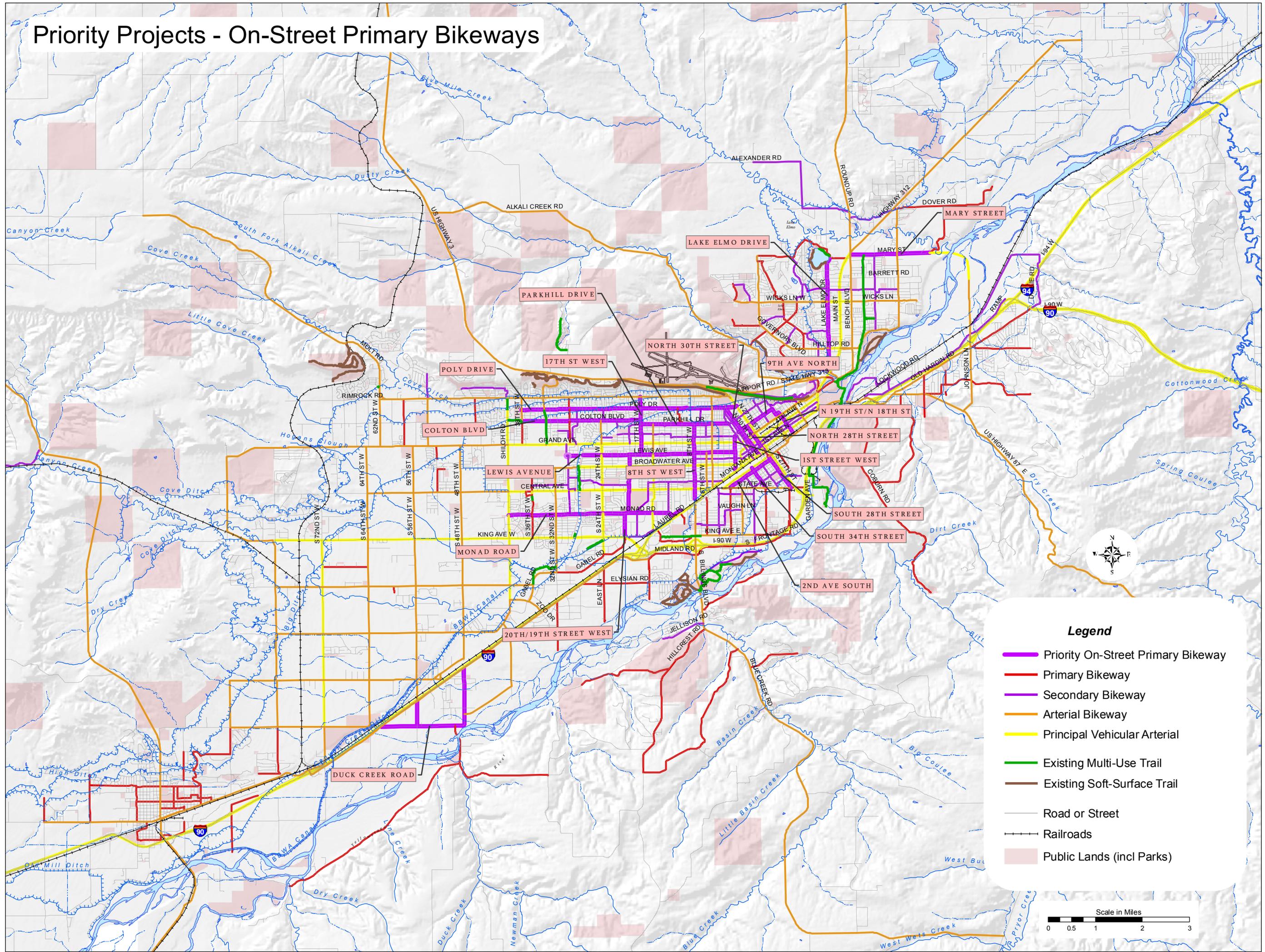


Legend

- Trail Routes**
- High Priority Routes
 - Other Routes
- Bike Trails**
- Existing Multi-Use Trail
 - Existing Soft-Surface Trail
 - Proposed/Concept Route
 - Primary Bikeway
 - Secondary Bikeway
 - Arterial Bikeway
 - Principal Vehicular Arterial
 - Road or Street
 - Railroads
 - Public Lands (incl Parks)

