



Bozeman Community Transportation Safety Plan



prepared by
Cambridge Systematics, Inc.



July 2013

final report

Bozeman Community Transportation Safety Plan

prepared for

City of Bozeman

prepared by

Cambridge Systematics, Inc.
115 South LaSalle Street, Suite 2200
Chicago, IL 60603

date

July 2013

Table of Contents

Executive Summary	ES-1
1.0 Relationship of Community Transportation Safety Plan to Montana Comprehensive Highway Safety Plan.....	1-1
2.0 Transportation Safety Problem Overview	2-1
3.0 Methodology.....	3-1
3.1 Planning Process	3-2
3.2 Safety Plan Goal	3-6
3.3 Emphasis Areas.....	3-7
3.4 Safety Strategies Approach	3-10
3.5 Transportation Safety Summit.....	3-10
3.6 Emphasis Area Teams.....	3-11
4.0 Emphasis Area Strategies	4-1
4.1 Strategy Definitions.....	4-1
4.2 Inattentive Driving	4-2
4.3 Occupant Protection.....	4-10
4.4 Bicycle and Pedestrian Crashes	4-24
5.0 Implementation.....	5-1
5.1 Transportation Safety Advisory Committee Role.....	5-2
5.2 Progress Reporting	5-3
Appendix A - TSAC Membership	A-1
Appendix B - Safety Summit Participants	B-1
Appendix C - Safety Resources	C-1
Appendix D - Glossary	D-1
Appendix E - CTSP Annual Reporting Template.....	E-1

List of Tables

Table E.1	Bozeman Community Transportation Safety Plan Strategies	ES-2
Table 1.1	Statewide Urban vs. Rural Crashes	1-1
Table 3.1	Objectives for Key Planning Meetings	3-5
Table 3.2	Annual Bozeman Traffic Fatalities and Injuries	3-6
Table 4.1	Bozeman Inattentive Injury Crashes by Roadway Classification, 2007-2011	4-3
Table 4.2	Bozeman Inattentive Drivers by Age, 2007-2011	4-4
Table 4.3	Bozeman Unbelted Injuries by Age, 2007-2011	4-10
Table 4.4	Bozeman Unbelted Injuries by Gender, 2007 - 2011	4-12
Table 4.5	Bozeman Bicycle Crashes by Relationship to Junction, 2007- 2011	4-25
Table 4.6	Bozeman Bicycle Crashes by Bikeway, 2007 - 2011	4-26
Table 4.7	Bozeman Bicyclist Crashes by Age of Bicyclist, 2007-2011	4-26
Table 4.8	Pedestrian Crashes by Relationship to Junction, 2007-2011	4-28
Table 4.9	Bozeman Pedestrian Crashes by Light Condition, 2007-2011	4-28

List of Figures

Figure 2.1	Bozeman Crash Injuries by Severity, 2009-2011	2-1
Figure 3.1	The Four Es of Safety	3-2
Figure 3.2	CTSP Planning Process.....	3-3
Figure 3.3	Potential Safety Emphasis Areas - Fatal and Incapacitating Injury Crashes in Bozeman.....	3-8
Figure 3.4	Potential Safety Emphasis Areas - All Crashes in Bozeman	3-9
Figure 4.1	Bozeman Inattentive Injury Crashes by Roadway Classification, 2007-2011	4-3
Figure 4.2	Bozeman Inattentive Drivers by Age, 2007-2011	4-4
Figure 4.3	Bozeman Unbelted Severe Injuries by Age Group, 2007-2011	4-11
Figure 4.4	Bozeman Unbelted Nonsevere Injuries by Age Group, 2007-2011	4-11
Figure 4.5	Bozeman Severe Injuries by Gender, 2007-2011	4-12
Figure 4.6	Bozeman Nonsevere Injuries by Gender, 2007-2011	4-13
Figure 4.7	Bozeman Bicycle Crashes by Relationship to Junction, 2007-2011	4-25
Figure 4.8	Bozeman Bicycle Crashes by Age of Bicyclist, 2007-2011.....	4-27
Figure 4.9	Bozeman Pedestrian Crashes by Light Condition, 2007-2011	4-29
Figure 5.1	TSAC Team Structure for Implementation	5-2



Executive Summary

Montana's *Comprehensive Highway Safety Plan* (CHSP), identifies urban area crashes as one of twelve Emphasis Areas. As a primarily rural state, the majority of Montana's fatal and incapacitating injury crashes (severe crashes) occur in rural areas. However, given higher population densities, the majority of all crashes occur in urban areas. Therefore, the Montana Department of Transportation (MDT) established a program through which individual communities could apply for assistance for the development of a Community Transportation Safety Plan (CTSP) to address transportation safety needs within their community. The City of Bozeman applied for and received assistance to develop its own safety plan through this program, which included crash data provided by MDT, and consultant support to facilitate planning meetings and develop materials. The process is data driven and led by community members.

The Problem: In Bozeman, over the past three years (2009-2011) an average of one person dies annually and six people suffer incapacitating injuries resulting from traffic crashes. In addition, each year more than 200 people suffer less severe injuries in traffic crashes. The toll on Bozeman is significant in terms of suffering and economic loss.

The Approach: In the fall of 2012, Bozeman began working to reduce the number of severe injury crashes in the urban area through the development of a Community Transportation Safety Plan. A Transportation Safety Advisory Committee (TSAC) was established to lead the effort, drawing upon stakeholders in the community with expertise in the 4 E's of transportation safety: education, enforcement, emergency response, and engineering. Among the first accomplishments of the TSAC was to set an overall goal for the CTSP of reducing traffic fatalities and injuries by 25 percent between 2013 and 2018. This means a reduction from a three year average of 213 fatalities and injuries to an average of 160 fatalities and injuries. The committee reviewed Bozeman crash data from MDT's Safety Management System to help identify the most significant safety issues in Bozeman. Based on the crash data analysis and community input, the TSAC identified three top areas for focus to reduce fatal and incapacitating crashes in Bozeman: inattentive driving crashes, lack of occupant protection usage, and, bicycle and pedestrian crashes. Therefore, the focus of the plan would be on strategies that could reduce severe injury crashes with these contributing circumstances.

A key event in the planning process was convening a Bozeman Community Transportation Safety Summit, which was held in Bozeman on March 20, 2013. At this event 27 stakeholders from Bozeman came together for a focused discussion of safety strategies to reduce inattentive driving, increase occupant protection, and reduce bicycle and pedestrian crashes that could work in the



Bozeman Community Transportation Safety Plan

community, based on both national experience and local stakeholder input. These strategies shown in Table E.1 form the basis of the plan.

Table E.1 Bozeman Community Transportation Safety Plan Strategies

Bozeman Community Transportation Safety Plan Strategies
Inattentive Driving Crashes
<ol style="list-style-type: none"> 1. Publicize the risks of distracted driving and conduct enforcement of distracted driving, including electronic handheld device use while driving. 2. Conduct ongoing public education and outreach about safe driving protocols/skills and retraining opportunities.
Seat belts/Occupant Protection Use
<ol style="list-style-type: none"> 1. Promote seat belt use, through broadened membership partners and increase activity of the Greater Gallatin Safety Coalition. 2. Conduct targeted youth outreach to increase seat belt use. 3. Conduct outreach to Montana State University students on the importance of wearing seat belts in vehicles. 4. Conduct general media outreach on the importance of seat belt use focusing on demographic groups with high rates of non-use. Complement outreach with targeted enforcement. 5. Collaborate with judges to ensure the judicial process is supportive of increased enforcement of seat belt non-use. 6. Enact a local ordinance making non-use of a seat belt a primary offense in Bozeman. 7. Conduct increased outreach about the need for vehicle passengers ages 4 to 9 to use booster seats.
Bicycle and Pedestrian Crashes
<ol style="list-style-type: none"> 1. Increase bicycle and pedestrian infrastructure in Bozeman, including bicycle lanes, sidewalks, signage and pavement markings. 2. Reduce impaired bicycling and walking. 3. Increase reporting of bicycle and pedestrian crashes. 4. Conduct public education about safe operating procedure between bicyclists and pedestrians and vehicles. 5. Increase enforcement of safe behaviors by both drivers around bicyclists and pedestrians and by bicyclist and pedestrians as they enter into the transportation mix.



The most important part of the plan will be implementation. No reduction in crashes will occur without additional effort focused on putting new strategies into place. Therefore, the safety strategies in the plan are accompanied by guidance on their implementation, including action steps, stakeholder groups involved, leaders, and resources.

Many of the strategies involve little or no cost, and can be initiated quickly, building on the momentum generated through development of the plan. New conversations are occurring, and new partnerships are being formed around safety, which will reduce crashes and improve the quality of life in Bozeman. This community transportation safety plan is designed to be a living document that can be adapted and updated by the community in five years as progress is made. MDT will continue to work with City of Bozeman to provide crash data and assist the community to monitor progress toward its goal of reducing crashes in Bozeman. Each year the City of Bozeman will report to MDT on the progress overall of the Emphasis Areas.



1.0 Relationship of Community Transportation Safety Plan to Montana Comprehensive Highway Safety Plan

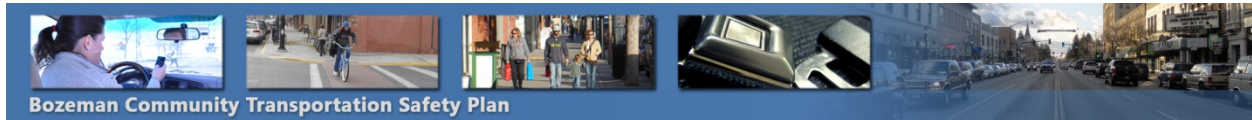
In September 2006, MDT, in partnership with multiple agencies and stakeholders, completed Montana’s Comprehensive Highway Safety Plan (CHSP). Since then, MDT has been actively supporting the implementation of strategies aimed at addressing the twelve CHSP Emphasis Areas. Urban area crashes were identified as one of these areas. Based on input from the CHSP Committee and MDT, it was determined that urban area crashes are most appropriately addressed at a local level, enabling individual communities to focus on their particular issues and needs and take responsibility for implementing the strategies that would benefit their community.

Urban Area Crashes represent a unique issue in the State of Montana. As a primarily rural state, the majority of the Montana’s fatal and serious injury crashes occur in rural areas. However, given higher population densities, the majority of all crashes occur in urban areas. Furthermore, urban fatal crashes continue to represent an average of over 10 percent of Montana’s fatal crashes over the past ten years as shown in Table 1.1. In 2011, urban fatal crashes represented more than 18 percent of Montana’s total fatal crashes.

Table 1.1 Statewide Urban vs. Rural Crashes

Statewide Urban vs. Rural Crashes					
Year	Fatal Crashes	Rural Fatal Crashes	Urban Fatal Crashes	Percent Rural	Percent Urban
2002	232	209	23	90.1%	9.9%
2003	239	214	25	89.5%	10.5%
2004	209	184	25	88.0%	12.0%
2005	224	194	30	86.6%	13.4%
2006	226	204	22	90.3%	9.7%
2007	249	230	19	92.4%	7.6%
2008	208	175	33	84.1%	15.9%
2009	198	180	18	90.9%	9.1%
2010	161	139	22	86.3%	13.7%
2011	187	152	35	81.3%	18.7%

Source: MDT – Safety Management System



Bozeman Community Transportation Safety Plan

Given these statistics and the State’s commitment to comprehensively address all aspects of transportation safety, MDT established a program through which individual communities could request technical and financial support to develop a Community Transportation Safety Plan (CTSP). To participate in this program, individual communities submit a written request expressing their interest in developing a safety plan, a problem statement of perceived safety issues, and letters of community support. Communities must also identify a local point of contact responsible for coordinating development, implementation, and tracking progress of strategies identified in the plan. Similar to the Comprehensive Highway Safety Plan (CHSP), these community level transportation safety plans must be comprehensive, coordinated, data-driven and identify safety issues within the community.

Technical and financial support is provided by MDT to assist the community in identifying community safety issues, setting a goal, developing an inventory of existing efforts, identifying new strategies to implement, and developing a safety plan and implementation schedule. The CTSP emerging from this effort then provides direction for the community to improve transportation safety at the local level. The CTSP documents the data-driven process undertaken to determine the most significant safety issues in the community and an action plan to address them.

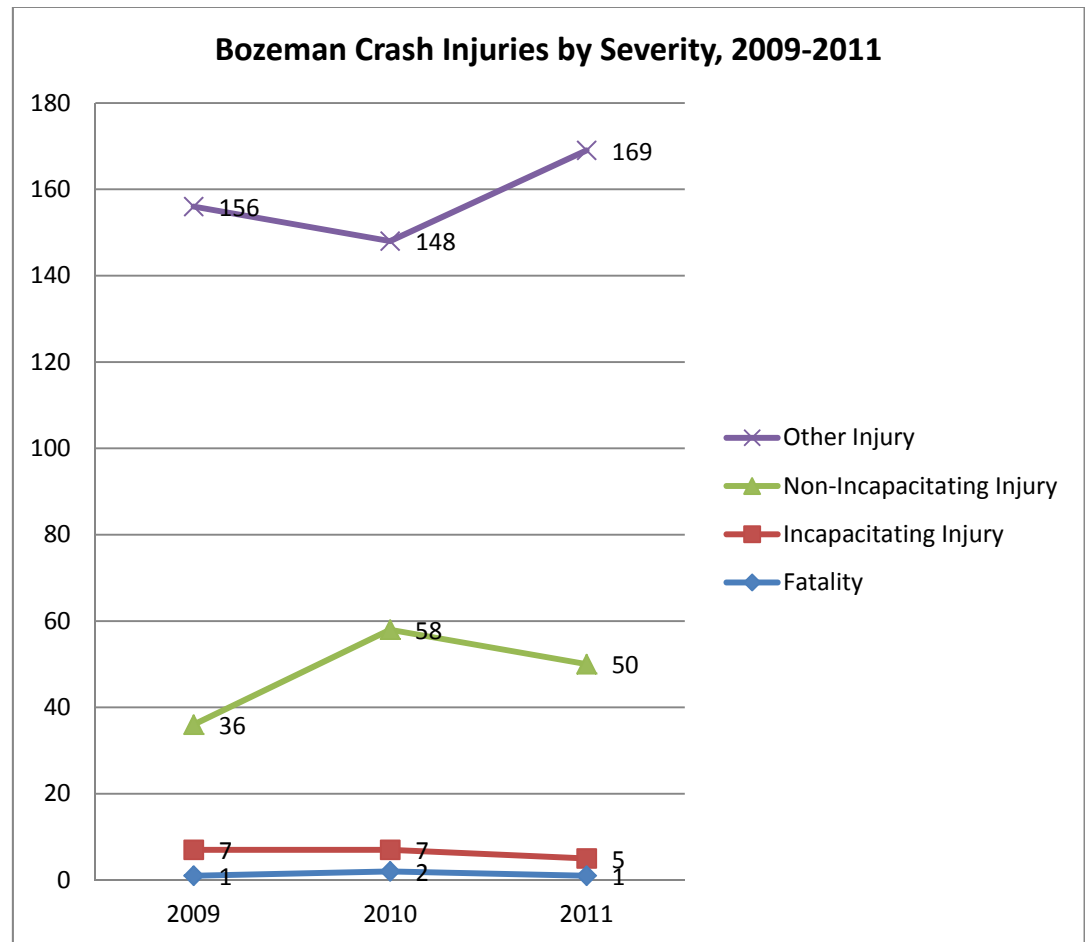
The general approach to develop a community transportation safety plan is to use the same methodology as for the State’s Comprehensive Highway Safety Plan, but at a community level and at a reduced scale, consistent with the needs of the individual community. The primary inputs to this plan are analysis of existing crash data, stakeholder input, “best practices” in safety programs, and resources and funding opportunities.



2.0 Transportation Safety Problem Overview

Each year in Bozeman an average of one person dies in a vehicle crash, as shown in Figure 2.1. An additional six people suffer incapacitating injuries each year, which means their lives are forever altered and they may never fully recover from their injuries. An average of 206 people experience less severe injuries, but these still likely result in time lost from work and other responsibilities, financial hardships, and medical costs, not to mention pain and suffering.

Figure 2.1 Bozeman Crash Injuries by Severity, 2009-2011



Source: MDT Safety Management System.



Development of effective strategies to improve safety depends on accurate and complete crash data. Bozeman has access to high-quality crash data via the resources of MDT's Safety Management System. This information is vital to understanding transportation safety trends in the region and pinpointing the populations, infrastructure, and driver behaviors with the greatest need for safety improvement.

The impact of traffic crashes is devastating for the families and friends of those killed or injured. While the personal costs of crashes can be massive, the economic costs are also substantial. The economic impact of crashes to Montana was estimated at \$595 million in 2005 during the development of the CHSP¹. The suffering and economic loss caused by crashes is not simply the price Bozeman residents must pay for mobility. Many actions can be taken to reduce the number and severity of crashes. Many groups have a role in transportation safety, including government agencies that manage transportation infrastructure and operations; advocacy organizations that seek ways to educate and reduce public injury; agencies that respond to crashes and provide medical care; law enforcement agencies that enforce traffic laws; and the public in taking seriously the privilege and responsibility of driving a vehicle by making good choices when on the road.

The first step in taking action is understanding the problem. Many factors play a role in why crashes occur. Contributing circumstances include decisions made by the driver such as whether to drink alcohol before driving, drive without enough rest, drive in bad weather, talk on the phone while driving, drive aggressively or



inattentively, or disregard signals and signs. The condition of the roadway is also important - are the stripes visible, is the bend in the road too sharp, are the road signs visible in the dark, or is the roadway slippery due to rain, snow, or ice? Many issues must be considered when addressing roadway safety.

Research in transportation safety has shown that nearly every crash is preventable. Human behavior plays a significant role in safety. Drivers must appreciate the skill, training, and attention required to safely maneuver a

¹ Montana Comprehensive Highway Safety Plan, 2010. http://www.mdt.mt.gov/publications/docs/brochures/safety/current_chsp.pdf



powerful two-ton vehicle. Every time a person gets into a car, the driver is presented with the opportunity to make that trip as safe as possible by obeying traffic laws, focusing on the task of driving, not driving when fatigued or impaired by drugs or alcohol, and wearing a seat belt.

