

BILLINGS  
MONTANA

# Complete Streets Benchmark Report

Prepared June 2013



healthy  
design



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This publication was supported through a cooperative agreement (CDC-RFA-DPO8-805) with the Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity and through the Montana Department of Public Health and Human Services. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the US Department of Health and Human Services. Alternative, accessible formats of this document will be provided upon request.



# Foreword

A complete street is a road designed to be safe for drivers, bicyclists, transit vehicles and riders, and pedestrians of all ages and abilities. A complete streets approach focuses not just on individual roads but on changing the decision-making and design process so that all users are considered during the planning, design, construction and maintenance of all roadways.<sup>1</sup>

A complete street is context-sensitive but could include various elements, like sidewalks, pedestrian refuge islands, bicycle lanes, landscaping, accessible bus shelters or longer crossing times for pedestrians.<sup>2</sup>

As of December, 2012, 400 communities and 28 states across the U.S. have adopted complete streets policies.<sup>3</sup>

The Billings City Council joined the national movement when it adopted a complete streets policy on August 22, 2011. The policy (available in full in the Appendix) reflects the City's commitment to accommodate all roadway users: "WHEREAS, in enacting this resolution, it is the intent of the City Council to encourage healthy, active living; reduce traffic congestion; and improve the safety and quality of life of Billings residents by providing safe, convenient, and comfortable routes for walking, bicycling, and public transportation."

The policy's adoption did not represent a "light switch moment" wherein everything about the City's philosophy and approach to roadways changed. On the contrary, roadway projects – whether for maintenance or expansion – have long been planned and designed to accommodate more than motor vehicles. The policy formalizes this approach and ensures all users will be considered in the future.

Since any policy is only as effective as its implementation, regular reporting will monitor progress in making Billings' roadways complete streets.

The same community group that drafted Billings' complete streets policy has compiled this report to track implementation of the policy. This report contains a sampling of the national research that informed local policy and tracks measurable local attributes that show how the policy is making a difference. This initial report provides baseline measures of multi-modal infrastructure in place as of late 2012.

This report will be updated every three years and is available online at [www.ci.billings.mt.us/transportationplanning](http://www.ci.billings.mt.us/transportationplanning) and [www.healthybydesignyellowstone.org](http://www.healthybydesignyellowstone.org). Limited hard copies will be printed. To request a printed report, call RiverStone Health at (406) 247-3200.

Sincerely,

The Healthy By Design Built Environment Workgroup



Co-Lead, RiverStone Health



Co-Lead, RiverStone Health

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# Glossary

**ADA:** Americans with Disabilities Act.

**Arterial:** Wider, higher capacity and higher-speed roads that connect major destinations within an urban or rural area (per *Dangerous By Design 2011* report); Arterials are typically federal-aid roads and, as such, are eligible to receive federal funding for construction or improvement and are subject to federal oversight or guidance for their design.

**Boulevard strip:** A physical separation - usually planted with grass - between motorists and pedestrians and other vulnerable roadway users.

**Collector streets:** A low to moderate capacity road which serves to move traffic from local streets to arterial (see above for definition) roads.

**Commuting mode share:** The percentage of commuting travelers using a particular type of transportation or number of trips using said type (as used on p. 33).

**Connectivity:** Connections between different types of roadways, route types, and transportation modes. A city where trips can easily be made by multiple modes and in which routes overlap has high connectivity.

**Cross-community arterial corridor connections:** Connections of arterials that run east-west or north-south across Billings, increasing connectivity (primarily for automobiles and arterial bus routes) (as used on pp. 24 and 26).

**Crossing enhancements:** Any improvement made to a pedestrian or bicycle crossing that increases ease of use and perceived safety of the primary user of the facility, but also for all users of the roadway.

**Curb ramp:** A solid ramp graded down from the level of the sidewalk to the level of the street, providing easier access to streets from sidewalks and to sidewalks from streets for pedestrians and bicyclists, but especially for those using wheelchairs or other mobility devices. Curb ramps also help those with limited range of motion to be able to step up to or down from the sidewalk without the abruptness of the curb face.

**Facilities:** Space on the roadway or nearby that is dedicated to a certain mode. A crosswalk is a pedestrian facility, while a bus stop is a transit facility, although each may serve other users as well (as used on pp. 3, 5, 6, 11, 13, 24, 26, 31, and 33).

**Greenway:** Multi-use paths adjacent to or near green, vegetated space.

**Mode share:** The percentage of travelers using a particular transportation type or mode or the number of trips using said type (i.e., 30 percent bicycle mode share means that 30 percent of trips are made by bicycle).

**Multi-modal infrastructure:** Facilities that provide space and safe accommodations for all transportation types or modes.

**Multi-modal transportation system:** The result of connective and cohesive multi-modal infrastructure.

**Parallel multi-use paths:** Multi-use paths that parallel a roadway, similar to the manner in which a sidewalk does. Also known as a sidepath (as used on p. 25).

**Sharrow:** A pavement marking usually placed in the center of the travel lane to indicate to motorists and bicyclists that bicyclists may use the full lane.

**Traffic-calming device:** Some physical measure, constructed or painted, put in place on roads for the intention of slowing down or reducing motor-vehicle traffic in order to increase comfort and perceived safety.

**Traffic-calming measures:** Steps taken by transportation officials to improve safety and comfort for all roadway users by decreasing the speed of traffic and increasing ease of use and accessibility and connectivity. Also see “Traffic-calming device” defined above.





walkable communities where shops, restaurants and local businesses are within an easy walk from their homes, regardless of what type of neighborhood or house they live in.<sup>4</sup>

- A CEOs for Cities report found homes located in more walkable neighborhoods – those with a mix of common daily shopping and social destinations within a short distance—command a price premium over otherwise similar homes in less walkable areas. Similarly, an analysis of office, retail, apartment and industrial properties found higher values for properties in more walkable areas.<sup>5</sup>
- Nearly half of all trips in urban areas are three miles or less, and 28 percent are one mile or less – distances easily covered by foot or bicycle. Yet 60 percent of trips shorter than one mile are made by automobile.<sup>6</sup>
- Planning and designing roads to make them safer for all users and more inviting to pedestrians, bicyclists, and transit users can increase overall capacity and efficiency without a negative impact on automobile travel. For example, improving intersections for pedestrian safety can reduce the time needed for a pedestrian crossing signal phase, keeping vehicular traffic flowing.<sup>7</sup>

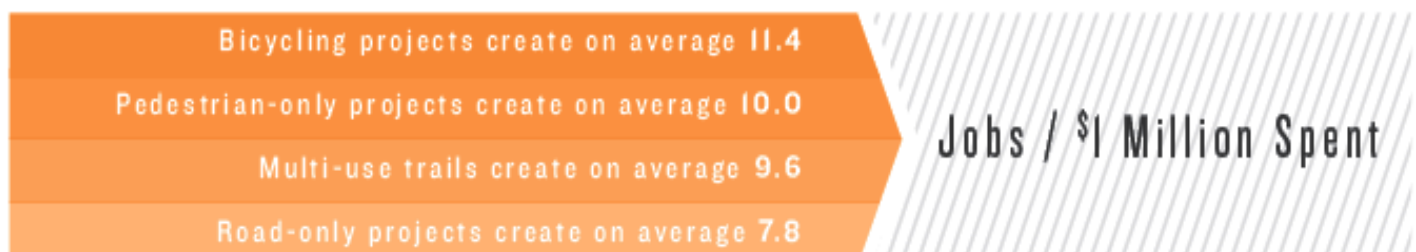
#### PUBLIC TRANSIT GETS PEOPLE MOVING TOO:



Data Source: American Journal of Preventive Medicine

Graphic Source: DC Streetsblog

- During the period between 1966 and 2009, the number of children who biked or walked to school fell 75 percent, while the percentage of obese children rose 276 percent.<sup>8</sup>
- When surveyed, parents express concerns about a range of perceived safety hazards: the amount of traffic on roads (71.3 percent), the speed of traffic (69.8 percent), inadequate or missing sidewalks (48.6 percent) and poor quality or missing crosswalks (39 percent) — all factors influenced by street design.<sup>9</sup>



Data Source: Alliance for Biking and Walking

Graphic Source: Mode Shift Omaha



## 2: What Complete Streets Mean for Billings

Photo: Broadwater Avenue & Vermillion Drive;  
Gregory Miller Photography

*A substantial body of research shows that certain aspects of the transportation infrastructure – public transit, greenways, paths and trails, sidewalks and safe street crossings near schools, bicycle paths, traffic-calming devices, and sidewalks that connect schools and homes to destinations – are associated with more walking and bicycling, greater physical activity and lower obesity rates.*

– Active Living Research

**T**he complete streets policy represents a commitment to equitable, safe and responsible growth of the transportation system for the City of Billings.

Prior to adoption of the complete streets policy (see Billings Complete Streets Policy in the Appendix), the City's Subdivision Regulations had required sidewalks within new subdivisions since the early 1970s. Bike lanes, pathways, wheelchair ramps, pedestrian crossings, medians, boulevards and bus facilities have also been constructed through the years under the guidance of various plans, policies and regulations. Even so, as one looks around Billings, it is easy to spot incomplete and unconnected facilities suggesting possible holes and inconsistencies in past efforts.

Billings' complete streets policy builds on existing policies and ordinances by communicating a vision for the City's entire transportation system in consideration of all roadway users. The policy guides staff and elected officials to maintain a consistent philosophy when making decisions.



Portions of Broadwater Avenue now feature wider sidewalks and ADA ramps, as visible in the top photo.

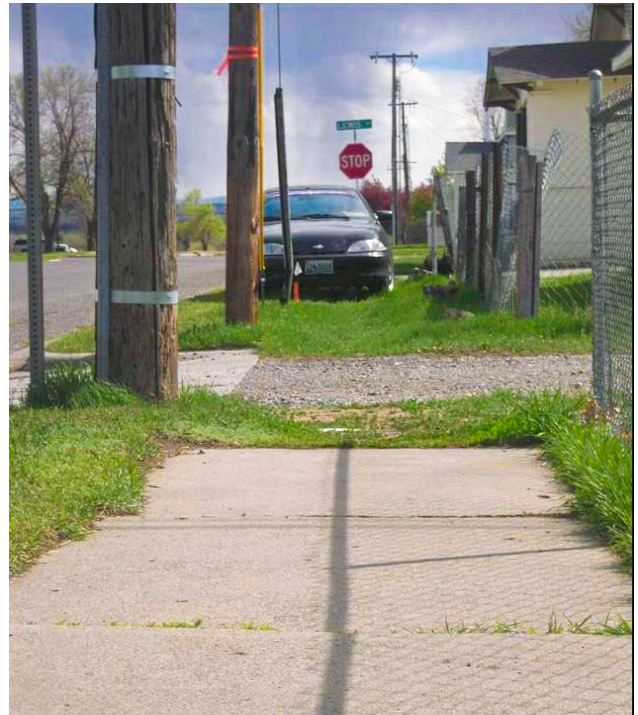
Photo: City of Billings

### Performance Measures

The primary goal of this report is to track the effectiveness of the complete streets policy over time. This can be done using performance measures, also known as performance indicators. Transportation planning in America since the 1950s has focused on making sure roadways have

adequate capacity for motor vehicle travel. As such, we have collected motor vehicle counts for years and have large amounts of historical data and future projections. Tracking the capacity and performance of other modes of travel has not been as systematically measured. Nonetheless, these measures do exist and can be compiled both quantitatively and qualitatively. It is important to bear in mind though that the objective of this report is to evaluate the complete transportation network by tracking existing data sources and currently collected measurements, as not to create an additional burden to already limited staff and research resources. Also, the performance measures should effectively reflect the vision and goals expressed in the adopted complete streets policy.

The following chapters look at the impacts of complete streets for Billings and establish performance measures to evaluate the effectiveness of the policy over time.



*This sidewalk near Lewis Avenue has buckled and does not connect to the rest of the sidewalk network. A neighborhood child walking to school or wheelchair-bound resident would have to enter the street to continue on their way.*

*Photo: Healthy By Design*





## 3: Pedestrians

Photo: 4th Avenue North & North 20th Street;  
Gregory Miller Photography

*At the new Department of Interior building, above, a HAWK signal facing motorists is dark until a pedestrian pushes the “walk” button. This activates a flashing yellow signal advising motorists to slow down. The signal changes to solid yellow, then solid red, telling motorists to stop. After another interval, the solid red goes to flashing red, allowing motorists to proceed if the intersection is free of pedestrians. The signal then goes dark until activated again.*

Complete streets infrastructure supporting pedestrian travel includes features beyond sidewalks and curb ramps. Crossing enhancements, roadway and travel lane widths, traffic calming measures to reduce vehicular speeds, the presence of boulevard strip or other forms of physical separation between pedestrians and motor vehicles, landscaping, trees, lighting and maintenance can all contribute to a walkable environment. Safety education programs and traffic enforcement efforts also play an important role.

