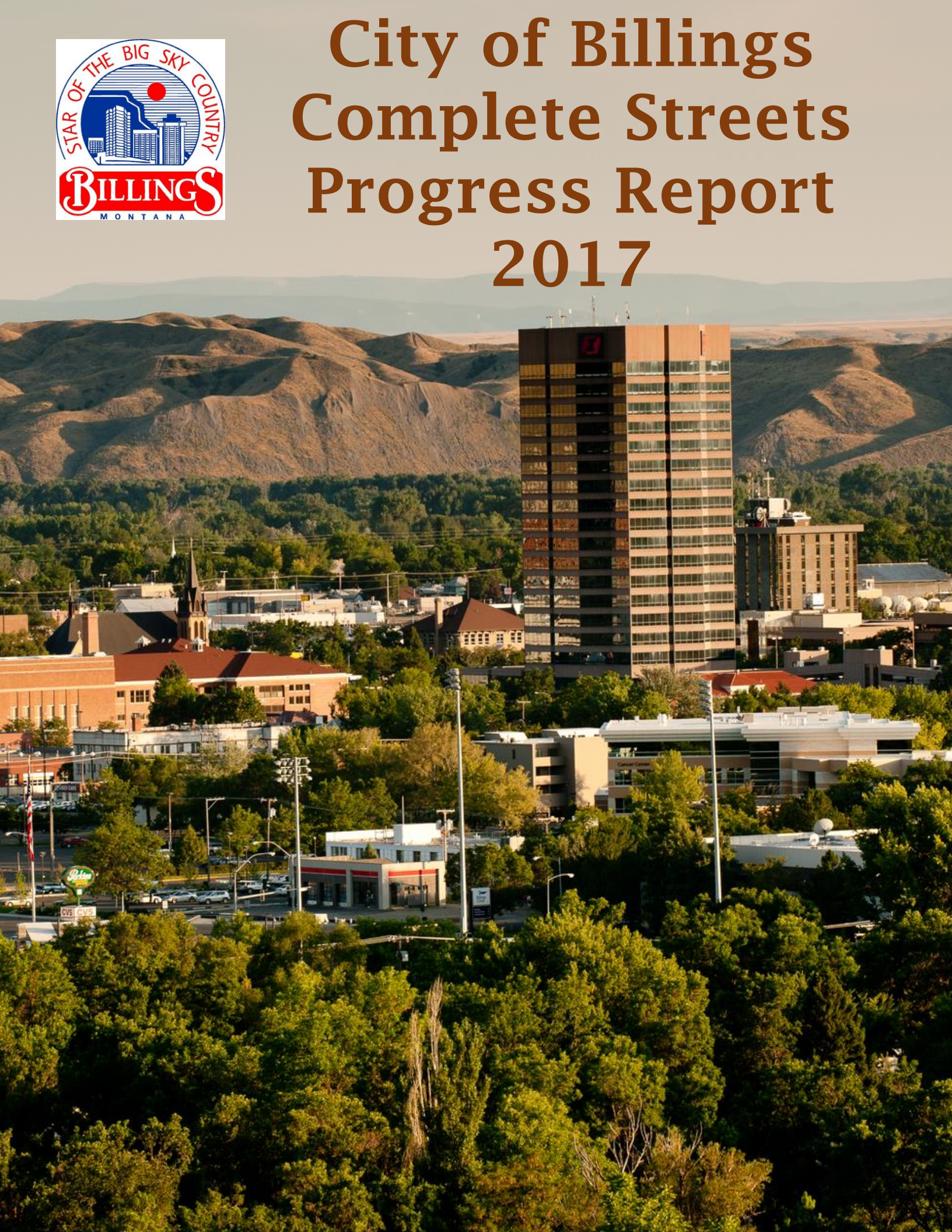
City of Billings Complete Streets Progress Report 2017



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A Special Thank You to the Billings City Council and the Healthy By Design Coalition for their continued support.

Complete Street Elements being constructed as part of the Grand Avenue and 56th Street West reconstruction project as part of the new Ben Steele Elementary School

Foreword – Letter from Coalition and Mayor

We are proud to introduce the 2017 City of Billings Complete Streets Policy Progress Report. The purpose of this report is to offer a performance based approach to our transportation systems, ensuring these work for all people of all abilities.

Roadway designs continually evolve with new and innovative opportunities to encourage healthy, active living; reduce traffic congestion, and reinforce predictable transportation behaviors.

Billings' residents enjoy a high quality of life. Passage and meaningful implementation of the Complete Streets Policy helps reinforce the community's commitment to this quality of life by guiding and highlighting design that provides safe, convenient and enjoyable experiences while walking, bicycling, accessing transit and utilizing local transportation systems. Streets that work for all users enhance community life and social connectivity.

Great streets come from conscious design decisions and creative approaches to development of the street as a whole system that serves all users. Well-designed streets, connections, bikeways and trails bolster local economics through enhanced workforce recruitment and retention, increased business sales, relief from congestion, and increased property values for businesses and homeowners alike[1].

This document examines current and future opportunities for a balanced transportation network. This report captures data from the previous three years while offering a vision for the work ahead. In order to create this balanced approach to our transportation network, we are challenged to think more broadly about the term "complete street" and to explore ways to incorporate these principles into projects that improve the lives of all residents and visitors.

Now is the time to seize the moment and continue our commitment to the vision of a healthy and more livable community. Please join us in adopting this vision.

This report will continue to be updated every three years and is available online at: http://ci.billings.mt.us/2336/Transportation-Resources.

Sincerely,

MAYOR	CEO	CEO	CEO
City of Billings	Billings Clinic	RiverStone Health	St. Vincent Healthcare

[1]http://headwaterseconomics.org/wphw/wp-content/uploads/trails-library-property-value-overview.pdf

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1. Introduction

A 1915 photograph of North Broadway – Image provided by the Western Heritage Center

Complete Streets mean something different to each community and project. The Complete Streets Policy for Billings as defined in the Resolution means "a transportation and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages, abilities regardless of their mode of transportation". Every trip starts and ends with a walk, most have ridden a bicycle in their life, many have used transit, and nearly all have ridden in a car. Whether or not we realize it, we all use multiple modes of transportation, and therefore can benefit from Complete Streets. Complete streets is not a prescriptive "must include" mandate, but can serve as a guide for measuring the performance of transportation corridors for all users.

These measurements of performance have become more critical as competition for grant monies between cities has escalated as funding sources have decreased. Having a Complete Streets Policy can make a City more competitive for limited grant funds. A Complete Streets Policy and the projects that are born from it can also be instrumental in attracting and maintaining a skilled and talented workforce.

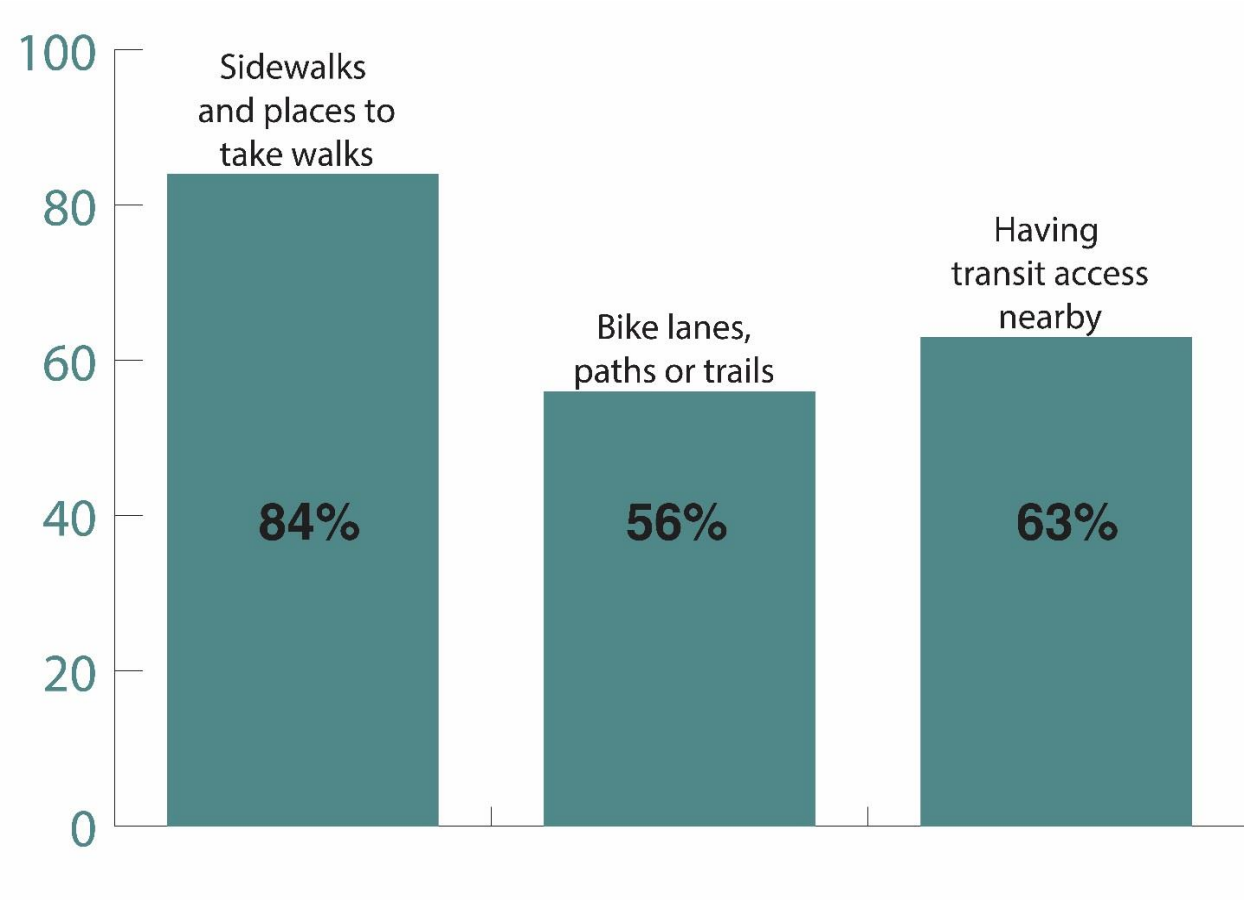
In selecting a location to live, quality of life is the most important factor for business owners and residents. A business survey of nearly 1,000 respondents found that in the Rocky Mountain West**, 70 percent of business owners move first to a community, then started a business**; more respondents chose

community as more important than the job and people will sacrifice salary for location[1].

Billings is expected to increase in population by approximately 40,000 people in the next 20 years. This estimate is based on historic growth rates calculated over the last 25-years. This increase in population may lead to an increase in traffic congestion and the need to expand the transportation system to accommodate all users. The City's Complete Streets Policy looks at alternative options in our transportation corridors that will help reduce traffic congestion and give all residents transportation options.

> 'At the heart of the concept of complete streets is the very real need for communities to invest in strategic place making, which is fundamental to retaining and attracting talent and encouraging private investment and job creation.'
>
> - Steve Arveschoug
> Executive Director,
> Big Sky Economic Development

Figure 1.1 2016 national survey of transportation infrastructure people want to live near.



Source: Jennifer Dill and Nathan McNeil, "**Revisiting the Four Types of Cyclists: Findings from a National Survey**," *Transportation Research Record,* 2587, 2016. (forthcoming)

A National Association of Realtors® survey found that "people of all ages with places to walk to are more satisfied with the quality of life in their community"[2]. According

[1] http://communitybuilders.org/wp-content/uploads/2015/07/PV_Infographic.pdf
[2] Millennials' transportation and housing choices will shape the nation. Joan Mooney. On Common Ground. 2016.

to a primary investigator with the same national survey, **transportation options and walkable neighborhoods are even more critical to smaller cities** due to the diversity of neighborhoods found within a larger city[3].

> "Given the choice, younger people tend to prefer to live in neighborhoods where they can easily walk to shops and restaurants. Mid-sized cities may be in a great position to provide these types of communities within short commute times that young people and families prefer. It seems clear Complete Streets Policies tend to promote the ability to get around without a car."
>
> - Nathan McNeil
>
> Center for Transportation Studies
> National Association of Realtors
> Study Investigator

Fiscal Responsibility

The Complete Streets approach of examining design consideration for all users during initial design **prevents future costly retrofitting.**

Image 1.1 Construction crews building boulevard sidewalks as a requirement for a new subdivision hence preventing increased installation costs in the future

The Complete Streets Policy ensures inclusion of elements at the time of construction as well as provides flexibility for reconstruction projects. Retrofitting elements like sidewalks, ADA ramps, separated side paths, bus pullouts, etc. can be difficult or prohibitively expensive if right-of-way is limited. The Policy enables limitations to be addressed while still working to accommodate all users in most situations. Planning ahead for these elements with new projects is fiscally responsible and can leverage opportunities with other public and private

[3] Telephone interview. Nathan McNeil. September 20, 2016

investments including but not limited to: right-of-way dedications, tax increment financing, developer contributions, improvement districts, grants and bonds.

Inclusion

The Policy was adopted, in part, because "the health, safety and welfare of citizens of and visitors to the City of Billings [are] enhanced by the adoption of a policy that promotes a complete transportation system …". All roadway users, including those who walk, bike, drive, move freight, use transit, and respond to emergencies are considered. The policy also specifically calls out the need to accommodate people experiencing disabilities and our growing aging populations.

Health is highly influenced by individual lifestyle behaviors, which can be enhanced or inhibited by our built environment. Physical activity reduces stress, obesity, heart diseases, and depression, while also increasing access to daily needs such as school, employment, groceries, and recreational opportunities, regardless of income or education.

Billings is the largest City in Montana and has one of the highest incomes per capita in the State. However, there are families and individuals who struggle financially. Residents spend approximately 25% of their income on transportation in Billings[4] and not everybody can drive a car. A balanced transportation network helps those who are living and working in the community but do not have access to an automobile and need other transportation options that are safe and accessible.