At the same time, roadways should be designed so drivers know what is expected of them. If a driver makes a slight error in maneuvering a vehicle the roadway should enable recovery without a major impact. Roadways should include safety features such as proper signage, adequate pavement markings, safe alignments at posted speeds, good visibility, minimal roadside hazards, and infrastructure for pedestrians and bicycles. Roadway safety features include elements such as guardrails, striping, pedestrian crosswalks, signage warning of a sharp curve, lighting, etc.

The most crucial crashes to address through safety activities are severe crashes, which result in either a fatality or incapacitating injury. Severe crashes have a very high cost both socially and financially. Therefore, the focus of crash data analysis for this plan was on fatal and incapacitating injury crashes. However non-severe injury crashes and property-damage-only (PDO) crashes, which result in damage significant enough to warrant a crash report but where nobody was injured, also provide information on overall trends. The data by crash type include crashes between 2007 and 2011; it is important to look at multiple years of crash data, as significant variation can occur from year to year. In section 3.0 and 4.0, more detailed data is provided on crash factors most prevalent in Bozeman.





3.0 Methodology

The rationale for undertaking safety planning at the community level is to provide a more customized approach to planning both from the standpoint of problem analysis and strategy development. The crash problem at a community level is often somewhat different than at the state level, because communities are more urban than the state overall. Therefore customized analysis of the safety issues at a community level will improve how well efforts can target local problems.

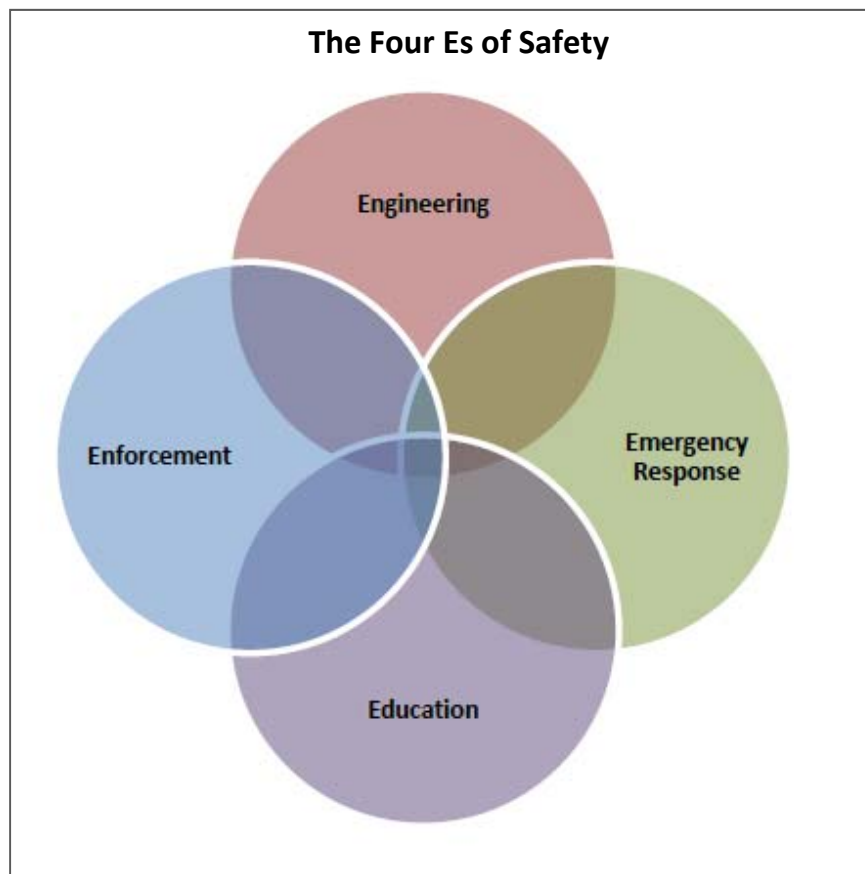
Implementation of safety strategies at a community level can be very effective because community leaders, agencies, institutions, and key advocacy groups can be engaged and work together on developing a culture of safety. Often resources and information can be shared through collaboration to strengthen the safety effort. When local residents hear the safety message from other community members they know it can be much more compelling. The key is to effectively use existing transportation safety resources through collaboration and communication.



3.1 PLANNING PROCESS

The initial step in developing the Bozeman Community Transportation Safety Plan was assembling key community safety members with knowledge of safety issues and interest in working toward reducing crashes and saving lives in Bozeman. Individuals were invited to be part of the Transportation Safety Advisory Committee (TSAC) based on their knowledge of and involvement in the 4 Es (education, enforcement, emergency medical services, and engineering) of safety, shown in Figure 3.1.

Figure 3.1 The Four Es of Safety



It has been proven that safety strategies are most effective if safety partners and stakeholders from each of these disciplines are involved in the process. It is beneficial for partners to collaborate closely on the practice of safety. When partners work together, often resources can be combined and information can be shared that enables more efficient use of staff and funds. Partners and stakeholders involved in the Bozeman CTSP included representatives from the local hospital, first responders, Bozeman Police Department, Bozeman Public Works Department, Montana State University, members of the Transportation Coordinating Committee, Bozeman School District, community organizations,



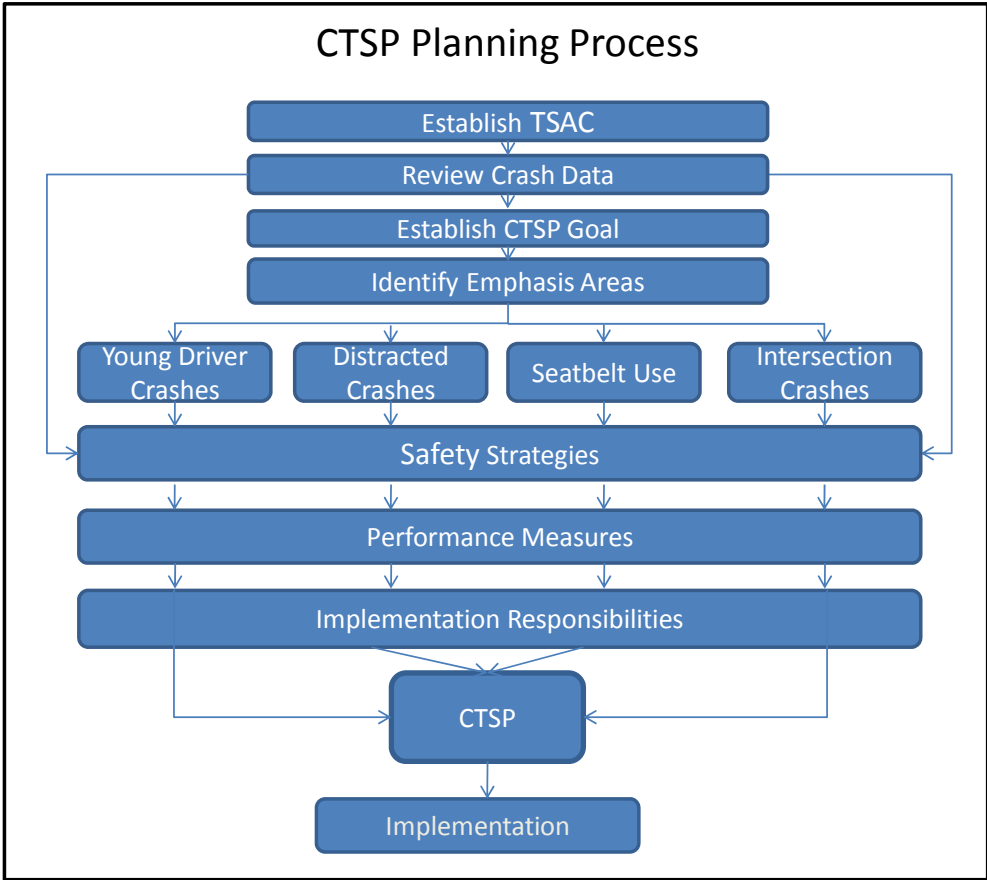
Gallatin County DUI Task Force, Greater Gallatin Buckle Up Coalition, and transportation planners and engineers.

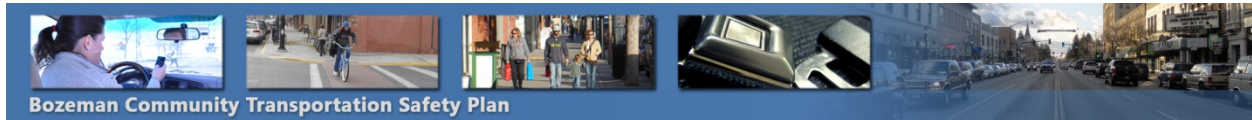
The key steps in the planning process are shown in Figure 3.2, including:

- Establish a Transportation Safety Advisory Committee;
- Review available crash data;
- Develop vision statement and goal;
- Identify Safety Emphasis Areas;
- Review existing strategies and determine new strategies;
- Develop action plans to facilitate implementation; and
- Submit final plan to local governing body for adoption.

The CTSP planning process is shown below in Figure 3.2.

Figure 3.2 CTSP Planning Process





Transportation Safety Advisory Committee (TSAC)

The TSAC met five times over the course of the plan development, in addition to participating in the Safety Summit. Table 3.1 shows the key objectives for each of the meetings. The planning process started by ensuring that a wide range of stakeholders were involved in the transportation safety plan development. Members were individually invited to participate in the TSAC by the local point of contact to ensure full representation by the 4Es. The TSAC membership is shown in Appendix A.

MISSION

To provide guidance on the development of the Community Transportation Safety Plan and participate in and provide direction on plan implementation

The roles and responsibilities of the TSAC include:

- Review Bozeman crash data;
- Develop mission, vision, and goal;
- Identify Emphasis Areas;
- Participate in development of safety strategies and action steps;
- Lead Implementation of the CTSP

The TSAC members discussed their role in the safety planning process and defined what TSAC sought to accomplish. The TSAC members also defined a mission statement to guide their overall efforts in the CTSP development process.



The objectives for the planning meetings can be found below in Table 3.1.

Table 3.1 Key Objectives for Planning Meetings

Key Objectives for Planning Meetings	
Meeting	Key Objectives
TSAC Meeting 1 October 16, 2012	<ul style="list-style-type: none"> • Initiate plan development • Confirm TSAC members • Conduct initial review of crash data
TSAC Meeting 2 November 27, 2012	<ul style="list-style-type: none"> • Review key safety issues in Bozeman • Define TSAC Mission • Define Safety Vision and Goal • Select Emphasis Areas for CTSP
TSAC Meeting 3 February 20, 2013	<ul style="list-style-type: none"> • Inventory current activities relevant to Emphasis Areas • Discuss potential new approaches for strategies
Safety Summit March 20, 2013	<ul style="list-style-type: none"> • Identify safety strategies for Emphasis Areas
TSAC Meeting 4 April 17, 2013	<ul style="list-style-type: none"> • Review/refine potential safety strategies
TSAC Meeting 5 May 22, 2013	<ul style="list-style-type: none"> • Review and approve plan

TSAC members reviewed all Bozeman crash data for multiple years to identify the factors that were actually involved in crashes. It was important that decisions about the areas of focus for the safety plan were supported both by crash data and the members of community that will be implementing the plan. The committee reviewed fatal and incapacitating injury crash data in Bozeman related to key safety factors to determine how and where to focus and prioritize efforts, but decided to focus on severe crashes. This helped the group identify safety Emphasis Areas.

Once those Emphasis Areas were determined, the group inventoried current safety programs in the community to identify opportunities for enhancement, as well as to identify gaps that could be addressed by future strategies. Next, the TSAC identified potential safety strategies based both on a review of the national literature and what stakeholders felt would be appropriate and effective in Bozeman.



3.2 SAFETY PLAN GOAL

The overall goal of the CTSP was designed to be specific, measurable and have a timeline. Overall, during the three-year period from 2009 to 2011, Bozeman experienced an average of one fatality, six incapacitating injuries 48 non incapacitating injuries and 158 other injuries, which are those that may be experienced after leaving the crash scene (e.g. back pain or whiplash), shown below in Table 3.2.

Table 3.2 Annual Bozeman Traffic Fatalities and Injuries

Annual Bozeman Traffic Fatalities and Injuries					
	Fatality	Incapacitating Injury	Non-Incapacitating Injury	Other Injury	TOTAL
2009	1	7	36	156	200
2010	2	7	58	148	215
2011	1	5	50	169	225
3 Year Annual Average	1	6	48	158	213

Source: MDT Safety Management System

The TSAC identified a goal to reduce fatalities and injuries by 25 percent between 2013 and 2018.

GOAL

Reduce fatalities and injuries by 25 percent between 2013 and 2018, from 213 to 160 fatalities and injuries.



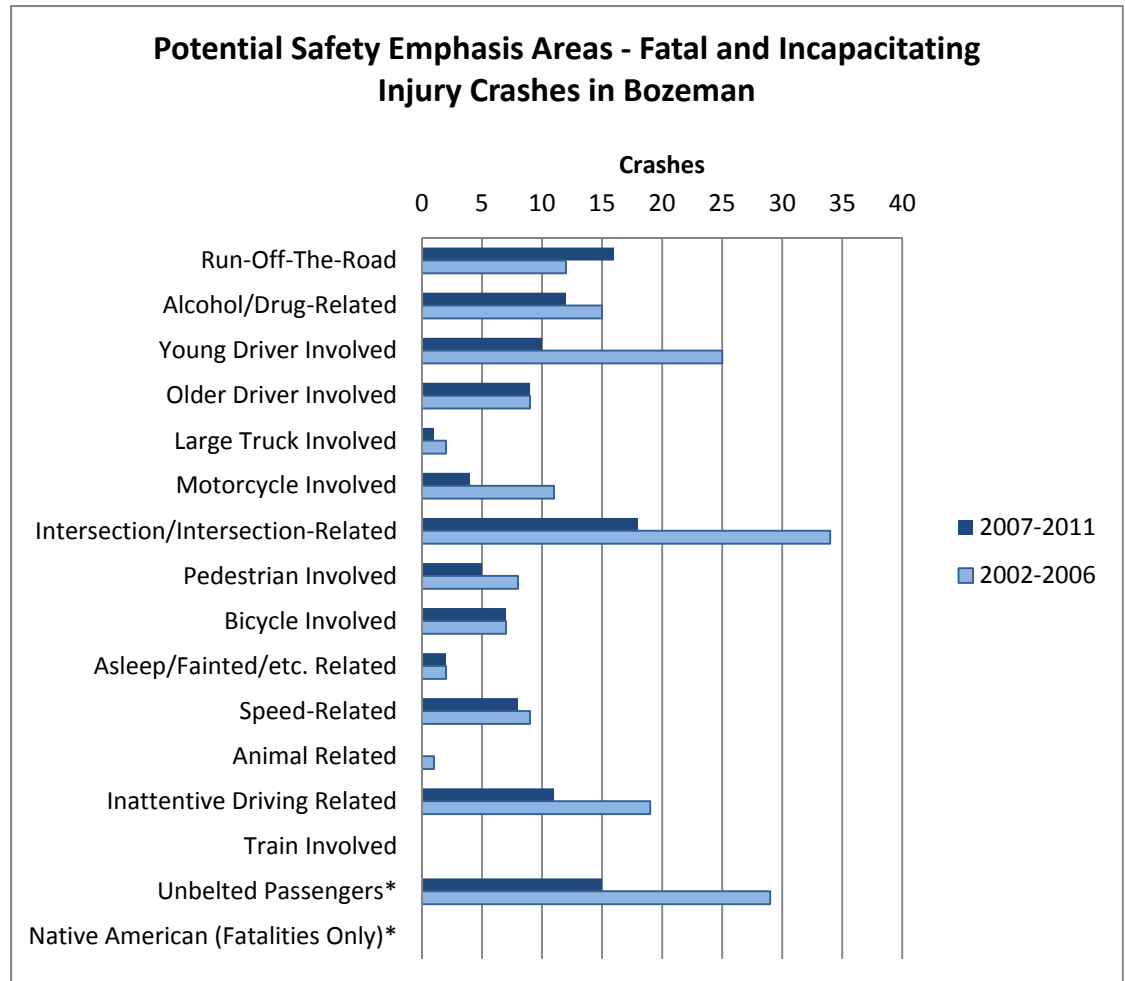
3.3 EMPHASIS AREAS

To understand how to most effectively focus resources, it is important to identify what types of crashes predominantly contribute to the community safety problem. The American Association of State Highway Transportation Officials *Strategic Highway Safety Plan: A Comprehensive Plan to Substantially Reduce Vehicle-Related Fatalities and Injuries on the Nation's Highways*, published in 2005, identified 22 safety Emphasis Areas on a national level. The development of Emphasis Areas represents a new approach to roadway safety by including populations (e.g., older and younger drivers), crash types (e.g., roadway departure crashes, head-on collisions), infrastructure/hazards (e.g., intersections, tree and utility pole collisions), behavior (e.g., lack of occupant protection, inattentive/distracted/fatigued, alcohol and/or drug impaired), and modes (e.g., pedestrian, bicycle, motorcycle, heavy trucks). Once a community has a detailed understanding of the types of crashes that are causing the greatest loss of life and severe injury it is possible to target safety strategies to have the greatest safety impact with the resources available.



Montana’s CHSP took the approach of using a data-driven process to define Emphasis Areas and the same approach was used in this plan. The Emphasis Areas considered for the Bozeman CTSP are shown in Figures 3.3 and 3.4 with crash data shown for 10 years, broken into two five-year increments. It is important to consider crash data for multiple years to accurately capture trends. The crash data show that progress has been made in reducing crashes in most of the Emphasis Areas in Bozeman, because the numbers were, for the most part, lower during 2007 to 2011 as compared to 2002 to 2006. However, the group saw that the opportunity existed for improvement in several areas that showed relatively higher levels of severe injury crashes (fatal plus incapacitating injury crashes).