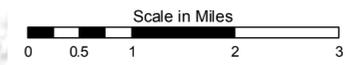


Priority Projects - On-Street Primary Bikeways



Legend

- Priority On-Street Primary Bikeway
- Primary Bikeway
- Secondary Bikeway
- Arterial Bikeway
- Principal Vehicular Arterial
- Existing Multi-Use Trail
- Existing Soft-Surface Trail
- Road or Street
- Railroads
- Public Lands (incl Parks)





Because of the difference in evaluation criteria, the results of the ranking process for on-street facilities should not be directly compared to the results for off-street facilities. In addition, as previously discussed, this process should only be used to compare one potential project to another and should not be used for design purposes.

Up to this point, this process has been independent of fiscal and constructability constraints, which will ultimately have an effect on the actual development of proposed facilities. Therefore, the highest ranked projects based on the above criteria were then further evaluated based on cost, funding availability, and ease of implementation.

Cost and Funding Availability

The overall cost and source of funding will ultimately be the deciding factor on the timeframe available for implementation of a proposed facility. The cost of an individual project should be considered within the context of the entire network to determine its real benefit. Overall cost of a facility is dependent on length, crossings (at-grade or grade separated), addition or removal of earthwork, clearing or modification of vegetation, and amenities (lighting, benches, etc.).

Section 7.3 lists a range of estimated costs and potential funding sources for each of the priority multi-use trails. The cost estimates were calculated using the following assumptions based on 2003-2004 construction costs.

- 10-foot wide hard-surface trails at \$2.50 to \$3.00 per square foot
- 5-foot landscaped (or reseeded) area on either side of the trails at \$0.24 to \$0.30 per square foot
- Grade-separated crossings, at-grade crossings, and waterway crossings based on the cost of similar, recently constructed projects

See Appendix H for detailed calculations of construction cost estimates of priority multi-use trails. It should be noted that the purpose of these cost estimates is for comparison only, and they should not be used for securing or allocating funding. The trail lengths used for this analysis were based on proposed corridors and not actual alignments. Cost estimates should be recalculated once actual alignments are determined. These estimates also assume minimal landscaping and do not include any additional amenities, such as lighting, benches, or railings.

Ease of Implementation

Similar to cost and funding availability, the ease of implementation for a proposed project could be the difference in whether or not a project gets constructed. The ease of implementation depends on necessary crossings, characteristics of existing terrain, and the availability of right-of-way. Trail corridors that have the most amount of public-owned land should be given some preference over those requiring right-of-way acquisition or easements. Section 7.3 includes various constraints on implementation for the priority multi-use trails.



7.3 PRIORITY PROJECTS

Although all of the proposed bicycle and pedestrian facilities would be integral parts of the overall network, the following projects have been selected as priority projects based on the evaluation criteria previously discussed.

MULTI-USE TRAILS

The following provides a detailed description of each of the priority multi-use trail projects, listed in order of public preference. Also included are a range of estimated costs, potential funding sources, and implementation constraints for each proposed multi-use trail. As previously discussed, each of the proposed projects are highlighted in Figure 7.2.1 and a summary of the results of the project evaluation process is included in Appendix F.

1. ***Riverfront Trail*** – This trail would run along the Yellowstone River and would provide a connection to the existing multi-use trail that runs from Metra Park to Mystic Park near the I-90 27th Street Interchange. The proposed trail would also connect to the existing Riverfront Park trails. The following list provides additional information on this project:
 - Approximate Length: 1.8 miles
 - Estimated Construction Cost – \$260,000 to \$315,000
 - Potential Funding Sources – Community Transportation Enhancement Program (CTEP), Recreational Trails Program (RTP), Transportation Community Systems Preservation (TCSP), 1999 GO Bond
 - Constraints – Acquisition of right-of-way

2. ***Blue Creek Trail*** – This trail would run along the Blue Creek Corridor from the Yellowstone River to Basin Creek Road (Blue Creek School). The following list provides additional information on this project:
 - Approximate Length: 3.0 miles
 - Estimated Construction Cost – \$490,000 to \$600,000
 - Potential Funding Sources – CTEP, RTP, TCSP, Private funding
 - Constraints – Multiple crossings of Blue Creek and acquisition of right-of-way