Image 1.2 An elderly individual using a walker while crossing a major arterial

[4] http://www.locationaffordability.info/lai.aspx

2. Complete Streets for Billings

Energy Corps AmeriCorps member Elyse Monat, serving with Billings TrailNet, gives a "Take the Hi Road" campaign presentation at a local senior center

The City first adopted a Complete Streets policy in August of 2011 to ensure all roadway users – drivers, bicyclists, transit vehicles and riders, and pedestrians – are considered during the planning and design of roadway projects. The City updated the Policy in May of 2016 – adding a checklist, among other components, that helps clarify the application of the policy elements and ensures the community is invested in accommodating all users as it improves upon existing infrastructure and builds new infrastructure.

Image 2.1 Informational card developed by the Planning Division with walking tips and a link to an educational resource

Actions

Passage of this policy has provided context for additional actions since 2011:

- **www.bikebillings.com**
  A source of information for the traveling public, on the City's website, with information for people and geared towards demographic interests.

- **"Take the Hi Road"**
  https://billingstrailnet.org/take-the-hi-road/
  A collaboration between Billings TrailNet and the City's Public Works providing information to encourage respect among road users.

- **Kids In Motion**
  http://kidsinmotionvolunt.wixsite.com/kimbillings
  An active transportation program, started with Billings Metro VISTA Project members, sponsored by St. Vincent Healthcare, facilitated by School District #2, Education Foundation, City of Billings and other community partners. Program emphasis on equity.

Meaningful Input

The policy has meant more to the community than how projects are vetted and designed. It also has encouraged conversations about our street network and our sense of place as the City of Billings.

City Council revisited and amended the Complete Streets Policy in May 2016. This review and update provided a new opportunity for input from the diverse users of our transportation system. The quote to the right shows an example of some of the input the City received during its update to the Policy.

In order to continue the effort of meaningful dialogue and input, the City Council included a checklist and also a directive to the City Public Works Department to bring to the City Council at a Work Session any major street construction or reconstruction project when it is at the 30 percent design level for review. This effort may provide the opportunity for the Council to review the projects as well as offer another way to engage residents and ask for their input on the plans and elements of a project before it is completed.

- **Data Collection**
  The traffic count program has expanded to bicycle specific mixed traffic counters and a video counter.

- **Enhanced Collaboration**
  Transit, Engineering, Planning, Parks, Council and external entities established improved transportation and project discussions.

.

The checklist was added to the Policy to ensure consistent review of all projects, which are subjected to the same criteria, which is clearly presented to residents during Council meetings. The checklist includes the following:

Existing Conditions

- What accommodations for bicycles, pedestrians and transit are included on the existing facility and on facilities that it intersects or crosses?
- If there are no pedestrian or bicycle facilities, how far from the proposed project are the closest parallel walkways and bikeways?
- Are there existing challenges the proposed project could address for bicycle, transit and pedestrian travel?
- Did the project design consider collisions involving pedestrians and bicyclists along the proposed roadway? If so, what are the potential options?

- Do any adopted plans call for the installation of bicycle or pedestrian facilities on, crossing or adjacent to the proposed facility? If yes, list the applicable plans.

Project Scope:

- What accommodations, if any, are included for bicycle, pedestrians and transit in the proposed project design?
- If the proposed project does not incorporate bicycle and pedestrian facilities, list reasons
- What is the cost of the bicycle and pedestrian improvements and their proportion of the total project cost?
- What agency will be responsible for the maintenance of the bicycle and pedestrian facilities and how will they be budgeted?

Image 2.3 Installation of bike lane as part of restriping project of 13th Street West in July 2014

National Recognition

The City of Billings has been recognized several times since the adoption of the first Complete Streets Policy in 2011. Awards include:

- **Sunset Magazine**
  Awarded best sustainable community runner up because of "its green streak with miles of bike paths."
- **Outdoor Magazine**
  Billings was named America's Best Town of 2016 in part because, "It truly is Montana's Trailhead … it's not uncommon to see bikes night and day. People in Billings love to ride bikes."
- **Chamber of the Year**
  The Association of Chamber of Commerce Executives named Billings Chamber of the Year for its trails and heritage initiative.
- **Smart Growth America**
  Billings' Complete Streets policy and the Benchmark report were recognized on this national website.

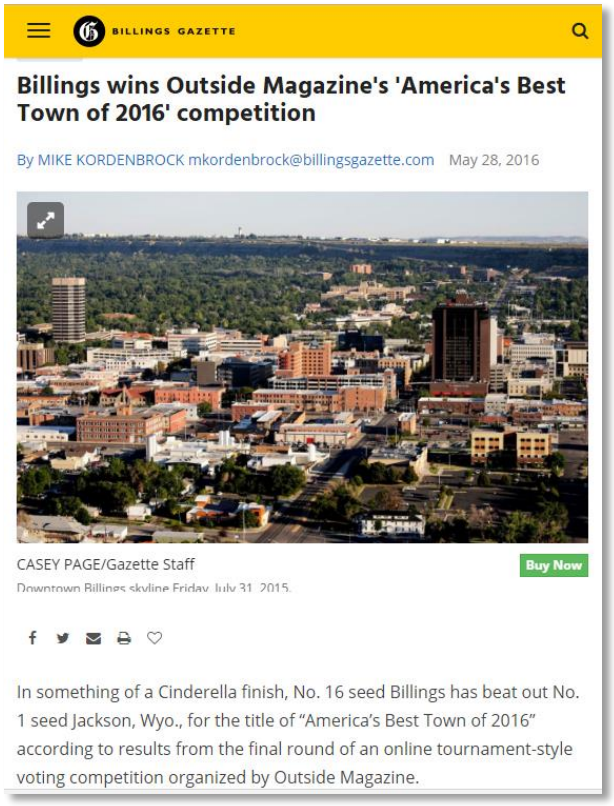


Image 2.2 Billings Gazette article about winning 'America's Best Town of 2016'

Performance Measures

The primary goal of the Progress Report is to track the effectiveness of the Complete Streets policy over time. This can be done by developing performance measures that adequately and consistently document conditions such as traffic counts, crash data and modes of travel.

It is important to keep in mind that the objective of this report is to evaluate the complete transportation network by tracking existing data sources and currently collected measurements and not to create an additional burden on already limited staff and research resources. The performance measures should effectively reflect the vision and goals expressed in the adopted Complete Streets Policy.

The following chapters examine the impacts of Complete Streets for Billings and evaluate the effectiveness through established performance measures.

Partnerships

Since publication of the 2013 Complete Streets Benchmark Report, the City has partnered with non-profits, community groups, and other governmental organizations to ensure implementation of the Complete Streets Policy and to encourage active transportation. These partnerships include, but are not limited to:

Figure 2.4 5-2-1-0 messaging utilized by Healthy By Design

- **Healthy By Design**
  The Healthy By Design Coalition, originally created by Billings Clinic, RiverStone Health, and St. Vincent Healthcare, strives to collaborate with partners across sectors of the community to promote and improve health. Healthy By Design identified the need, and advocated for, a Complete Streets Policy in Billings. The Coalition is comprised of several workgroups focused on making the healthy choice, the easy choice related to physical activity and nutrition. The group also continues to advocate the 5-2-1-0 message, pictured in Figure 2.4.
- **St. Vincent Healthcare**
  St. Vincent Healthcare sponsors Kids In Motion (see explanation above on page 9).
- **AmeriCorps VISTA**
  AmeriCorps VISTA (Volunteers in Service to America) members serve with organizations that help eradicate poverty. The Billings/Yellowstone County Planning Division partnered with AmeriCorps Vista members to bring Kids in Motion (see explanation on page 9) to Billings.
- **Bike-Walk Montana**
  Bike-Walk Montana is a state-wide bicycling and walking advocacy organization whose mission is to make bicycling and walking safe and accessible for all.
- **Billings School District #2**
  School District #2 is a partner in Kids Motion (see page 9).
- **Education Foundation for Billings Public Schools**
  The Education Foundation believes that all students in Billings Public Schools deserve a rigorous, well-rounded education to prepare them for successful careers. To this end, the Foundation partnered with the City on Kids in Motion (see page 9).

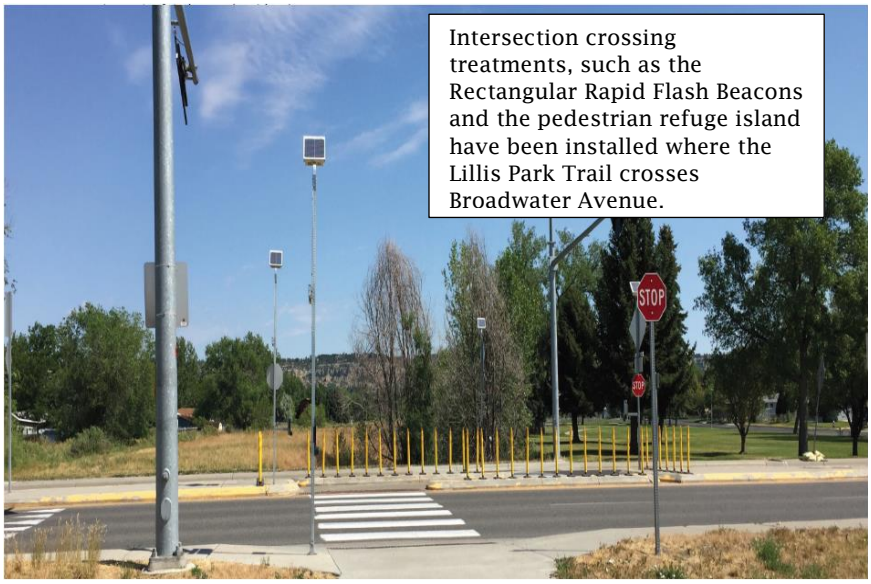
- **Billings TrailNet**
  Billings TrailNet is a non-profit, 501c3, grass-roots organization that supports urban trails in and around the Billings Community.
- **Billings Chamber of Commerce**
  The goal of Billings Chamber's trail initiative is to develop the Billings trail system for the economic and healthy community benefits that result from active transportation.
- **Downtown Business Improvement District (BID)**
  The BID is an area of the downtown maintained through the cooperation of the businesses located there and provides for maintenance and general cleanup of the area. It also includes initiatives such at Spare Change for Real Change, Community Innovations, Downtown Resource Officers and the BID Street Team/Purple People.
- **League of American Bicyclists**
  The League of American Bicyclists is a national bicycle advocacy group. The City of Billings has been named a Bronze level Bicycle Friendly Community through the League's Bicycle Friendly America program.
- **Montana Department of Transportation (MDT)**
  MDT administers the Transportation Alternatives Program (TAP) which administers funds for infrastructure for active transportation through a competitive grant process
- **Yellowstone River Parks Association (YRPA)**
  YRPA seeks to make the most of the Yellowstone River and has been supportive of multi-use trails.

3. Walking and Rolling

"The first thing people want to learn to do as a child is learn to walk and it's the last thing people want to give up."

Dan Burden

Complete Streets means so much more than just sidewalk infrastructure; it means assuring ADA curb ramps, crossing enhancements, traffic calming, shorter lane widths and landscaped boulevards (including lighting) that provide a safety buffer between the user and the motorized vehicles. In addition to infrastructure, safety education and programs play a very important role.



Intersection crossing treatments, such as the Rectangular Rapid Flash Beacons and the pedestrian refuge island have been installed where the Lillis Park Trail crosses Broadwater Avenue.

2016 Bikeway and Trails Master Plan

Walkability Evaluation

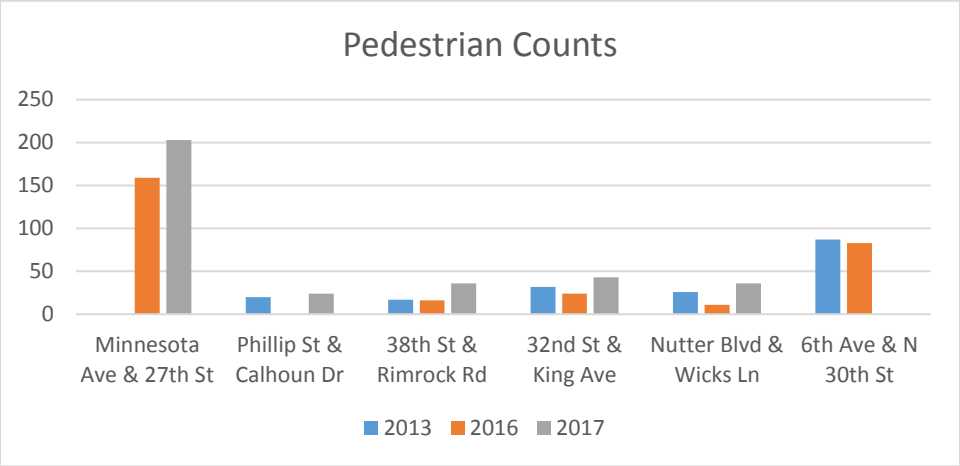
Pedestrian performance measures include a review of existing facilities, pedestrian counts at select intersections (see Figure 3.1), and crash data. In this context, pedestrian means any person using a pedestrian facility whether by walking or rolling with assistance.

Pedestrian Counts

In an effort to establish consistent pedestrian counts, six Billings intersections have been counted for non-motorized transportation. The first count was completed with the initial Complete Streets Benchmark Report in September of 2013. For this report, counts were completed in May of 2016 and 2017. The months of May and September

were used to capture school age children as well as adults. Please note that due to construction at the intersection of 6th Avenue North and 30th Street West bicycle and pedestrian counts were not completed during 2017.