### Performance Measures

Pedestrian performance measures include an inventory of existing facilities, pedestrian counts at select intersections (see Figure 3.1), and

pedestrian-motor vehicle crash rates (see Figure 3.2).

An up-to-date inventory of sidewalks, crosswalks or other pedestrian enhancements does not currently exist for Billings, but the data that is available is useful to visualize which areas within the City have or lack pedestrian infrastructure (see Map 1 on p.9). As data collection of these infrastructure elements for the City’s Geographic Information System (GIS) is completed, more meaningful information will be extracted concerning the quantity and completeness of Billings’ non-motorized roadway user infrastructure. The City is working to update its GIS database on these facilities and estimates its completion by 2014 or 2015.

*Complete streets reduce crashes through comprehensive safety improvements. A Federal Highway Administration review of the effectiveness of a wide variety of measures to improve pedestrian safety found that simply painting crosswalks on wide, high-speed roads does not reduce pedestrian crashes. But measures that design the street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers – all improve pedestrian safety.<sup>10</sup> Some features, such as medians, improve safety for all users: they enable pedestrians to cross busy roads in two stages, and reduce left-turning motorist crashes to zero, a type of crash that also endangers bicyclists.*

As was the case with the facilities inventory, no equivalent systematic data has been collected regarding system usage by pedestrians. Data collected on pedestrian usage has either been ancillary to motor vehicle usage or at isolated locations where a specific pedestrian issue was being investigated.

In an effort to establish baseline data, RiverStone Health sponsored counts of non-motorized roadway users at six Billings intersections in September 2012 (see Figure 3.1). Several of these intersections are near recent or proposed pedestrian improvements (sidewalks or paths/trails). If these counts are repeated systematically at these same intersections in future years, it may be possible to determine if the pedestrian amenities have resulted in increased pedestrian travel.

The number of reported motor vehicle-pedestrian crashes is available. Figure 3.2 on p. 8 indicates no

clear trend regarding these crashes over time.

Information from the Montana Department of Transportation shows that Billings has the highest number (incidence) of reported pedestrian crashes of Montana's seven major cities. However, the crash rate (pedestrian crashes per 1,000 population – prevalence) ranks fourth (tied with Missoula) among these same seven cities.

Improving the pedestrian environment requires a relatively small public investment, one greatly outweighed by the cost savings that would result from reducing traffic-related fatalities and improving health. The National Safety Council estimates the comprehensive cost — including economic costs and diminished quality of life — for each traffic death at \$4.3 million. Multiplying those figures by the 120 pedestrians killed in Montana from 2000 to 2009 equates to a cost of \$516 million.<sup>11</sup>



*Pedestrian Crosswalk, Sign, and Signal*

*Photo: City of Billings*

*This sign has Rapid Rectangular Flashing Beacons to enhance safety for bicyclists and pedestrians crossing King Avenue West. Additionally, the pedestrian refuge island buffers non-motorized travelers from traffic and enables them to cross the street in two stages.*



# WHAT AMERICANS OVER 50 THINK ABOUT THEIR NEIGHBORHOODS



40%

say there are inadequate sidewalks



55%

say there are inadequate bike lanes and paths



48%

say there is no comfortable place to wait for the bus

Source: Alliance for Biking and Walking

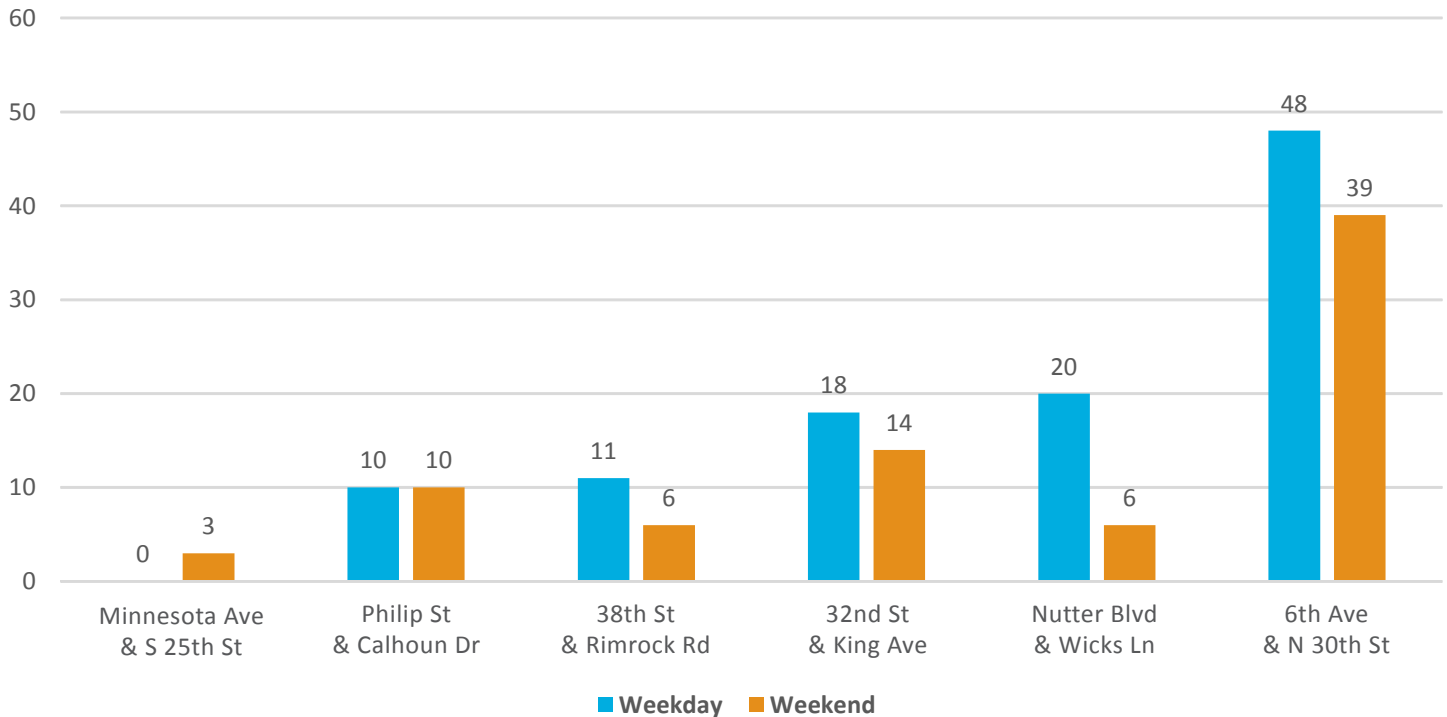
- The U.S. Census Bureau estimates that by 2025, the number of seniors will increase by about 70 percent, and an estimated 18 percent of the population (62 million people) will be 65 and older.<sup>12</sup> People aged 65 and older will account for 25 percent of U.S. drivers.<sup>13</sup>
- Many older adults will continue to drive for most of their trips, but some will face physical and cognitive challenges that must be addressed to enable their continued mobility and independence.<sup>14</sup>
- According to an article in *The American Journal of Public Health*, both men and women are likely to live beyond the time that they can drive safely, as much as seven years for men and about 10 for women.<sup>15</sup> During that period, they will lose the independence of the personal automobile and become dependent on alternative transportation.
- Not having safe and viable transportation alternatives can contribute to increased isolation and decline. Having few opportunities to walk on a daily basis can make it more difficult for older adults to remain active, and having to give up driving puts a great strain on their ability to live independently.<sup>16</sup>
- More than 50 percent of older Americans who do not drive stay home on a given day because they lack transportation options. Older Americans make just 6 percent of their trips on foot or bike.<sup>17</sup> Non-driving seniors make 65 percent fewer trips to visit family or friends or to go to church; many report they do not like to ask for rides.<sup>18</sup>

### Figure 3.1 Billings Pedestrian Counts

Data Source: Dowl-HKM

Note: Counts conducted in September 2012 using the National Bicycle and Pedestrian Documentation Project Standard ([www.bikepeddocumentation.org](http://www.bikepeddocumentation.org)).

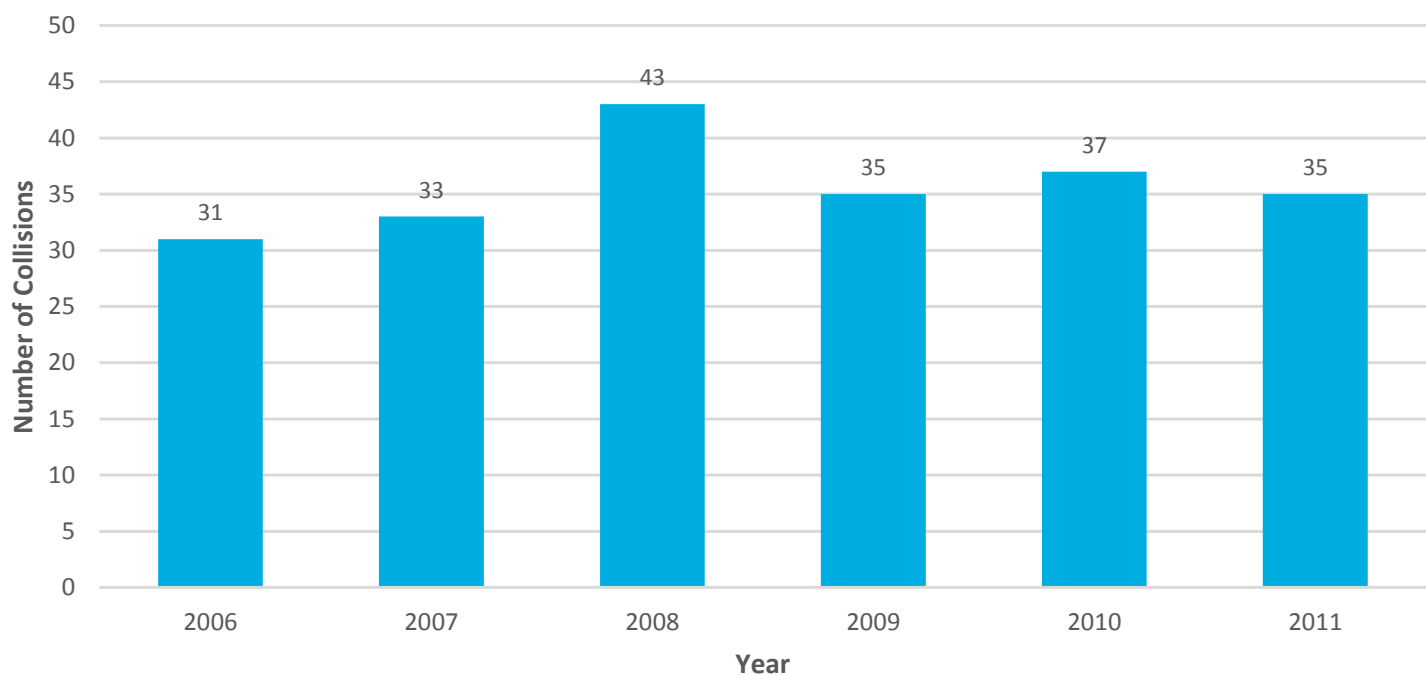
Note: Two-hour hand counts were performed at each site on a weekday from September 18 through September 20 and one weekend day on September 22 or September 23. Weather was partly cloudy or sunny, between 70 and 80 degrees.



### Figure 3.2 Billings Pedestrian-Motor Vehicle Collisions (2006-2011)

Data Source: Intersection Magic

Note: Compiled August 2012



Map 1

Billings Complete Streets  
Benchmark Report

Legend

- Sidewalks
- Sidewalk Gaps
- River
- Park
- Billings Logan International Airport
- City Owned Property
- Billings City Limits

DISCLAIMER: No warranty is made by the City of Billings for the use of this data, nor does the City represent or warrant its accuracy, currency, or completeness. In no event shall the City be liable for any incorrect results or analysis. The GIS data included on this page is intended for broad planning purposes only and should not be solely relied upon for any decision making. Accuracy of the GIS data is limited to the accuracy of the data available to create these layers at the time.