3. ***Downtown Railroad Trail*** – This trail would run along the railroad right-of-way beginning from the area between MRL RR Bridge and the Interstate by the Yellowstone River, through Downtown, to the I-90 West Billings Interchange. The following list provides additional information on this project:
 - Approximate Length: 5.4 miles
 - Estimated Construction Cost – \$2,780,000 to \$3,340,000
 - Potential Funding Sources – CTEP, RTP, TCSP



- Constraints – Acquisition of right-of-way or easement from railroad and grade separated crossings at N. 13th St., N. 21st Overpass, 6th Street Underpass and West Billings Interchange
4. ***Alkali Creek Trail*** – This trail would run through the Alkali Creek Corridor. It would provide a connection to the existing trail near Lincoln Lane. Although the proposed trail would eventually extend for several miles along Alkali Creek, this priority project would end at Senators Boulevard. The following list provides additional information on this project:
- Approximate Length: 2.4 miles
 - Estimated Construction Cost – \$1,860,000 to \$2,235,000
 - Potential Funding Sources – Currently \$500,000 available through TCSP, CTEP, RTP
 - Constraints – Acquisition of right-of-way, grade separated crossing at Main Street, and Park Master Plan
5. ***BBWA Northwest Trail*** – This trail would run along the BBWA Canal from North 27th Street to Broadwater Avenue, where it would connect to the existing Descro Park Trail. The following list provides additional information on this project:
- Approximate Length: 4.0 miles
 - Estimated Construction Cost – \$660,000 to \$815,000
 - Potential Funding Sources – CTEP, RTP, TCSP
 - Constraints – Acquisition of right-of-way and multiple arterial and collector street crossings
6. ***BBWA Westend Trail*** – This trail would run along the BBWA Canal from the south end of the Descro Park Trail at Central Avenue to Shiloh Road. Included in this corridor is the existing trail located along Famous Dave’s Restaurant on King Avenue West. Also included in this priority corridor is a link to the existing Midland Park Trail. The following list provides additional information on this project:
- Approximate Length: 3.4 miles
 - Estimated Construction Cost – Central to King-\$291,300; Gabel Rd. Connector-\$776,750 (excluding Midland and section already funded for Transtech)
 - Potential Funding Sources – CTEP, 1999 GO Bond, RTP (Funding already in place for trail from Central to King and portion through TransTech Center)
 - Constraints – Acquisition of right-of-way and multiple arterial street crossings and potential BBWA crossings
7. ***BBWA Heights Trail*** – This trail would run along the portion of the BBWA Canal located in the Heights. It would run from Five Mile Creek, along Lake Elmo, to Alkali Creek. The following list provides additional information on this project:
- Approximate Length: 3.8 miles



- Estimated Construction Cost – \$590,000 to \$720,000
 - Potential Funding Sources – CTEP, RTP, TCSP
 - Constraints – Acquisition of right-of-way and multiple street crossings
8. ***Zimmerman Trail***– This trail would run along the existing street, called Zimmerman Trail, and would provide a connection from Rimrock Road to State Highway 3 above the Rimrocks. This trail would also provide a connection to Zimmerman Park, a recreational area with a significant number of natural trails. The following list provides additional information on this project:
- Approximate Length: 1.0 miles
 - Estimated Construction Cost – \$435,000 to \$650,000
 - Potential Funding Sources – CTEP, RTP, TCSP
 - Constraints – Limited right-of-way, rough terrain and steep grades
9. ***Big Ditch Trail***– This trail would run along the Big Ditch from Shiloh Road at the existing Shiloh Road Underpass to approximately 1 mile west of 56th Street West. The following list provides additional information on this project:
- Approximate Length: 2.9 miles
 - Estimated Construction Cost – \$420,000 to \$505,000
 - Potential Funding Sources – CTEP, RTP, TCSP
 - Constraints – Acquisition of right-of-way
10. ***Bridal Moon Trail***– This trail would run from Alkali Creek Road near Senators Boulevard to Airport Road near Swords Park. The trail would run through the existing Bridal Moon Park and along the old Airport Operations Center access road. The following list provides additional information on this project:
- Approximate Length: 1.5 miles
 - Estimated Construction Cost – \$300,000 to \$480,000
 - Potential Funding Sources – CTEP, RTP, TCSP
 - Constraints – Acquisition of right-of-way, rough terrain and Airport Road crossing



ON-STREET PRIMARY BIKEWAYS

The following is a list of the priority on-street bikeways, listed in order of public preference. As previously discussed, the proposed projects are highlighted in Figure 7.2.2 and a summary of the results of the project evaluation process is included in Appendix G.