Figure 3.3 Potential Safety Emphasis Areas – Fatal and Incapacitating Injury Crashes in Bozeman

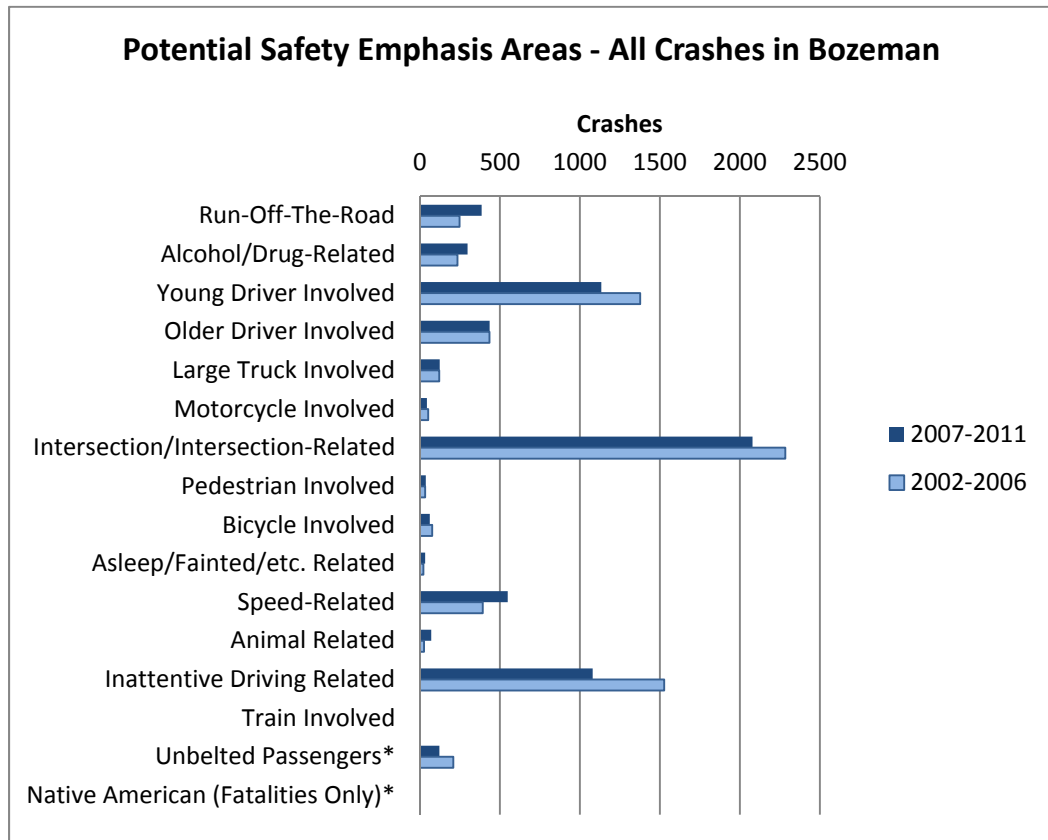


Source: MDT Safety Management System.

Note: Data for Native Americans and unbelted represents persons involved, not number of crashes.



Figure 3.4 Potential Safety Emphasis Areas – All Crashes in Bozeman



Source: MDT Safety Management System.

Note: Data for Native Americans and unbelted represents persons involved, not number of crashes.

The group considered a number of criteria to decide which Emphasis Areas the community could have the greatest impact upon. Factors the group considered included the extent of loss of life and serious injury, availability of data, resources available to address the issue, and feasibility of making an impact in terms of being able to generate stakeholder support.

EMPHASIS AREAS

- **Inattentive/Distracted Driving Crashes**
- **Seat belt/Occupant Protection Use**
- **Bicycle and Pedestrian Crashes**

Following a discussion of the various areas, TSAC members conducted a voting exercise during which participants were given stickers to place next to the Emphasis Areas they believed were most important. The result of the voting



exercise was selection of inattentive driving crashes, seat belt/occupant protection, and pedestrian and bicycle crashes. While the largest number of crashes were at or near intersections, many of those crashes likely also involved impairment or inattention, and increased occupant protection will help to reduce the severity of injuries for all crash types. Younger drivers also were involved in a large number of crashes but the group felt this demographic group would be covered via strategies of the other Emphasis Areas..

3.4 SAFETY STRATEGIES APPROACH

Safety strategies are targeted efforts to address a specific safety problem. The strategy must be implementable and should be based on defined action steps. The outcome of each strategy will be tracked to ensure efforts are successful in reducing the numbers of fatal and severe injury crashes.

At the Bozeman Transportation Safety Summit, Emphasis Area discussion groups reviewed the safety data so strategies could be targeted to the specific problems in Bozeman. Groups considered safety strategies proven to work in other states or regions as well as how to build upon and enhance programs already underway in Bozeman. Participants discussed in depth what they felt the major issues were regarding safe driving related to inattention/distraction, lack of seat belt use/occupant protection, and bicycle and pedestrian crashes and devised strategies tailored to the Bozeman community.

Identifying how strategies will be implemented moving forward is a critical part of this plan. At the Summit, participants identified agencies and or stakeholders that would be most appropriate to be involved in and/or leading each strategy. The anticipated life of the plan is up to five years, after which time crash data should be reviewed and the results of strategy implementation fully evaluated. A potential new set of safety Emphasis Areas and strategies can then be developed based on the key crash factors shown in the crash data at that time.

3.5 TRANSPORTATION SAFETY SUMMIT

A key event in development of the CTSP was the Transportation Safety Summit held the evening of March 20, 2013 at the Bozeman City Hall. The goal of this event was to reach out to a wider audience of community members and stakeholders, particularly those with expertise in the Emphasis Area topics. At this meeting community participants confirmed the emphasis areas and safety goal to identify new safety strategies for the Emphasis Areas to form the basis of the CTSP.





Twenty seven people participated in this three-hour transportation safety planning workshop including representatives from the City of Bozeman, the Bozeman Chronicle, the Pedestrian and Traffic Safety Committee, Child Care Connections, the Bozeman Area Bicycle Advisory Board, the Bozeman Police Department, Montana Highway Patrol, Collin's Coalition, Montana State University, MDT- Engineering & Planning staff, and local residents (see Appendix B for list of participants). At the Summit, Bozeman Mayor Sean Becker emphasized the importance of reducing crashes to the Bozeman community noting the significant of personal loss in addition to economic and financial hardship. Cambridge Systematics staff presented information on Bozeman crash data and the Community Transportation Safety Planning process to date.

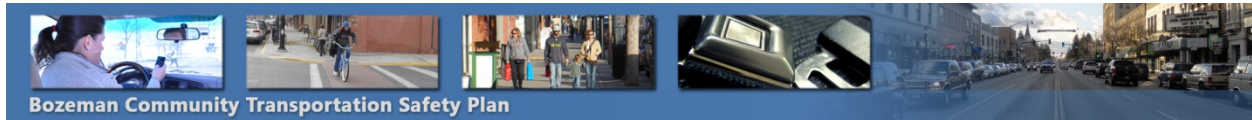


Summit participants were divided into three workgroups based on their area of interest and expertise in the three Emphasis Areas. Each facilitator provided their specific group an overview of crash data, current programs and safety strategies that have been tried and proven effective in other areas. The group discussed which of these could be effective at improving safety in Bozeman. Participants were encouraged to generate new strategies ideas other than those presented that would be

appropriate for the Bozeman community. Strategies are discussed detail in Section 4.0.

3.6 EMPHASIS AREA TEAMS

Emphasis Area teams will collaborate and support implementation of the strategies identified in this plan. The starting point for forming Emphasis Area teams will be to coordinate with stakeholder and safety partners that have a responsibility or jurisdictional authority over the strategies being undertaken. Participants in each of the Emphasis Area discussion groups at the Summit are potential team members. Additional interested stakeholders and safety partner representatives of groups important to implement safety strategies should also be invited to participate.



Bozeman Community Transportation Safety Plan

Each Emphasis Area team has a champion tasked with serving as chairperson for the workgroup and convening regular meetings. The team will review and refine the strategies, define tactics to complete strategies, and ensure the responsible agencies and individuals are assigned to carry out the strategy activities. It is recommended that these groups initially meet every one to two months to get the strategies actively underway and to establish a protocol for monitoring progress. Most of the members of the TSAC will likely join one of the three Emphasis Area teams.

In this safety plan, each of the core strategy descriptions includes a list of potential stakeholders and safety partners to act as lead on implementing activities and action steps. Each Emphasis Area team should include these groups and validate on an ongoing basis that it has the right membership to lead implementation of the



strategies. If an individual can no longer fill the lead role on implementing a particular safety strategy or activity, the Emphasis Area team members should work together to identify a replacement.

Emphasis area team leaders are:

- Bicycle and Pedestrian Crashes Emphasis Area Chair, Danielle Scharf, Pedestrian Traffic and Safety Committee;
- Seat belts/Occupant Protection Use Emphasis Area, Jessi Malcolm, Child Care Connections; and
- Inattentive/Distracted Driving Emphasis Area Champion, Officer Rick Musson, Bozeman Police Department.



4.0 Emphasis Area Strategies

4.1 STRATEGY DEFINITIONS

For each of the three Emphasis Areas defined in the plan, safety strategies and action steps were identified, as well as implementation stakeholders and partners, and resources and funding needs. Each of these elements is further defined below.

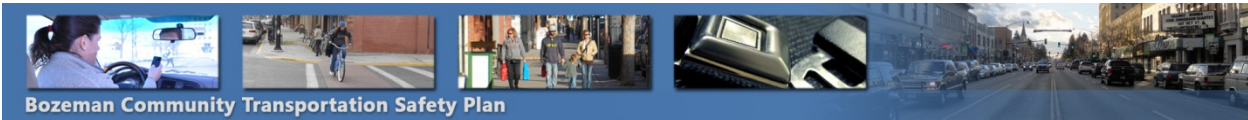
Strategy – This is an approach to improving safety in the community that addresses a defined transportation crash type (i.e. inattentive, unbelted, or bicycle and pedestrian). Implementation of the strategy will involve a series of more specific action steps. They should be designed with crash data in mind so they are targeting the most significant crash factors within that Emphasis Area (e.g. the demographic groups with highest crash involvement, or times of day with highest numbers of crashes). They may be phased in over the five-year span of the plan and can be prioritized based on the Emphasis Area team’s interest and resources.

Purpose – This information provides context as to why the strategy is needed in the community, including current conditions such as crash history, policies, or community experience. The purpose also provides insight into how the strategy will improve safety in the community.

Activities/Action Steps – These are specific steps for implementing the strategy over time with the objective of reducing fatal and injury crashes.

Implementation Stakeholders/Partners – These are agencies or groups with jurisdiction, authority or special expertise necessary to accomplish the action steps. These agencies/groups may take a lead or supporting role in implementing the defined action steps. These are initial lists but may need to be expanded as the Emphasis Area group begins implementation.

Resources/Funding Needs – This information defines resources needed to implement action steps for this strategy including funding and staff time. Many action steps involve improving processes or refocusing existing resources and will not require new funding sources. Resources to support implementation are defined including national programs providing technical support and resource materials for customization to the community. The community may be able to maximize resources by using or adapting existing materials and increasing collaboration among existing organizations.



4.2 INATTENTIVE DRIVING

Inattentive driving can involve distraction due to a number of factors including activity outside the vehicle, activity inside the vehicle such as a child or pet, or by use of an electronic device. Too often people do not give driving the full attention it deserves. The attention required to operate a vehicle safely and react to any unexpected conditions does not allow for reading a newspaper, putting on makeup, or eating a sandwich while the vehicle is in motion. Other passengers can provide a significant distraction, especially for young drivers transporting other teenage passengers. This is why it is recommended that as novice drivers are gaining skills there be limits to the number of passengers in the vehicle.

The emotional state a person is in can significantly affect driving – it is possible to “look but not see” the road ahead when the mind is agitated, occupied with other thoughts or daydreaming. It is important for drivers to take seriously the potential level of risk to themselves and others when driving a vehicle and concentrate on the driving task accordingly.



With the increase in use of electronic devices including cell phones, smart phones, iPods, and iPads, recent attention has focused on distraction by these devices. Some states and communities have enacted bans on handheld cell phone use, including Bozeman. The Bozeman ordinance also prohibits texting while driving. Currently eleven Montana communities, including

Bozeman have enacted similar bans that prohibit use of cellphones, including texting, while driving.

While involvement of electronic device use in crashes is known to be underreported, national data show that distraction is a significant contributing factor. According to the National Highway Transportation Safety Administration (NHTSA), nationally 18 percent of injury crashes in 2010 were reported as involving distracted driving. Drivers who use hand-held devices are four times more likely to get into a crash serious enough to injure themselves, according to the Insurance Institute for Highway Safety. Because text messaging requires visual, manual, and cognitive attention from the driver, it is by far the most alarming distraction. Drivers who text are 23 times more likely to be in a crash, according to USDOT.



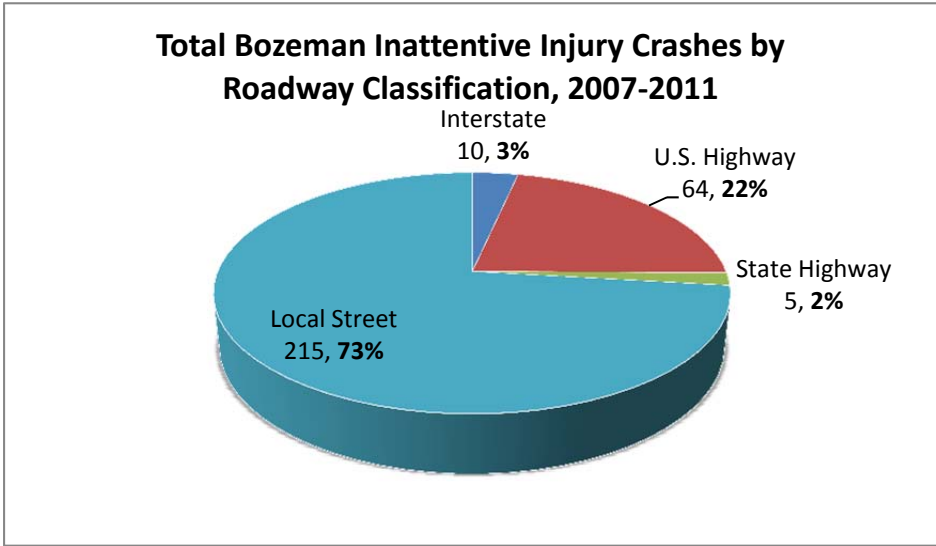
The majority of injury crashes involving inattentive drivers were on local streets (73 percent). Nearly a quarter (22 percent) of inattentive injury crashes were on U.S. highways (Table 4.1, Figure 4.1).

Table 4.1 Bozeman Inattentive Injury Crashes by Roadway Classification, 2007-2011

Bozeman Inattentive Injury Crashes by Roadway Classification, 2007-2011						
Crashes by Roadways	Severe Injury Crashes	Severe Injury Crashes (%)	Nonsevere Injury Crashes	Nonsevere Injury Crashes (%)	Total Injury Crashes	Total Injury Crashes (%)
Interstate	–	–	10	4%	10	3%
U.S. Highway	2	9%	62	23%	64	22%
State Highway	3	13%	2	1%	5	2%
County Roads	–	–	–	–	–	–
Local Street	18	78%	197	73%	215	73%
TOTAL	23		271		294	

Source: MDT Safety Management System

Figure 4.1 Bozeman Inattentive Injury Crashes by Roadway Classification, 2007-2011



Source: MDT Safety Management System



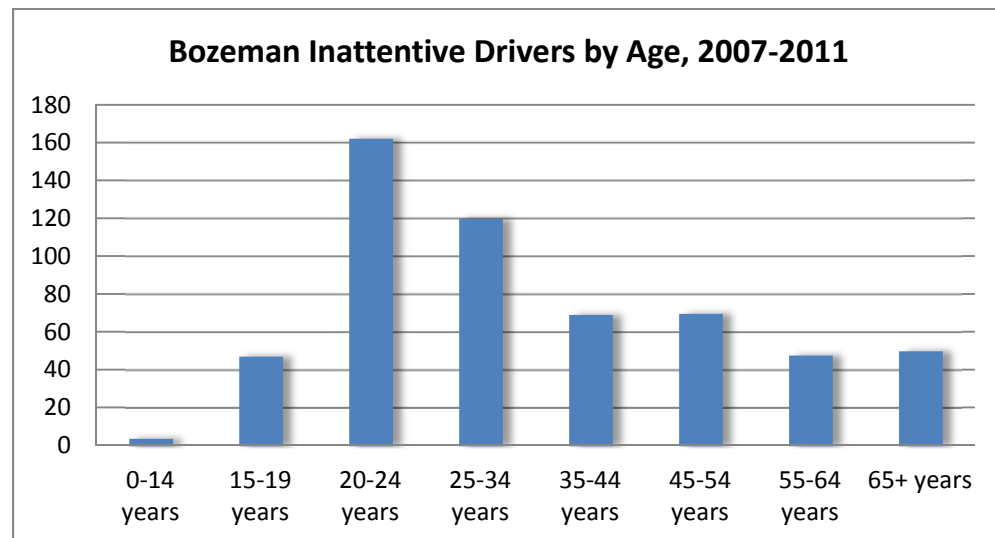
From 2007 to 2011, there were 1,080 crashes in the Bozeman urban area involving an inattentive driver. Of those, 11 were severe injury crashes involved a fatality or incapacitating injury and 271 resulted in nonsevere injury crashes. Inattentive severe injury crashes were fairly evenly distributed among drivers age 15 to 54 years old as shown in Table 4.2 and Figure 4.2.

Table 4.2 Bozeman Inattentive Drivers by Age, 2007-2011

Bozeman Inattentive Drivers by Age, 2007-2011				
Drivers by Age	Severe Injuries	Severe Injury Crashes (%)	Nonsevere Injury Crashes	Nonsevere Injury Crashes (%)
0-14 years	-	-	4	1%
15-19 years	3	14%	44	8%
20-24 years	3	14%	159	29%
25-34 years	4	19%	116	21%
35-44 years	4	19%	65	12%
45-54 years	3	14%	67	12%
55-64 years	1	5%	47	9%
65+ years	3	14%	47	9%
TOTAL	21		549	

Source: MDT Safety Management System

Figure 4.2 Bozeman Inattentive Drivers by Age, 2007-2011



Source: MDT Safety Management System



Current Inattentive Driving Programs and Strategies in Bozeman

A key step in the CTSP development process was identification of the safety strategies currently in place in Bozeman and where there were opportunities either to expand upon current strategies or devise new strategies to address gaps. While the list of current strategies below may not be complete, the programs listed include some of the safety activities underway in the community.

Electronic communication devices while driving or riding bicycle prohibited.

Per an ordinance effective Jan 17, 2012 all drivers are required to use hands-free devices while using their cellular phones and texting while driving is prohibited.

AARP Defensive Driving Program - for training schedule or to register for a class near you at www.aarp.org.