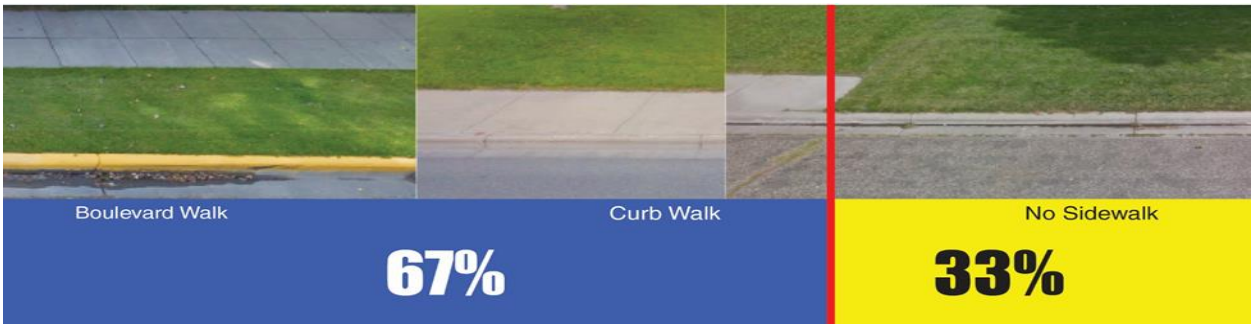
Figure 3.1 Billings Pedestrian Counts by Location



In addition to providing the sidewalk infrastructure, consideration must be given to sidewalk and public right-of-way "furniture". A clear path throughway zone is crucial for residents walking with a cane or using a motorized or self-propelled wheelchair. Those with visual impairments must be able to decipher the clear pathway to safely make their way. To ensure this clear zone, signs, fences, table/chairs and even landscaping must be kept outside the throughway zone.

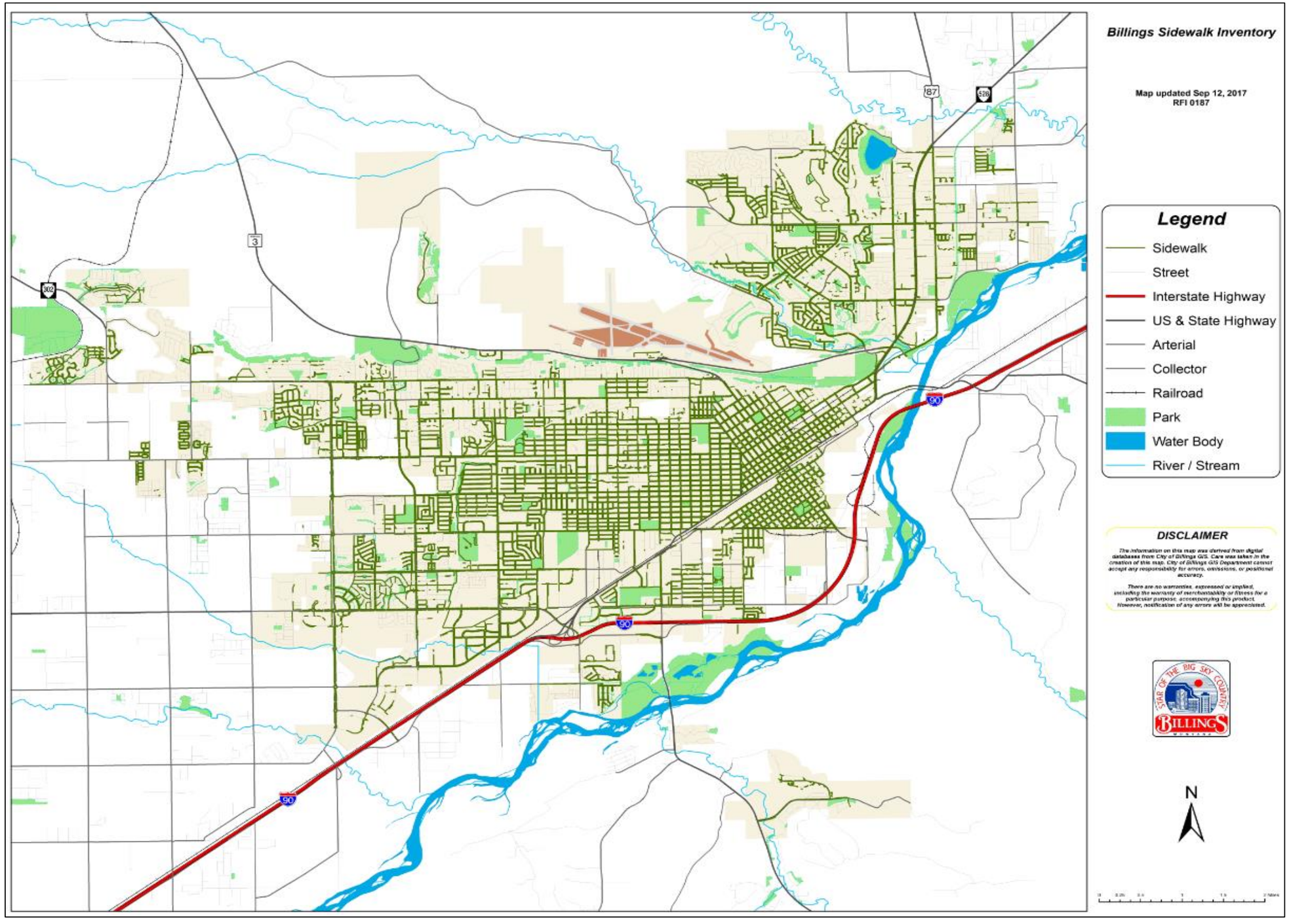
While ensuring quality sidewalks it is important, it's also important to ensure there is a clear place for people to walk. There have been gaps in the sidewalk infrastructure *(See Map 3.1 – Billings Sidewalk Inventory)* – both in historic neighborhoods and some along the edges of the city. In order to avoid gaps, the City has effectively required sidewalks since incorporation. However, some exceptions have occurred as new areas become incorporated into the city limits. With this discrepancy between city and county public right-of-way development regulations in mind, Yellowstone County recently adopted the Suburban Subdivision Regulations. These regulations apply to the suburban areas of the County within the Zoning Jurisdiction and subdivision development that may be annexed into the City. The regulations focus on road and pedestrian facility standards to enhance safety in county neighborhoods and consistency of neighborhood design.

Figure 3.2 Two-thirds of Billings' streets have recorded sidewalks



Source: City of Billings' GIS database

Map 3.1 Billings Sidewalk Inventory



Multi-Use Trails

Shared use pathways, or multi-use trails, serve a variety of users and accommodate people walking, bicycling and using a mobility aid. They are used for recreation purposes and can create transportation corridors through parkland or between neighborhoods. These facilities come in a variety of contexts and can sometimes provide predictability challenges to the traveling public[5]. The League of American Bicyclists does not consider "sidepaths" along a road-way bicycle infrastructure within an urban context. The Federal Highway Administration states that "multi-use trails can be a backbone to the bicycle network, but not a substitute for on-street facilities"[6].

Figure 3.3 Trail parallel to Shiloh Road

Walking "Tools"

- *Sidewalks*
- *Ramps*
- *Curb Extensions*
- *Narrower Travel Lanes*
- *Shared Use Path*
- *Waiting Islands*
- *Boulevard Strips*
- *Trees*
- *Furnishings*
- *Bollards*
- *Maintenance*
- *Street Blocks - < 660"*
- *Traffic Calming*
- *Sidewalk Oriented Buildings / Windows*
- *Leading Pedestrian Intervals*
- *HAWK Signals*

Tools

The set of walking tools above helps demonstrate the variety of opportunities to improve walkability. In addition to sidewalks or curb ramps, curb extensions, HAWK signals and narrower travel lanes also enhance the pedestrian infrastructure.

[5] AASHTO Guide for the design of bicycle facilities

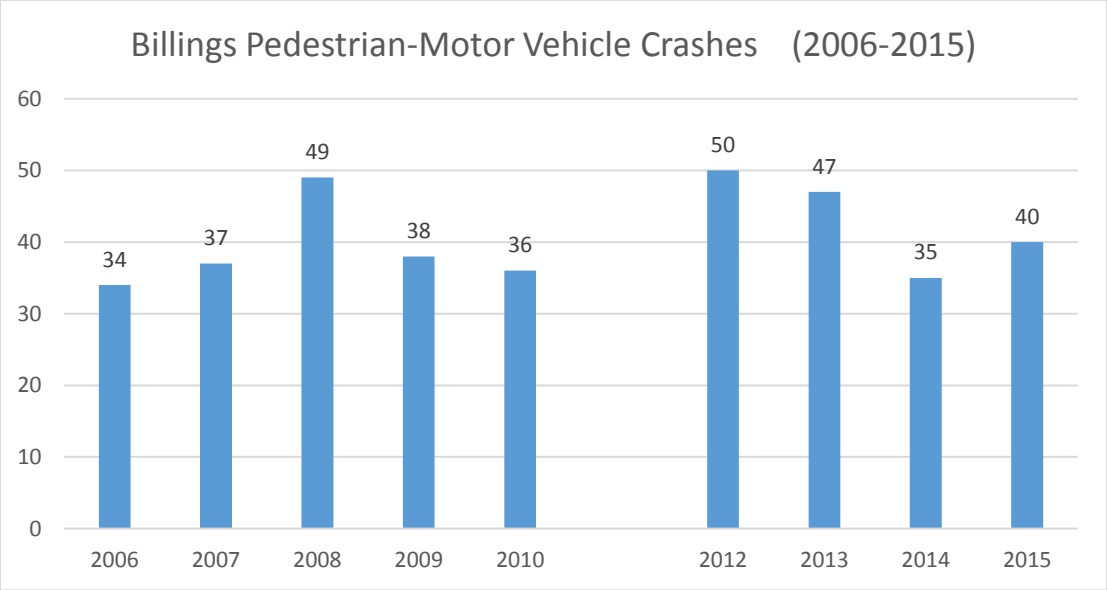
[6] http://www.fhwa.dot.gov/publications/research/safety/pedbike/05085/chapt19.cfm

Data

The crash data shown in Figure 3.4 shows an overall decrease in walk-drive collisions after the implementation of the policy with a slight increase in 2015. These figures include all pedestrian-car collisions and although not calculating a trend, the data highlights the complexity and various factors that affect pedestrian use and behavior in the relationship with crashes with motor vehicles.

Review of the census data reflects that the percentage of pedestrians from 2012 to 2015 has stayed relatively consistent with 3.4% of the population commuting via walking but a decrease in the amount of crashes.

Figure 3.4 Pre and post policy crashes



Source: MDT City and Statewide Crash Data (2006-2015)

4. Bicycling

A member of the public waits for Downtown Business Improvement District staff finish the installation of two city bike staples so he can park his bicycle.

Billings first set out to build a safe and connected bike network in 1996 when it published the *BikeNet Plan.* According to the *2016 Billings Area Bikeway and Trails Master Plan*, at the time, the City had less than 5 miles of paved trails and no bike lanes. Since then, the City has installed 24 miles of on-street bike lanes, two miles of shared lane markings, nearly 40 miles of multi-use trails, and more than 10 miles of neighborhood connectors. While Billings has been steadily incorporating much of this bicycle infrastructure through road projects for many years, the Complete Streets Policy and the *2017 Billings Area Bikeway and Trail Master Plan* (BABTMP) have helped lay out a comprehensive vision for the City's multi-modal transportation system.

Since the adoption of the Complete Streets Policy in 2011, the City has continued to install bicycle infrastructure at a steady rate, and, additionally, has experimented with new treatments such as shared lane markings and thermoplastic shared lane panels shown in Figure 4.1.

Figure 4.1 Shared lane panel install on 32nd St. West at Central Ave

Figure 4.2 Yearly Bike Lane Mileage Added & Total
Source: 2017 Billings Area Bikeway + Trails Master Plan Update

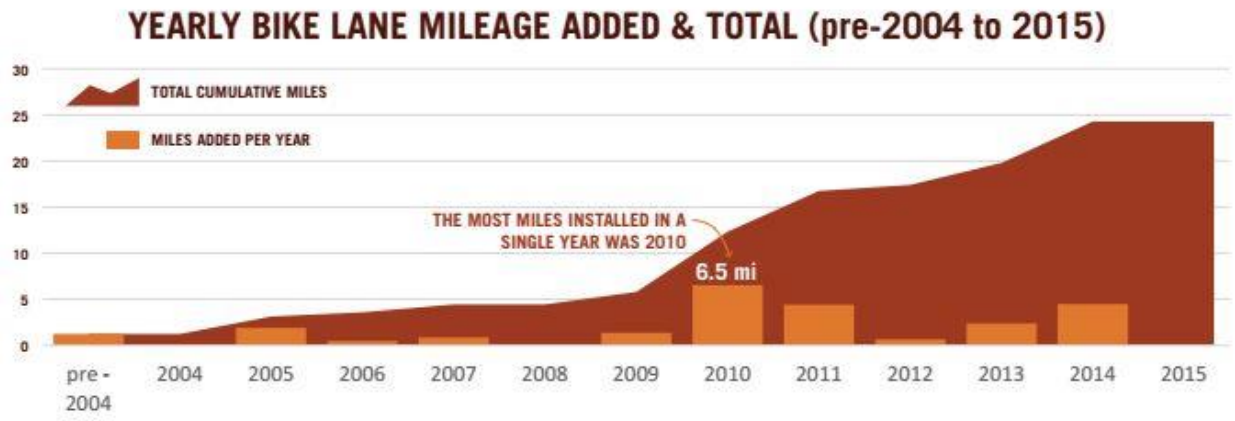


Figure 4.3: Yearly Shared Use Path Mileage Added & Total
Source: 2017 Billings Area Bikeway + Trails Master Plan Update