1. ***Poly Drive*** – From North 27th Street to 38th Street West
2. ***Lake Elmo Drive*** – From Main Street to Pemberton Lane
3. ***Mary Street*** – From Main Street (Bench Boulevard) to Fivemile Creek
4. ***North 30th Street*** – From Poly Drive to Montana Avenue
5. ***Lewis Avenue*** – From 1st Street West to Parkview Drive
6. ***20th Street West/19th Street West/17th Street West*** – From King Avenue West to Rimrock Road
7. ***Duck Creek Road/Rudio Road/56th Street West*** – South of South Frontage Road
8. ***Parkhill Drive*** – From North 32nd Street to 17th Street West
9. ***Monad Road*** – From Moore Lane to Shiloh Road
10. ***Colton Boulevard*** – From 17th Street West to 38th Street West
11. ***South 28th Street*** – From 1st Avenue South to State Avenue
12. ***2nd Avenue South*** – From South 28th Street to State Avenue
13. ***North 28th Street*** – From 9th Avenue North to proposed railroad trail
14. ***8th Street West*** – From proposed railroad trail to Parkhill Drive
15. ***South 34th Street*** – From 1st Avenue South to State Avenue
16. ***9th Avenue North*** – From North 31st Street to North 19th Street
17. ***1st Street West*** – From North 32nd Street (Avenue B) to proposed railroad trail
18. ***North 19th Street/North 18th Street*** – From 9th Avenue North to proposed railroad trail

7.4 FUNDING STRATEGIES

FEDERAL FUNDING SOURCES

The Intermodal Surface Transportation Efficiency Act (ISTEA), enacted in 1991, provided authorizations for highways, highway safety, and mass transportation. Under the Enhancement Program, special funding was dedicated for bicyclists and pedestrians. This act was superseded in 1998 by the Transportation Equity Act for the 21st Century (TEA21). It provides authorization for highways, highway safety, transit and other surface transportation programs and builds on the initiatives established in ISTEA. A portion of this funding is dedicated for bicyclists and pedestrians.

TEA21 recognizes the transportation value of bicycling and walking and offers mechanisms to increase consideration of bicyclists' and pedestrians' needs within the National Intermodal



Transportation System. The following are major funding programs of TEA21 under which bicycle and pedestrian projects are included as eligible activities.

National Highway System (NHS)

These funds may be used to construct bicycle transportation facilities and pedestrian walkways on land adjacent to any highway on the National Highway System (other than highways with access control). In addition, NHS funds can now be spent on non-motorized projects within Interstate corridors. The federal share of the projects funded is generally 80% with a 20% state or local match.

Surface Transportation Program (STP)

Funds may be used on an 80% federal/20% state or local basis for either the construction of bicycle transportation facilities and pedestrian walkways, or non-construction projects related to safe bicycle use (such as brochures, public service announcements, and route maps). TEA21 specifically made sidewalk improvements required to comply with Americans with Disabilities Act eligible for funding.

In addition, 10 percent of each State's annual STP funds are available only for Transportation Enhancement Activities (TEAs). This activity has, and will continue to have, a significant impact upon the development of bicycle and pedestrian programs and facilities.

Congestion Mitigation and Air Quality Improvement (CMAQ)

Program funds may be used on an 80% federal/20% state or local basis for the construction of bicycle and pedestrian facilities, or non-construction projects related to safe bicycle use (such as brochures, public service announcements, and route maps).

Federal Lands Funds

May be used on a 100% federal basis to construct bicycle and pedestrian facilities in conjunction with roads, highways, or parkways at the discretion of the Federal Bureau charged with the administration of such funds.

Scenic Byway Program

Funds may be used on an 80% federal/20% state or local basis to plan, design, and construct facilities along highways for the use of bicyclists and pedestrians. The Scenic Byway Program may also be funded through the Community Transportation Enhancement Program (CTEP), which is further discussed under State and Local Funding Sources.

