

# Bozeman Community Transportation Safety Plan

*presented to*

## Bozeman Transportation Safety Advisory Committee – Meeting I

*presented by*

**Cambridge Systematics, Inc.**

**Audrey Wennink**

**October 16, 2012**



Transportation leadership you can trust.



# Project Team

- Montana Department of Transportation
  - » Carol Strizich
  - » Pam Langve-Davis
- Consultant Team from Cambridge Systematics, Inc.
  - » Audrey Wennink – Senior Analyst
  - » Sam Lawton – Project Manager



# Agenda

- **Welcome and Introductions**
- **Community Transportation Safety Planning (CTSP) Process Overview**
- **Transportation Safety Advisory Committee (TSAC) Role & Responsibilities**
- **TSAC Membership Discussion**
- **Bozeman Crash Data Overview**
- **Community Safety Issues Discussion**
- **CTSP Vision**
- **CTSP Goal**
- **Next Steps**

# MT Comprehensive Highway Safety Plan

- Developed through coordinated, comprehensive, data-driven process
- Designed to reduce fatal and injury crashes on MT roadways
- 12 Emphasis Areas including urban area crashes

## Montana Comprehensive Highway Safety Plan

Amended 2010



### State of Montana Department of Transportation



*in cooperation with:*

Federal Highway Administration  
National Highway Traffic Safety Administration  
Blackfeet Tribe  
Confederated Salish and Kootenai Tribes  
Crow Tribe  
Chippewa Cree Tribe  
Little Shell Tribe  
Northern Cheyenne Tribe  
Fort Peck Tribes  
Montana Highway Patrol  
Montana Motor Vehicle Division  
Montana Office of Public Instruction  
Montana Department of Justice  
Montana Department of Revenue  
Office of the Court Administrator  
Federal Motor Carrier Administration  
Montana Metropolitan Planning Organizations  
Montana Department of Public Health and Human Services