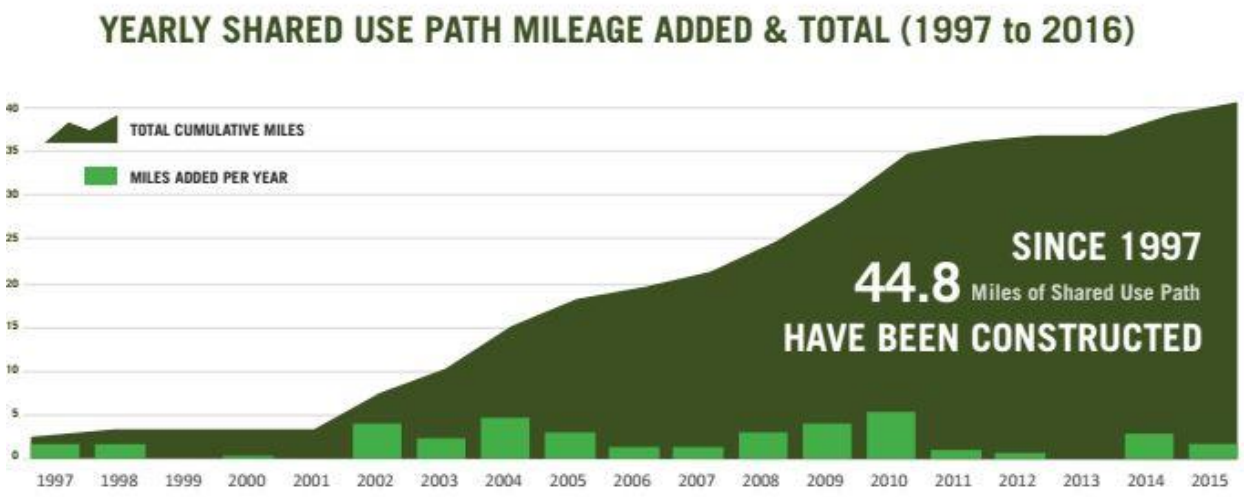


Figure 4.4 Bicycling Counts by Location

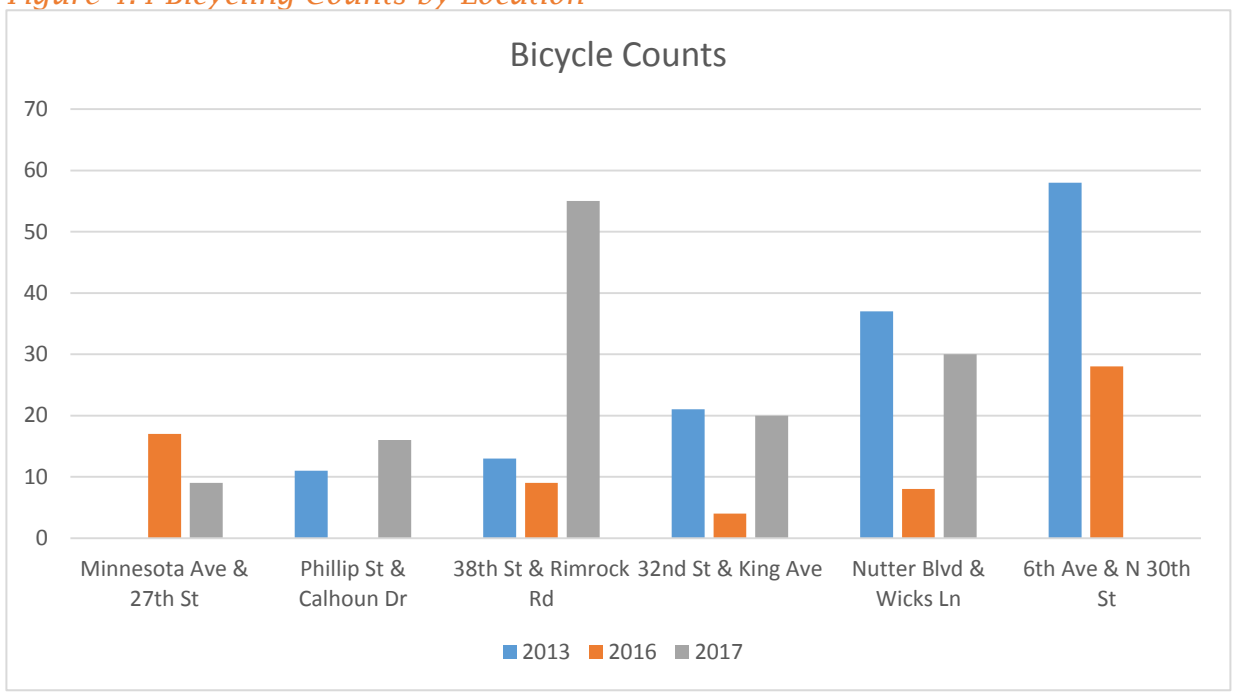
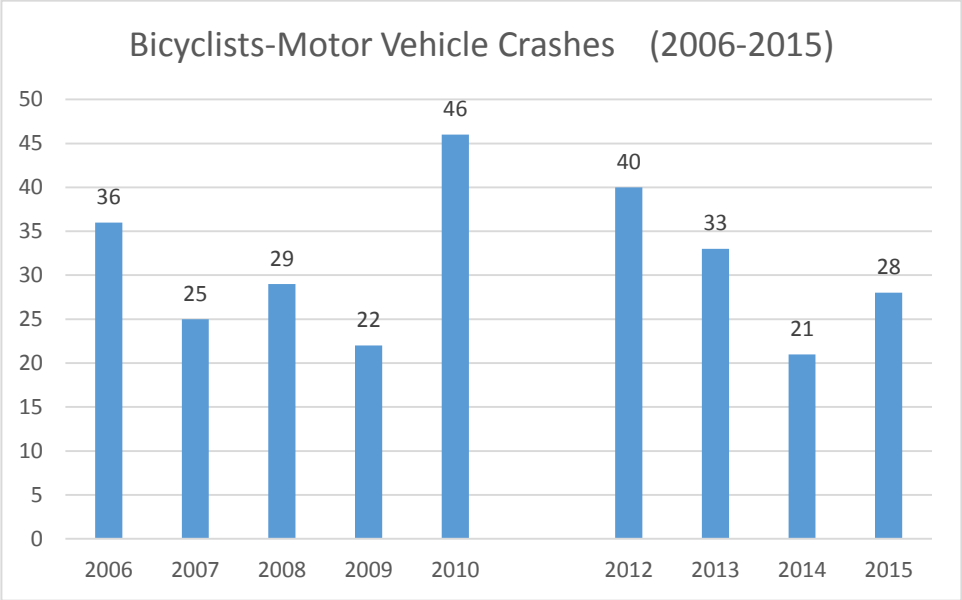


Figure 4.5 Bicyclist-Motor Vehicle Crashes 2006-2015



Data

The crash data shown in Figure 4.5 shows an overall decrease in bike-drive collisions after the implementation of the policy with a slight increase in 2015 (similar increase as the walk-drive data). These figures include all bicycle-car collisions and although not calculating a trend, demonstrates the difficultly in using crash data alone for analysis due to unknown circumstances, i.e. environmental, economic, etc.

Review of the census data reflects that the percentage of bicyclists from 2012 to 2015 has stayed relatively consistent with 1.0% of the population commuting via bicycle but a decrease in the amount of crashes.

Community Education and Outreach

Bicycling Skills for Kids

As described in Chapter 2, the City of Billings has partnered with AmeriCorps VISTA, School District #2, the Education Foundation for Billings Public Schools, local businesses, and community organizations in the development of a grades 4-8 active transportation program presented by St. Vincent Healthcare called *Kids In Motion* (KIM).

KIM combines volunteer-coordinated events with in-class education to empower youth with the skills and confidence needed to ride their bicycle every day. During KIM tune-up clinics, volunteers fix up students' bikes to ensure they have a way to get to school, friends' houses, and the grocery store. KIM's education component then provides kids with the skills needed to confidently and predictably ride their bicycles to these locations.

Figure 4.5 Broadwater Elementary physical education teacher, Justin King demonstrates how to use a bike light during a KIM event

<u>The Future of KIM</u>

KIM continues to expand in reach and scope. The program now includes additional grade levels and incorporates STE (A) M (science, technology, engineering, art, and math) learning into its curriculum. School District #2 administration requested KIM education be incorporated into the 4th grade curriculum for the 2017-2018 school year. The program aims to give students the skills needed to understand how the built environment affects their lives.

Public Outreach

During the summer of 2015, the City of Billings Public Works Department and Billings TrailNet created a cycling and driving etiquette campaign called "Take-the-Hi-Road". *Take the Hi Road*'s message of empathy, lawfulness, and respect among all road users was shared with residents through televised Public Service Announcements, presentations, and road signage.

The Planning Division created an active transportation website called www.bikebillings.com with information to help all residents, including young families, seniors, and women, feel comfortable biking and walking in Billings. The page also hosts information about policies and planning studies affecting those who bike and walk.

The figure below shows a utility insert that was included in all sewer bills in June 2015. The insert links *Take the Hi Road* and bikebillings.com by directing residents to both websites as well as Billings Department of Public Works' webpage.

Figure 4.6 Utility insert with Take the Hi Road and City of Billings' information

Map 1 Billings Bicycle and Trail Recommendations

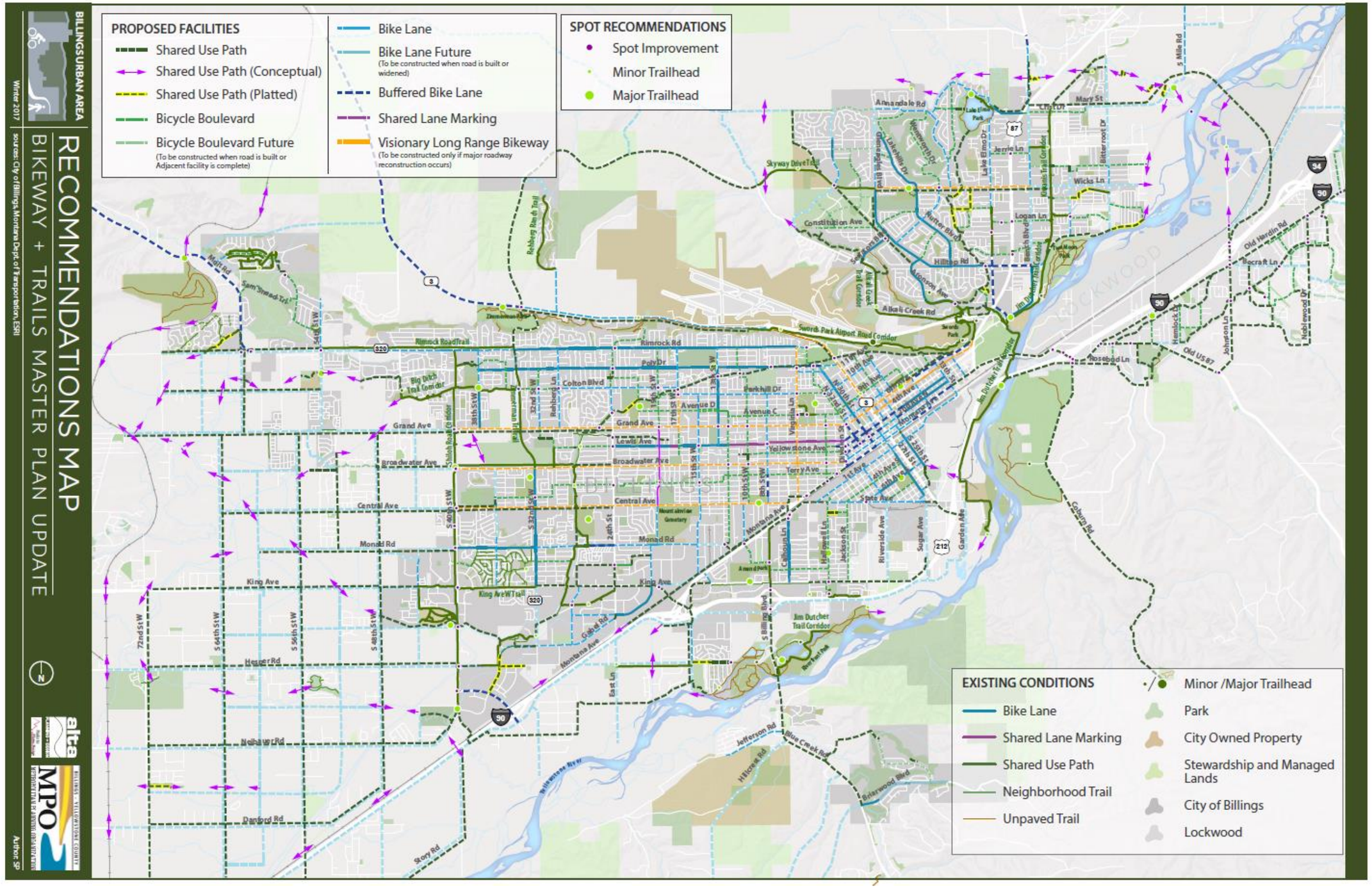


Table 1 City of Billings Major Roadway Projects Completed From 2013 Through Summer 2017