Alive@25 Courses - Defensive driving course often are court-ordered courses instructed by Montana Highway Patrol trainers on driver safety for drivers age 15 to 25 who have received a traffic violation. Currently one course per month is offered in Bozeman. It is not required to be court ordered to attend. Contact: Jessi at Child Care Connections or Katie at Montana Highway Patrol at 406-587-4525.

Bozeman High School has set up a Team page on **Teens in the Drivers Seat**

This is an effective peer-to-peer education program for addressing a range of driving safety issues. Western Transportation Institute is developing a Montana-specific program to develop a "how-to" guide book for distribution to communities. Project research: Laura Stanley, Assistant Professor, WTI-MSU, PO Box 174250, Bozeman, MT 59715, phone 406-994-1399, laura.stanley@ie.montana.edu.

Potential Stakeholder Groups for the Inattentive Driving Emphasis Area

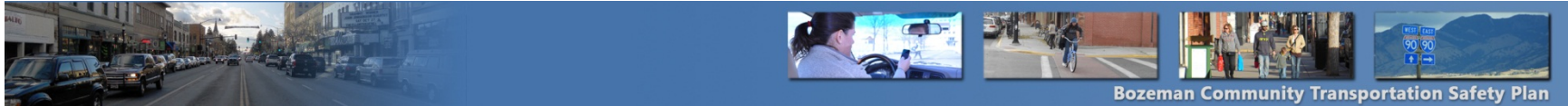
A number of local agencies can play a role in reducing inattentive driving crashes. These agencies can be partners in implementing safety strategies:

- Bozeman Police Department;
- Bozeman School District- Driver's Education and Athletic Coaches;
- Chamber of Commerce and Business Owners;
- Montana State University (MSU) Media Department; and
- Bozeman media.



New Inattentive Driving Safety Programs and Strategies in Bozeman

New strategies and action steps for implementation in Bozeman were identified during the Safety Summit and are described as follows:



Emphasis Area: Inattentive/Distracted Driving Crashes
Emphasis Area Chair: Officer Rick Musson, Bozeman Police Department
New Strategies

Strategy 1	Purpose	
Publicize the risks of distracted driving and conduct enforcement of distracted driving, including electronic handheld device use while driving.	While Bozeman has enacted an ordinance prohibiting use of handheld electronic devices while driving, many drivers violate the ordinance. Additional promotion and education on this ordinance is needed. Campaigns should include the reasons behind the ordinance, and the potential citation and physical risks of driving while distracted. In addition, many other behaviors also result in distraction and drivers should also be reminded of the risks of engaging in these behaviors as well. These behaviors include: 1) drowsy driving, 2) personal hygiene, 3) passengers, 4) eating/drinking, 5) Music, 6) picking up items off floor, 7) reading, 8) lack of location awareness, and 9) outside distractions.	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman Police Department • Media • Chamber of Commerce • Civic organizations • Network of Employers for Traffic Safety • Bozeman High School • Montana State University (MSU) • Others 	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman Police Department • Media • Chamber of Commerce and Business Owners • Civic organizations • Network of Employers for Traffic Safety • Bozeman High School • MSU • Others
Activities/Action Steps		
<ul style="list-style-type: none"> • Develop/adapt existing materials discouraging distracted driving. Conduct outreach to businesses to encourage development of contracts prohibiting handheld electronic device use and other distracting behaviors by employees. Potentially partner with the Chamber of Commerce. • Conduct public awareness campaign against distracted driving. Potentially distribute reminders via licensing stations, water bill mailings. • Communicate to the public the importance of not driving distracted via key local groups such as civic organizations. • Bozeman PD traffic division can conduct outreach about risks of distracted driving through media interviews (TV and radio), social media, etc. • Integrate driving distraction into Bozeman High School peer-to-peer safety education efforts. • Install more signs noting prohibition on handheld cell phone use/texting and fines for a citation – consider updated sign layout with more graphics 		



Emphasis Area: Inattentive/Distracted Driving Crashes
Emphasis Area Chair: Officer Rick Musson, Bozeman Police Department
New Strategies

Strategy 2	Purpose	
Conduct ongoing public education and outreach about safe driving protocols/skills and retraining opportunities.	Most people receive driver’s education only once prior to receiving their driver’s license. Rules of the road change over time. Re-education and reinforcement of proper driving skills and behaviors is needed on an ongoing basis, particularly for dangerous driving behaviors that law enforcement officers see regularly. The public can be informed of the availability of refresher courses and other safe driving information from national organizations.	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Bozeman Police Department • Media • MT Office of Public Information (driver’s ed.) • MSU Media Department • Insurance Agencies • AARP 	<ul style="list-style-type: none"> • Chamber of Commerce and Business Owners • Public Service Announcements • Montana Office of Public Instruction • National Safety Council Defensive Driving Resources • AARP Defensive Driver Program
	Activities/Action Steps	
<ul style="list-style-type: none"> • Enhance coverage of common key issues such as navigation of uncontrolled intersections in driver’s education course. • Partner with MSU media department to develop PSAs on key driving skills needing a refresher, which can be posted to social media, YouTube, the City’s website, potentially as part of a “Common Driving Issues” series. • Bozeman PD Traffic Division conducts outreach about key driving skills through media interviews (TV and radio), social media, etc. • Publicize availability of defensive driving refresher courses for adults. 		



Inattentive/Distracted Driving Performance Measures

Performance measures will need to be documented by the Emphasis Area on a tracking form shown in Appendix E. Key performance measures to track progress in this Emphasis Area over time include:

- Number of crashes in Bozeman involving inattentive/distracted driving;
- Number fatalities and incapacitating injuries in Bozeman involving inattentive/distracted driving; and
- Number of citations issued by law enforcement for inattentive/distracted driving in the Bozeman urban area.



4.3 OCCUPANT PROTECTION

One of the most effective measures a person can take to prevent injury and death in a crash is to be appropriately restrained through the use of seat belts, child safety seats, or booster seats. National Highway Traffic Safety Administration (NHTSA) estimates that lap/shoulder seat belts, when used correctly, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent. Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants (less than 1 year old) and by 54 percent for toddlers (1 to 4 years old) in passenger cars. For infants and toddlers in light trucks the corresponding reductions are 58 percent and 59 percent, respectively. **Despite this evidence, however, a large proportion of fatally injured people are not properly restrained.**

From 2007 to 2011 in Bozeman, 17 unbelted vehicle occupants suffered severe injuries and 171 unbelted people experienced nonsevere crash injuries. Thirty-one percent (31%) of unbelted passengers with severe injuries and 19 percent (19%) with nonsevere injuries were people ages 20-24 (Table 4.3, Figures 4.3 and 4.4).

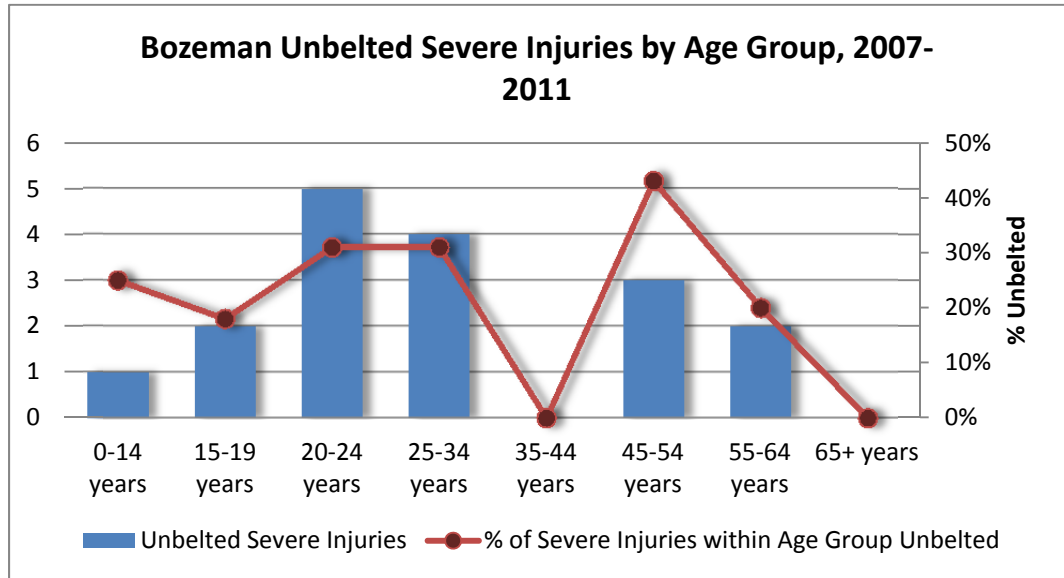
Table 4.3 Bozeman Unbelted Injuries by Age, 2007-2011

Bozeman Unbelted Injuries by Age, 2007-2011						
Unbelted Injuries by Age	Belted Severe Injuries	Unbelted Severe Injuries	Belted Non-Severe Injuries	Unbelted Non Severe Injuries	Unbelted Severe Injuries (%)	Unbelted Non-severe Injuries (%)
0-14 years	3	1	56	11	25%	16%
15-19 years	9	2	120	33	18%	22%
20-24 years	11	5	187	43	31%	19%
25-34 years	9	4	194	39	31%	17%
35-44 years	2	-	120	17	-	12%
45-54 years	4	3	131	13	43%	9%
55-64 years	8	2	91	10	20%	10%
65+ years	11	-	78	5	-	6%
TOTAL	57	17	977	171		

Source: MDT Safety Management System. Note: Includes only data for which seat belt usage was known.

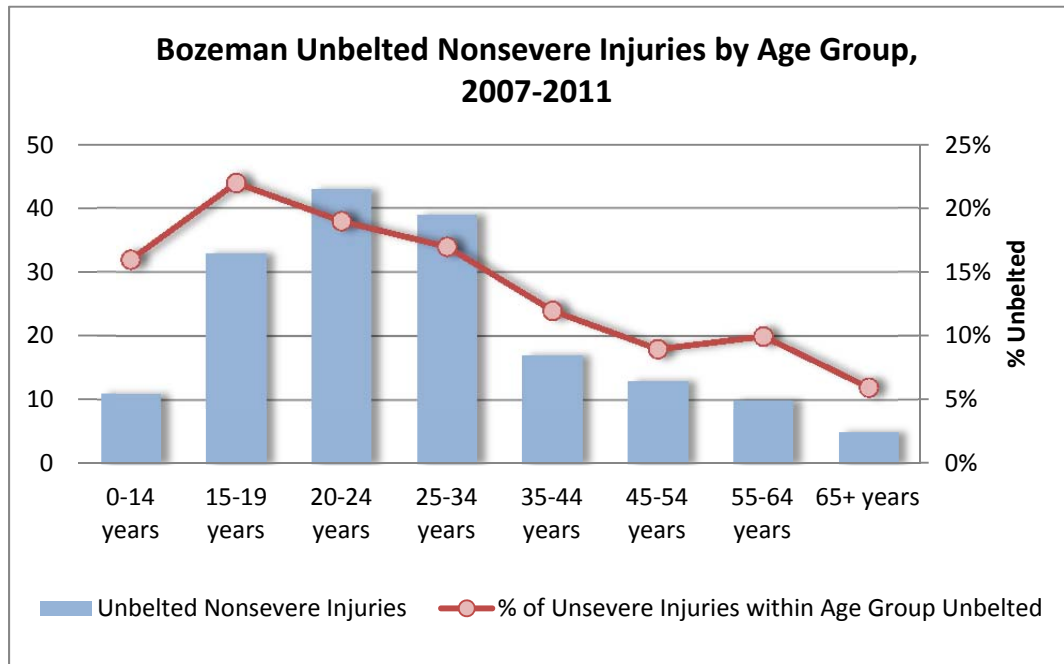


Figure 4.3 Bozeman Unbelted Severe Injuries by Age Group, 2007-2011



Source: MDT Safety Management System. Note: Includes only data for which seat belt usage was known.

Figure 4.4 Bozeman Unbelted Nonsevere Injuries by Age Group, 2007-2011



Source: MDT Safety Management System. Note: Includes only data for which seat belt usage was known.

More than a quarter (28 percent) of males with severe injuries and nearly one-fifth (19 percent) of males experiencing nonsevere injuries were unbelted, as shown in Table 4.4, and Figures 4.5 and 4.6.

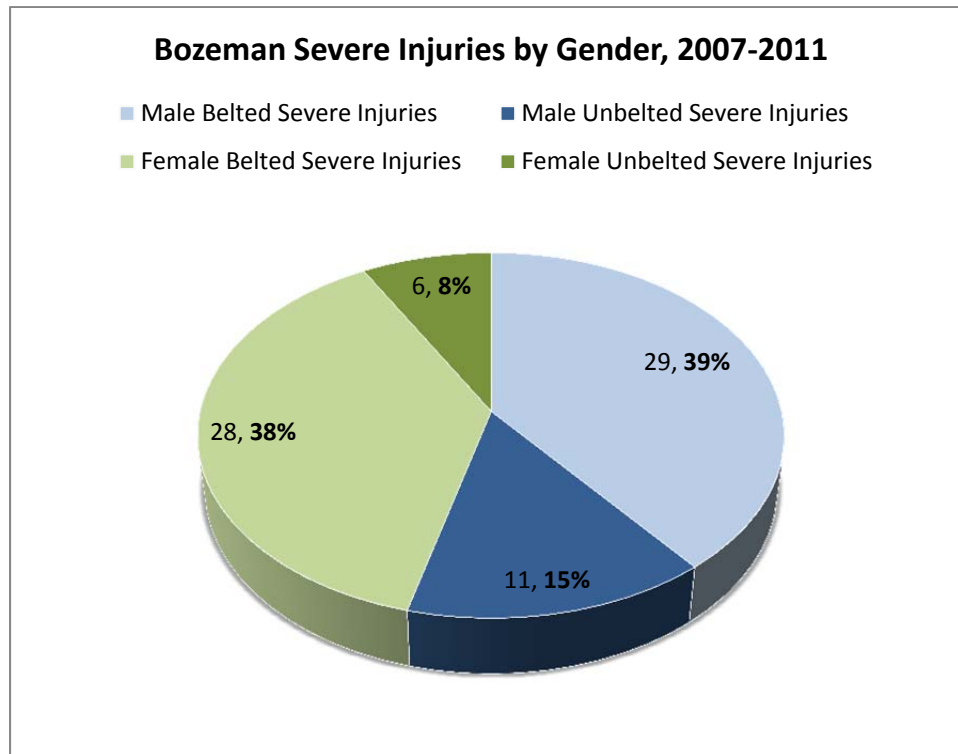


Table 4.4 Bozeman Unbelted Injuries by Gender, 2007 - 2011

Bozeman Unbelted Injuries by Gender, 2007-2011						
Unbelted Injuries	Belted Severe Injuries	Unbelted Severe Injuries	Belted Non-severe Injuries	Unbelted Non Severe Injuries	Unbelted Severe injuries (%)	Unbelted Non-severe Injuries (%)
Male	29	11	409	95	28%	19%
Female	28	6	577	81	18%	12%
TOTAL						

Source: MDT Safety Management System

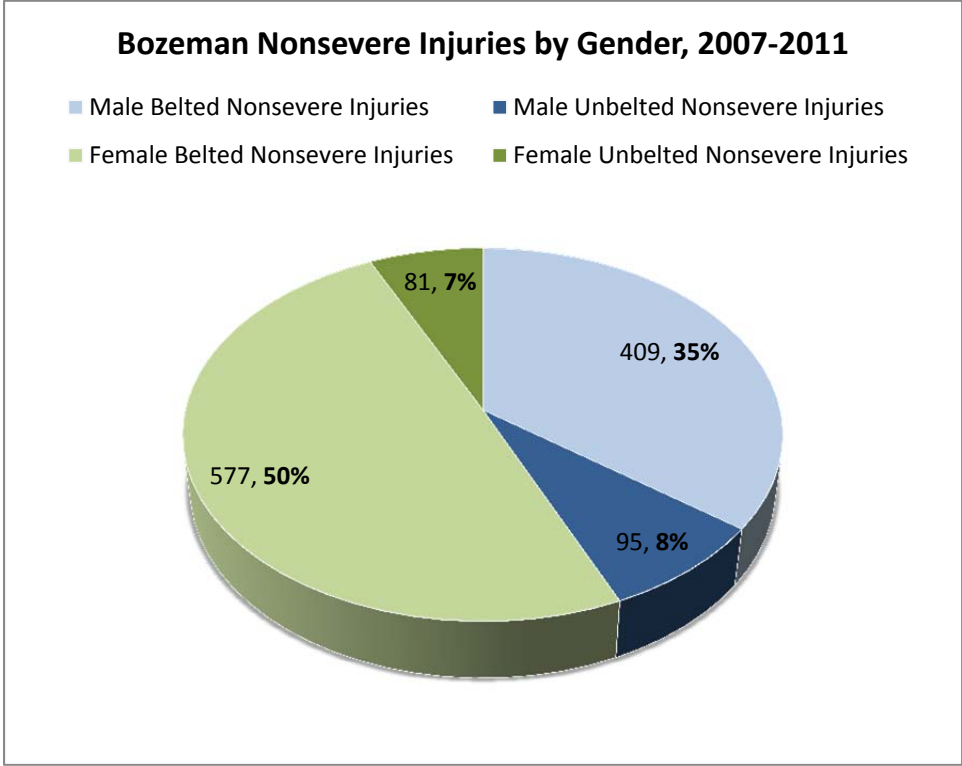
Figure 4.5 Bozeman Severe Injuries by Gender, 2007-2011



Source: MDT Safety Management System



Figure 4.6 Bozeman Nonsevere Injuries by Gender, 2007-2011



Source: MDT Safety Management System

Current Programs and Strategies in Bozeman

Below are current programs related to seat belt use in Bozeman.

Greater Gallatin Safety Coalition - Seatbelt use and child occupant protection programs, including Child Passenger Safety Technician training. Child Care safety seat clinics are offered. Contact: Jessi Malcolm at jess4cps@yahoo.com

National Child Passenger Safety Week, NHTSA-September 15-21 and National Seat Check Saturday is recognized in Bozeman and includes public notice of child car seat fittings.

State Teen Driver Safety week, Montana Office of Public Information coordinates press release statewide to school administrators and in partnership with BuckleUp MT Coalitions to promote awareness with local news station KBKZ focus on seat belt awareness.