*prepared by:*

**Cambridge Systematics, Inc.**

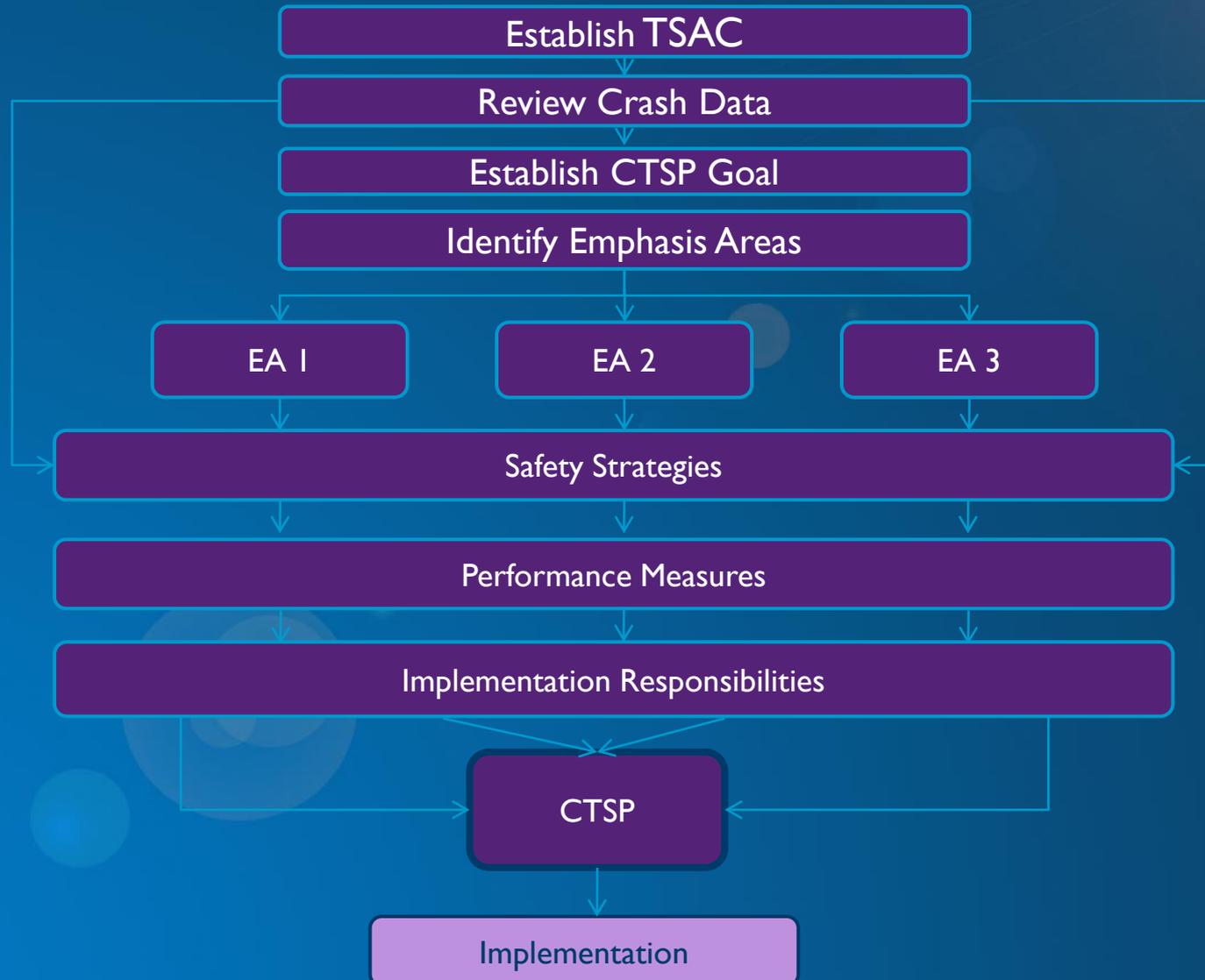
# Community Transportation Safety Plans

- Target fatal and injury crashes based on locally identified safety problems
- Devise safety strategies that can be implemented at the local level
- Customize strategies based on local priorities, organizational structures, programs, leadership

# Purpose of Transportation Safety Plan

The Bozeman community seeks to develop a multimodal Community Transportation Safety Plan to document the area's transportation safety issues and identify a comprehensive set of strategies to reduce the number and severity of traffic crashes.

# Plan Development Process



# Work Plan and Timeline (proposed)

<b>Kickoff Meeting</b>	<b>October 16, 2012</b>
<b>Select Emphasis Areas</b>	<b>November</b>
<b>Identify Current Strategies/Plan Safety Summit</b>	<b>December</b>
<b>Safety Summit</b>	<b>January</b>
<b>Draft Plan</b>	<b>February</b>
<b>Final Plan</b>	<b>March</b>



# Transportation Safety Advisory Committee (TSAC)

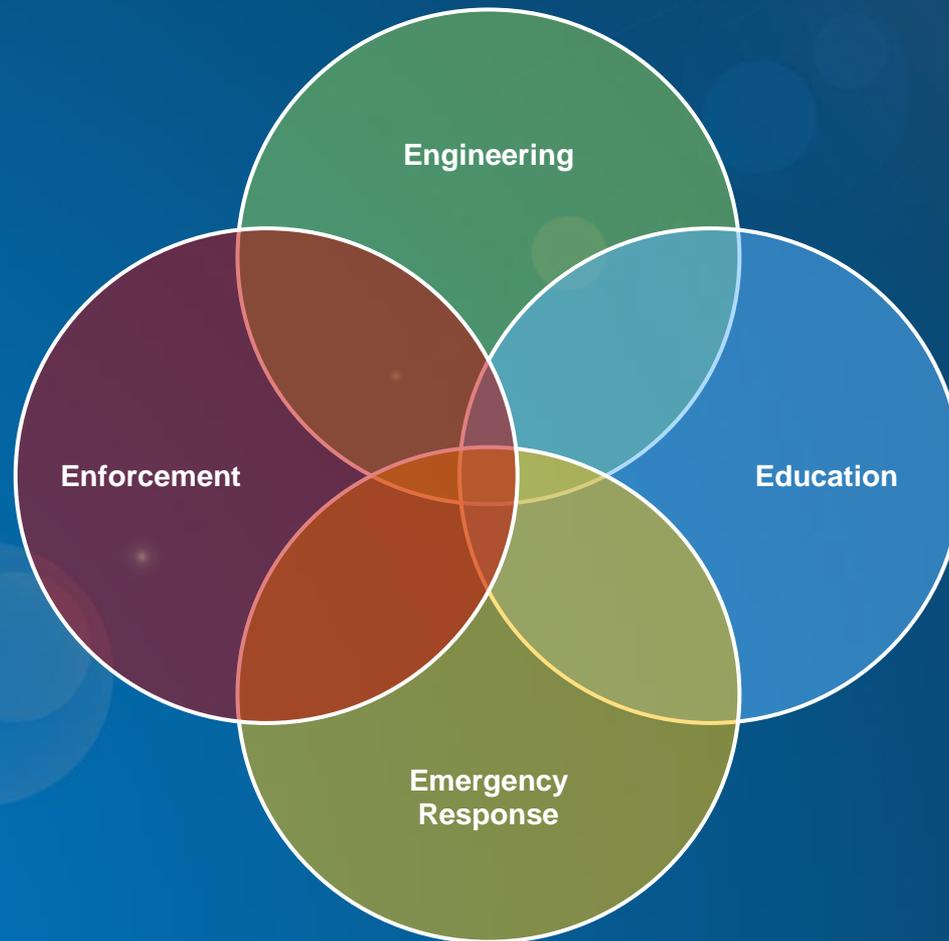
## TSAC Draft Mission Statement

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

# TSAC Roles and Responsibilities

- Attend committee meetings and the Transportation Safety Summit
- Review available data; identify data needs
- Identify vision and goal
- Determine priority safety emphasis areas
- Review and finalize strategies, action steps, and performance measures
- Identify lead agencies, organizations, and individuals to facilitate implementation
- Approve and submit final plan to Bozeman for adoption
- Support implementation of the Community Transportation Safety Plan