Data obtained from City of Billings  
Map created May 28, 2013



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## 4: Bicyclists

Photo: Rimrock Road; Gregory Miller Photography

*Studies conducted around the country have found the presence of bicycle lanes and paths is positively related to cycling and to more adults meeting the national physical activity recommendations.*

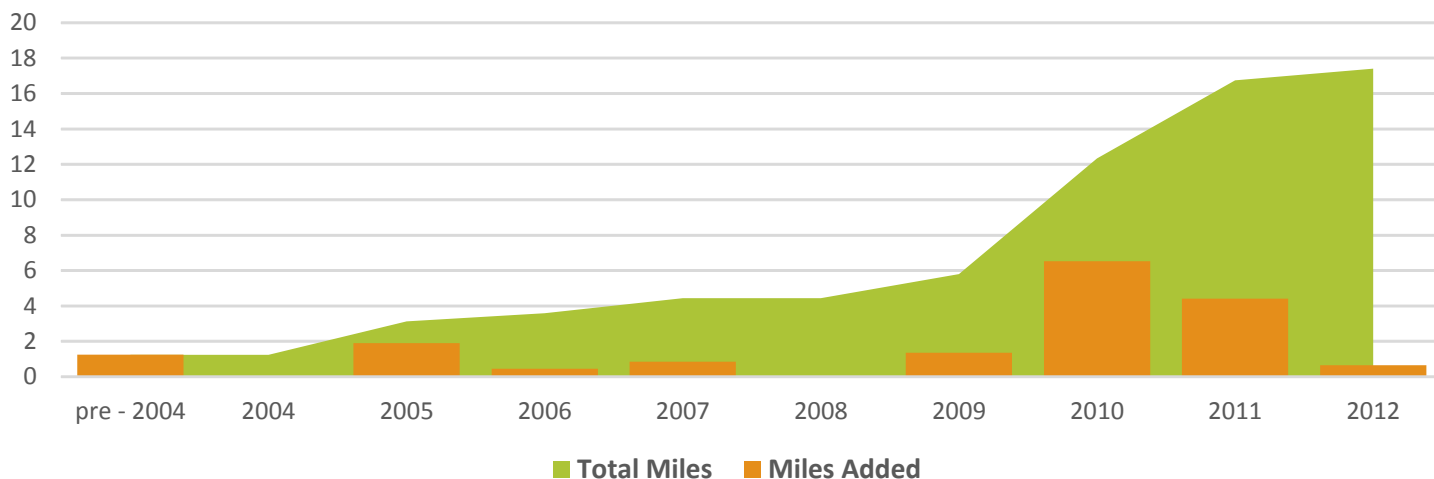
*– Active Living Research*

**T**he City of Billings has been steadily working to increase infrastructure for biking to provide a safe environment and to increase active transportation. The *2011 Billings Area Bikeway and Trail Master Plan (BABTMP)*<sup>19</sup> reflects the City's vision for an enhanced multi-modal transportation system and sets these priorities:

- On-street bikeways
- Key path/trail connections to add value, not just mileage to the network
- Guidelines to evaluate the plan after adoption
- Increased integration with MET Transit
- Set standards and funding for the maintenance of existing facilities
- Provide recommendations for educating and encouraging bikeway and trail users
- Maintain and increase bikeway and trail law enforcement
- Cities that invest in bicycle facilities exhibit higher levels of bicycle commuting. One study of cities across the country estimated that, for every 1 percent increase in the length of on-street bicycle lanes, there was a 0.31 percent increase in bicycle commuters.
- Studies conducted in Minneapolis, Minn., and Portland, Ore., showed that bicyclists were willing to go farther than they would normally in order to use safe bicycle infrastructure.
- With few exceptions, living near paths and/or trails or having them in one's neighborhood has been associated with people being 50 percent more likely to meet physical activity guidelines and 73 to 80 percent more likely to bicycle.<sup>20</sup>
- Surveys have found that a lack of sidewalks and safe places to bike are a primary reason people give when asked why they don't walk or bicycle more.<sup>21</sup>
- Promote the system as a healthy, safe way of transportation

**Figure 4.1** Yearly Bike Lane Mileage Added & Total (Pre-2004 to 2012)

Data Source: City of Billings

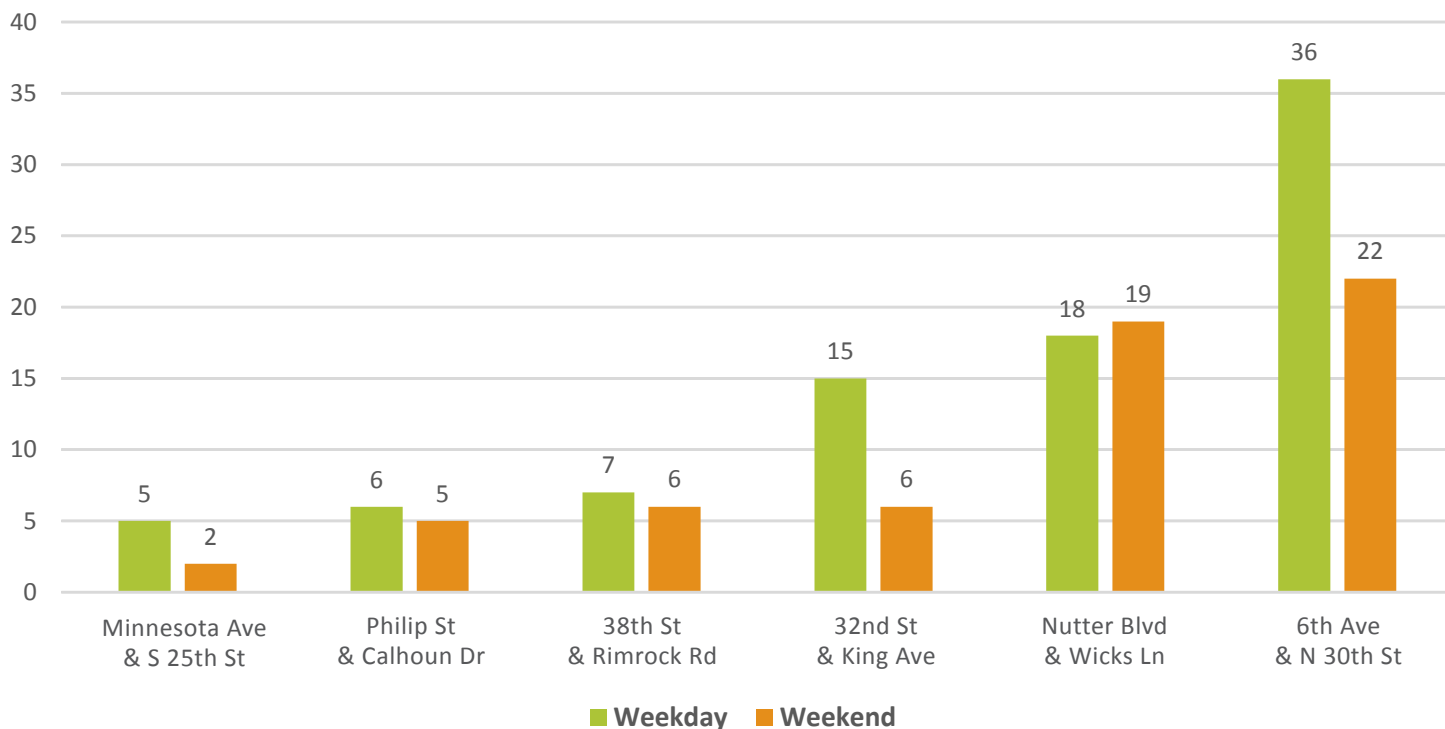


**Figure 4.2** Billings Bicyclist Counts

Data Source: Dowl-HKM

Note: Counts conducted in September 2012 using the National Bicycle and Pedestrian Documentation Project Standard ([www.bikepeddocumentation.org](http://www.bikepeddocumentation.org)).

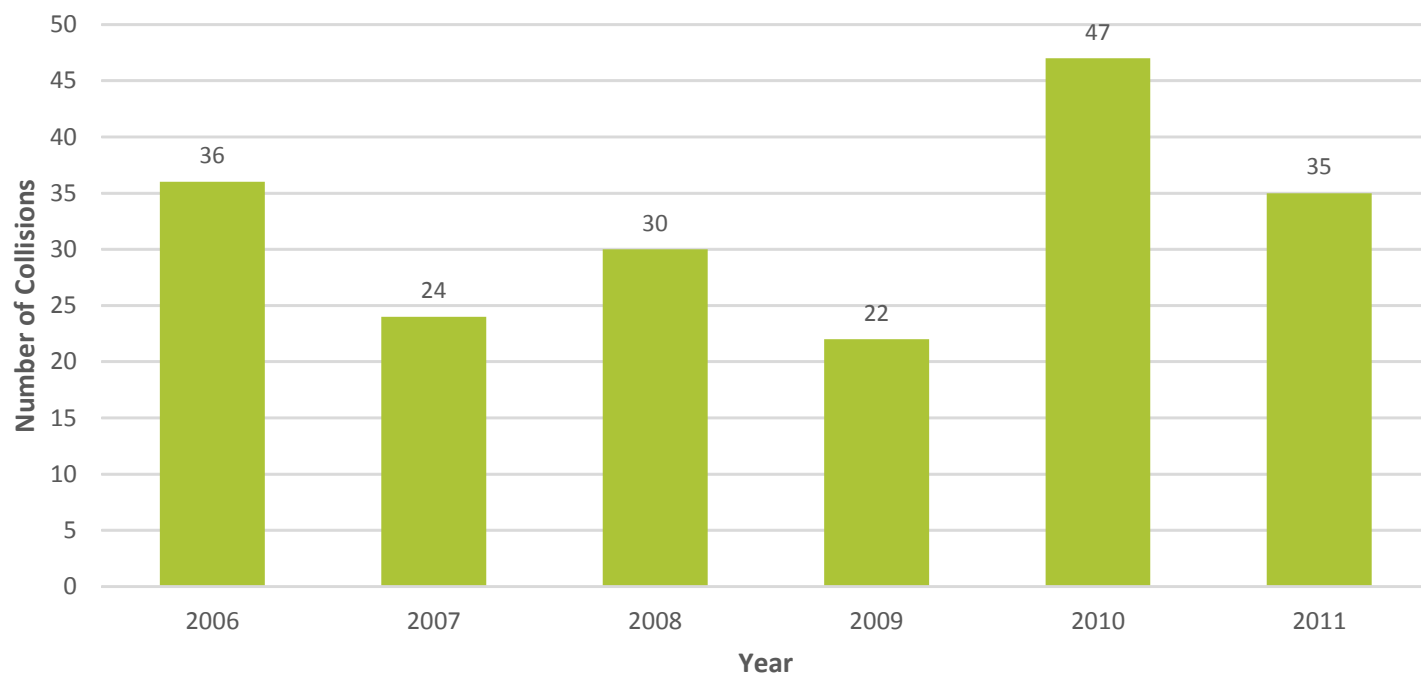
Note: Two-hour hand counts were performed at each site on a weekday from September 18 through September 20 and one weekend day on September 22 or 23. Weather was partly cloudy or sunny, between 70 and 80 degrees.



**Figure 4.3** *Billings Bicyclist-Motor Vehicle Collisions (2006-2011)*

Data Source: Intersection Magic

Note: Compiled August 2012



This plan, along with the *2009 Billings Urban Area Long Range Transportation Plan*, guides transportation system development and complete streets policy implementation. Several data sources track the City's progress in enhancing its multi-modal transportation system.

### **Performance Measures**

The City has been diligent in tracking bicyclist infrastructure since the late 1990s under the guidance of the *1995 BikeNet Plan*, the *2004 Heritage Trail Plan*, and the current *2011 BABTMP*. This careful tracking may make evaluating the progress of bicyclist facilities easier than some of the other elements of complete streets. Performance measures include miles of bike lanes (see Figure 4.1), bicyclist counts at select intersections (see Figure 4.2), and bicyclist-motor vehicle collision rates (see Figure 4.3).

As noted in Chapter 3, RiverStone Health sponsored counts of non-motorized roadway users at six Billings intersections in September

2012 (see Figure 4.2). If these counts are repeated systematically at these same intersections in future years, it may be possible to determine if the bicyclist amenities have resulted in increased bicycle travel.

Figure 4.3 indicates no clear trend regarding bicycle-motor vehicle crashes over time. As data is collected regarding on-street bicycle usage over the coming years, it may be possible to conclude that bicycle safety is improving as usage increases even if the number of reported crashes holds constant.