Alive@25 courses – Defensive driving courses often are court-ordered courses instructed by Montana Highway Patrol trainers on driver safety for drivers age 15 to 25 who have received a traffic violation. Currently one course per month is offered in Bozeman. It is not required to be court ordered to attend. Contact: Jessi at Child Care Connections or Katie at Montana Highway Patrol at 406-587-4525.

Signage – City of Bozeman and some local businesses have installed some Buckle Up, It's the Law signs in the past around Bozeman. Currently OPI have partnered with the State Highway Traffic Safety Occupant Protection program and local BuckleUP Mt Coordinators to coordinate placement of Buckle Up signage featuring school mascot and colors at the access points of school and field parking lots. This awareness campaign is conducted with education assemblies and driver's education discussions and monitored with pre- and post seat belt use surveys.

Bozeman High School has established a Peer to Peer Traffic Safety Campaign including setting up a Team page on **Teens in the Drivers Seat**. This is an effective peer-to-peer education program for addressing a range of driving safety issues. Western Transportation Institute is developing a Montana-specific program to develop a "how-to" guide book for distribution to communities. Project research: Laura Stanley, Assistant Professor, WTI-MSU, PO Box 174250, Bozeman, MT 59715, phone 406-994-1399, laura.stanley@ie.montana.edu.

Potential Stakeholders/Partners for the Seat belts/Occupant Protection Use Emphasis Area

The following are agencies and organizations that can play a role in increasing transportation safety in Bozeman:

- Greater Gallatin Safety Coalition;
- Child Care Connections;
- Montana State University (MSU);
- Bozeman Police Department;
- Insurance companies;
- Chamber of Commerce;
- Bozeman School District;
- Bozeman High School;
- Bozeman Deaconess Hospital Trauma Center;
- Civic Groups;
- City Court Judge;



- News media; and
- Montana State University (MSU)-Engineering and Media Departments.

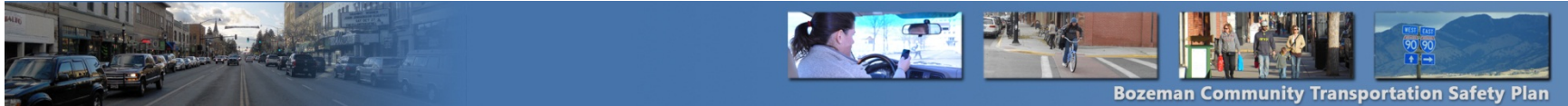
New Safety Strategies

A number of potentially useful strategies to reduce unbelted crashes were identified by stakeholders at the Safety Summit and are presented as follows:



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections
New Strategies

Strategy 1	Purpose	
Promote seat belt use, through broadened membership partners and increase activity of the Greater Gallatin Safety Coalition	The existing Greater Gallatin Safety Coalition is housed at Child Care Connections and includes seatbelt use and child occupant protection programs. This group should be grown and leveraged to lead and coordinate seat belt/occupant protection programs in greater Bozeman. The group can conduct outreach to a broader range of stakeholders and undertake new safety initiatives.	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Child Care Connections • Montana State University (MSU) • Civic groups, e.g. Lions Club • Law enforcement • Bozeman School District • Insurance companies • Emergency response stakeholders • Physicians • Bozeman Deaconess Hospital Trauma Center • Tavern Association • Media • Chamber of Commerce • Others 	<ul style="list-style-type: none"> • Staff time • Public service announcements <ul style="list-style-type: none"> ◦ National Highway Traffic Safety Administration Resources • Incentives for seat belt use awareness programs
	Activities/Action Steps	
<ul style="list-style-type: none"> • Define core Coalition membership, reach out to new members, and establish a regular meeting schedule and agenda. Conduct ongoing outreach programs in partnership with member agencies. Seek media coverage of activities. • Conduct outreach to major employers encouraging them to institute a policy requiring seat belt use by all employees. Potentially reach out via the Chamber of Commerce. • Develop and distribute PSAs. 		



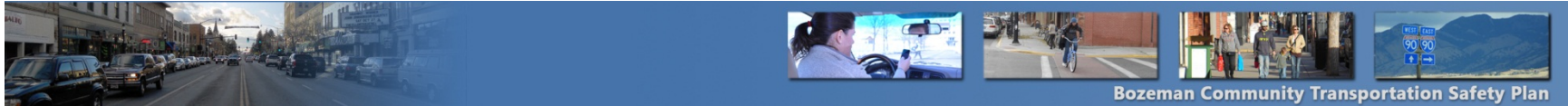
Emphasis Area: Seat belts/Occupant Protection Use Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections New Strategies					
Strategy 2	Purpose				
Conduct targeted youth outreach to increase seat belt use.	Young drivers have lower seat belt use and are also more likely to be involved in crashes as they are gaining driving experience. Seat belt use may mean the difference between sustaining a potentially serious injury in a crash or walking away uninjured. It is important to establish consistent seat belt use early in life so this becomes an ingrained habit. Peer-to-peer education is the most effective means of reaching and impacting young drivers.				
	<table border="1"> <thead> <tr> <th>Implementation Stakeholders/Partners</th> <th>Resources/Funding Needs</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman High School (Principal Robert Watson) • Western Transportation Institute (Laura Stanley) • City Court Judge • Montana Highway Patrol • Bozeman Police Department • Insurance companies • Others </td> <td> <ul style="list-style-type: none"> • Montana Office of Public Instruction • AAA Keys2Drive Parent-Teen Agreement and other resources http://teendriving.aaa.com/OK/ • OPI Driver's Education K.E.Y.S. Parent's Guide • Peer-to-Peer Traffic Safety Campaign Program • Alive @ 25 • Montana Traffic Education Association • Montana Highway Safety Office • National Highway Traffic Safety Administration Resources • Montana Highway Safety Office Grant application </td> </tr> </tbody> </table>	Implementation Stakeholders/Partners	Resources/Funding Needs	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman High School (Principal Robert Watson) • Western Transportation Institute (Laura Stanley) • City Court Judge • Montana Highway Patrol • Bozeman Police Department • Insurance companies • Others 	<ul style="list-style-type: none"> • Montana Office of Public Instruction • AAA Keys2Drive Parent-Teen Agreement and other resources http://teendriving.aaa.com/OK/ • OPI Driver's Education K.E.Y.S. Parent's Guide • Peer-to-Peer Traffic Safety Campaign Program • Alive @ 25 • Montana Traffic Education Association • Montana Highway Safety Office • National Highway Traffic Safety Administration Resources • Montana Highway Safety Office Grant application
	Implementation Stakeholders/Partners	Resources/Funding Needs			
	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman High School (Principal Robert Watson) • Western Transportation Institute (Laura Stanley) • City Court Judge • Montana Highway Patrol • Bozeman Police Department • Insurance companies • Others 	<ul style="list-style-type: none"> • Montana Office of Public Instruction • AAA Keys2Drive Parent-Teen Agreement and other resources http://teendriving.aaa.com/OK/ • OPI Driver's Education K.E.Y.S. Parent's Guide • Peer-to-Peer Traffic Safety Campaign Program • Alive @ 25 • Montana Traffic Education Association • Montana Highway Safety Office • National Highway Traffic Safety Administration Resources • Montana Highway Safety Office Grant application 			
Activities/Action Steps					
<ul style="list-style-type: none"> • Use the Peer-to-Peer Traffic Safety Campaign toolkit and other resources to establish a peer-to-peer program in the high school. Build on the Teens in the Driver's Seat program already established as a supplement to Driver's Education. • Incorporate methods for engaging parents, including contracts with teens on safe driving. Enforce state requirement that parents attend first driver's education course meeting. • Promote Alive@25 courses to the general population of young drivers, highlighting benefits of reduced car insurance when course is completed. Potentially offer course within high school. • Link activities with Teen Driver Awareness Week, and promote through partner networks. • At risk youth assigned community service to help conduct seat belt surveys with coalition member. 					



Bozeman Community Transportation Safety Plan

Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections
New Strategies

Strategy 3	Purpose	
Conduct outreach to Montana State University students on the importance of wearing seat belts in vehicles.	The age range considered young drivers at higher risk for injury crashes extends to age 24 and seat belt use is lower among younger drivers. The large population of MSU students in Bozeman is a key target audience to disseminate educational information about seat belt use.	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman Police Department • Montana State University (MSU) student council or appropriate groups • MSU Media & Graphic Design Departments • MSU Engineering Department/students • MSU Police • MSU Athletics Department • Others 	<ul style="list-style-type: none"> • Incentives for campus program (acknowledgement of seat belt use) • MDT Buckle Up Montana Survey forms http://www.opi.mt.gov/pdf/DriverEd/Buckle_Up_Seatbelt_Survey_Form.pdf • Montana Highway Safety Office • National Highway Traffic Safety Administration Resources • Montana Highway Safety Office Grant application
	Activities/Action Steps	
<ul style="list-style-type: none"> • Conduct peer-to-peer campaign, which could include: <ul style="list-style-type: none"> ○ Observation of seat belt use in parking lots and rewards for those buckled up ○ On-campus speaker (someone who survived a crash due to seat belt use) ○ Survey of student attitudes and practices about seat belt use and publicity of results ○ Student – developed print or video PSAs (potentially a contest) ○ Position crashed cars around campus with stories about the incidents ○ Increased enforcement of seat belt use around campus ○ MSU- Engineering & Media students to recreate the 3 Collisions of a Crash model and develop video clip and partner with Public Television to promote statewide 		



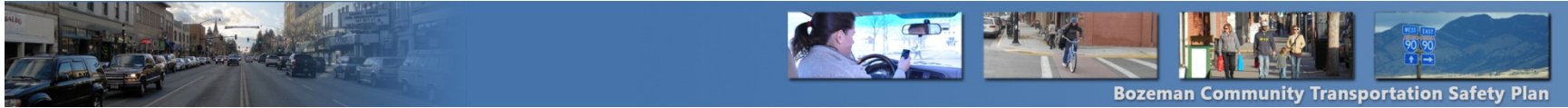
Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections
New Strategies

Strategy 4	Purpose	
Conduct general media outreach on the importance of seat belt use focusing on demographic groups with high rates of non-use. Complement outreach with targeted enforcement.	Wearing a seat belt is the easiest action a person can take to reduce the potential for a severe injury should a crash occur. However, on a state level more than 20 percent of drivers do not wear seat belts. Continued work is needed to change the culture so wearing a seat belt is expected and non-use is not tolerated.	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • News media • Law enforcement • Bozeman High Schools • Montana State University (MSU) Students and Faculty • Local Businesses • Chamber of Commerce • Others 	<ul style="list-style-type: none"> • Montana Office of Public Instruction • Resources to produce educational materials • NHTSA Seat Belt campaigns, http://www.nhtsa.gov/PEAK • Montana Highway Safety Office • National Highway Traffic Safety Administration Resources • Montana Highway Safety Office Grant application
	Activities/Action Steps	
<ul style="list-style-type: none"> • Target demographic groups (other than college students) with higher seat belt non-use rates with targeted messages to encourage use. <ul style="list-style-type: none"> ○ Potentially conduct outreach to middle aged males via civic organizations and chamber of commerce businesses. • Increase enforcement of seat belt non-use; coordinate with education campaigns. 		



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections
New Strategies

Strategy 5	Purpose	
Collaborate with judges to ensure the judicial process is supportive of increased enforcement of seat belt non-use.	Because Montana does not have a primary seat belt law, law enforcement personnel can issue a citation only when they have stopped a driver for another violation. Therefore a seat belt citation is often a second citation issued to a driver. It is not uncommon for judges to dismiss seat belt citations during the judicial process; however when this happens this communicates a lack of importance to drivers about seat belt use and drivers are not forced to deal with a real penalty. Additionally, law enforcement becomes reluctant to issue citations for seat belt non-use when they know the citations are likely to be dismissed. It is critical that the judicial system understands and supports efforts to increase seat belt use through increased enforcement and citations.	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Judges • Bozeman Police Department • Montana Highway Patrol • MT Traffic Safety Resource Prosecutor • Others 	<ul style="list-style-type: none"> • MT Traffic Safety Resource Prosecutor
	Activities/Action Steps	
<ul style="list-style-type: none"> • Engage the state’s traffic safety prosecutor to conduct training to local judges on the importance of upholding citations for seat belt non-use. • Promote issuance of seat belt citations by Bozeman Police, potentially via a roll-call briefing, reinforcing support by local judges. 		



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections
New Strategies

Strategy 6	Purpose	
<p>Enact a local ordinance making non-use of a seat belt a primary offense in Bozeman.</p>	<p>Because Montana does not have a primary seat belt law, law enforcement personnel can issue a seat belt citation only when they have stopped a driver for another violation. Therefore, it is much more difficult to enforce seat belt non-use as drivers may not feel they are likely to receive a citation. Local jurisdictions have the ability to pass an ordinance requiring seat belt use at the local level, which will be a primary offense (as was done with use of hand-held cell phones).</p>	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman Council of Commissioners • Bozeman Police Department • Chamber of Commerce • Local officials • Media • Bozeman residents • Other 	<ul style="list-style-type: none"> • Public outreach campaign time/ potential advertising resources. • Model ordinance, e.g. Seattle & Kansas City
	Activities/Action Steps	
<ul style="list-style-type: none"> • Research and develop a municipal ordinance making non-use of seat belts by all vehicle occupants a primary offense. • Conduct meetings with Council Commissioners to communicate about the significance of the issue using crash data and examples from other communities that have successfully implemented such a policy. • Conduct a public education and awareness campaign. • Introduce the ordinance for adoption by the Council of Commissioners. 		



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections
New Strategies

Strategy 7	Purpose	
<p>Conduct increased outreach about the need for vehicle passengers ages 4 to 9 to use booster seats.</p>	<p>While most people recognize the need for infants to be buckled into car seats, once children are a bit older drivers may not realize the importance of continued occupant protection. Seat belts in vehicles are positioned to restrain adults; therefore children need to sit on booster seats so the belt crosses their body at the correct height. State law requires use of a booster seat for children up to a specific height and weight (currently 6 years old <u>and</u> 60 pounds).</p>	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Greater Gallatin Safety Coalition • Bozeman Police Department • Montana Highway Patrol • Bozeman Deaconess Hospital • Physicians • Bozeman Fire Department • Gallatin County Sheriff Office • Head Start • Others 	<ul style="list-style-type: none"> • Public Service Announcements <ul style="list-style-type: none"> ◦ NHTSA Child Restraint Marketing Materials • Bozeman Deaconess Hospital • Greater Gallatin Safety Coalition • Bozeman Police Department • Montana Highway Patrol • Gallatin County Sheriff Office • Physicians • Bozeman Fire Department • Head Start • NHTSA website, Parents Central, http://www.safercar.gov/parents/index.htm
	Activities/Action Steps	
<ul style="list-style-type: none"> • Conduct education and outreach to key safety partners and stakeholders, including pediatricians, day care providers, and parents. • Conduct training of law enforcement on booster seat curriculum • Develop and distribute PSA campaign. 		



Occupant Protection Performance Measures

Performance measures will need to be documented by the Emphasis Area on a tracking form shown in Appendix E. Key performance measures to track progress in this Emphasis Area over time include:

- Number of unbelted persons involved in crashes in the Bozeman urban area;
- Number of unbelted fatal and incapacitating injuries in the Bozeman urban area; and
- Number of citations issued by law enforcement for nonuse of seat belts in the Bozeman urban area.



4.4 BICYCLE AND PEDESTRIAN CRASHES

From 2007 to 2011, there were 58 injury crashes in the Bozeman area involving a bicycle. Of those, seven crashes involved a fatality or incapacitating injury and 51 involved a nonsevere injury. During the same period, 33 injury crashes with pedestrians occurred. Five pedestrian crashes involved a fatality or incapacitating injury and 28 involved a nonsevere injury.

It is important that bicyclists, pedestrians and motorists understand their roles and responsibilities on the road and how to operate safely on the roadway together.





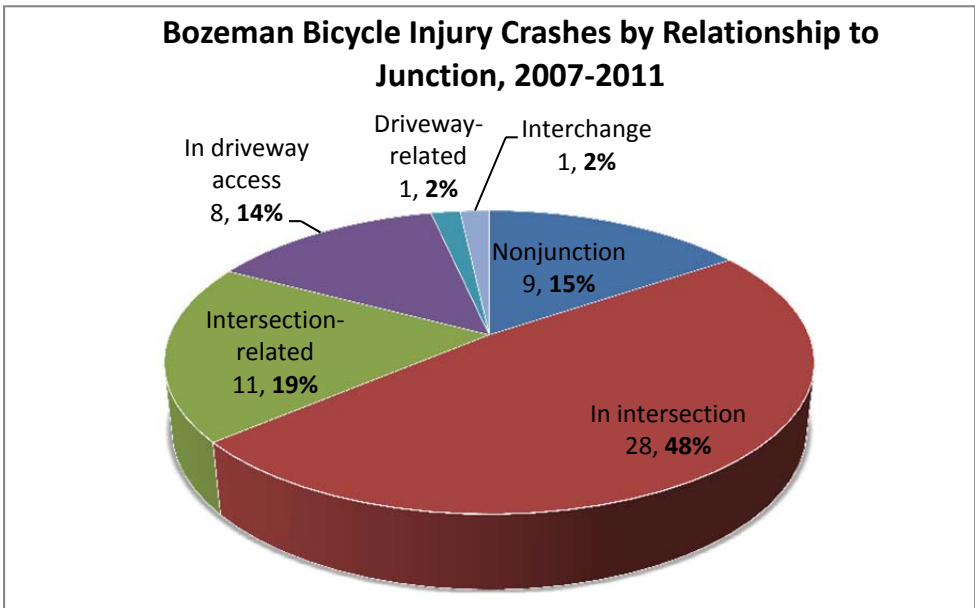
Crash data from 2007 to 2011 show that most (57 percent) severe bicycle crashes were not at an intersection while a slight majority (51%) of nonsevere injury crashes were at an intersection, as shown in Table 4.5 and Figure 4.7.