# “The 4 E’s of Safety”



# Potential TSAC Membership

- School District Administrators
- Montana State University
- Bozeman Public Works
- Montana Department of Transportation
- Bozeman Police Department
- MT Highway Patrol
- Buckle Up MT – Bozeman Coordinator
- Gallatin County DUI Task Force
- Safe Routes to School Coordinator
- Bozeman Deaconess Hospital
- HRDC/Streamline/Galavan
- Others?

# Crash Data

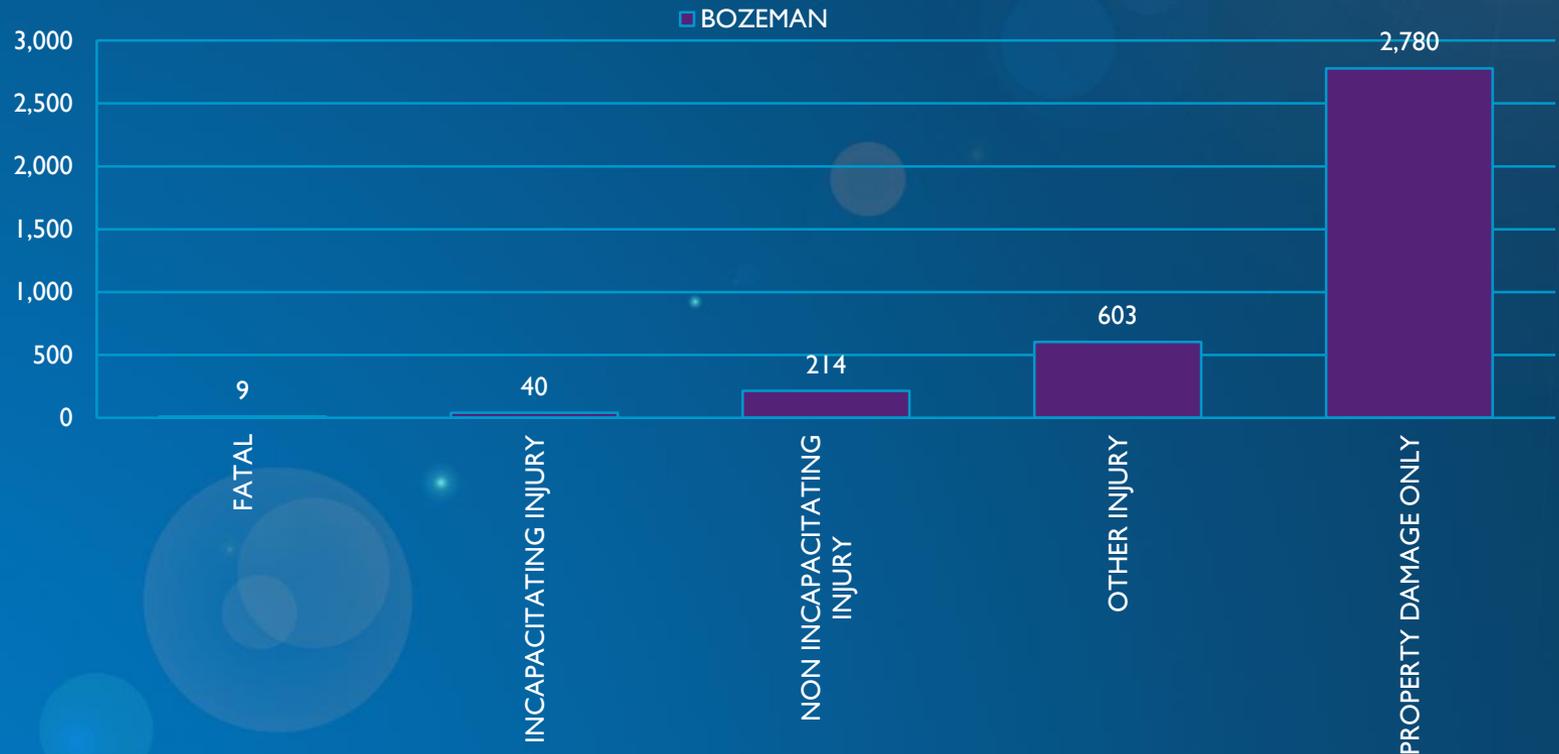
# Crash Data Analysis Process

- Behavior, e.g.
  - » Distracted
  - » Speeding
  - » Impaired
  - » Safety Belt Use
- Infrastructure/Crash Types, e.g.
  - » Intersections
  - » Road departure
- Demographics, e.g.
  - » Under 25
  - » 65 and older