Project Description	*Pedestrians*	*Elderly/Disabled*	*Bicyclists*	*Transit*	*Additional Complete Streets Features*
Bench Boulevard -- Lincoln Ln. to Wicks Ln.	New continuous sidewalks on both sides	ADA ramps at intersections	Shared bike lanes from Lincoln Ln. to Hilltop Rd.	Two-way left turn lane allows traffic to pass when busses are stopped.	Street lighting
Grand Avenue -- 32nd St. W. to Shiloh Rd.	New continuous sidewalk/trail on both sides	ADA ramps at intersections	Multi-use trail	No specific changes	Street lighting
Calhoun Lane -- King Ave. E. to Underpass Ave.	New continuous sidewalks on both sides	ADA ramps at intersections	On-street bike lanes added	Two-way left turn lane allows traffic to pass when busses are stopped.	Street lighting
Arrowhead School Path	Multi-use trail	ADA ramps at intersections	Multi-use trail	No specific changes	
Poly Drive Sidewalks	Bulbouts added at school crossing	ADA ramps at intersections	Maintained existing bike lanes within the bulbout limits		
Shiloh Conservation Area	Multi-use trail	Multi-use trail	Multi-use trail		Benches, informational signs, etc.
Poly & Virginia Bike/Ped	Upgraded pedestrian signals	ADA ramps at intersection	On-street bike lanes added from Virginia Ln. to 13th St. W.	No specific changes	
Poly Drive -- 32nd St. W. to 38th St. W.	New continuous sidewalks on both sides	ADA ramps at intersections	On-street bike lanes added	No specific changes	
Orchard Lane -- King Ave. E. to State Ave.	New continuous sidewalks on both sides	ADA ramps at intersections	Parallel bike lanes on Calhoun	Two-way left turn lane allows traffic to pass when busses are stopped.	Street lighting
Exposition Gateway Infrastructure Improvements	New continuous sidewalks on both sides	ADA ramps at intersections	No specific changes	No specific changes	Street lighting
Lewis Avenue Bike Lanes	No specific changes	No specific changes	On-street bike lanes and shared lanes added	No specific changes	
32nd St. W. & Gabel Rd. Traffic Signal Improvements	Installed new traffic signal with pedestrian signals	ADA ramps at intersections	No specific changes	No specific changes	
Ponderosa School Path	Multi-use trail	Multi-use trail	Multi-use trail		
44th Street West Trail	Multi-use trail	Multi-use trail	Multi-use trail		
19th Street West at Parkhill Drive	Sidewalk added along north side	ADA ramps at intersections	No specific changes	No specific changes	
19th Street West/Hoover Avenue at Colton Blvd.	Bulbouts added at school crossing	ADA ramps at intersections	No specific changes	No specific changes	
Wicks Lane Multi-use Path	Multi-use trail	Multi-use trail	Multi-use trail		
Jackson Street Sidewalks	Sidewalk added along west side	ADA ramps at intersections	No specific changes	No specific changes	
Grand Avenue -- 48th St. W. to 58th St. W.	School, Traffic signal at Grand Ave. & 54th St. W., Multi-use trail	ADA ramps at intersections	Multi-use trail	No specific changes	Included multi-use trail along 54th St. W. from Grand Ave. to Rimrock Rd. New street lighting added.
4th Ave. N. & Division St. Capacity Improvements	Upgraded pedestrian signals	ADA ramps at intersection	Upgraded detection to include bicycle detection	No specific changes	
Swords Bypass Trail	Multi-use trail	Multi-use trail	Multi-use trail	No specific changes	
Rimrock Road -- Forsythia Blvd. to Shiloh Rd.	New continuous sidewalk/trail on both sides	ADA ramps at intersections	Multi-use trail	Two-way left turn lane allows traffic to pass when busses are stopped.	Street lighting
Annual ADA ramp project	Project aimed at corners, not aimed at providing continuous pedestrian paths	Over 200 ADA ramps installed at intersections	Project intent is providing accessibility at intersections	Provides improved access along MET routes	
Annual Curb, Gutter, Sidewalk Project	Installed over 50,000 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 MET routes	
Broadwater Shared Multi-use trail (TA Project)	Installed approximately 1-mile of shared use path along Broadwater Avenue from 32nd to Shioh	Multi-use trail	Multi-use trail	No specific changes	
Overlays:					
Monad Road -- 32nd St. W. to Shiloh Rd.	Outside scope of the project	Outside scope of the project	On-street bike lanes added	Outside scope of the project	
Monad Road -- 24th St. W. to Lampman Trl.	Outside scope of the project	Outside scope of the project	On-street bike lanes added	Outside scope of the project	
13th Street West -- Grand Ave. to Poly Dr.	Outside scope of the project	Outside scope of the project	On-street bike lanes added	Two-way left turn lane allows traffic to pass when busses are stopped.	
Governors Boulevard -- Babcock Blvd. to Bazaar Exchange	Outside scope of the project	Outside scope of the project	On-street bike lanes added	Outside scope of the project	

5. Transit

"The bus is important for connecting destinations in Billings and there is opportunity for developers to encourage greater use of transit through location and incentives."

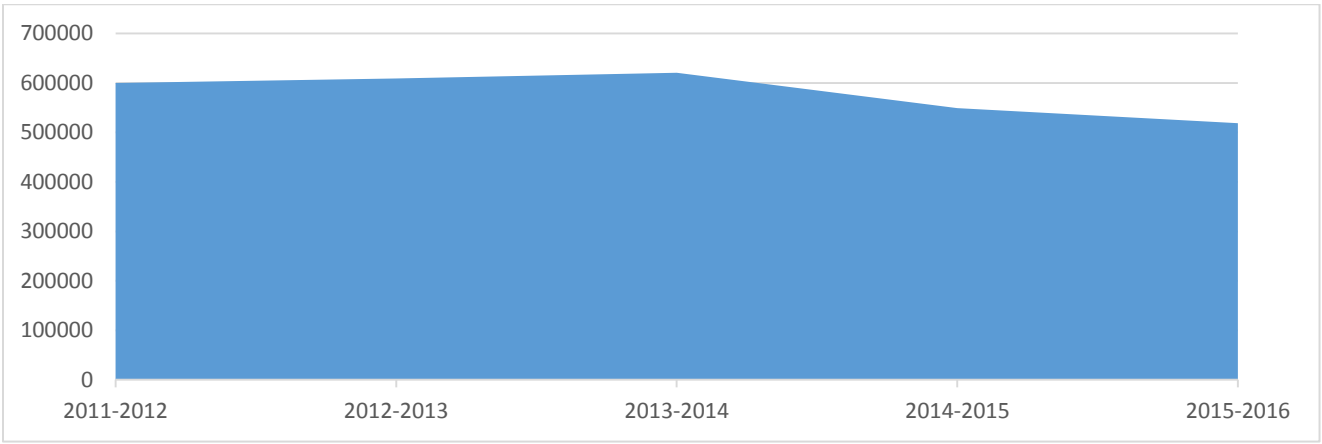
Billings Beyond Public Comment

Transit is a central component of a transportation network. People need convenient and comfortable access to and within the transit system. MET Transit currently operates as a flag stop system where an individual can signal for a bus driver to stop at nearly any street corner along the route. MET also utilizes branded signs and bus shelters at specific stops.

Sidewalks and bikeways provide important linkages to transit stops within the catchment area. A lack of sidewalks or pathways to a bus stop can be a barrier for those with or without disabilities in addition to members of the community who may be younger or older users of the transit system. Transportation mobility has been a hallmark of full membership into society[7].

Figure 5.1 Annual MET Transit Ridership (FY 2011-2016)

Data Source: Billings MET Transit



Source: MET Transit

Individuals without an automobile have unequal access to our transportation system; MET Transit provides a direct service of social equity by providing a viable

[7] The Right to Transportation: Moving Towards Equity

means of transportation. It helps build a prosperous city for everybody by getting people to work, appointments and school. The request for an expanded transit service was the number one transportation comment during the Billings Beyond Growth Policy public comment period.

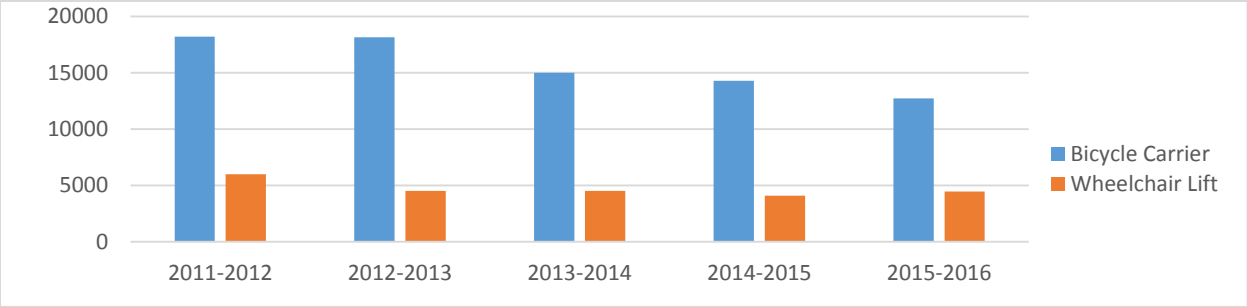
"Planning and building houses walkable to existing bus routes expands transportation to seniors and people with limited mobility options while creating a more socially cohesive, healthy and economically vibrant community."

League of Women Voters of Billings

Over the past few years, transit usage has seen a slight decline. This may be due to reduced gas prices, weather, and changes in travel destinations and routes.

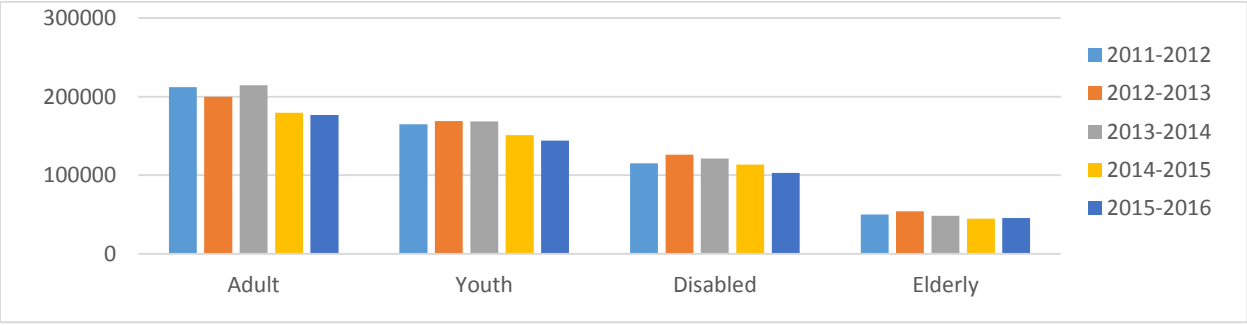
Figure 5.1., above, shows a peak in 2013-2014 during a year of record snow-fall. The usage of on-bus infrastructure and ridership by user type correlates with overall ridership levels, as shown below.

Figure 5.2 On-bus Counts of Infrastructure Usage (FY 2011-2016)



Source: MET Transit

Figure 5.3 Annual MET Transit Ridership by User Type (FY 2011-2016)



Source: MET Transit

Due to changing land-use and ridership, MET Transit modified its routes in July 2016. MET Transit expanded service in some areas while removing others. While the changes are still new, initial signs show an increase of ridership. Figure 5.4 and 5.5 show changes to Route 19, Southside Loop.

Figure 5.4 Route 19, Southside Loop, before July 2016 route changes

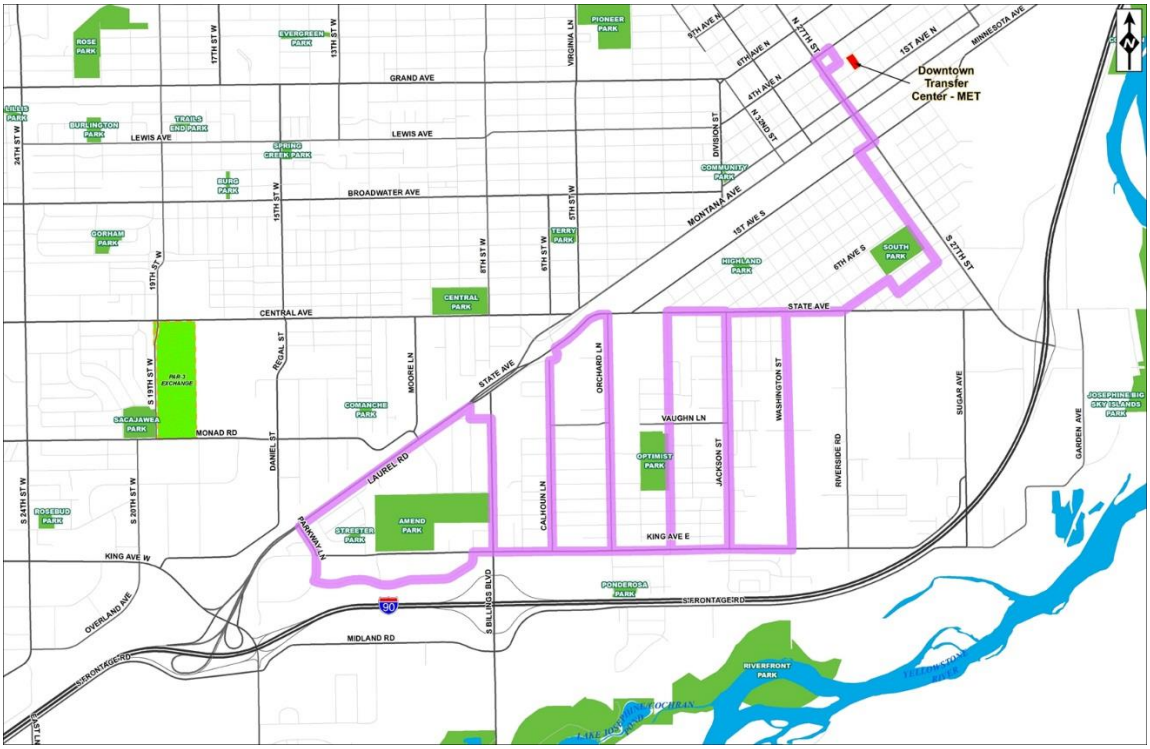
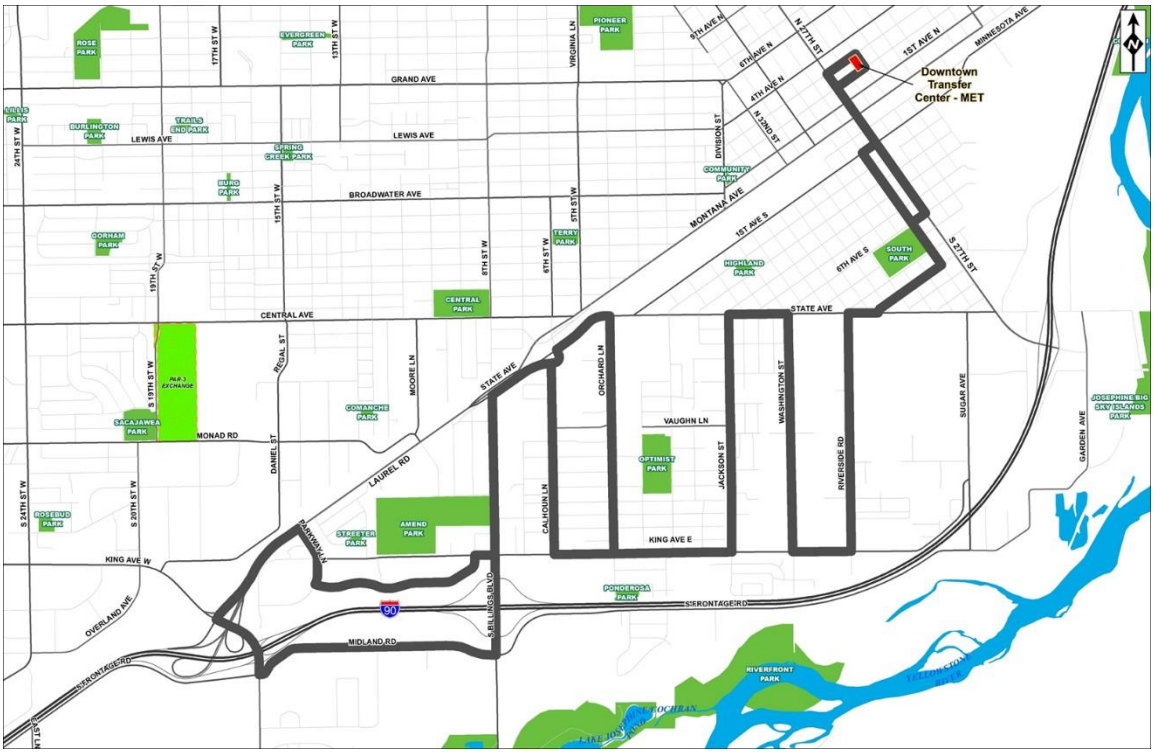