Table 4.5 Bozeman Bicycle Crashes by Relationship to Junction, 2007-2011

Bozeman Bicycle Crashes by Relationship to Junction, 2007-2011				
Bicycle Crashes by Relationship to Junction	Bicycle Severe Crashes	Bicycle Severe Crashes (%)	Bicycle Nonsevere crashes	Bicycle Nonsevere Injury Crashes (%)
Nonjunction	4	57%	5	10%
In intersection	2	29%	26	51%
Intersection-related	–	0%	11	22%
In driveway access	1	14%	7	14%
Driveway-related	–	0%	1	2%
Railroad crossing-related	–	0%	–	0%
Interchange	–	0%	1	2%
Not stated	–	0%	–	0%
TOTAL	7		51	

Source: Montana Department of Transportation Safety Management System

Figure 4.7 Bozeman Bicycle Injury Crashes by Relationship to Junction, 2007-2011



Source: Montana Department of Transportation Safety Management System



Most bicycle crashes (86% severe and 61% nonsevere) occurred where there is no separate bikeway, as shown in Table 4.6.

Table 4.6 Bozeman Bicycle Crashes by Bikeway, 2007 - 2011

Bozeman Bicycle Crashes by Bikeway, 2007 - 2011				
Crashes by Bikeway	Bicycle Severe Crashes	Bicycle Severe Crashes (%)	Bicycle Nonsevere Crashes	Bicycle Nonsevere Injury Crashes (%)
No bicycle involved	–	–	4	8
Bikeway separated from roadway	–	–	–	–
Bikeway adjacent to roadway	–	–	11	22%
No bikeway or bike route	6	86%	31	61%
Bike route	1	14%	–	–
Not stated	–	–	5	10%
TOTAL	7		51	

Source: MDT Safety Management System

The majority of bicyclists involved in injury crashes are under age 35, with 22 percent of nonsevere injury crashes involving children under age 15, and 27 percent involving bicyclists between the ages of 20 and 24 (Table 4.7 and Figure 4.8).

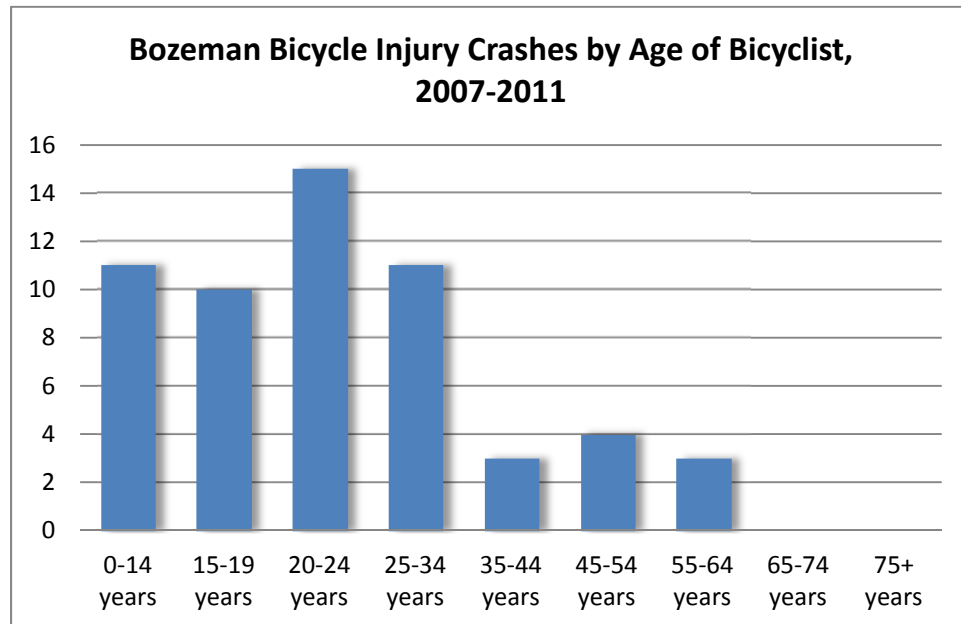
Table 4.7 Bozeman Bicyclist Crashes by Age of Bicyclist, 2007-2011

Bozeman Bicyclist Crashes by Age of Bicyclist, 2007-2011				
Bicycle Crashes by Age of Bicyclist	Bicycle Severe Crashes	Bicycle Severe Crashes (%)	Bicycle Nonsevere Crashes	Bicycle Nonsevere Injury Crashes (%)
0-14 years	–	0%	11	22%
15-19 years	3	38%	7	14%
20-24 years	2	25%	13	27%
25-34 years	1	13%	10	20%
35-44 years	1	13%	2	4%
45-54 years	1	13%	3	6%
55-64 years	–	0%	3	6%
65-74 years	–	0%	-	0%
75+ years	–	0%	-	0%
TOTAL	8		49	

Source: MDT Safety Management System



Figure 4.8 Bozeman Bicycle Injury Crashes by Age of Bicyclist, 2007-2011





The majority of severe pedestrian crashes were not at an intersection while most nonsevere injury crashes were at an intersection (Table 4.8)

Table 4.8 Pedestrian Crashes by Relationship to Junction, 2007-2011

Pedestrian Crashes by Relationship to Junction, 2007-2011				
Pedestrian Crashes by Relationship to Junction	Pedestrian Severe Crashes	Pedestrian Severe Crashes (%)	Pedestrian Nonsevere Crashes	Pedestrian Nonsevere Injury Crashes (%)
Nonjunction	3	60%	7	25%
In intersection	2	40%	16	57%
Intersection-related	-	0%	3	11%
In driveway access	-	0%	-	0%
Driveway related	-	0%	1	4%
Railroad crossing related	-	0%	-	0%
Interchange	-	0%	1	4%
Not stated	-	0%	-	0%
TOTAL	5		28	

Source: MDT Safety Management System

Four of five severe injury pedestrian crashes occurred during dark conditions (Table 4.9, Figure 4.9).

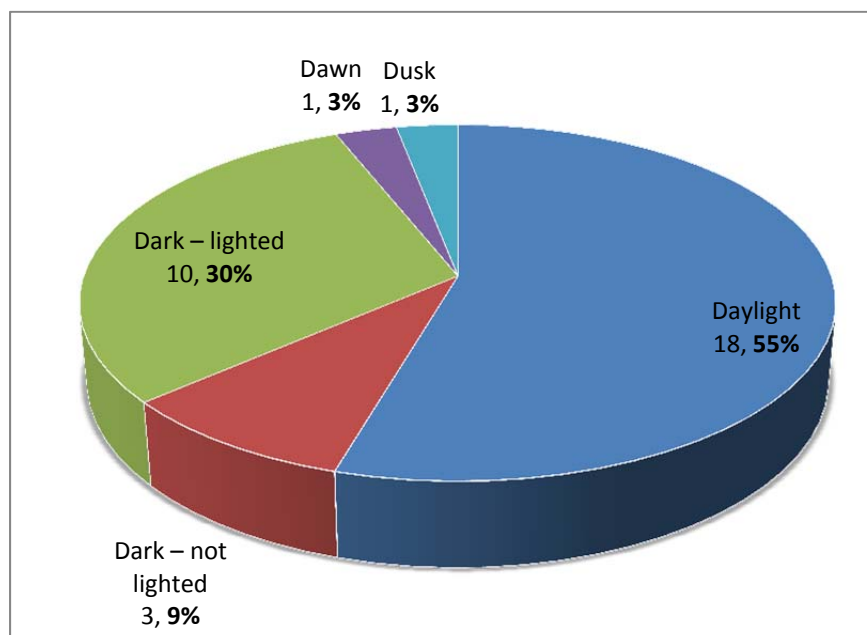
Table 4.9 Bozeman Pedestrian Crashes by Light Condition, 2007-2011

Bozeman Pedestrian Crashes by Light Condition, 2007-2011				
Pedestrian Crashes by Light Condition	Pedestrian Severe Crashes	Pedestrian Severe Crashes (%)	Pedestrian Nonsevere Crashes	Pedestrian Nonsevere Injury Crashes (%)
Daylight	1	20%	17	61%
Dark – not lighted	3	60%	-	-
Dark – lighted	1	20%	9	32%
Dawn	-	-	1	4%
Dusk	-	-	1	4%
TOTAL	5		28	

Source: MDT Safety Management System



Figure 4.9 Bozeman Pedestrian Crashes by Light Condition, 2007-2011



Current Bicycle and Pedestrian Safety-Oriented Programs and Strategies in Bozeman

Below is a list of some of the safety activities underway in the community to address bicycle and pedestrian safety.

- Bozeman High School** has set up a Team page on the Teens in the Driver’s Seat program at <http://www.t-driver.com/first-annual-montana-driving-the-message-contest/>. This is an effective peer-to-peer education program for addressing a range of driving safety issues. The Western Transportation Institute at Montana State University is developing a Montana-specific program to develop a “how-to” guide book for distribution to communities.
- Alive@25 courses** - Defensive driving course often are court-ordered courses instructed by Montana Highway Patrol trainers on driver safety for drivers age 15 to 25 who have received a traffic violation. Currently one course per month is offered in Bozeman. It is not required to be court ordered to attend. Contact: Jessi at Child Care Connections or Katie at Montana Highway Patrol at 406-587-4525.
- Transportation Alternatives Program** - MAP-21 establishes a new program to provide for a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. The Transportation Alternative (TA) replaces the funding from pre-MAP-21 programs including Transportation Enhancements and Safe Routes to School, wrapping them into a single funding source.



The law requires selection of projects through a competitive process: http://www.mdt.mt.gov/mdt/ta_application.shtml.

- The **Pedestrian Traffic and Safety Committee** was created under an Interlocal Agreement with the Montana Department of Transportation, the City of Bozeman and Gallatin County. The Committee is advisory and acts as a sounding board for proposals advanced to the Transportation Coordinating Committee.
- The **Bozeman Area Bicycle Advisory Board (BABAB)** was created by the City Commission in 1990. BABAB's purpose is to recommend safe bicycle practices throughout Bozeman in regard to enhanced bicycle circulation and design, community-wide bicycle education and safety programs, and other matters relating to bicycling in the Bozeman area.

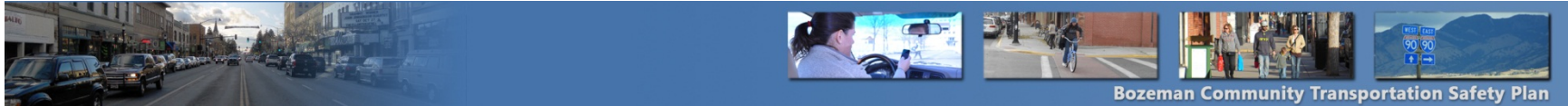
Potential Stakeholders/Partners for the Bicycle and Pedestrian Crashes Emphasis Area

A number of local partners can play a role in reducing crashes involving bicyclists and pedestrians, including:

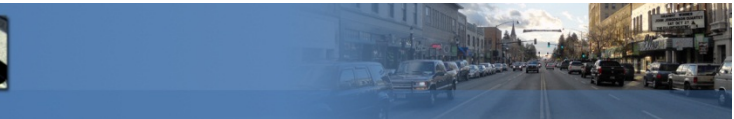
- Bozeman Area Bicycle Advisory Board (BABAB);
- Pedestrian Traffic and Safety Advisory Committee;
- Collin's Coalition;
- City of Bozeman;
- Streamline;
- Gallatin Valley Bicycle Club;
- Bicycle Shops;
- Bozeman School System;
- Montana State University; and
- Bozeman Police Department.

New Bicycle and Pedestrian Safety Programs and Strategies for Bozeman

The core result of this safety planning process is to determine what more can be done to improve transportation safety in Bozeman. A number of potentially useful strategies were identified by stakeholders at the Safety Summit and are presented below.

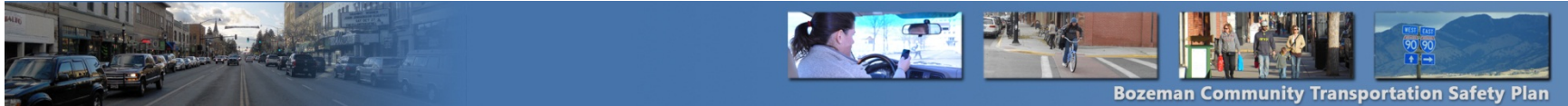


Emphasis Area: Bicycle and Pedestrian Crashes Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee New Strategies					
Strategy 1	Purpose				
Increase bicycle and pedestrian infrastructure in Bozeman, including bicycle lanes, sidewalks, signage and pavement markings.	Safety is improved when all road users can have a set of consistent expectations about user behaviors. It is important to ensure that whenever appropriate and possible, bicycle and pedestrian facilities are installed on existing, new and improved roadways. Infrastructure may include sidewalks, bicycle lanes, signage, traffic signals, and pavement markings. Particular attention may be needed at intersections, where vehicles cross paths and the potential for conflict is increased.				
	<table border="1"> <thead> <tr> <th>Implementation Stakeholders/Partners</th> <th>Resources/Funding Needs</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> City of Bozeman Bozeman Area Bicycle Advisory Board (BABAB) Pedestrian and Traffic Safety Committee Montana Department of Transportation (MDT) Others </td> <td> <ul style="list-style-type: none"> City of Bozeman BABAB Pedestrian and Traffic Safety Committee Collin's Coalition MDT NACTO Urban Bikeway Design Guide and relationship to Manual on Uniform Traffic Control Devices http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/mutcd_bike.cfm Highway Safety Manual Crash Modification Factors Clearinghouse </td> </tr> </tbody> </table>	Implementation Stakeholders/Partners	Resources/Funding Needs	<ul style="list-style-type: none"> City of Bozeman Bozeman Area Bicycle Advisory Board (BABAB) Pedestrian and Traffic Safety Committee Montana Department of Transportation (MDT) Others 	<ul style="list-style-type: none"> City of Bozeman BABAB Pedestrian and Traffic Safety Committee Collin's Coalition MDT NACTO Urban Bikeway Design Guide and relationship to Manual on Uniform Traffic Control Devices http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/mutcd_bike.cfm Highway Safety Manual Crash Modification Factors Clearinghouse
	Implementation Stakeholders/Partners	Resources/Funding Needs			
	<ul style="list-style-type: none"> City of Bozeman Bozeman Area Bicycle Advisory Board (BABAB) Pedestrian and Traffic Safety Committee Montana Department of Transportation (MDT) Others 	<ul style="list-style-type: none"> City of Bozeman BABAB Pedestrian and Traffic Safety Committee Collin's Coalition MDT NACTO Urban Bikeway Design Guide and relationship to Manual on Uniform Traffic Control Devices http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/mutcd_bike.cfm Highway Safety Manual Crash Modification Factors Clearinghouse 			
Activities/Action Steps					
<ul style="list-style-type: none"> Conduct Road Safety Audit (RSA) Training. Potentially develop a program to conduct a set number of Bicycle or Pedestrian RSAs annually. Implement proven effective countermeasures identified in RSAs, particularly low cost measures. Based on the bicycle and pedestrian infrastructure needs defined in the 2007 Bozeman Area Transportation Plan, Road Safety Audits and other input, make improvements where needed, ensuring proven effective safety measures are incorporated. Document and communicate improvements made to date. Improve functionality and use of existing infrastructure for bicyclists and pedestrians by clearly defining and communicating "rules of the road" including policies for use of two-way trails and appropriate behavior at transition points where bicycle lanes and sidewalks end. This would include signing and marking. Ensure consistent bicycle markings at all intersections. In particular ensure that clear direction is provided to bicyclists regarding proper navigation of roundabouts. Evaluate signal timing and yellow phase intervals to ensure signals are optimized for maximum safety. Consult guidance from the FHWA Nine Proven Safety Countermeasures. Research potential use of impact fees for funding of bicycle and pedestrian facilities 					



Emphasis Area: Bicycle and Pedestrian Crashes
Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee
New Strategies

Strategy 2	Purpose	
Reduce impaired bicycling and walking.	<p>There is a perception that if a person is impaired, and they are not driving a motor vehicle there is no safety issue; however many bicycle and pedestrian crashes involve impairment by the pedestrian or bicyclist. Reduce the risk of an impaired bicyclist or pedestrian being involved in a crash through education.</p>	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • City of Bozeman • Streamline • MSU • BABAB • Pedestrian and Traffic Safety Committee • Collin's Coalition • MDT • Community Alcohol Coalition • Others 	<ul style="list-style-type: none"> • Costs to develop and implement education campaign • Impaired Pedestrian Education, Loyola University Health System, http://www.stitch.luc.edu/depts/injprev/Transprt/tran4-03.htm • Taxi service for rides • Designated driver program • California State Law on Impaired Cycling
Activities/Action Steps		
<ul style="list-style-type: none"> • Conduct education campaign about the risks of walking or riding a bicycle while impaired • Promote alternative transportation options for impaired pedestrians or bicyclists, such as the late-night Streamline, free rides home, taxis, designated drivers • Develop education and awareness campaign • Consider development and adoption of an impaired bicycling ordinance 		



Emphasis Area: Bicycle and Pedestrian Crashes Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee New Strategies					
Strategy 3	Purpose				
Increase reporting of bicycle and pedestrian crashes.	<p>The state crash database is based on crash reports submitted by law enforcement and includes all crashes if there is a crash report filled out and the crash results in more than \$1,000 in damage or an injury. If those involved in a crash do not call police and a crash report is not developed, the crash is not included in the crash database; therefore, bicycle and pedestrian crashes may be underreported. Because crash data is a key source for defining future safety improvements, it is important to document bicycle crashes including those resulting in property damage only to help identify and address areas of concern. By comprehensively reporting bicycle and pedestrian crashes, improved data on safety issues will be available.</p>				
	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Implementation Stakeholders/Partners</th> <th style="width: 50%;">Resources/Funding Needs</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Bike Walk Montana • Gallatin Valley Bicycle Club • Bicycle Shops • Montana State University (MSU) • Bozeman school system • Bozeman Area Bicycle Advisory Board (BABAB) • Pedestrian and Traffic Safety Committee • Collin's Coalition • Bicyclists • Bozeman Police Department </td> <td> <ul style="list-style-type: none"> • Printed flyer/sticker to promote online reporting of bicycle and pedestrian incidents • Bike Walk Montana • Gallatin Valley Bicycle Club • Bicycle Shops • MSU • Bozeman School District • BABAB • Bozeman Bike Kitchen • Bicyclists </td> </tr> </tbody> </table>	Implementation Stakeholders/Partners	Resources/Funding Needs	<ul style="list-style-type: none"> • Bike Walk Montana • Gallatin Valley Bicycle Club • Bicycle Shops • Montana State University (MSU) • Bozeman school system • Bozeman Area Bicycle Advisory Board (BABAB) • Pedestrian and Traffic Safety Committee • Collin's Coalition • Bicyclists • Bozeman Police Department 	<ul style="list-style-type: none"> • Printed flyer/sticker to promote online reporting of bicycle and pedestrian incidents • Bike Walk Montana • Gallatin Valley Bicycle Club • Bicycle Shops • MSU • Bozeman School District • BABAB • Bozeman Bike Kitchen • Bicyclists
	Implementation Stakeholders/Partners	Resources/Funding Needs			
	<ul style="list-style-type: none"> • Bike Walk Montana • Gallatin Valley Bicycle Club • Bicycle Shops • Montana State University (MSU) • Bozeman school system • Bozeman Area Bicycle Advisory Board (BABAB) • Pedestrian and Traffic Safety Committee • Collin's Coalition • Bicyclists • Bozeman Police Department 	<ul style="list-style-type: none"> • Printed flyer/sticker to promote online reporting of bicycle and pedestrian incidents • Bike Walk Montana • Gallatin Valley Bicycle Club • Bicycle Shops • MSU • Bozeman School District • BABAB • Bozeman Bike Kitchen • Bicyclists 			
Activities/Action Steps					
<ul style="list-style-type: none"> • Promote self-reporting of crashes using the Montana Highway Patrol vehicle Crash report "white form" <ul style="list-style-type: none"> ○ Conduct outreach via bicycle shops, Bike to Work Week, school system, MSU, Bozeman Bike Kitchen, Bike Swap, etc. • Work with law enforcement to develop process and procedures for tracking and maintaining bicycle and pedestrian crashes that may not meet reporting thresholds. • Obtain and evaluate non-motorized incident data for Bozeman from Bike Walk Montana to supplement state and city crash data. 					