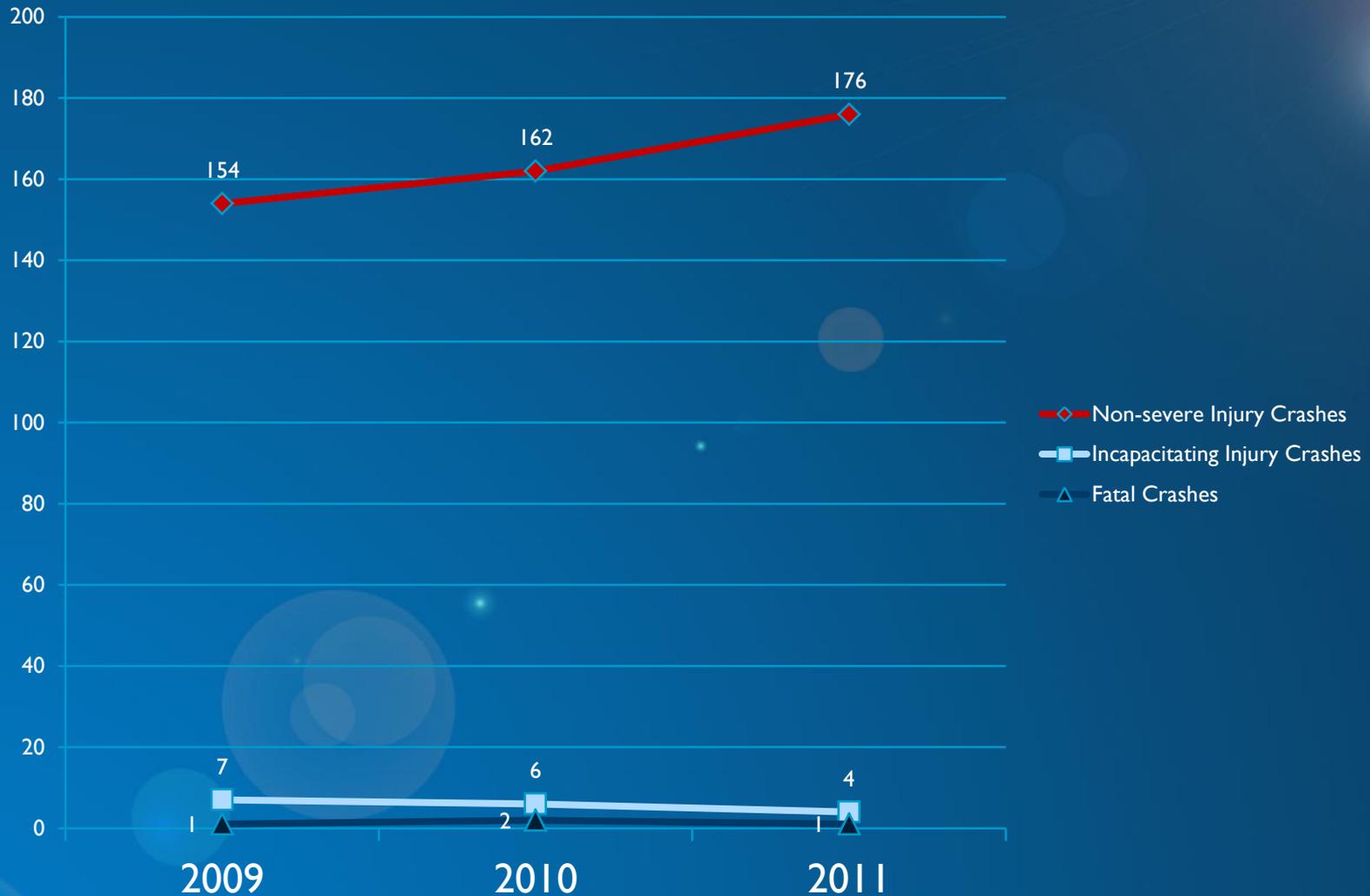
# Bozeman Crash Severity (2006-2010)