The *2011 BABTMP* recommends educating and encouraging bikeway and trail users. This recommendation corresponds with the intent of the Billings Complete Streets Policy "...to encourage health, active living; and improve the safety and quality of life of Billings residents...." Research shows the presence of on-street bicycle facilities increases bicycle riding, but cyclists and motorists need to know the rules of the road in

order to comfortably and confidently use the expanding transportation network.

To this end, Healthy By Design has invested Community Transportation Enhancement Program funds to implement a multi-media road user safety campaign in Yellowstone County. The campaign will incorporate radio and television commercials as well as a social media and website presence from July to October 2013. Based on available crash data from the 2011 BABTMP, 62 percent of

crashes involving a motor vehicle and a bicyclist were caused by factors that a bicyclist can control, including inattentive riding (71 percent), failure to yield (11 percent), disregarding traffic signs (7 percent), and wrong-way riding (6 percent). Using this data, the campaign focuses on educating all roadway users on the rules of the road so that every user can behave more predictably and, thus, more safely. For more information about this campaign, please visit [www.crashthemyth.org](http://www.crashthemyth.org).



Billings Bicycling and Trail Network

Map 2

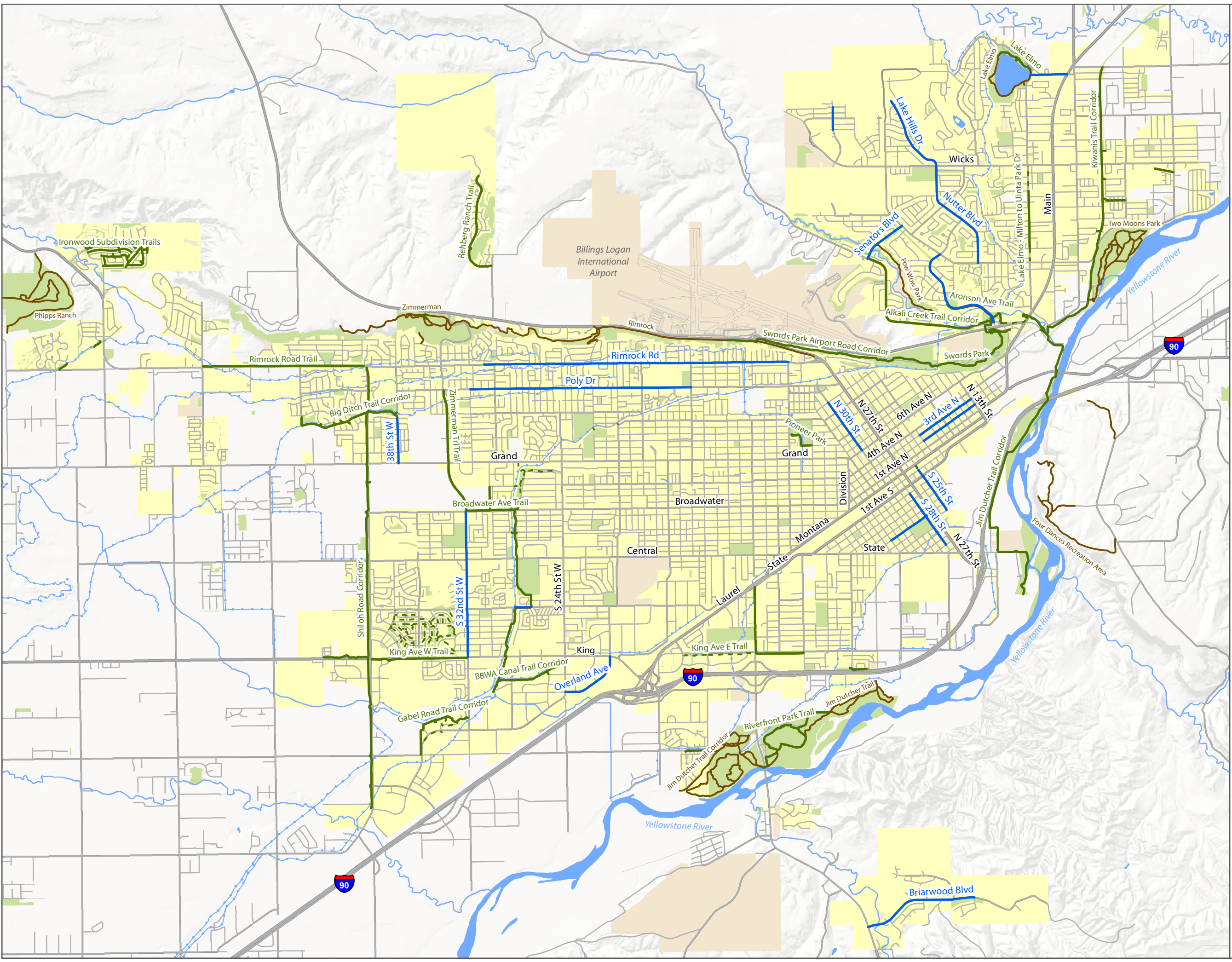
Billings Complete Streets Benchmark Report

Legend

- Bike Lane
- Multi-Use Path
- Neighborhood or Connector Path/Trail
- Unpaved Trail
- Roads
- River
- Park
- Billings Logan International Airport
- City Owned Property
- Billings City Limits



Data obtained from City of Billings  
Map created May 28, 2013





Map 3

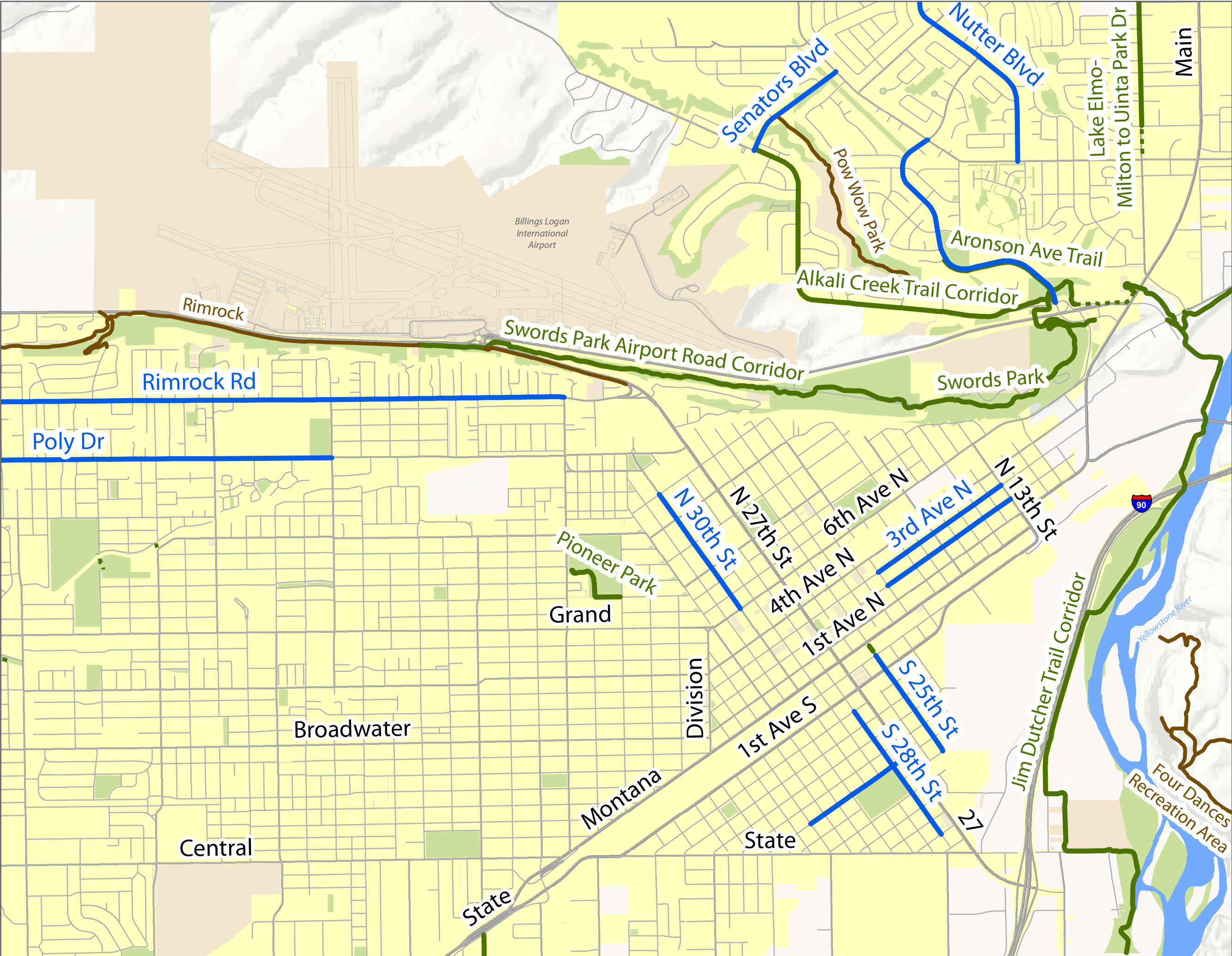
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Data obtained from City of Billings  
Map created May 28, 2013



# City of Billings Major Roadway Projects Completed During 2012 Construction Season

Project Description	How Non-Motorized Roadway Users Were Considered/Accommodated				
	Pedestrians	Elderly + Disabled	Bicyclists	Transit	Additional Complete Streets Features
Rimrock Road Reconstruction (Forsythia Boulevard to 17th Street West)	New continuous sidewalk on both sides	ADA ramps at intersections	On-street bike lanes	Two-way left turn lane allows traffic to pass when buses are stopped	Street lighting
32nd Street West Striping (King Avenue to Broadwater Avenue)	Existing crosswalks perpetuated	Striping project only	On-street bike lanes added	No specific changes	Shared bike/motor vehicle lane at major intersections
Central Avenue & 29th Street West Traffic Signal	Pedestrian signals included	ADA accessible ramps & accessible ped signals	Parallel trail along BBWA* canal	No specific changes	
Central Avenue (29th to 32nd Streets West)	Sidewalk added along north side	ADA ramps at intersections	No specific features added for bicyclists	No specific changes	
Bench Boulevard Connection (a Montana Department of Transportation project)	Sidewalk added on one side	ADA ramps at intersections	No specific features for bicyclists	Not on MET route	Constructed sidewalk connecting Airport Road & Bench Boulevard intersection to the trail paralleling Alkali Creek
Broadwater Trail -- Vermillion Dr to Zimmerman Trail	Multi use trail	ADA ramps added at 31st St. W	Multi-use trail	No specific changes	
2012 ADA Ramp Project	Project concentrates on accessibility at intersection corners; not aimed at providing continuous pedestrian path	46 ADA accessible ramps along major streets	Project intent is providing accessibility at intersections	Provides improved access along some MET routes	
Annual Curb, Gutter, Sidewalk Project	Installed 6,700 lineal feet of new sidewalk	ADA ramps where applicable	Project intent is to install missing curb, gutter, and sidewalk, and was not focused on bicycle improvements	Provides improved access along some MET routes	
2nd & 3rd Avenues North -- Conversion to 2-way traffic N 13th to N 22nd	Striping project only	Striping project only	Added on-street bike lanes	Not on MET route	
2012 Overlay Program:					
Overland Avenue	Existing sidewalk on north side, partial sidewalk on south side	No specific changes	On-street bike lanes added	No specific changes	
Grant Road	Continuous sidewalk both sides	Existing ramps	Parallel to Overland Avenue	Not on MET route	
Gabel Road	Gaps in sidewalk along undeveloped lots	Existing ramps	Parallel trail system through TransTech	Not on MET route	
Daniel/Regal from Central Avenue to Monad Road	Outside scope of project	Does not have continuous sidewalk	Insufficient street width; no connections on either end	No specific changes	
Swords Bypass (Airport Road to 6th)	Outside scope of project	No existing sidewalks	Insufficient street width	No specific changes	

LEGEND:

New/Added/Expanded

Existing Feature--No Changes

Served by Adjacent or Parallel Facility

Beyond Scope of Project

Not Addressed with Project

Not Applicable

\* = Billings Bench Water Association



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Photo: Billings MET Transit

## 5: Transit Users

*Compared to commuting to work by car, at \$60 in total vehicle expenses per 100 miles, commuting by bus or other forms of alternative transportation, represents a considerable financial savings.*