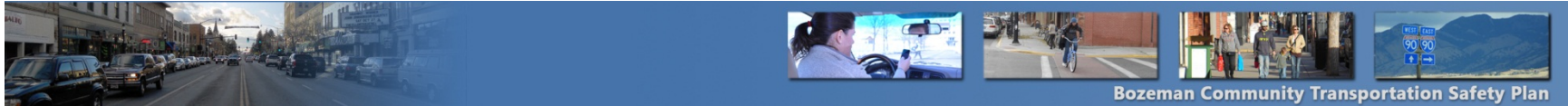


Emphasis Area: Bicycle and Pedestrian Crashes

Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee

New Strategies

Strategy 4	Purpose	
Conduct public education about safe operating procedures between bicyclists and pedestrians and vehicles	<p>Many drivers and bicyclists do not fully understand their respective legal rights and responsibilities on the road. Often drivers express hostility at bicyclists, despite bicyclists' right to ride on any public road. At the same time, some bicyclists ride without following rules of the road and behave in unpredictable ways, increasing the risk of a crash. Both vehicles and bicyclists need to respect each other and share the road safely. Education may take the form of developing and distributing printed materials, developing local public service announcements, education on safe operating procedures, or other communications.</p>	
	Implementation Stakeholders/Partners	Resources/Funding Needs
	<ul style="list-style-type: none"> • Gallatin Valley Bicycle Club • Bozeman Police Department • Local Television Stations • Montana State University (MSU) • Bozeman School District elementary, middle, and high schools • Bozeman Bike Kitchen • Montana Bicycle and Pedestrian Coordinator 	<ul style="list-style-type: none"> • Funding to develop educational materials • Utilize Share the Road brochure developed by MDT http://www.mdt.mt.gov/publications/docs/brochures/share_the_road.pdf • Resources for video PSA development • Partnership for broadcast of video PSAs, e.g. NBC affiliate • Missoula Bike/Ped Coordinator
Activities/Action Steps		
<ul style="list-style-type: none"> • Develop video PSAs in partnership with local television stations, MSU film department, or the high school media department • Distribute materials to both the general driving public and bicyclists, pedestrians and other users via the City of Bozeman website, partner agencies, schools, bike shops, bicycling enthusiast groups, etc. • Initiate a Bicycle Ambassadors program by which individuals are employed to ride around town and initiate educational conversations with people who are bicycling or walking unsafely. (Adapt Missoula model) • Publicize and promote existing transportation safety laws including bicycle and pedestrian laws such as required use of headlights and tail lights by bicycles during dark conditions. • Continue K-8 school traffic education program, which has a bicycle focus in grades 4-5 and pedestrian focus in K-3. • Provide education about the safety value of visible, reflective clothing for bicyclists and pedestrians. 		



Emphasis Area: Bicycle and Pedestrian Crashes Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee New Strategies	
Strategy 5	Purpose
Increase enforcement of safe behaviors by both drivers around bicyclists and pedestrians and by bicyclist and pedestrians as they enter into the transportation mix.	<p>To increase safety of bicyclists, pedestrians and motorists sharing the roadways, it is important that they believe there will be consequences for unsafe behavior. Increased enforcement of violations by both motorists and users of nonmotorized transportation will raise awareness that safe behavior is expected in Bozeman and unsafe behavior will not be tolerated. Interactions between the police and the drivers/cyclists also provide opportunities for education. If improved laws governing safe vehicular operation around bicyclists and pedestrians are enacted, it is easier to enforce safe behavior.</p>
	Implementation Stakeholders/Partners
	<ul style="list-style-type: none"> • Gallatin Valley Bicycle Club • Bozeman Police Department • Local Television Stations • Montana State University (MSU) • Bozeman School District elementary, middle, and high schools • Bozeman Bike Kitchen • Montana Bicycle/Pedestrian Coordinator • Greater Gallatin Safety Coalition
	Resources/Funding Needs
	<ul style="list-style-type: none"> • Enforcement dedicated to violations of motorized-nonmotorized safe practices • Educational materials for dedicated campaigns targeting violations involving non-motorized transportation • Bozeman Police Department • Montana Highway Patrol • Missoula Bike/Ped Coordinator
	Activities/Action Steps
	<ul style="list-style-type: none"> • Conduct periodic pedestrian safety enforcement by which a plainclothes police officer crosses the street using a crosswalk and a partner tickets vehicle operators that do not yield to the pedestrian decoy. • Pursue legislation to improve bicycle and pedestrian safety such as requiring vehicles to provide a 3-foot margin when passing bicycles and requiring vehicles to stop for pedestrians in a crosswalk (versus only yield). • Consider increasing fines associated with violations involving non-motorized transportation users. • Increase the amount of enforcement by Bozeman P.D. on bicycles, which facilitates educational conversations in the course of duty. • Educate and enforce required use of headlights and tail lights by bicyclists • Educate and enforce the importance of proper positioning of pedestrian walking along roadway (against traffic) and bicyclist riding along roadway (with traffic).



Bicycle and Pedestrian Safety Performance Measures

Performance measures provide a means of assessing progress toward achieving the overall goal of the Emphasis Area and whether the strategies being undertaken are achieving their intended results. Some overall performance measures can be applied to determine how effective the collective strategies within an Emphasis Area are performing. In addition, individual performance measures may be appropriate for specific strategies and can be developed by the Emphasis Area team. Performance measures will need to be documented on a tracking form shown in Appendix E.

For the Bicycle and Pedestrian Crashes Emphasis Area, the following performance measures should be considered for tracking by the Emphasis Area team:

- Annual number of bicyclists and pedestrians involved in crashes in the Bozeman urban area;
- Annual number of bicyclist and pedestrian fatalities in the Bozeman urban area; and
- Annual number of bicyclist and pedestrian serious injuries in the Bozeman urban area.





5.0 Implementation

Completion of the Bozeman Community Transportation Safety Plan is just the first step toward improving the safety of community residents on Bozeman roadways. For any change to substantively occur, the plan must be *implemented*. The momentum achieved through the TSAC and at the Safety Summit must be maintained to bring safety strategies to fruition.

A committed group of stakeholders – the Transportation Safety Advisory Committee (TSAC)– has been established. All members involved have provided their knowledge, expertise, and best ideas and commitment to this safety plan. Development of this safety planning process was accomplished by the safety partners and stakeholders who make up the TSAC. Throughout plan implementation, TSAC members will need to continue to provide overarching guidance, and be involved in implementation of individual strategies.

The TSAC will provide oversight of the safety effort and report progress to the Transportation Coordinating Committee. Each Emphasis Area will report progress to the TSAC quarterly. Implementation of each strategy listed above must be tracked and the performance measures monitored to ensure progress is being made. The TSAC will report results to MDT annually.

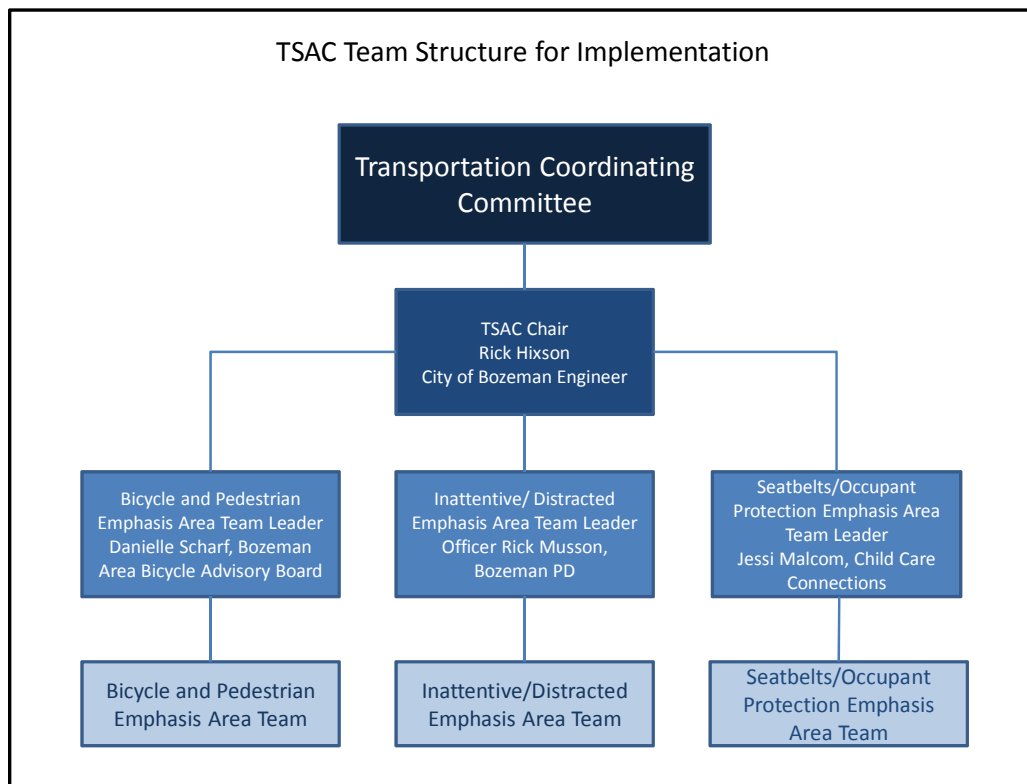
Key implementation steps to be undertaken by each Emphasis Area team include the following activities:

1. Chairs identify the appropriate partners to serve on the Emphasis Area teams and coordinate regular team meetings;
2. Teams develop safety targets for each Emphasis area, e.g. number of fatal and injury crashes involving inattention, unbuckled passengers or bicycles and pedestrians;
3. Emphasis Area teams identify a strategy leader to carryout each Emphasis Area strategy and associated action steps;
4. Emphasis Area teams conduct regular (e.g. monthly) meetings to coordinate strategy implementation and report progress;
5. Emphasis Area teams report to the TSAC Chairperson, the Bozeman city engineer, on a regular basis (e.g. quarterly); and
6. Emphasis Area teams should develop new strategies for each Emphasis Area as strategies are put into place.



Figure 5.1 shows the TSAC organizational structure for implementation.

Figure 5.1 TSAC Team Structure for Implementation



5.1 TRANSPORTATION SAFETY ADVISORY COMMITTEE ROLE

The purpose of the Transportation Coordinating Committee (TCC) is to develop and keep current transportation planning as an integral part of comprehensive regional planning for the Bozeman area. The Bozeman City Engineer is the Bozeman Transportation Safety Advisory Committee chair who will ensure implementation of the CTSP and is tasked with reporting on implementation and progress updates to the TCC and MDT CTSP Coordinator. The TSAC will establish three Emphasis Area teams to work on carrying out strategies.

Every three months, the Emphasis Area team leaders will present a status update of plan implementation to the City Engineer so that a progress update can be provided to the TCC. Reporting should include details on which strategy activities are underway, what activities have been accomplished, safety performance measures and discussion of any challenges that may require additional community support.



5.2 PROGRESS REPORTING

Regular progress tracking and reporting is essential to the CTSP's success. Monitoring progress allows the City Engineer, the TSAC, the TCC and MDT to assess and modify strategies as necessary to accomplish the Bozeman's Community Transportation Safety Plan goal. Tracking and reporting progress of Emphasis Area strategies and performance measures to MDT must be completed by the point of contact by December 31st of each year. Performance measures the TCC and TSAC Emphasis Area teams should track annually are:

Three-year rolling average of fatalities and injuries toward reaching the goal of reducing fatalities and injuries by 25 percent between 2013 and 2018, from 213 to 160 fatalities and injuries.

Total crashes, fatalities and incapacitating injuries involving:

- Inattentive /distracted driving;
- Lack of proper occupant protection; and
- Pedestrians and bicyclists.

The City of Bozeman, the City Engineer, TSAC, and the TCC will update the Bozeman Community Transportation Safety Plan as warranted to improve safety and reduce the number and severity of crashes in Bozeman. A suggested reporting template is included in this plan as Appendix E.



Appendix A

TSAC Membership

Rick Hixson, TSAC Chair- Bozeman City Engineer

Chris Kukulsi, City of Bozeman, City Manager

Rick Musson, Bozeman Police Department

Jessi Malcolm, Childcare Connections

Danielle Scharf, Pedestrian and Traffic Safety Committee

Rob Bukvich, Montana Department of Transportation – Engineering

Robert Lashaway, Montana State University, University Services

Jenna Caplette, Gallatin County DUI Task Force

Bill Cochran, Bozeman Area Bicycle Advisory Board

Rebecca Gleason, Bozeman Area Bicycle Advisory Board

Tom Keck, Collin’s Coalition

Taylor Lonsdale, Safe Routes to School/Bike&Walk Montana

Sam Miller, Bozeman Deaconess Hospital

Ron Price, Chief, Bozeman Police Department

Vance Ruff, Bozeman School District Transportation

Chris Saunders, City of Bozeman

John Vandelinder, City of Bozeman Public Services Department

Ralph Zimmer, Pedestrian and Traffic Safety Committee

Craig Woolard, City of Bozeman Public Works



Appendix B

Safety Summit Participants

Sean Becker, Bozeman Mayor

Rick Hixson, City of Bozeman

Rick Musson, Bozeman Police Department

Jessi Malcolm, Childcare Connections

Danielle Sharf, Pedestrian and Traffic Safety Committee

Katie Bark, Bozeman resident

Rob Bukvich, Montana Department of Transportation-Engineering

Jenna Caputo, Gallatin County DUI Task Force

Bill Cochran, Bozeman Area Bicycle Advisory Board

Lisa Curry, Child Care Connections

Jason Delmue, Bozeman Area Bicycle Advisory Board

Dave Dolph, Bozeman resident

Frank Fosfer, Bozeman resident

Tommi Franscioni, Bozeman Police Department

Nate Gaulker, Bozeman Police Department

Rebecca Gleason, Bozeman Area Bicycle Advisory Board

Jodi Hausen, Bozeman Chronicle

Tom Keck, Collin's Coalition

Steve Kurk, City of Bozeman

Patrick McLaughlin, Montana Highway Patrol

Deneen Pancare, Child Care Connections

Jen Peterson, Bozeman Area Bicycle Advisory Board

Ralph Zimmer, Pedestrian and Traffic Safety Committee

John Preston, Bozeman resident

Scott Swanson, Bozeman resident

John Vandelind, City of Bozeman

Gary Vodehnal, Gallatin Valley Land Trust



Justin Watkins, Bozeman resident

Audrey Wennink, Cambridge Systematics

Pam Langve-Davis, Montana Department of Transportation-Planning

Carol Strizich, Montana Department of Transportation



Appendix C

Safety Resources

Distracted/Inattentive Driving

Network of Employers for Traffic Safety (NETS) – distracted driving, impaired driving, employer information <http://trafficsafety.org/>

National Safety Council- Distracted Driving, Driver Safety, Teen Driving (Alive @ 25) http://www.nsc.org/safety_road/Pages/safety_on_the_road.aspx

U.S. DOT Distracted Driving Web Site – <http://www.distraction.gov/>

Texting & Driving Utah video – <http://ut.zerofatalities.com/texting.php>

Hands Free Info – <http://handsfreeinfo.com/>

State Farm – Teen Driving Site; tips, facts, discount funding, <http://www.betterteendriving.com/>

MDT- Highway Safety Office, Distracted Driving Webpage – http://www.mdt.mt.gov/safety/distracted_driving.shtml

AT&T Distracted Driving Prevention Webpage – pledge, download AT&T Drive Mode App <http://www.att.com/gen/press-room?pid=2964>

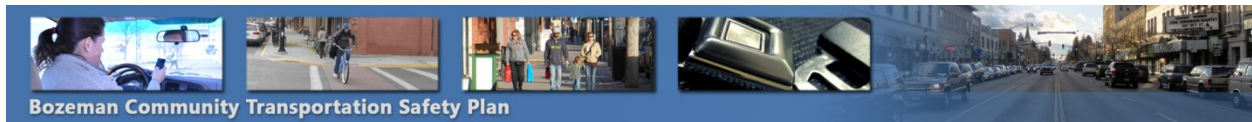
Verizon Distracted Driving Prevention App – http://www.getizup.com/index.php/what_is_izup/overview?PHPSESSID=

Insurance Institute for Highway Safety – Q&A on Cell phones and driving http://www.iihs.org/research/topics/cell_phones.html

Countermeasures That Work: A Highway Countermeasure Guide for State Highway Safety Offices
<http://www.ghsa.org/html/publications/countermeasures.html>

AARP Driver Safety Program – http://www.aarp.org/home-garden/transportation/driver_safety/

The Century Council's I Know Everything Program – <http://iknoweverything.centurycouncil.org/node/2>



Occupant Protection

Buckle Up Montana – <http://buckleup.mt.gov/>

MDT Highway Safety Office Occupant Protection Webpage–
<http://www.mdt.mt.gov/safety/occupant.shtml>