## Crashes by Severity



Source: MDT-Safety Management System, 2012

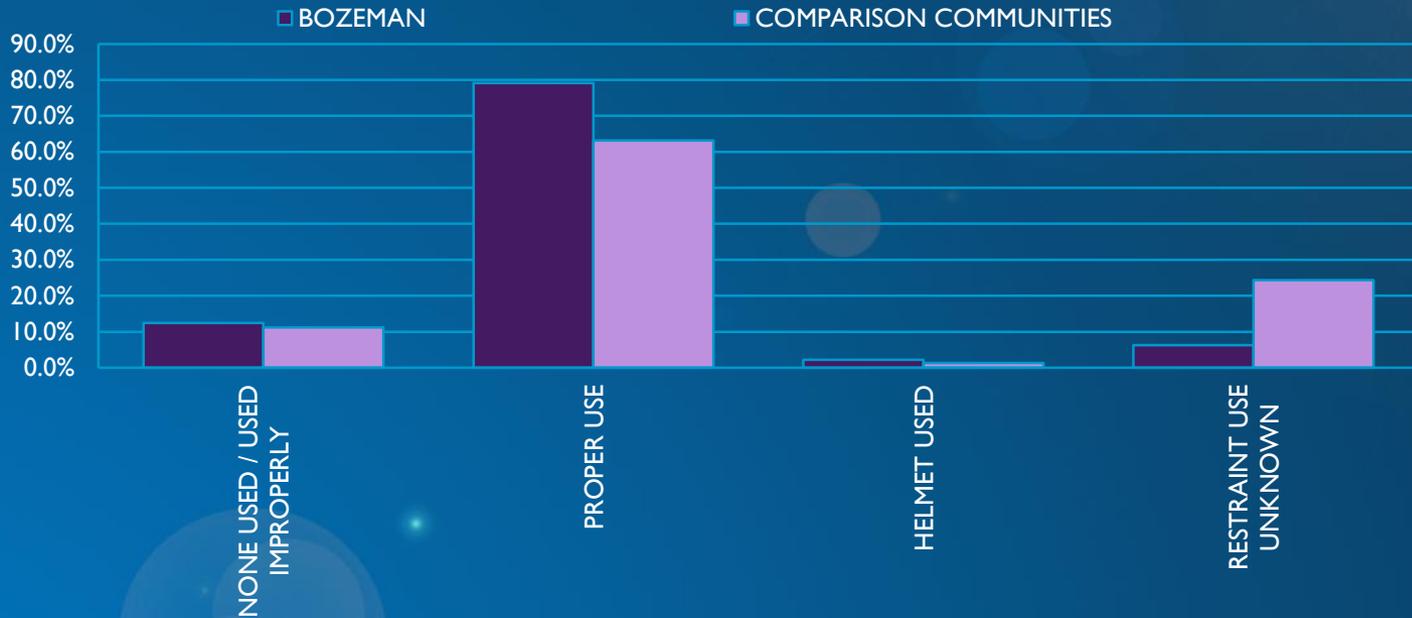
# Bozeman Crash Severity (2009-2011)



Source: MDT-Safety Management System, 2012

# Behavior

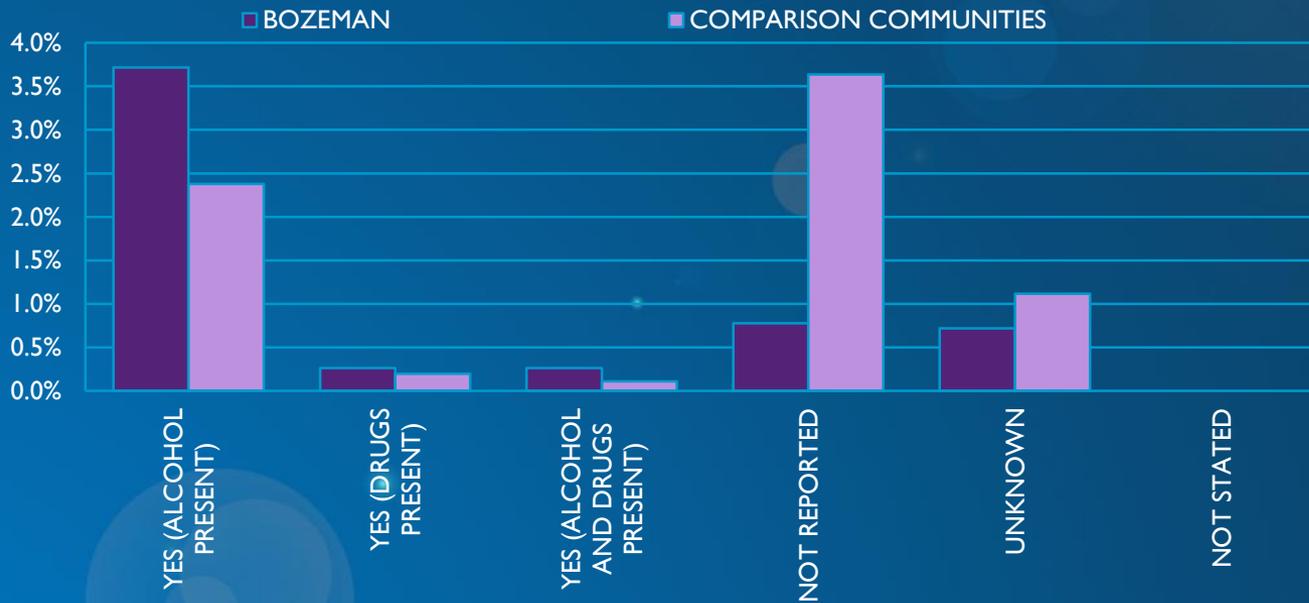
# Bozeman Injuries by Safety Device Use (2006-2010)