*– American Automobile Association*

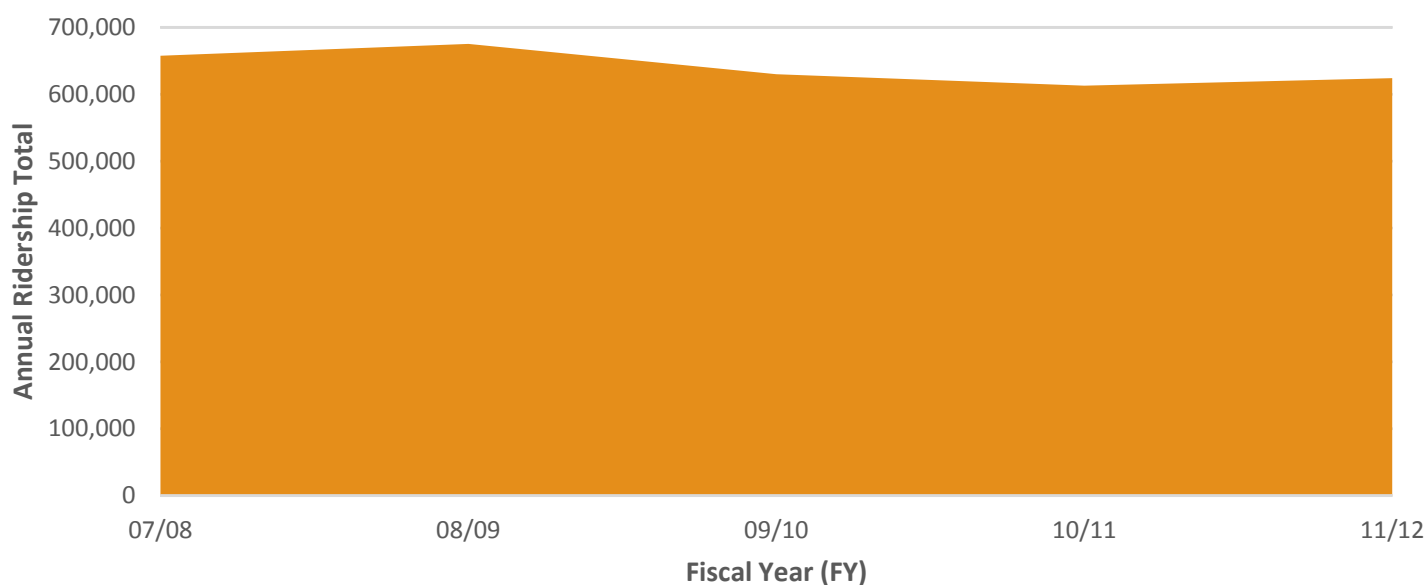
**A**lmost every transit trip begins as a walking trip. Riders need to be able to access the transit system in a safe and convenient manner. MET Transit operates as a flag down system meaning transit users can signal the bus driver by waving when the bus is a half-block away.

Buses stop at most corners along the route or at any designated blue and green MET bus sign. A lack of sidewalks or pedestrian paths linking the entire catchment area of a transit stop form a barrier to transit use by all members of the community – young and old, with or without disabilities.<sup>22</sup>

**Figure 5.1** Total Annual MET Transit Ridership (2007-2012)

Data Source: Billings MET Transit

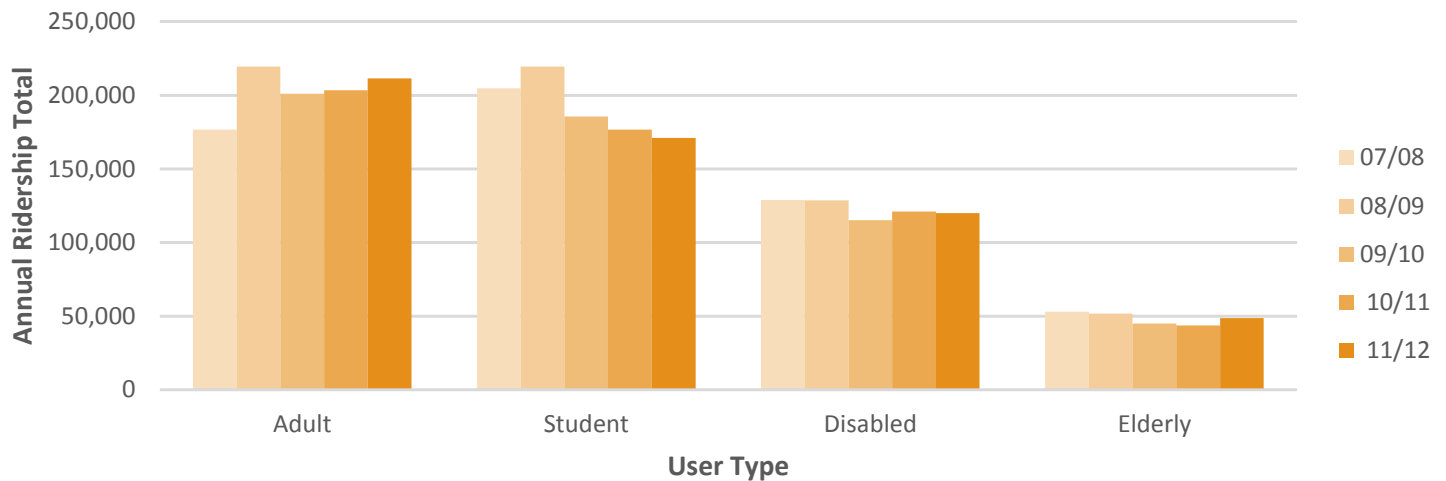
Note: Difference between 08/09 and 10/11 is ~60,000 rides.



## Figure 5.2 Annual MET Transit Ridership by User Type (FY 2007-2012)

Data Source: Billings MET Transit

Note: Student and overall ridership have declined since 08/09, but adult ridership has increased.



Complete streets infrastructure – such as sidewalks, dedicated bike lanes, and improved crossings, bus stop placement and configuration – contributes greatly to the safety and convenience of pedestrians and bicyclists accessing transit stops.

The City of Billings MET Transit System provides public transportation through fixed route and paratransit services throughout the city. MET

Transit has a fixed route fleet of 26 buses, operating 18 routes Monday through Friday and nine fixed routes on Saturdays. Each bus is ADA-accessible and equipped with a two-slot bike rack. The bike racks on MET Transit buses are used daily and usage has steadily increased since 2007 (see Figure 5.3).

*Nationwide, 30 percent of transit users get 30-plus minutes of physical activity each day and typically walk an average of 19 minutes daily getting to and from transit stops. People who use public transportation, for any reason, are less likely to be sedentary or obese than those who do not use public transportation.<sup>23</sup>*

### Performance Measures

Billings' complete streets policy envisions an equitable, accessible, user-friendly transit system.

Figures 5.1 and 5.2 reflect ridership since 2007. Bike rack usage has continually increased over the past four years, indicating Billings residents are using bicycles with increasing frequency to link to transit trips (see Figure 5.3). Subsequent updates to this report will show ridership after the adoption of the complete streets policy and may indicate the policy's impact on ridership and bike rack use.

MET Transit currently has 20 bus shelters installed on routes throughout Billings. This has largely been in response to user requests or to high volumes of riders accessing the system at a particular location.

Pedestrian access to transit is important to provide connectivity for the first mile and last mile of a transit trip. When the existing sidewalk inventory is overlaid over the MET Transit network, 86 percent (or 150 of the 173 miles) of the network is supported by sidewalks. As new sidewalks are installed over time, this relationship will be tracked



as a performance measure.

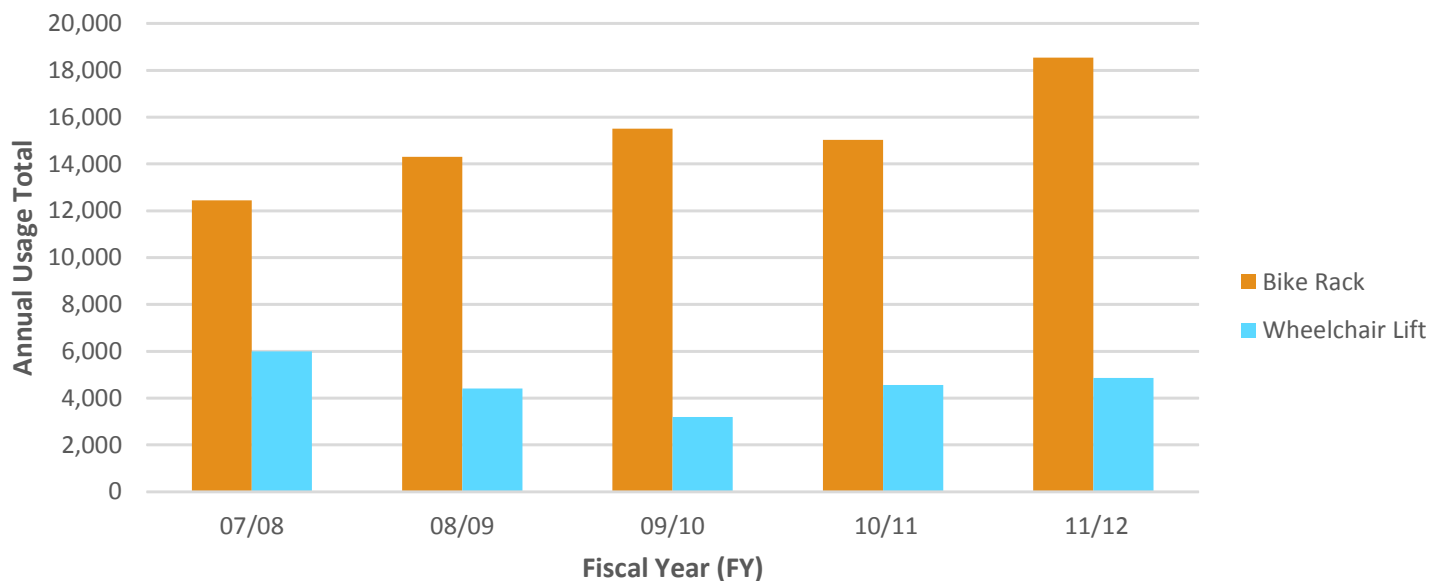
Currently, a monthly, unlimited bus pass in Billings costs \$22 for adults, \$6 for seniors and \$15 for students. For \$264 per year, an adult employee can

commute by bus to and from work. Employers can also purchase monthly bus passes at a discounted rate to give or sell to employees, making this mode even more affordable. To learn more about this bus pass purchase program, call 657-8218.

**Figure 5.3 On-bus Amenity Usage (2007-2012)**

*Data Source: Billings MET Transit*

*Note: Although total MET Transit use has declined in recent years, on-bus bike rack usage has increased.*




Path and Trail Connections  
with MET Transit

Map 4


Billings Complete Streets  
Benchmark Report

**Legend**

- MET Transit Bus Routes
- Multi-Use Path
- Neighborhood or Connector Path/Trail
- Bus Route - Path/Trail Connection
- Unpaved Trail
- Roads
- River
- Park
- Billings Logan International Airport
- City Owned Property
- Billings City Limits