National Recreational Trails Act

At least 30% of these funds go to motorized trails, 30% to non-motorized trails, and 40% to multipurpose trails. This money can be used for maintenance as well as construction of recreational trails. The Recreational Trails Program, one part of TEA 21, will provide \$1.4 million for Montana trails over the next two years. Montana's Parks Division administers these funds with advice from the citizen's State Trails Advisory Committee.



Highway Safety Programs

This funding is 100% federal and includes components to “improve pedestrian performance and bicycle safety.” A recreation department or elementary school, for example, could apply for these funds to conduct a program on bicycle safety.

Federal Transit

Transit funds may be used on an 80% federal/20% state or local basis for bicycle and pedestrian access to transit facilities, to provide shelters and parking facilities for bicycles in or around transit facilities, or to install racks or other equipment for transporting bicycles on transit vehicles.

Hazard Elimination Program

TEA21 added bicycling and walking hazards into the list of eligible elimination activities. It also included publicly owned bicycle and pedestrian pathways and trails and traffic calming measures into the definition of a public road.

Section 402 Funding

Pedestrian and bicyclist safety remain priority areas for highway safety program funding. State and community highway safety grant programs are eligible for 100% federal funding.

Demonstration Projects

One-of-a-kind projects may be funded under this provision on an 80% federal, 20% state/local basis. This may include funding the construction of a bicycle and pedestrian path or just a special feature, such as vegetation demonstration planting. It may also include the funding by a group to develop a program that encourages more children to wear bicycle helmets.

Transit Enhancement Activities

This new TEA 21 funding program created with a one percent set-aside of Urban Area Formula transit grants can be used for, among other things, bicycle and pedestrian access to mass transit, including bicycle storage facilities and installing equipment for transporting bicycles on transit vehicles. The funding is 95% federal and only 5% matching local funds.

Transportation and Community and system preservation PILOT Program (TCSP)

The TCSP Program, administered by the Federal Highway Administration, provides funds for planning and implementation grants, technical assistance and research to investigate and address the relationship between transportation, community and system preservation, and private sector-based initiatives. States, local governments, metropolitan planning organizations (MPOs), and tribal governments are eligible to apply for TCSP Program funds.



Other Potential Federal Funding Sources

- Watchable Wildlife Program
- Community Development Block Grants, Entitlement Program, Small Cities Program
- Federal Land and Water Conservation Funds (administered by MT Fish Wildlife and Parks)
- Congestion Management and Air Quality Improvement Program

STATE AND LOCAL FUNDING SOURCES

Community Transportation Enhancement Program (CTEP)

Montana is currently in the tenth year of administering the Community Transportation Enhancement Program (CTEP), made available by federal funding sources. Annually, this program provides the mechanism for allocating about \$5 million to Montana jurisdictions. Over half of the enhancement projects selected by local units of government involve facilities for bicycles and pedestrians.

Historically, MDT has been actively involved in the funding of bicycle and pedestrian facilities. The 1985 Footpath and Bicycle Act (Montana Code Annotated 60-3-301) is the only Montana statute that specifically addresses bicycle and pedestrian funding. This act sets a minimum annual spending requirement for footpaths and bicycle trails. Through the federal programs and other initiatives, MDT has consistently exceeded this minimum requirement.

Additional State and Local Funding Sources

- Montana Air and Congestion Initiative Funds
- State General Funds, State of Montana, Governor's Office
- Transportation Funds administered by MDT
- Montana Department of Natural Resources & Conservation (DNRC) Conservation Grant Program
- Reallocation of Existing Resources
- Local government general funds and parks, public works, engineering, public utilities, and community development funds
- Land acquisition through subdivision development land dedications
- Recreational use easements
- Special Assessment and Taxes
- Special improvement districts, bond issues, and optional sales tax
- Developer land dedications
- Adverse impact mitigation improvements
- Impact fees
- Motor vehicle taxes, user or licensing fees
- Park dedication requirements – cash in lieu of land provisions



Private Funding Sources

- Cash Donations
- Fund raising events (i.e., Ales for Trails)
- Conservation Groups
- Corporate sponsors
- Bank trusts established for bicycle interests
- Foundations (i.e., Bikes Belong Coalition Ltd., Montana Community Foundation)
- Volunteer and Service Organizations
- League of American Wheelman
- Cost sharing with Government
- Medical and educational facilities
- Land acquisition through donations, conservation easements, and shared use agreements

7.5 REFERENCES

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