Source: MDT-Safety Management System, 2012

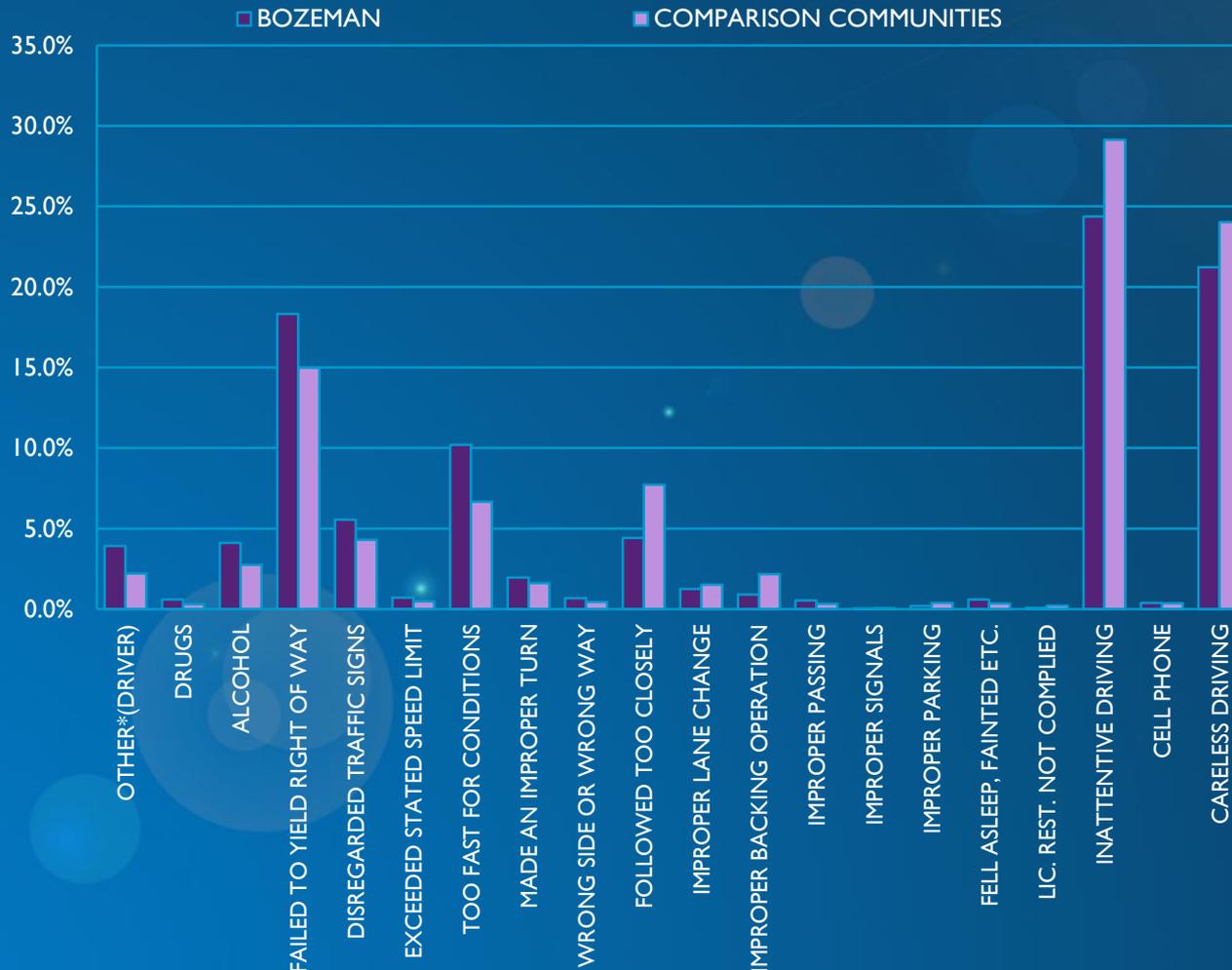
# Bozeman Drivers by Impairment – All Crashes (2006-2010)