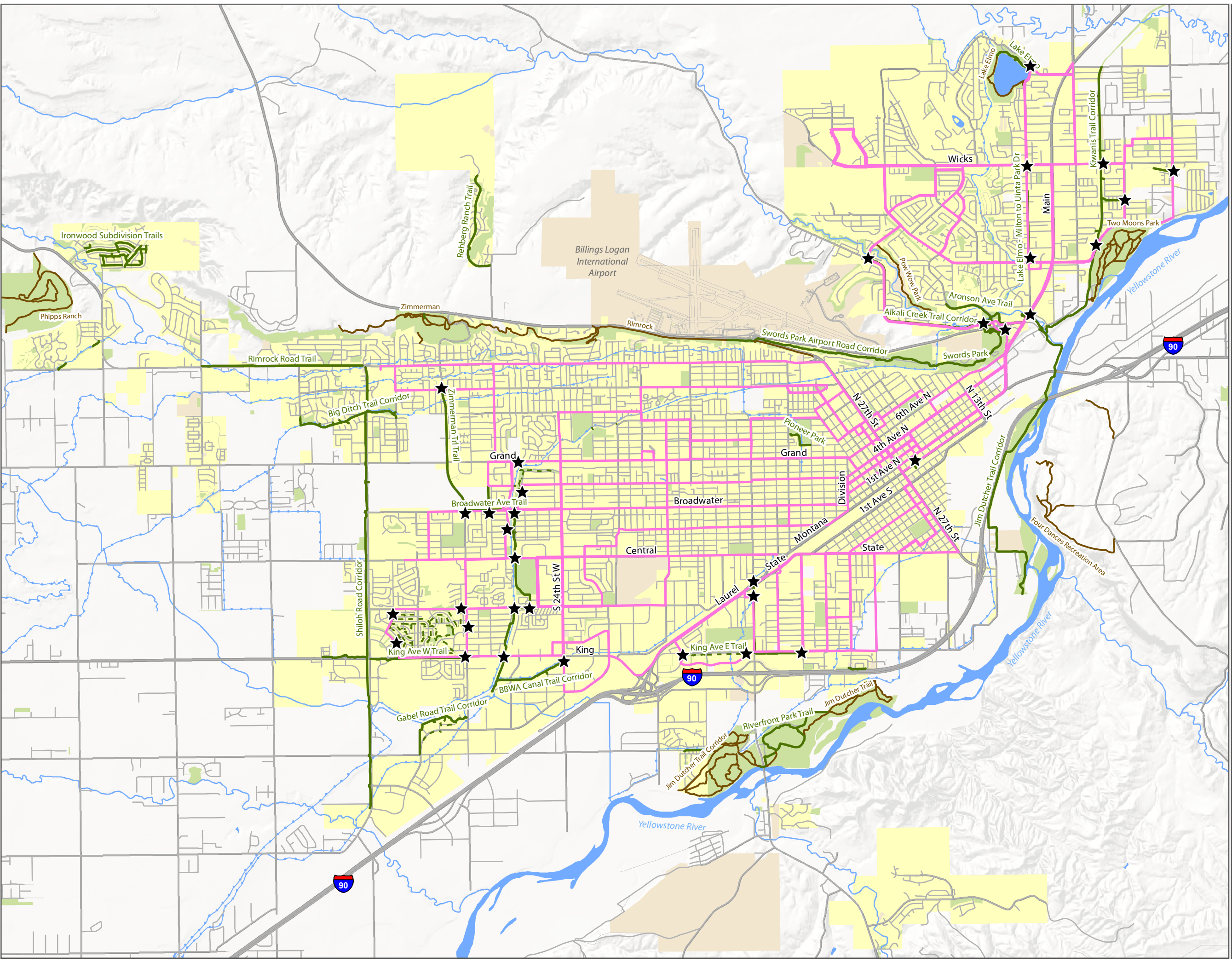
PLANNING + DESIGN



0 0.5 1 2 Miles

Data obtained from City of Billings  
Map created May 28, 2013







## 6: Connectivity

Photo: Broadwater Trail; Gregory Miller Photography

*Increased connectivity reduces the amount of circuitous travel required and often encourages shorter vehicle trips and the use of alternative modes such as biking and walking.*

– Montana Department of Transportation

Many people remark on the newly resurfaced roadway as they zip along the smooth surface in a vehicle, but imagine finding your daily walk to school transformed from a muddy goat trail (see photo at right) into a fresh ribbon of asphalt or concrete under your sneakers (see photo above). This is what students and staff found in fall 2012 when they began their walk-commute to Will James Middle School from neighborhoods south of Broadwater Avenue. The new pedestrian and bicycle trail now connects the school to another new trail along Broadwater Avenue for students, joggers, and anyone else wanting to get from Broadwater Avenue to the Grand Avenue corridor.

### **Connectivity Completes Streets & Communities**

How easily motorized vehicles, transit vehicles, bicyclists, the elderly and disabled, and all pedestrians move around a community and get to work, shopping, and play is largely dependent on the connectivity of the transportation network.

Billings' complete streets policy is focused on improving the transportation environment for



*This vacant strip of untended land now features a tidy asphalt trail, visible in the top photo, connecting Broadwater and Lewis Avenues at 30th Street West.*

Photo: City of Billings

all roadway users – including motorists, transit users, pedestrians and bicyclists. Therefore, transportation network enhancements should aim at greater street connectivity, more and improved sidewalks, trails, bike lanes, crosswalks, transit routes and stops, and other improvements that make our community more connected.



### Performance Measures

Three measures demonstrate changes in connectivity over time:

1. *Transit–Trail Connections (see Map 4 on p. 22)*
2. *Neighborhood Sidewalk/Bike Lane/Connector Trails (see Maps 1 and 2, pp. 9 and 15, respectively)*
3. *Cross-community arterial corridor connections*

While each measure looks at connectivity on a different scale, all get at the overall goal of providing a more complete, connected transportation network for all users.

#### Transit–Trail Connections

As of April 2013, there are currently 34 locations in Billings where a bus route intersects an existing trail through the city (see Map 4 on p. 22). These

points are important to provide options for trail users and transit riders to switch travel modes and get to their destinations more easily. The more trail/transit intersections there are, the more flexibility travelers have getting around the city.

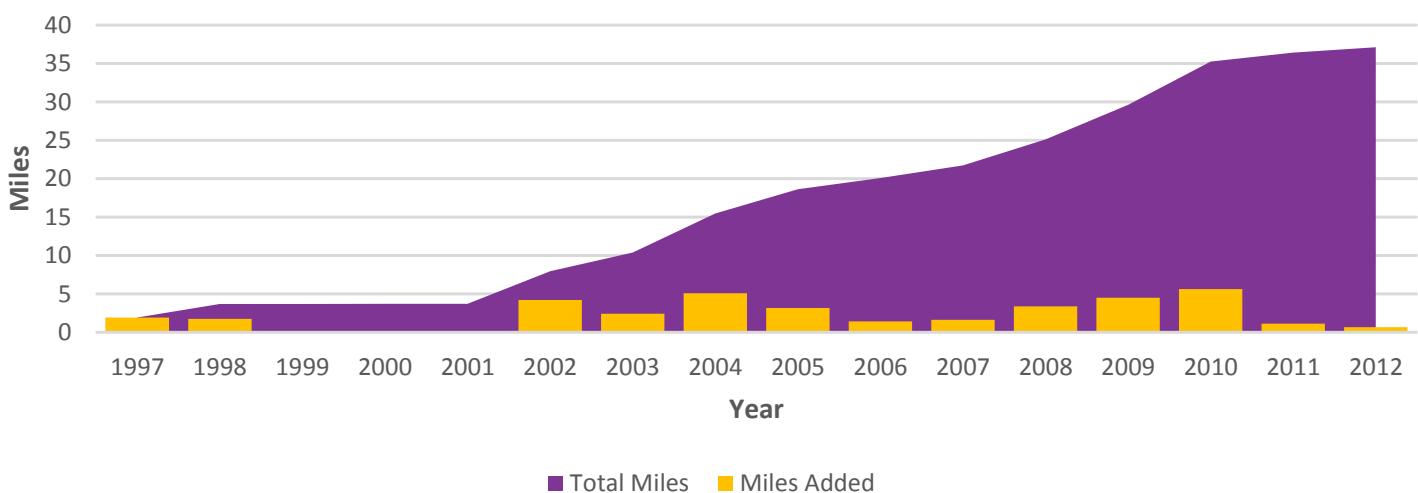
#### Neighborhood Sidewalk/Bike Lane/Connector Trails

Sidewalk, bike lanes and connector trails play a large role in providing connections within and between city neighborhoods. Pedestrians and bicyclists seek out these facilities to get from one neighborhood to another and they provide safe means of travel for all ages and abilities. Further, since many of them utilize existing transportation corridors, they give people familiar routes to use that they may also use when traveling by car for some trips.

As of 2013, there are approximately 40 miles of on-street bike lanes in place within existing transportation corridors. In addition, there are approximately eight miles of neighborhood paths,

**Figure 6.1** Yearly Multi-use Path Mileage Added & Total

Data Source: City of Billings



# Completing Connections



Photo: Central Avenue & 31st Street West; Gregory Miller Photography

*Every major street reconstruction project since 2007 has incorporated sidewalks or parallel multi-use paths. The City has an annual curb, gutter, and sidewalk contract that historically has been a way to get missing sidewalks installed near schools, replace deteriorated sidewalks and fill in other gaps in the sidewalk system. Community Transportation Enhancement Program funds (CTEP) have helped reduce the cost to homeowners for many of the school-route-related sidewalk programs. The City also has an annual ADA ramp contract to install accessible pedestrian ramps at intersections along major roadways. The ADA ramps are terra cotta-colored and visible at the curb ramps pictured above. Since 2006, over 500 curb ramps have been installed under that program.*

*This does not mean the City has a perfect sidewalk program or that there are no gaps in the sidewalk infrastructure. There are still many older areas, or areas originally developed in the County and later annexed into the City, where sidewalks do not exist. The most common cause of gaps in sidewalk continuity in newer residential subdivisions is delaying the installation of sidewalks until each individual lot actually develops. If one or two lots along a street do not develop until significantly later than the surrounding lots, pedestrians are left with a gap in sidewalk continuity until the vacant lots develop, as visible in the photo below. The City is working to close the gaps that occurred under the former requirement.*



Photo: Central Avenue; Gregory Miller Photography

nine miles of unpaved trails, and 38 miles of paved multi-use paths (of which 11 miles are alongside major roadways). Billings has an estimated 600 miles of sidewalk for its 1,021 miles of streets within the city limits (see Map 1 on p. 9). This translates to approximately 58.7 percent of in-city street frontages having sidewalk.

One example of recent improvements in neighborhood connectivity can be found in the downtown area along North 30th Street, South 28th Street, and 2nd and 3rd Avenues North. This area has seen significant bike lane development through 2012. Map 3 (p. 16) shows the downtown bike lanes that provide better connections between the North Elevation, Highland, North Park, South Side and East Billings neighborhoods and the downtown core.

In addition to sidewalk and bike lane connections, Billings also has over eight miles of connector trails. Connector trails range from short segments along major transportation corridors to internal neighborhood trails that provide connections between blocks for pedestrian access and circulation. They complement the network of multi-use paths and are useful for connections by a variety of users (see Map 2 on p. 15).

### ***Cross-Community Arterial Corridor Connections***

Connectivity at a large scale can be achieved by completing cross-community corridor connections. These connections are often among arterial or collector streets that move large

volumes of people in very direct routes for many miles in Billings. Ensuring travelers of all modes can operate in these transportation corridors is a primary goal of the complete streets policy. These connections can facilitate safer, more efficient vehicular travel, preventing traffic backups or cut-through traffic in residential neighborhoods. Recent examples of successful arterial connections include the connection of Grand Avenue and Broadwater Avenue via Zimmerman Trail, as well as the Bench connector, which allows direct traffic flow from 4th Avenue North to Bench Boulevard. Both of these examples also include transportation facilities for all modes of travel.

Many of Billings' bike lanes and roadside trails have been added in the last few years along a few major corridors, including Shiloh Road and Poly Drive. These are significant improvements for cross-community travel for pedestrians and cyclists as they can travel from one end of the city to the other along these corridors. Tracking the status and addition of vehicular connections and on-street bike lanes, roadside trails, sidewalks, and crosswalks on the major transportation corridors in Billings will show how the City continues to improve cross-community connections.



# 7: Community Health

Photo: RiverStone Health

*Bicycling and walking result in significant cost savings on health care spending. If just one out of 10 adults started a regular walking program, the U.S. could save \$5.6 billion in heart disease costs alone. Cost-benefit analyses show that as much as \$11.80 in benefits can be gained from every \$1 invested in bicycling and walking.*

– Alliance for Biking and Walking

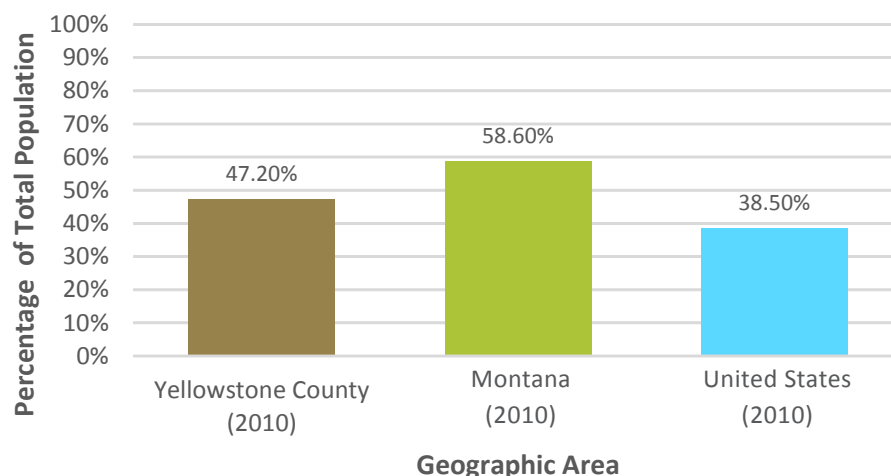
According to U.S. Department of Health and Human Services Physical Activity Guidelines for Americans, adults should strive to meet either of the following physical activity recommendations:

1. Moderate-intensity physical activities for at least 30 minutes on five or more days of the week, or,

**Figure 7.1** Percentage of Population Meeting Physical Activity Recommendations

Data Source: PRC Community Health Surveys; Center for Disease Control & Prevention

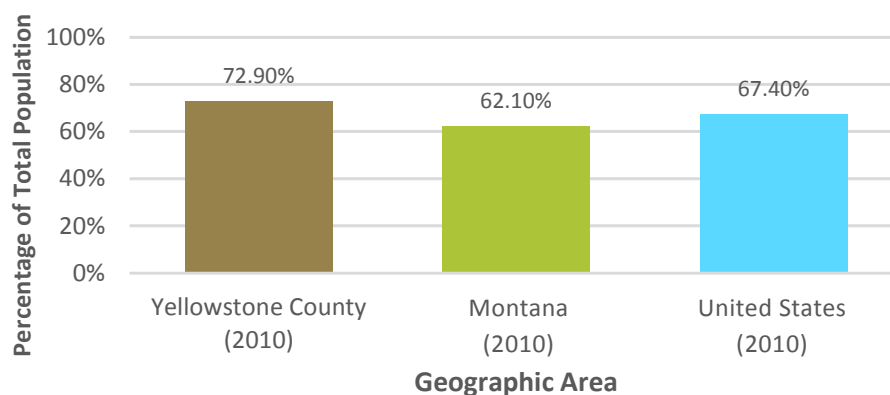
Note: Higher values indicate a healthier population. In this case the term “meets physical activity recommendations” refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least five times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least three times a week for 20 minutes at a time.