Figure 5.5 Route 19, Southside Loop, after July 2016 route changes



Bus ridership fluctuates each year. Changing the routes may help increase ridership and provide access to new destinations, but within a limited budget and sprawling city, these changes act like a balloon; it pushes out in one area, but is squeezed in another.

The route changes included:

- Eliminating lower performing routes:
  - Rt 2P – Rimrock
  - Rt 4P - Parkhill
  - Rt 6P- Lewis
  - Rt 8P - Miles
- Expanding higher performing routes:
  - Rt 5 - Grand Ave
  - Rt 13 - Westend
  - Rt 19 - Southside Loop
  - Rt 7 - Broadwater

Transit "Tools"

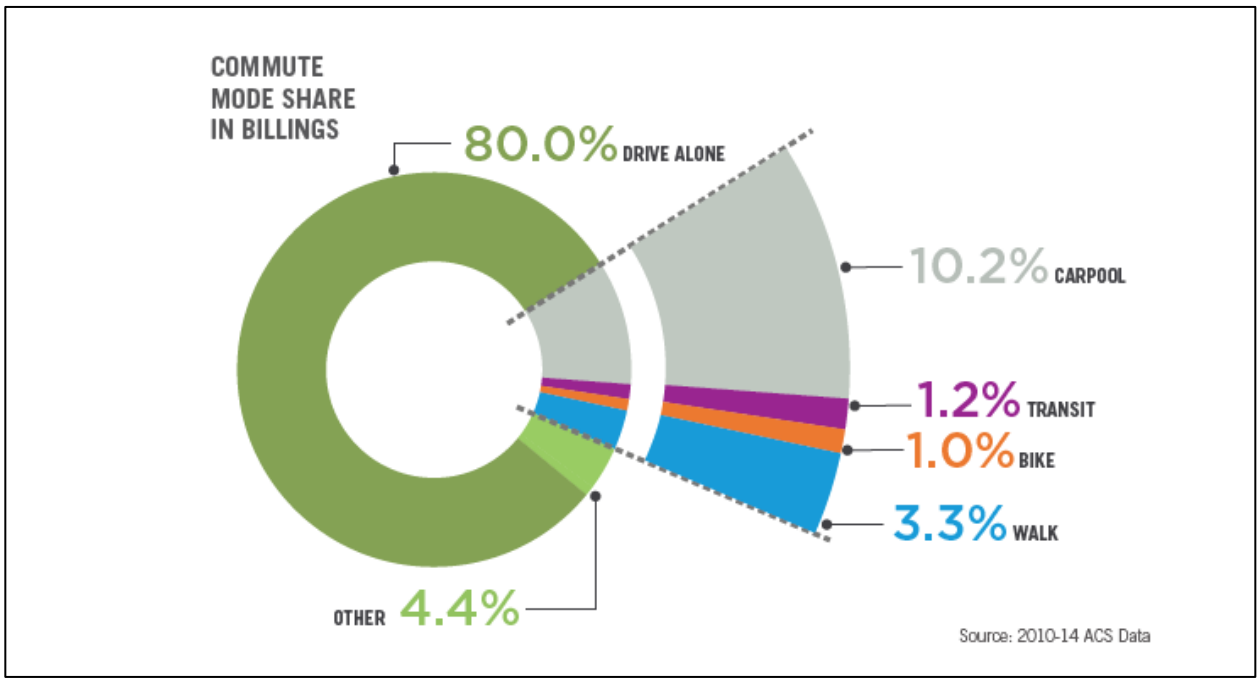
- *Bus Pull-Outs*
- *Bus Pads*
- *Bus Shelters*
- *Bus Benches*
- *Technology*
- *Data Collection*
- *Route Analysis*
- *Coordination between MET and Engineering on street projects*

6. Automobile

"Everything is somewhere else in life and you get there in a car." E.B. White

A review of mode split, the percentage of travelers using a particular type of transportation, shows that approximately 80% of trips in Billings are taken in a single occupancy motor vehicle. See Figure 6.1

Figure 6.1 Mode Share in Billings – 2016 Billings Area Bikeway and Trail Master Plan



The Complete Streets Policy is not only for non-automobile travel, it also instills a sense of predictable transportation movements, in a sense, it provides a safe travel area for all types of transportation, whether it be bike lanes, sidewalks or transit pull-outs. This type of infrastructure informs all users that a bike, pedestrian or transit rider may be present.

Also, by increasing the choices users have in transportation modes, this may reduce automobile use, thus improving the air quality, reducing congestion, and providing a healthy alternative to driving.

In December of 2016 the Billings Metropolitan Planning Organization (MPO) adopted a Billings Community Transportation Safety Plan (Billings CTSP). The *Vision* of the Billings CTSP was defined as follows:

The Billings community will achieve zero fatalities and serious injuries through a culture of safety for all travelers.

This vision ties directly to the Montana Department of Transportation's Vision Zero policy. The goal for the Billings CTSP is to reduce fatalities and serious injuries by 20% from 70 in 2014 to 56 by 2020.

When reviewing crash data for the MPO, it was determined that the three areas of emphasis that the MPO would concentrate on were: 1. Unrestrained Occupants; 2. Impaired Driving; and 3. Inattentive Driving/Speeding. When reviewing crash data for bicyclists and pedestrians, it was noted that there seemed to be two types of collisions between cars and bike/pedestrians. Some cases were the result of an impaired pedestrian that entered the roadway outside of a crosswalk and was struck. The other prevailing collisions occurred in signalized or defined crosswalks, in these cases; the cause of the crash was often contributed to distracted or impaired driving. The long-term goal is to reduce crashes between automobiles and bicyclists/pedestrians through the reduction of distracted and impaired driving. Table 6.1 demonstrates crash data pre and post adoption of the Complete Streets Policy.

Table 6.1 City of Billings All Mode Crash Data – 2007 – 2015

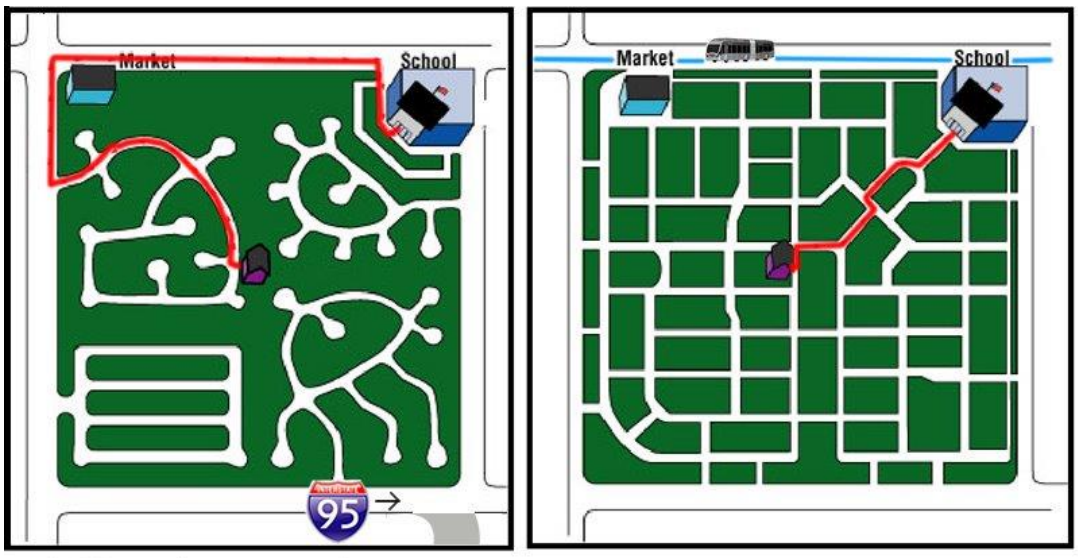
Crash Severity	**2007**	**2008**	**2009**	**2010**		**2012**	**2013**	**2014**	**2015**
Fatal Crash	5	7	10	7		6	5	8	6
Serious Injury Crash	35	38	37	25		31	40	41	39
Other Injury Crash	801	781	727	712		741	675	728	729
No Injury Crash	1905	1834	1925	1947		1921	1911	1886	1863
Unknown/Other Crash	35	64	48	19		40	66	43	62
Total	*2781*	*2724*	*2747*	*2710*		*2739*	*2697*	*2706*	*2699*

7. Connectivity

"Better connectivity of streets and sidewalks between subdivisions, more of a grid system"
Billings Beyond Public Comment

Well-connected street networks foster active and healthy transportation choices. Billings' historic block pattern of development creates opportunities for people to leave the busy streets and take a side street. This not only reduces automobile congestion with additional travel options, but enhances travel routes along quiet and more direct neighborhood streets. Street connectivity – as measured by the number of four-way intersections and density of intersections – has a statistically positive correlation with the number of people who walk or ride a bicycle and reduces automobile injuries[8].

Figure 7.1 Diagram depicting suburban and historic block patterns



Driving-only transportation pattern Walkable connected transporation network

[8] Ewing and Cervero

Housing developments that include trail connections between cul de sacs or non-grid streets can shorten the distances between destinations. This allows children to more easily bike or walk to school, a friend's house, or to a park with family members. This may also increase access to MET Transit stops through easier connections.

Historic development patterns in Billings, as a railroad town, were 300 feet by 300 feet square blocks in the central city, mainly a grid like pattern. A similar block pattern continued until recent decades when the block pattern design continued primarily on arterial streets and not local. Subdivision development took on a cul de sac pattern with dead end streets that was not conducive to connecting bicyclists and pedestrians to outside areas.

In addition to the Suburban Subdivision Regulations discussed in Chapter 3, the 2017 Billings Urban Bicycle and Trail Master Plan update identified several projects and strategies to promote Complete Streets. Goals include the expansion of active transportation facilities within the city, as well as the continued integration of walking into the MET Transit system. This plan update relied heavily on resident feedback and recommendations. Another goal discusses the continued integration of bicycling and walking into the MET Transit system. In addition to the goal, the Plan interviewed several organizations to discuss the current system and gather input; the overwhelming response within these interviews was the desire for better connectivity of the network.