## Drivers by Impairment \*



Source: MDT-Safety Management System, 2012

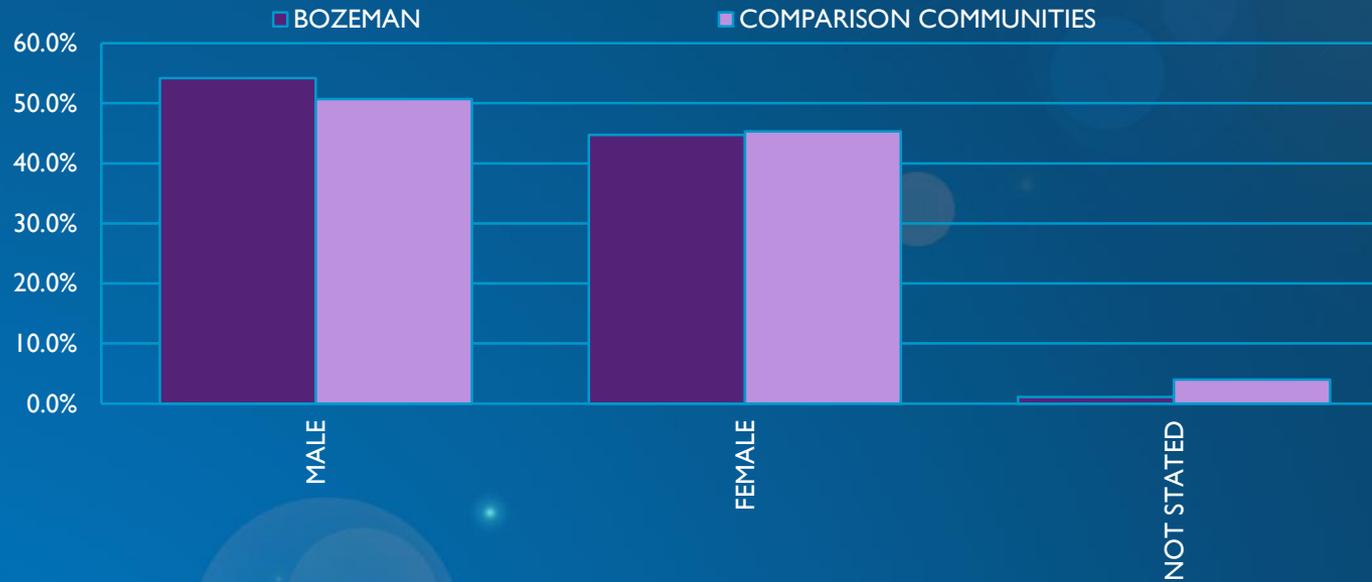
# Bozeman Driver Contributing Circumstances All Crashes – 2006-2010