Countermeasures That Work: A Highway Countermeasure Guide for State Highway Safety Offices
<http://www.ghsa.org/html/publications/countermeasures.html>

NCHRP 500 Series Volume 11: A Guide for Increasing Seat belt Use
<http://safety.transportation.org/guides.aspx?cid=28>

National Highway Traffic Safety Administration Occupant Protection Web Site –
<http://www.nhtsa.gov/Driving+Safety/Occupant+Protection>

Bicycle/Pedestrian

Pedestrian and Bicycle Information Center
<http://www.pedbikeinfo.org/>

MDT Bicycle and Pedestrian Coordinator,
<http://www.mdt.mt.gov/travinfo/bikeped/>

FHWA Bicycle and Pedestrian Safety
http://safety.fhwa.dot.gov/ped_bike/

Bike Walk Montana
<http://www.bikewalkmontana.org/>

Crash Modification Factors Clearinghouse
<http://www.cmfclearinghouse.com>

NCHRP 500 Series Volume 18: A Guide for Reducing Crashes Involving Pedestrians
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_500v18.pdf

NCHRP 500 Series Volume 10: A Guide for Reducing Collisions Involving Pedestrians
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_500v10.pdf

Countermeasures That Work: A Highway Countermeasure Guide for State Highway Safety Offices
<http://www.ghsa.org/html/publications/countermeasures.html>



Other Resources

MDT Community Transportation Safety Plan: <http://www.mdt.mt.gov/safety/plans-programs/community-plans.shtml>

MDT -Comprehensive Highway Safety Plan <http://www.mdt.mt.gov/safety/plans-programs/chsp.shtml>

MDT Highway Safety Grants & Funding; <http://www.mdt.mt.gov/safety/grants.shtml>

Insurance Institute for Highway Safety – research, laws, vehicle safety ratings
<http://www.iihs.org/>

MDT Highway Safety Office Young Drivers Webpage –
http://www.mdt.mt.gov/safety/young_drivers.shtml

Network of Employers for Traffic Safety – <http://trafficsafety.org/>

Governors Highway Safety Association – <http://www.ghsa.org/>

Teen Drivers – <http://www.nhtsa.gov/Teen-Drivers>

SADD (Students Against Destructive Decisions) – underage drinking, other drug use, impaired driving and other destructive decisions
<http://www.sadd.org/>

NOYS (National Organizations for Youth Safety) – underage drinking, distracted driving, seatbelts
<http://www.noys.org/>

NOYS Youth Traffic Safety Toolkit:
<http://www.mdt.mt.gov/safety/docs/2010-youth-traffic toolkit1.pdf>

Family Guide to Teen Driver Safety:
http://www.mdt.mt.gov/safety/docs/family_guide_teen.pdf

National Safety Council Teen Driver Safety Information
http://www.nsc.org/safety_road/teendriving/pages/teen_driving.aspx

Teen Driver Safety Poster
http://www.nsc.org/safety_road/TeenDriving/Documents/83679A_TeenDriver-Safety-Poster_Eng_NoLogo.pdf

Teens and Work Zones: <http://www.workzonedriver.org/Teens/index.htm>

Allstate Keep the Drive campaign: <http://www.allstatefoundation.org/keep-the-drive?CID=OTC-DNSR-BO-110601&att=keepthedrive.com>

Stop The Texts – Stop the Wrecks <http://www.stoptextsstopwrecks.org/#home>



Teen Driving Web Site: <http://www.teendriving.com/>

Alive@25 Program

http://www.nsc.org/products_training/Products/MotorVehicleSafety/Pages/Aliveat25ParentProgram.aspx

Department of Justice Driver Licensing Information: <https://doj.mt.gov/driving/driver-licensing/>



Appendix D

Glossary

Data Sources

All the crash data contained in this report, except the Native American fatality data, was gathered from reports run in the spring of 2012 from the MT Department of Transportation, Safety Management System. The Native American fatality data is from the Fatality Analysis Reporting System.

Injury Severity

Fatal Injury: Any injury that results in death.

Incapacitating Injury: Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred.

Crash Severity

Fatal Crash: Any injury crash that results in one or more fatal injuries.

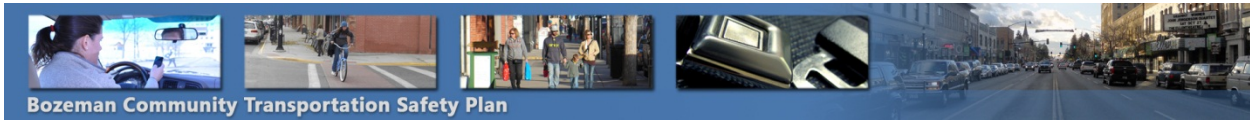
Incapacitating Injury Crash: Any injury crash, other than a fatal crash, that results in one or more incapacitating injuries.

Property Damage Only Crash: Any non-injury crash in which damage to the property of a person exceeds \$1,000.

Crash-Related Emphasis Areas

Run-Off-The-Road

Any crash where the first harmful event was overturn, immersion, other non-collision, collisions with motor vehicle on another roadway or collision with any fixed object. There is no specific code for road departure in the Montana crash report, so this provides a way to estimate the number of run-off-the-road crashes where a vehicle.



Alcohol/Drug-Related

Any crash where at least one driver involved in the crash is determined to have had a BAC of 0.01g/dL or higher OR if police indicate on the crash report that there is evidence of alcohol and/or drugs present. This does not necessarily mean that the driver was tested for alcohol and/or drugs.

Young Drivers

Any crash involving at least one driver from 16 to 24 years-old. This does not imply the young driver is at fault in the crash.

Older Drivers

Any crash involving at least one driver over the age of 64 years. This does not imply the older driver is at fault in the crash.

Trucks

Any crash involving at least one vehicle with a truck body-type and over 10,000 pounds gross vehicle weight rating, including single unit trucks and truck tractors. This is not limited to commercial vehicles. This does not imply the driver of the truck is at fault in the crash.

Motorcycles

Any crash involving at least one motorcycle. This does not imply the motorcyclist was injured, nor does it imply the motorcyclist was at fault. The definition of a motorcycle includes motor-scooters, mini-bikes and mopeds; it excludes all terrain vehicles (ATVs) and snowmobiles.

Intersection/Intersection-Related

Any crash where the first harmful event occurs within the limits of an intersection OR where the first harmful event occurs on an approach to or exit from an intersection and results from movement through the intersection.

Pedestrians

Any crash involving at least one pedestrian. This does not imply the pedestrian was at fault in the crash.

Bicycle

Any crash involving at least one bicycle. This does not imply the bicyclist was at fault in the crash.



Asleep/Fainted/etc.

Any crash with at least one driver-related contributing circumstance being fell asleep, fainted, etc.

Speed-Related

Any crash with at least one driver-related contributing circumstance being exceeded stated speed limit or too fast for conditions.

Wild Animals

Any crash where the first harmful event was wild animal. Crashes involving domestic animals are excluded.

Inattentive Driving

Any crash with at least one driver-related contributing circumstance being inattentive driving or cell phone use.

Train

Any crash where the first or most harmful event was railway train.



Appendix E

CTSP Annual Reporting Template

Summary

Please briefly characterize the activities undertaken to implement the CTSP during the past twelve months and note any challenges faced. Please note the five year average of total crashes in Bozeman during the most recent reporting year for which crash data are available, the change since the previous reporting year and the progress toward reaching your goal.

In the template below, please list accomplishments for each strategy addressed during the past 12 months. (For example: type of materials developed, number of materials distributed and to whom, number of media stories about issue, number of low cost engineering improvements identified/implemented, etc.). Please also list the dates of meetings held.



Bozeman Community Transportation Safety Plan

Emphasis Area: Inattentive Driving Crashes
Emphasis Area Chair: Officer Rick Musson

Meeting Schedule		Performance Measures
Meeting 1:	Meeting 2:	# of crashes involving inattentive driving _____
Meeting 3:	Meeting 4:	# of fatalities involving inattentive driving _____
Meeting 5:	Meeting 6:	# of incapacitating injuries involving inattentive driving _____
Meeting 7:	Meeting 8:	# of non-incapacitating injuries involving inattentive driving _____
Strategies	Action Steps	Implementation Status
Strategy 1: Publicize the risks of distracted driving and conduct enforcement of distracted driving, including electronic handheld device use while driving.	Develop/adapt existing materials discouraging distracted driving. Conduct outreach to businesses to encourage development of contracts prohibiting handheld electronic device use and other distracting behaviors by employees. Potentially partner with the Chamber of Commerce.	
	Conduct public awareness campaign against distracted driving. Potentially distribute reminders via licensing stations, water bill mailings.	
	Communicate to the public the importance of not driving distracted via key local groups such as civic organizations.	
	Bozeman PD traffic division can conduct outreach about risks of distracted driving through media interviews, social media, etc.	
	Integrate driving distraction into Bozeman High School peer-to-peer safety education efforts.	



Emphasis Area: Inattentive Driving Crashes
Emphasis Area Chair: Officer Rick Musson

	Install more signs noting prohibition on handheld cell phone use/texting and fines for a citation – consider updated sign layout with more graphics.	
Strategies	Action Steps	Implementation Status
Strategy 2: Conduct ongoing public education and outreach about safe driving protocols/skills and retraining opportunities	Enhance coverage of common key issues such as navigation of uncontrolled intersections in driver’s education course.	
	Partner with MSU media department to develop PSAs on key driving skills needing a refresher, which can be posted to social media, YouTube, the City’s website, potentially as part of a “Common Driving Issues” series.	
	Bozeman PD Traffic Division conducts outreach about key driving skills through media interviews (TV and radio), social media, etc.	
	Publicize availability of defensive driving refresher courses for adults.	



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections

Meeting Schedule		Performance Measures
Meeting 1:	Meeting 2:	# of crashes involving lack of occupant protection _____
Meeting 3:	Meeting 4:	# of fatalities involving lack of occupant protection _____
Meeting 5:	Meeting 6:	# of incapacitating injuries involving lack of occupant protection _____
Meeting 7:	Meeting 8:	# of non-incapacitating injuries involving lack of occupant protection _____
Strategies	Action Steps	Implementation Status
Strategy 1: Promote seat belt use, through broadened membership partners and increase activity of the Greater Gallatin Safety Coalition.	Define core Coalition membership, reach out to new members, and establish a regular meeting schedule and agenda. Conduct ongoing outreach programs in partnership with member agencies. Seek media coverage of activities.	
	Conduct outreach to major employers encouraging them to institute a policy requiring seat belt use by all employees. Potentially reach out via the Chamber of Commerce.	
	Develop and distribute PSAs.	



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections

Strategy 2: Conduct targeted youth outreach to increase seat belt use.	Use the Peer-to-Peer Traffic Safety Campaign toolkit and other resources to establish a peer-to peer program in the high school. Build on the Teens in the Driver's Seat program already established as a supplement to Driver's Education.	
Strategies	Action Steps	Implementation Status
Strategy 2 (continued): Conduct targeted youth outreach to increase seat belt use.	Incorporate methods for engaging parents, including contracts with teens on safe driving. Enforce state requirement that parents attend first driver's education course meeting.	
	Promote Alive@25 courses to the general population of young drivers, highlighting benefits of reduced car insurance when course is completed. Potentially offer course within high school.	
	Link activities with Teen Driver Awareness Week, and promote through partner networks.	



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections

	At risk youth assigned community service to help conduct seat belt surveys with coalition member.	
Strategies	Action Steps	Implementation Status
<p>Strategy 3: Conduct outreach to Montana State University students on the importance of wearing seat belts in vehicles.</p>	<p>Conduct peer-to-peer campaign, which could include:</p> <ul style="list-style-type: none"> ○ Observation of seat belt use in parking lots and rewards for those buckled up ○ On-campus speaker (someone who survived a crash due to seat belt use) ○ Survey of student attitudes and practices about seat belt use and publicity of results ○ Student – developed print or video PSAs (potentially a contest) ○ Position crashed cars around campus with stories about the incidents ○ Increased enforcement of seat belt use around campus ○ MSU- Engineering students to recreate the 3 Collisions of a Crash 	



Emphasis Area: Seat belts/Occupant Protection Use
Emphasis Area Chair: Jessi Malcolm, Buckle Up MT / Child Care Connections

<p>Strategy 4: Conduct general media outreach on the importance of seat belt use focusing on demographic groups with high rates of non-use. Complement outreach with targeted enforcement.</p>	<p>Target demographic groups (other than college students) with higher seat belt non-use rates with targeted messages to encourage use. Potentially conduct outreach to middle aged males via civic organizations.</p>	
	<p>Increase enforcement of seat belt non-use; coordinate with education campaigns.</p>	
<p>Strategies</p>	<p>Action Steps</p>	<p>Implementation Status</p>
<p>Strategy 5: Collaborate with judges to ensure the judicial process is supportive of increased enforcement of seat belt non-use.</p>	<p>Engage the state’s traffic safety prosecutor to conduct training to local judges on the importance of upholding citations for seat belt non-use.</p>	
	<p>Promote issuance of seat belt citations by Bozeman Police, potentially via a roll-call briefing, reinforcing support by local judges.</p>	



Bozeman Community Transportation Safety Plan

Emphasis Area: Bicycle and Pedestrian Crashes

Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee

Meeting Schedule		Performance Measures
Meeting 1: Meeting 3: Meeting 5: Meeting 7:	Meeting 2: Meeting 4: Meeting 6: Meeting 8:	# of crashes involving bicyclists/pedestrians _____ # of fatalities involving bicyclists/pedestrians _____ # of incapacitating injuries involving bicyclists/pedestrians _____ # of non-incapacitating injuries involving bicyclists/pedestrians _____
Strategies	Action Steps	Implementation Status
Strategy 1: Increase bicycle and pedestrian infrastructure in Bozeman, including bicycle lanes, sidewalks, signage and pavement markings.	Conduct Road Safety Audit (RSA) Training. Potentially develop a program to conduct a set number of Bicycle or Pedestrian RSAs annually. Implement proven effective countermeasures identified in RSAs, particularly low cost measures.	
	Based on the bicycle and pedestrian infrastructure needs defined in the 2007 Bozeman Area Transportation Plan, Road Safety Audits and other input, make improvements where needed, ensuring proven effective safety measures are incorporated.	
	Improve functionality and use of existing infrastructure for bicyclists and pedestrians by clearly defining and communicating "rules of the road" including policies for use of two-way trails and appropriate behavior at transition points where bicycle lanes and sidewalks end. This would include signing and marking.	
	Ensure consistent bicycle markings at all intersections. In particular ensure that clear direction is provided to bicyclists regarding proper navigation of roundabouts.	



Emphasis Area: Bicycle and Pedestrian Crashes
Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee

	Evaluate signal timing and yellow phase intervals to ensure signals are optimized for maximum safety. Consult guidance from the FHWA Nine Proven Safety Countermeasures.	
Strategies	Action Steps	Implementation Status
Strategy 2: Reduce impaired bicycling and walking.	Conduct education campaign about the risks of walking or riding a bicycle while impaired	
	Promote alternative transportation options for impaired pedestrians or bicyclists, such as the late-night Streamline, free rides home, taxis, designated drivers	
	Develop education and awareness campaign	
Strategy 3: Increase reporting of bicycle and pedestrian crashes.	Promote self-reporting of crashes using the Montana Highway Patrol vehicle Crash report "white form" https://doj.mt.gov/wp-content/uploads/HQ1598.pdf . Conduct outreach via bicycle shops, Bike to Work Week, school system, MSU, Bike Swap, etc	
	Work with law enforcement to develop process and procedures for tracking and maintaining bicycle and pedestrian crashes that may not meet reporting thresholds.	



Emphasis Area: Bicycle and Pedestrian Crashes
Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee

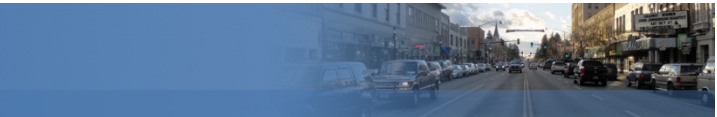
	Obtain and evaluate non-motorized incident data for Bozeman from BikeWalk Montana to supplement State and City crash data.	
Strategies	Action Steps	Implementation Status
Strategy 4: Conduct public education about safe operating procedures between bicyclists and pedestrians and vehicles	Develop video PSAs in partnership with local television stations, MSU film department, or the high school media department	
	Distribute materials to both the general driving public and bicyclists, pedestrians and other users via the City of Bozeman website, partner agencies, schools, bike shops, bicycling enthusiast groups, etc.	
	Initiate a Bicycle Ambassadors program by which individuals are employed to ride around town and initiate educational conversations with people who are bicycling or walking unsafely. (Adapt Missoula model)	
	Publicize and promote existing transportation safety laws including bicycle and pedestrian laws such as required use of headlights and tail lights by bicycles during dark conditions.	



Emphasis Area: Bicycle and Pedestrian Crashes

Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee

	Continue K-8 school traffic education program, which has a bicycle focus in grades 4-5 and pedestrian focus in K-3.	
	Provide education about the safety value of visible, reflective clothing for bicyclists and pedestrians.	
Strategies	Action Steps	Implementation Status
Strategy 5: Increase enforcement of safe behaviors by both drivers around bicyclists and pedestrians and by bicyclist and pedestrians as they enter into the transportation mix.	Conduct periodic pedestrian safety operations with enforcement by which a plainclothes police officer crosses the street using a crosswalk and a partner tickets vehicle operators that do not yield to the pedestrian decoy.	
	Pursue legislation to improve bicycle and pedestrian safety such as requiring vehicles to provide a 3-foot margin when passing bicycles and requiring vehicles to stop for pedestrians in a crosswalk (versus only yield).	
	Consider increasing fines associated with violations involving non-motorized transportation users.	
	Increase the amount of enforcement by Bozeman P.D. on bicycles, which facilitates educational conversations in the course of duty.	



Bozeman Community Transportation Safety Plan

Emphasis Area: Bicycle and Pedestrian Crashes

Emphasis Area Chair: Danielle Scharf, Pedestrian & Traffic Safety Committee

	Educate and enforce required use of headlights and tail lights by bicyclists	
	Educate on the importance of proper positioning of pedestrian walking along roadway (against traffic) and bicyclist riding along roadway (with traffic).	