## Figure 7.2 Prevalence of Total Overweight Population

Data Source: PRC Community Health Surveys; Center for Disease Control & Prevention

Note: Overweight or obese adults have a Body Mass Index (BMI) of 25.0 or higher. Lower values reflect a healthier population. The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender.



### 2. Vigorous-intensity physical activity three or more days per week for 20 or more minutes per occasion.

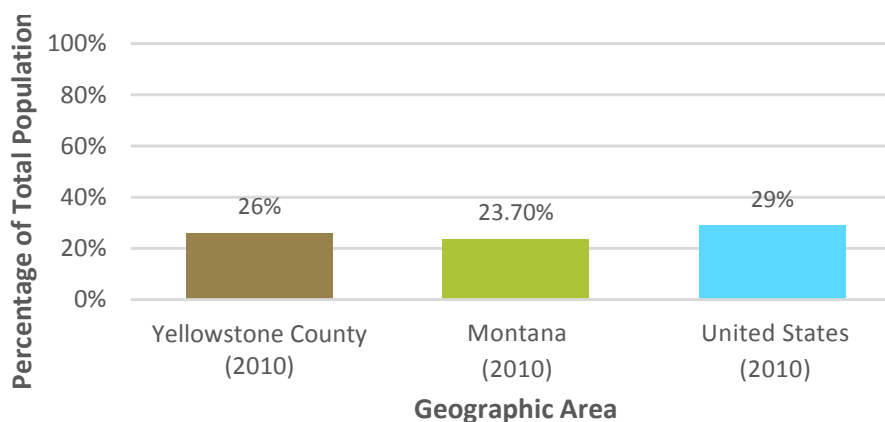
This level of physical activity is proven to reduce the risk of chronic diseases associated with inactivity, overweight and obesity. Unfortunately, over 62 percent of Montana adults are at an unhealthy weight and more than 40 percent do not meet the minimum guidelines for aerobic physical activity needed to reduce the risk of chronic disease (see Figures 7.1 and 7.2).<sup>24</sup>

Active transportation is one of the easiest ways to add physical activity to daily life. One of the visions of the Billings complete streets policy is to encourage walking and bicycling to increase the general safety, health and welfare of its citizens. As such, implementation of the policy should increase opportunities for and access to active transportation for people of all ages, stages and physical abilities. Furthermore, complete streets contribute to making Billings a healthy place, as defined by the Centers for Disease Control and Prevention: "... those designed and built to

## Figure 7.3 Prevalence of Total Obese Population (BMI above 30.0)

Data Source: PRC Community Health Surveys; Center for Disease Control & Prevention

Note: Lower values reflect a healthier population. The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender. The Healthy People 2010 national target - from the U.S. Department of Health and Human Services - was 15 percent or lower.



improve the quality of life for all people who live, work, worship, learn, and play within its borders – where every person is free to make choices amid a variety of healthy, available, accessible, and affordable options.”

### *Performance Measures*

In 2005 and 2010, Billings Clinic, St. Vincent Healthcare, and RiverStone Health co-sponsored a comprehensive Community Health Assessment (CHA) of Yellowstone County residents. The Community Health Survey developed for this assessment gave a remarkably complete and accurate view of the health status of residents through a randomized telephone survey of the health and behaviors of 400 community members. The sample drawn for this survey was representative of the Yellowstone County population. To gain further perspective from

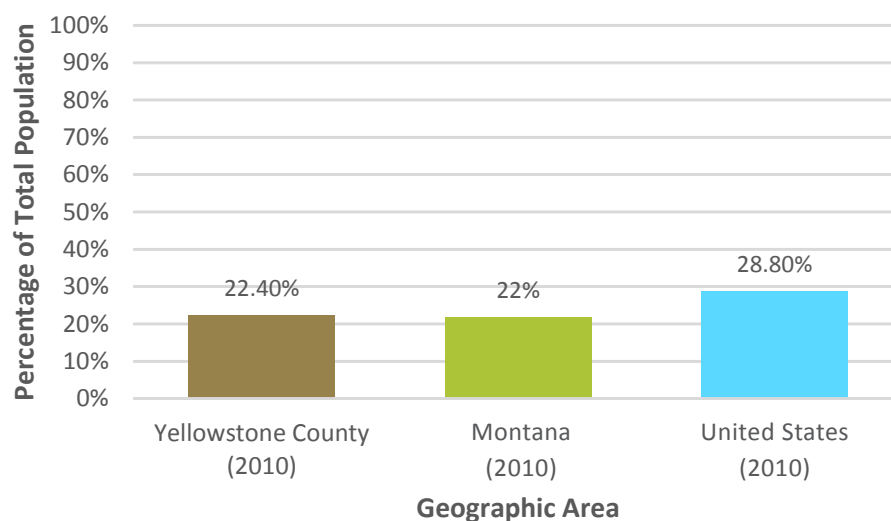
community members, five focus groups of community leaders, social service providers, physicians and health professionals, employers, educators, and public service professionals were conducted.

Both the 2005 and 2010 CHAs tracked information and habits related to the activity level and health of Yellowstone County citizens. Going forward, the CHA will be conducted every three years and the following trends will continue to be tracked: weight status in terms of both overweight and obesity (Figures 7.2 and 7.3); participation in regular, sustained moderate or vigorous physical activity (Figure 7.1); and participation in leisure-time physical activity (Figure 7.4). This information, over time, may illustrate the relationship between community health and the implementation success of the complete streets policy.

### *Figure 7.4 No Leisure Time Physical Activity in the Past Month*

*Data Source: PRC Community Health Surveys; Center for Disease Control & Prevention*

*Note: Lower values reflect a healthier population. More than 22 percent of Yellowstone County adults report no leisure-time physical activity in the past month. The Healthy People 2010 national target - from the U.S. Department of Health and Human Services - was 20 percent or lower.*





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## 8: Economics

Photo: Billings Chamber CVB

*“Cynics know the price of everything and the value of nothing.”*

– Oscar Wilde

Creating complete streets in business districts has increased retail sales in some areas of the U.S. even when city-wide or regional sales have been on the decrease. There are several explanations:

1. *Active transportation modes are now accommodated.*
2. *The street design increases overall traffic capacity.*
3. *Crashes of every sort have decreased.*
4. *Overall traffic counts have increased because the complete street attracts more users.*
5. *All of the above changes translate into more exposure, more potential customers, more sales, and a safer environment for businesses and patrons.<sup>25</sup>*

### **Mobility: Getting People To and From Workplace Efficiently and Safely**

Economists characterize the economic health of a geographic area in terms of output. Complete

streets contribute to the output – or production of a labor force – by providing a transportation network designed to safely and conveniently get people to work. A thriving economy relies on employees accessing their workplace in a timely manner at a cost that is not overly or even prohibitively expensive. Complete streets accommodate all users by providing transportation options like walking, public transit and bicycling. Having a choice of transportation modes can mean the difference between employment and unemployment.

A well-designed road network that safely and comfortably accommodates all types of vehicles and all modes results in fewer delays and

*Costs associated with the routine accommodation of bicycling, walking, and public transportation represent an immeasurably small percentage of a total road construction and maintenance budget. Complete streets require far less pavement per user; this saves money at the onset of the project and reduces maintenance costs over the long term. Compared to increasing road capacity for vehicles alone, investing in pedestrian and bicycle facilities costs far less. Over the width of one traffic lane, walking and cycling can move five to 10 times more people than driving.<sup>26</sup>*

accidents. Residents who can access more than one arterial between their homes and workplaces typically experience less time wasted on congested roadways by having the option of alternative travel routes. A safer and more convenient road network ensures the majority of Billings' residents arrive at their destination on time, contributing to greater productivity and quality of life.

### **Affordability: Reducing Transportation Costs**

When economists tally up the cost of living, transportation costs invariably make up a significant portion of the total.

In Billings, the transportation cost as a percent of total household income exceeds 29 percent on average (29.64 percent, Housing + Transportation Affordability Index).<sup>27</sup> Transportation costs estimated by this method include commuting

and all other travel as part of the household's daily trips. Add transportation costs to housing costs and the average Billings resident is paying 51.92 percent for these basic, non-discretionary expenses. The median gross household income in Billings is \$51,000 for a household size of two. After spending 51.92 percent of that income (\$26,479) on housing and transportation, less money is left for other non-discretionary items such as food, clothing and medical bills. Less household income spent on transportation means more can be spent on maintaining a healthy lifestyle and enjoying other services and commodities that otherwise might not be affordable. According to the American Automobile Association, the cost of yearly car ownership increased in 2012 to \$8,946 per sedan-style car, about 2 percent higher than 2011.<sup>28</sup>

### **Quality of Life and Creating Wealth**

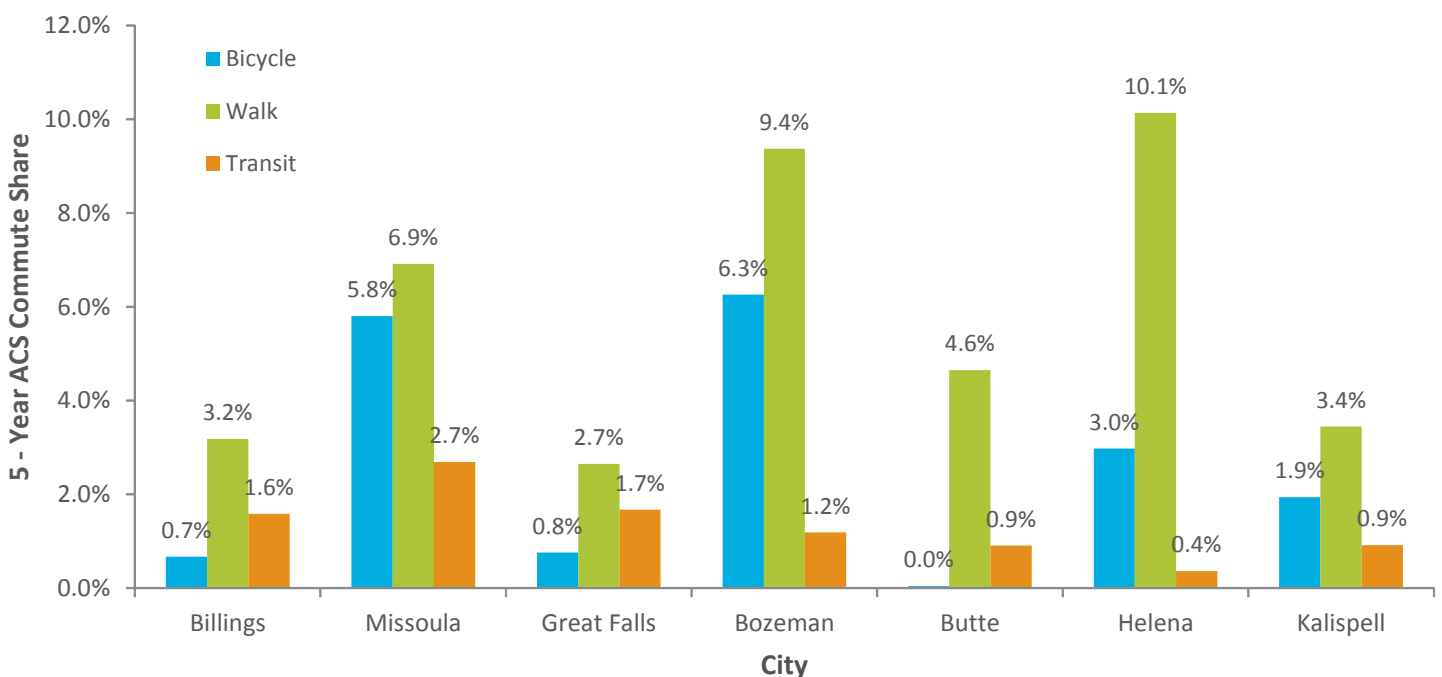
A survey conducted in 2012 for the National Association of Homebuilders indicated, of the households sampled, 70 percent of households