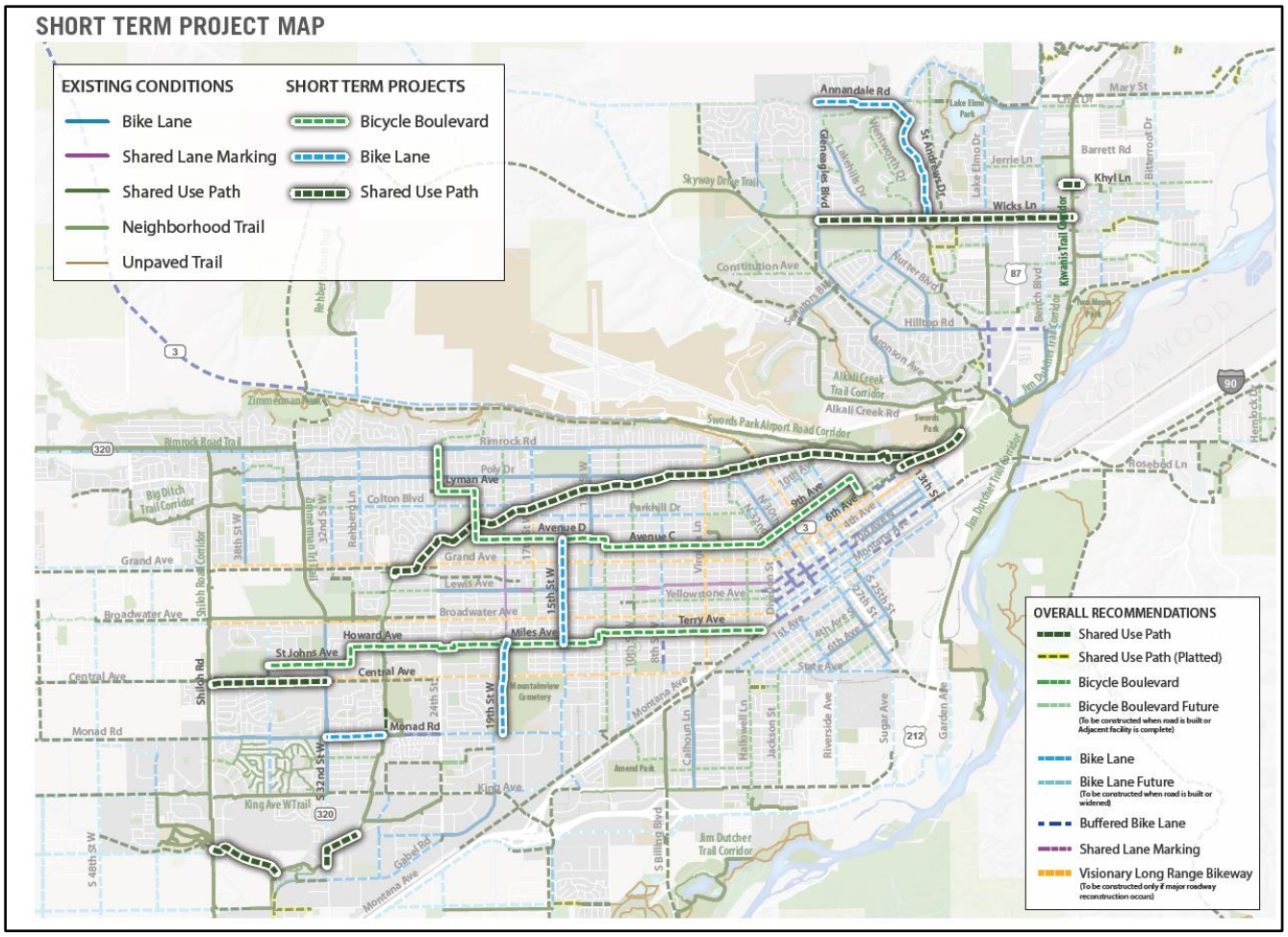
To help meet these connectivity needs, the Public Works Engineering Division identified short-term implementation projects to be funded within the next 5-year Capital Improvement Plan (CIP).

Figure 7.2 Short Term Project List

Project Name	Project Notes
6th Ave N Shared use Path	From Expo to 13th
Khyl Lane – Shared use Path	Connecting the street to the Kiwanis Trail
Howard/Terry Bicycle Boulevard	Striping and signage
Lyman/Ave D/Ave C/9th and 24th/Arvin Bicycle Boulevards	Striping and signage
19th St W – Miles to Monad Bike Lanes	Add striping
15th St W – Miles to Ave D Bike Lanes	Through overlay project
BBWA Canal – 6th Ave N to Shiloh Rd	Start the process, full project will take longer than 5 years
Annadale/St Andrews – Bike Lanes	Add striping
Wicks Lane – Gleneagles to Kiwanis – Shared use Path	Add shared use path to south side of the street
Central Ave – 32nd to Shiloh – Shared use Path	With road project
Monad Rd – 32nd to 29th – Bike Lanes	Through overlay project

Source: Billings Bikeway and Trail Master Plan Update – 2016

Figure 7.3 Short Term Project Map



Connectivity Measures

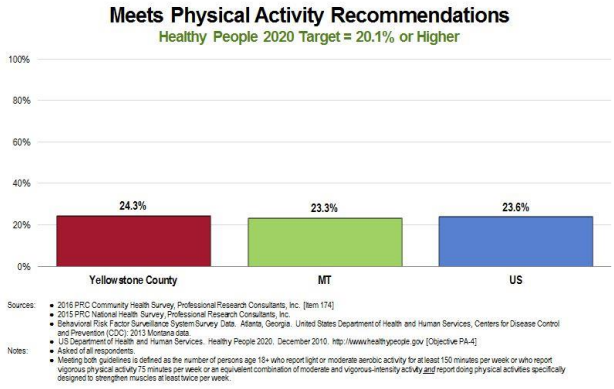
- Development guidelines (Suburban Subdivision Regulations)
- Shared Use Paths (Arterials)
- Bicycle Boulevards (Local Streets)
- Transit-trail connections
- Neighborhood connectivity

8. Community Health

"The mere existence of sidewalks and bike paths can have positive effects on health and physical activity levels. Studies have shown that more and better quality sidewalks are associated with higher rates of walking and more adults meeting the daily physical activity recommendations." (Data Driven Case for Complete Streets and Health, Voices for Healthy Kids, 2016)

According to the Physical Activity Guidelines put forth by the U.S. Department of Health and Human Services, adults should strive to meet one or both of the following recommendations:

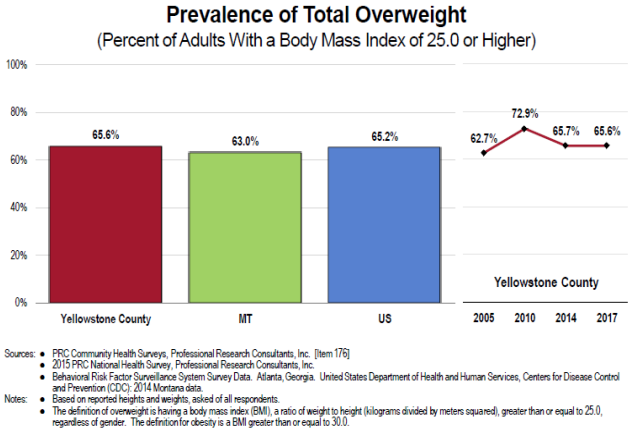
1. *Moderate-intensity physical activities for at least 30 minutes on five or more days of the week, or,*
2. *Vigorous-intensity physical activity three or more days per week for 20 or more minutes per occasion*[9]

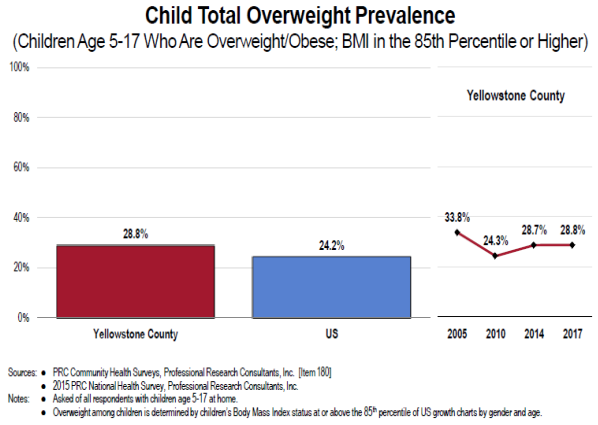


According to the Centers for Disease Control and Prevention (CDC), meeting these guidelines has been shown to yield substantial health benefits[10], including reduced risk of cardiovascular disease, type II diabetes, and some cancers; improved bone health, mood, and mental health; decreased risk of falls among seniors; and longer lifespan. However, based on the 2016-17 Community Health Needs Assessment Report, only about a quarter of the population of Yellowstone County meets these recommendations.

[9] https://health.gov/paguidelines/guidelines/adults.aspx
[10] CDC, 2015. https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm

As with many locales across the country, nearly two thirds the population of Yellowstone County is overweight with 65.6% of adults reporting a BMI of 25 or more. Approximately one third (29%) of Yellowstone County children age 5-17 years are overweight. The Complete Streets Policy is designed to encourage biking, walking, and other forms of active transportation, thus reducing the percentage of the population that is overweight. Building more trails, sidewalks, and bike lanes changes the built environment of Billings by providing safe places for residents to be active away from vehicular traffic, or in some cases, by allowing residents to be more predictable when around traffic. The safer residents feel while walking, cycling, or rolling, the more likely they are to engage in physical activities. According to one study, residents of "the most walkable neighborhoods were 35 percent less likely to be obese than those living in the least walkable areas" (Voices for Healthy Kids). In addition, "sidewalks are also associated with a lower likelihood of being overweight" (Voices for Healthy Kids).





Performance Measures

Every three years, Billings Clinic, RiverStone Health, and St. Vincent Healthcare collaborate to administer the Yellowstone County Community Health Needs Assessment (CHNA). The CHNA highlights community needs and areas of opportunities to promote health within the community. The report relies on a combination of primary and secondary data, including a statistically valid phone survey of residents regarding lifestyle and behaviors, key informant surveys, and secondary data specific to Yellowstone County. Since the initial adoption of Complete Streets in 2011, the percentage of overweight adults and children has remained relatively stable, and physical activity among both groups has increased.

While many factors influence individual health and healthy behaviors, as more active transportation infrastructure is built in Billings, the healthy choice will become the easy, and increasingly safer choice, resulting in increased physical activity among residents.

9. Economics

"Economy is the method by which we prepare today to afford the improvements of tomorrow." Calvin Coolidge

Installing complete street elements in commercial areas can have a beneficial impact to the community's overall economic vitality. A report by Smart Growth America outlined several areas of economic development that were positively influenced by the inclusion of complete street elements. The areas included:

- Higher employment levels;
- New business development; and
- Higher property values and private investment

Not only can complete streets have a positive influence on economic development generators, it provides the means for positive labor force production by providing the transportation network to safely get people to work. A complete street provides the transportation options for all employees whether they travel by car, transit, biking or walking.

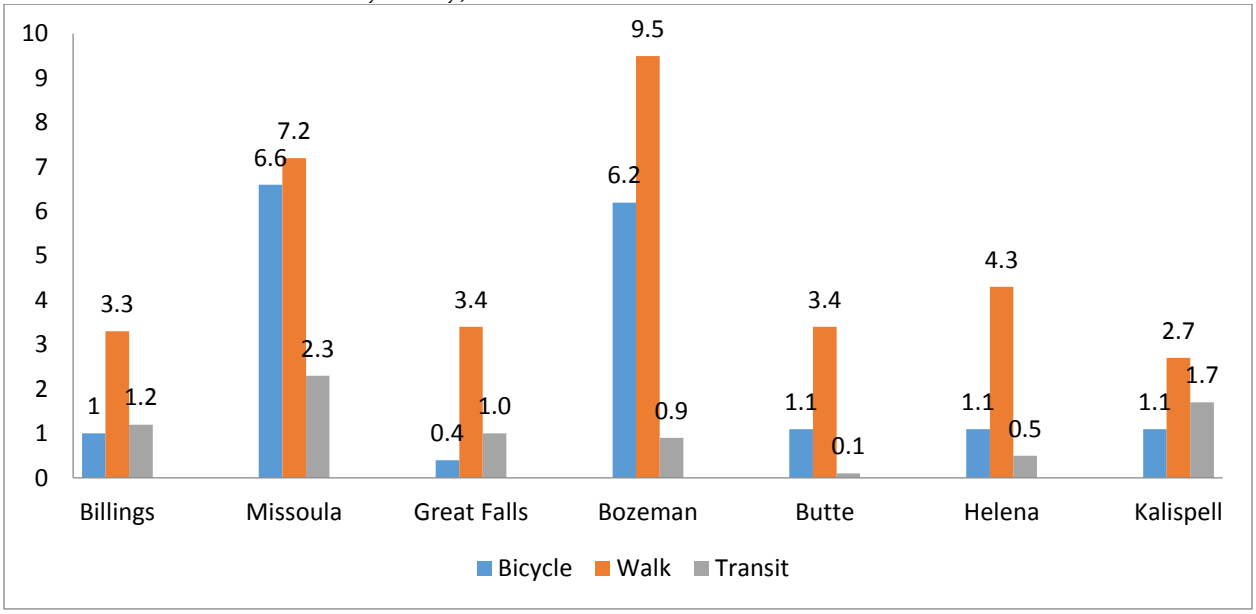
Affordability: Reducing Transportation Costs

The Housing and Transportation (H+T®) Affordability Index provides an expanded view of a household's affordability by combining housing and transportation costs. The index sets a threshold of no more than 45% of household income be spent on Housing + Transportation. In the 2013 Complete Streets Benchmark Report, it was reported that Billings had a Housing + Transportation Affordability Index of 51.92%. A review of the most recent data demonstrates that Billings has reduced this percentage to 48%. This percentage represents 25% in housing cost and 23% in transportation costs. Transportation costs include commuting and all travel as part of a household's daily trips. The 2013 report quoted an annual median household income, based on a household of two, as $51,000, today that number is $63,540. At 49% H+T® that household would spend $31,135 towards housing and transportation costs per year. The question to think about would be why the decrease of H+T® in the last 4-years, is it due to increased non-motorized infrastructure or possibly an economic shift? Additional research would be needed.

A comparison of the multimodal transportation routes for Billings versus other jurisdictions shows that Billings is the largest city in Montana by population it is the second lowest in both bicycling and walking, and third best in terms of transit ridership.

Figure 9.1 Five Year ACS Commute Share for Montana Population Centers

Data Source: American Community Survey, Five Year Estimates 2011-2015



Quality of Life

Periodically, the Billings City Council conducts a citizen survey on varying aspects of resident livability in Billings. In this case, "livability" is used to describe a desirable place, not only where people live but *where* they want to live.