*According to the Billings Housing + Transportation Affordability Index, Billings residents, on average, spend 51.92 percent of their income on housing and transportation costs.*

**Figure 8.1** Five-Year ACS Commute Share for Montana Population Centers

Data Source: American Community Survey, Five-Year Estimates

Note: Despite being the largest city (by population) in Montana, Billings' mode share - according to the ACS - is second lowest in both bicycling and walking. It is, however, the third best Montana city in terms of transit ridership.



with incomes greater than \$50,000 preferred walking trails as the number one amenity.<sup>29</sup> Billings has over 38 miles of hard-surface, multi-use paths; one-third of which are located along arterials.<sup>30</sup>

The Billings Chamber of Commerce recognizes that trails improve the quality of life for residents and, in turn, attract residents and businesses to Billings. Additional factors that attract new residents to a community include walking paths, bicycle lanes, public transit, and safe traffic conditions. These amenities all contribute to the appeal of a community and may offer a competitive edge over similar cities without these amenities. The Billings Chamber of Commerce considers the growing local network of non-motorized facilities to be such a valuable business recruitment tool that they have branded the city as “Montana’s Trailhead” and established the Chamber Trails Committee.

### Performance Measures

According to the American Community Survey (ACS) five-year estimate (2006-2010), Billings’ commuting (home to work and work to home) mode share is 0.7 percent bicycle, 3.2 percent walk, 1.6 percent public transit, 84.6 percent vehicle (drove alone), and 9.9 percent vehicle (carpooled). The National Household Travel Survey (NHTS) provides mode share data for all trips, not only for commuting trips.

This data is visualized as commute mode share and as an estimate of overall trips when adjusted for national trends in overall travel (see and compare Figures 8.1 and 8.2).

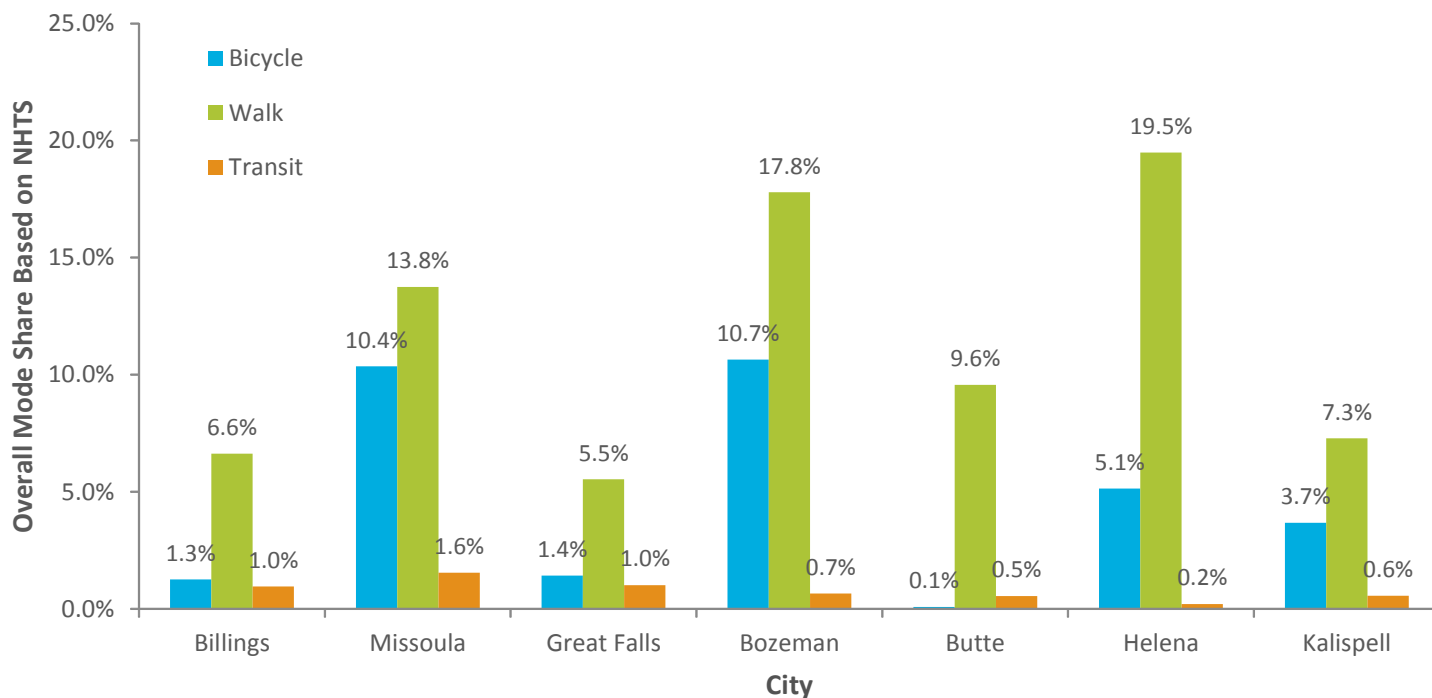
*Sidewalks are critical transportation routes for communities. They allow pedestrians to travel from one place to another, stimulate business districts by encouraging leisure shopping, and keep communities safe by providing more activity on the street.*

*- Federal Highway Administration*

### Figure 8.2 Overall Mode Share for Montana Population Centers

Data Source: American Community Survey (ACS) data normalized using the National Household Travel Survey (NHTS)

Note: It is interesting to compare the differences in mode share for the same seven Montana cities when adding in the NHTS data. Bicycling and walking trips make up a greater portion of all trips, while transit is used more heavily for commuting.





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# Appendix

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## RESOLUTION NO. 11-19097

A RESOLUTION OF THE CITY OF BILLINGS  
TO ADOPT A COMPLETE STREETS POLICY

WHEREAS, in enacting this resolution, it is the intent of the City Council to encourage healthy, active living; reduce traffic congestion; and improve the safety and quality of life of Billings residents by providing safe, convenient, and comfortable routes for walking, bicycling, and public transportation; and

WHEREAS, the promotion of transportation improvements that are planned, designed and constructed to encourage walking, bicycling, and transit use increase the general safety, health and overall welfare of the citizens of and visitors to the City of Billings; and

WHEREAS, the Billings Urban Area Long-Range Transportation Plan 2009 Update states, as one of its Guiding Principles, “the City will develop a complete streets policy which will design and operate to enable safe access for all users including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities to safely move along and across a complete street”; and

WHEREAS, the 2010 Community Investment Plan: City of Billings City Council and Staff Strategic Priorities identifies one of its goals to be the “development of a comprehensive, multi-modal transportation system” and includes “complete streets” as a priority; and

WHEREAS, 72.9% of residents are overweight or obese according to the 2010 Yellowstone County Community Health Assessment; and

WHEREAS, only 47.2% of residents meet nationally recognized physical activity recommendations according to the 2010 Yellowstone County Community Health Assessment; and

WHEREAS, Section 61-8-602 of the Montana Code Annotated (MCA) makes bicycle riders rightful road users, and Section 61-8-501, MCA, recognizes pedestrians as rightful road users; and

WHEREAS, the health, safety and welfare of the citizens of and visitors to the City of Billings will be enhanced by the adoption of a policy that promotes a complete transportation system that meets the needs and expectations of all transportation users; and

WHEREAS, the City Council of the City of Billings desires to establish a clear policy ensuring the needs of adjacent land users and all transportation users, including but not

limited to pedestrians, bicyclists, transit users, people with disabilities, the elderly, emergency responders, motorists, and freight providers are considered.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL that the City of Billings adopt the following Complete Streets Policy.

## **COMPLETE STREETS POLICY**

A complete street is comprised of many different elements that are tailored to fit the needs of Users. A complete street can vary considerably in context from rural to urban applications and the needs of Users.

**1. DEFINITIONS.** The following words and phrases, whenever used in this Policy shall have the meanings defined in this section unless the context clearly requires otherwise:

- (a) “Complete Streets Infrastructure” means design features that contribute to a safe, convenient, or comfortable travel experience for users, including but not limited to features such as: sidewalks; shared-use paths; bicycle lanes; shared roadways; bicycle boulevards; automobile lanes; paved shoulders; street trees and landscaping; planting strips; curbs; accessible curb ramps; bulb outs; crosswalks; refuge islands; traffic signals, including pedestrian countdown signals, accessible pedestrian signals and pedestrian hybrid beacons; signage; street furniture; bicycle parking facilities; public transportation stops and facilities; transit priority signalization; traffic calming devices such as roundabouts/rotary circles, speed humps, and surface treatments such as paving blocks, textured or colored asphalt, and concrete; narrow vehicle lanes; raised medians; dedicated transit lanes; and those features identified in the Billings Area Bikeway and Trail Master Plan, and the Manual on Uniform Traffic Control Devices.
- (b) “Street” means any road, public or private, open to the use of the public for vehicular travel, as well as bridges, tunnels, underpasses, overpasses and any other similar portions of the roadway network.
- (c) “Street Project” means the construction, reconstruction, retrofit, maintenance, alteration, or repair of any Street, and includes the planning, design, approval, and implementation processes. “Street Project” does not include minor routine upkeep such as cleaning, sweeping, mowing, spot repair, or interim measures on detour routes.

- (d) “Multi-modal Transportation Network” means all facilities, vehicles and devices designed to facilitate the mobility of people.
- (e) “Users” are individuals who use the Multi-modal Transportation Network. Categories of Users include pedestrians; bicyclists; motor vehicle drivers; public transportation riders and people of all ages and abilities.

## 2. IMPLEMENTATION

- (a) The City of Billings shall consider every Street Project an opportunity to incorporate the principles of Complete Streets.
- (b) The City of Billings shall work in coordination with other organizations, agencies, and jurisdictions to achieve a safe, convenient and connected Complete Streets Infrastructure within the Multi-modal Transportation Network.
- (c) This policy shall guide the City in the development of plans, design standards, procedures, rules, regulations, guidelines, programs, templates, and design manuals. As practicable, these documents and tools will be updated to reflect this Complete Streets Policy.
- (d) The City will provide periodic training on how to integrate, accommodate, and balance the needs of each category of User. Training will be available to City staff, private industry, other jurisdictions, and community members.

## 3. DATA COLLECTION AND PROGRESS REPORTING

- (a) The City will periodically collect, review and report performance data and benchmark measurements to demonstrate the effectiveness of the policy. This information could include: number of projects completed, number of projects incorporating complete streets infrastructure, actual infrastructure added, number of transit and non-motorized users, community attitudes and perceptions, and safety and health indicators.
- (b) Existing advisory boards and committees such as the Technical Advisory Committee, the Traffic Control Board, the Bicycle and Pedestrian Advisory Committee, the Aviation and Transit Board, Public Works Board, Yellowstone County Board of Health and the Yellowstone County Board of Planning are



encouraged to provide ongoing feedback and act as conduit for public participation on the implementation of Complete Streets practices.

**4. EXCEPTIONS.** Exceptions to implementation of this policy may be considered.

- (a) In considering all exceptions, alternatives shall be explored such as the use of the revised travel lane configurations, paved shoulders, signage, traffic calming, education or enforcement to accommodate pedestrians, cyclists, transit and persons with disabilities.
- (b) In considering all exceptions, future project phasing and improvements should address how complete streets principles will be accommodated.
- (c) Exceptions shall consider the multi-modal transportation network in the immediate vicinity.
- (d) When exceptions occur, alternatives and accommodations shall be documented.

PASSED by the City Council and APPROVED this 22<sup>nd</sup> day of August, 2011.



THE CITY OF BILLINGS:

BY: Thomas W. Hanel  
Thomas W. Hanel, Mayor

ATTEST:

BY: Cari Martin  
Cari Martin, City Clerk