The Billings City Council conducted a Citizen Survey during the 2015-2016 time frame. One question asked how much focus the community should have on the built environment (including buildings, parks, and *transportation systems*). Of the responses received, 75% stated that the built environment was essential or very important.

The Billings Chamber of Commerce over the last several years has focused on the quality of life of Billings residents. This in turn attracts new businesses and residents to Billings. This area of focus has centered on trails, walking paths, bicycle facilities, public transit and safe traffic conditions. These amenities have shown to contribute to Billings' competitive edge and appeal over similar cities. The Chamber's continued work on the non-motorized network has been a valuable tool for a city branded as "Montana's Trailhead".

10. The Future

"The reality about transportation is that it's future-oriented. If we're planning for what we have, we're behind the curve."

Anthony Foxx – United States Secretary of Transportation 2013-2017

Complete Streets Policy

In 2016, the City of Billings underwent an extensive review and revision of the 2011 Complete Street Policy. This revision included updated definitions, and provided the city flexibility on when/where to install complete street elements, more opportunity for coordinated planning efforts, a Complete Streets Checklist, and an opportunity for the public and City Council to review Complete Street projects at 30% design.

Definitions

The definition of "Complete Streets Infrastructure" was updated to meet the goals and objectives of the City of Billings. The definition provided language to refer to adopted plans and studies in regards to types of infrastructure.

Flexibility

The City of Billings will consider every street project for incorporation of complete street elements. However, in cases of limited rights-of-way, street function (local vs. arterial) and types of user needs, not every street will receive complete street elements or may include only certain elements.

Coordination

The Policy was developed to act as a guide for the development of local transportation, transit, and design standards. Complete Street elements are encouraged to be considered in all long and short range plans.

Checklist

The Complete Streets Checklist is used in the consideration of bicycle and pedestrian infrastructure in the planning, design, and construction or reconstruction of all transportation projects.

30% Design Review

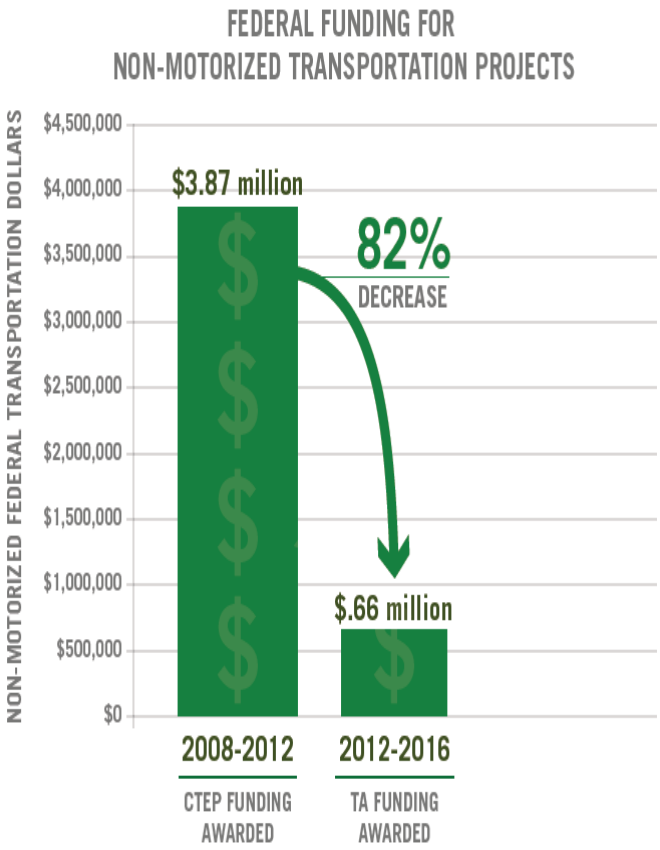
Public Works Engineering will present to the Billings City Council at a work session all construction/reconstruction transportation projects being undertaken on collector and arterial streets at approximately the 30% design phase. This presentation will include a discussion on complete street elements and how they were or were not incorporated with this project. This public forum allows for public input on the project and because it is at the 30% stage, changes may be incorporated.

In addition to the items listed above in the revised Complete Streets Policy, the policy directs the City to continue to collect data on the impacts of the Policy and complete a progress report like this one periodically to demonstrate the effectiveness of the policy.

Transportation Funding Limitations

The loss of the Community Transportation Enhancement Program (CTEP) funds with the passing of the new transportation bills (MAP-21 and the FAST Act) has significantly impacted the pace and number of project being developed in the community. During the life span of CTEP, the City of Billings and Yellowstone County received in total approximately $13.3 million dollars for non-motorized transportation projects.

Through the development of the 2016 Billings Bikeway and Trail Master Plan, several options for local funding were provided. This local funding is vital for accessing federal and state funding (local match). One new funding source that could be accessed if approved locally would be a portion of the gas tax. The 2017 Legislative Session passed an increase to the gas tax in the amount of 4.5 cents. Billings since 1983 has been receiving 27 cents/gallon, this will now increase to 31.5 cents/gallon. Table 10.1 highlights both the potential amount of local funds generated as a result of the local option tax, including the percentage that could be available to non-motorized transportation system development and maintenance based on a 3% allocation. At a minimal 3% allocation, by 2023, the city would have more than $126,000 per year available in non-motorized transportation funds that could be used in a variety of ways.



2016 Billings Bikeway and Trail Master Plan

The funds could be used as gap financing for non-motorized elements in reconstruction or construction of transportation projects and of maintenance of non-motorized facilities. The funds could be used to leverage other grant funding, for example, a 20% local match is required for off-system transportation projects through the Transportation Alternatives Program Grant. Combined with other local funding (Billings TrailNet), this provides an attractive application.

Table 10.1 - City of Billings Gas Tax Allocation

Existing 1983 Allocation	2018 (Partial)	2019	2023 Total
$1,766,830	$3,311,885	$3,598,398	$4,202,121
Source: Montana Department of Transportation			
3.0% Allocation	2018 (Partial)	2019	2023 Total
	$99,356.55	$107,951.94	$126,063.66

***Note: These figures are an estimate only and represent the potential increase of gas tax and does not reflect the base gas tax received on a yearly basis.""*

Short Term Projects

Through the development of the City of Billings Capital Improvement Program (CIP) and the Billings Area Bikeway and Trail Master Plan, the following is a list of proposed Short-term projects (2018-2022). These projects were developed by the City of Billings Public Works Engineering Division with input from the Billings Bikeway and Trail Master Plan Steering Committee, City Departments, Billings Residents and the Billings City Council. *Please note that these projects are subject to change.*

Table 10.2 List of Capital Improvement Projects 2018-2022

Project Name	Type of Project	Location	Year
Midland Road	Reconstruction	S. Billings to Mullowney Lane	2018
Inner Belt Loop	New Construction	Alkali Creek to Highway 3	2018
Central Avenue	Reconstruction	32nd Street West to Shiloh Road	2019
32nd Street West	Reconstruction	King Avenue West to Gabel Road	2021
Wicks Lane	Reconstruction	Main Street to Hawthorne Lane	2021
Source: City of Billings			

The Bike Plan identified many future projects for development. However, the Bike and Trail Master Plan Steering Committee and City Engineering worked together to develop a list of short-term projects that could be developed and implemented by Engineering in the next 5-years. These projects are developed with the intent to be included in future CIPs for implementation. The criteria for the development of these projects included:

1. Public Input
2. Proximity to schools
3. Connectivity to existing facilities
4. Network gaps
5. Connections to activity centers
6. Ease of implementation
7. Equity
8. Downtown

These projects are identified in Table 10.3

Table 10.3 List of Capital Improvement Projects 2018-2022

Project Name	Project Notes
6th Ave N Shared use Path	From Expo to 13th
Khyl Lane – Shared use Path	Connecting the street to the Kiwanis Trail
Howard / Terry Bicycle Boulevard	Striping and signage
Lyman/ Ave D / Ave C/ 9th and 24th / Arvin Bicycle Boulevards	Striping and signage
19th St W – Miles to Monad Bike Lanes	Add striping
15th St W – Miles to Ave D Bike Lanes	Through overlay project
BBWA Canal – 6th Ave N to Shiloh Rd	Start the process, full project will take longer than 5 years
Annandale / St Andrews – Bike Lanes	Add striping
Wicks Lane – Gleneagles to Kiwanis - Shared use Path	Add shared use path to south side of the street
Central Ave – 32nd to Shiloh – Shared use Path	With road project
Monad Rd – 32nd to 29th – Bike Lanes	Through overlay project
6th Ave N Shared use Path	From Expo to 13th
Khyl Lane – Shared use Path	Connecting the street to the Kiwanis Trail
Howard / Terry Bicycle Boulevard	Striping and signage
Lyman/ Ave D / Ave C/ 9th and 24th / Arvin Bicycle Boulevards	Striping and signage

Source: 2016 Billings Area Bikeway and Trail Master Plan

This reports serves as a guide to future Complete Streets implementation. It provides the data behind the policy in hopes that it will demonstrate the impact a policy of this type has on the community and its residents.

Appendices

Appendix A: Glossary of Terms

ADA: Americans with Disabilities Act.

Arterial: The highest class of highways and roads. These roadways are intended to server higher volumes of traffic, particularly through-traffic, at higher speeds. They also serve truck movements and should emphasize traffic movement over access to adjacent property. Arterial roadways re further designated as Principal and Minor Arterials.

Bicycle Boulevard: Streets with low motorized traffic volumes and speeds, designated and designed to give bicycle and pedestrian travel priority.

Boulevard Strip: A physical separation – usually planted with grass – between motorists and pedestrians and other vulnerable roadway users.

Collector streets: Collectors represent the intermediate class. As the name suggests, these roadways collect traffic from the local street system and link travel to the arterial roadway system. These roadways provide a balance between through-traffic movement and property access and provide extended continuity to facilitate traffic circulation within an urban community or rural area.

Commuting mode share: The percentage of commuting travelers using a particular type of transportation or number of trips using said type.

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).

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.

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: Also called shared-use paths or sidepaths, these facilities parallel a roadway, similar to the manner in which a sidewalk does.

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 travel 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 decreeing the speed of traffic and increasing ease of use and accessibility and connectivity. Also see “Traffic-calming device” defined above.

Appendix B: City of Billings Complete Streets Policy *(revised)*

RESOLUTION NO. 16-10550

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, 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.

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NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL that Resolution 11-19097 of the City of Billings is hereby repealed and the following Complete Streets Policy is adopted.

Statement of Intent:

The City of Billings through the adoption of the Complete Streets Policy intends to promote and encourage the development of a multi modal transportation systems that will provide access to all users were practicable.

COMPLETE STREETS POLICY

Complete Streets is a transportation and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages, abilities regardless of their mode of transportation.

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:

"Complete Streets Infrastructure" According to the National Complete Streets Coalition, appropriate elements that make up a complete street would include sidewalks, bicycle lanes, shared – use paths, designated transit lanes, safe and accessible transit stops, safe crossings for pedestrians, including median islands, accessible pedestrian signals, and curb extensions. Additionally, they could include any features identified in the Billings Area Bikeway and Trail Master Plan, and the Manual on Uniform Traffic Control Devices.

(a) "Street" per Montana Code Annotated 76-1-103 includes streets, avenues, boulevards, road, lanes, alleys, and all public ways.

(b) "Street Project" means the construction or reconstruction of any Street, and includes the planning, design, approval, and implementation processes.

(c) "Multi-modal Transportation Network" means all facilities, vehicles and devices designed to facilitate the mobility of people.

(d) "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 will 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 will be used as a guide to the City of Billings in the development of transportation plans, transit plans, and design standards. As practicable, these documents and tools will be updated to reflect this Complete Streets Policy.

(d) Implementation of the Complete Streets Policy will consider the adjacent neighborhood, completion of the multi-modal network, priority corridors, and the financial costs of implementation and maintenance of the Complete Streets elements.

(e) 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.

(f) The Complete Streets Checklist will be used in the routine consideration of bicyclists and pedestrians in the planning, design, and construction or reconstruction of all transportation projects.

(g) Public Works Engineering (PW) will present to the Mayor and City Council at Work Sessions all Collector and Arterial Street reconstruction and construction projects at approximately 30% design. PW will present the preliminary design representing the intent of the Complete Streets Policy to the Mayor, City Council, and public. The presentation will include Complete Streets Checklist results, recommended design section, alternative improvements if any, construction cost estimates for each alternative, maintenance responsibility, and estimated maintenance costs.

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.

PASSED by the City Council and APPROVED this 23rd day of May 2016.

THE CITY OF BILLINGS:

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

CITY OF BILLINGS • SEAL • YELLOWSTONE COUNTY, MONTANA

ATTEST:

BY: Denise R. Bohlman
Denise R. Bohlman, City Clerk

Complete Streets Checklist

1. **Existing Conditions**

   - What accommodations for bicycles, pedestrians, and transit are included on the existing facility and on facilities that it intersects or crosses:
   - If there are no pedestrian or bicycle facilities, how far from the proposed project are the closet parallel walkways and bicycle facilities:
   - Are there existing challenges the proposed project could address for bicycle, transit, and pedestrian travel:
   - What trip generators (current or future) are in the vicinity of the proposed project that potentially attract pedestrians, bicyclists, students, employees, or others:
   - Did the project design consider collisions involving pedestrians and bicyclists along the proposed roadway? If so, what are the potential options?
   - Do any adopted plans call for the installation of bicycle or pedestrian facilities on, crossing, or adjacent to the proposed facility? If yes, list the applicable plans.

2. **Project Scope**

   - What accommodations, if any, are included for bicycle, pedestrians, and transit in the proposed project design?
   - If the proposed project does not incorporate bicycle and pedestrian facilities, list reasons.
   - Cost of the bicycle and pedestrian improvements and their proportion of the total project cost?
   - What agency will be responsible for the maintenance of the bicycle and pedestrian facilities and how will they be budgeted?