Source: MDT-Safety Management System, 2012

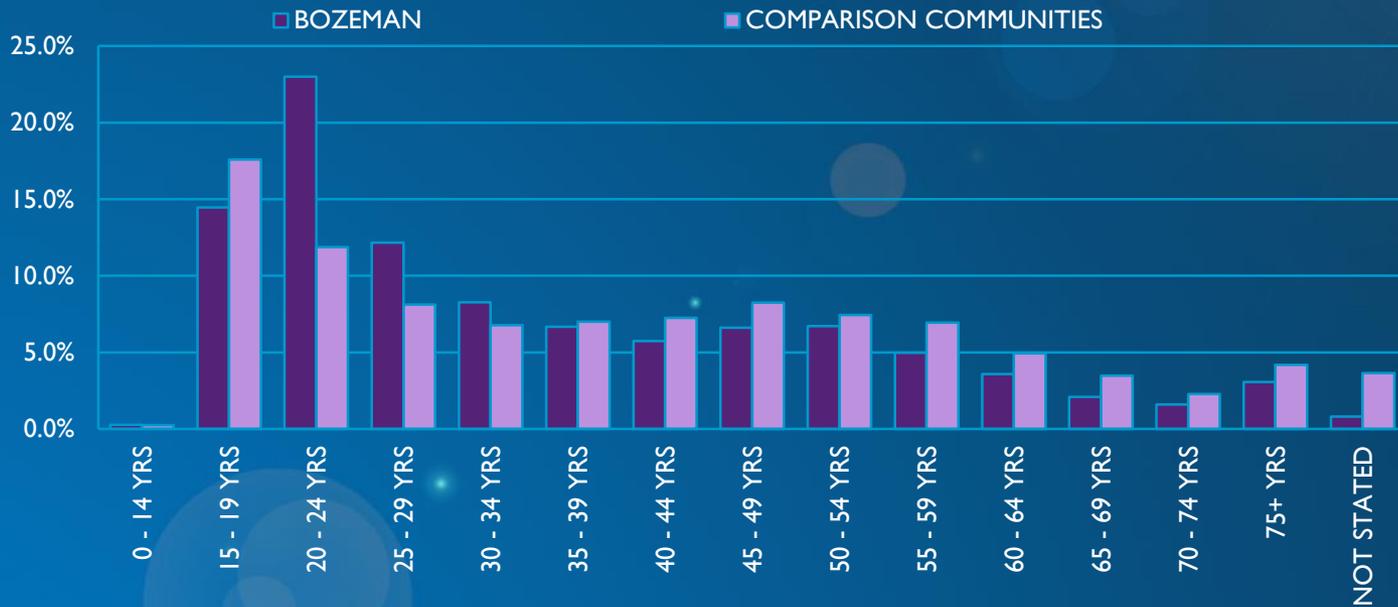
# Demographics

# Bozeman Drivers by Gender – All Crashes (2006-2010)



Source: MDT-Safety Management System, 2012

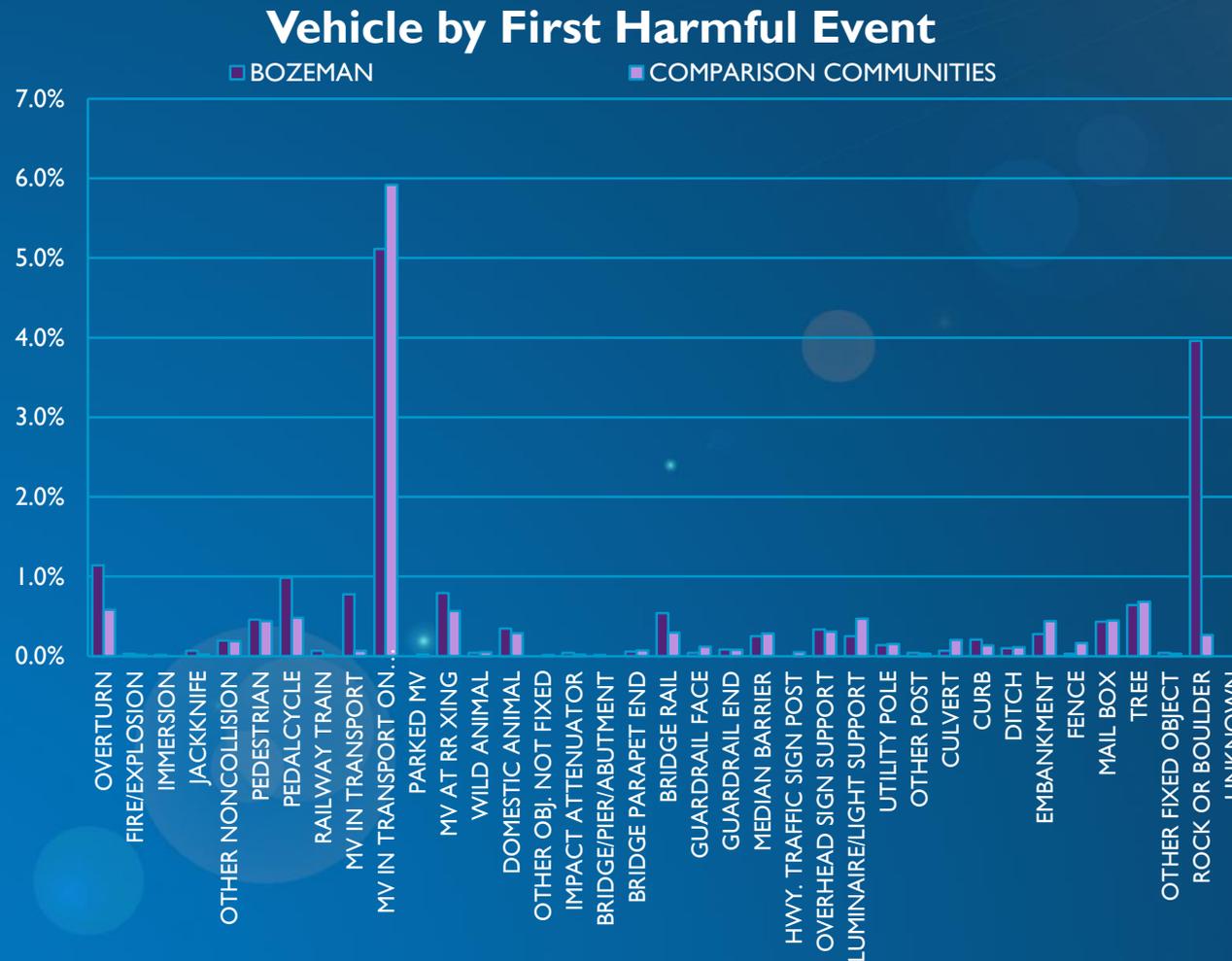
# Bozeman Drivers by Age - All Crashes (2006-2010)



Source: MDT-Safety Management System, 2012

# Crash Type

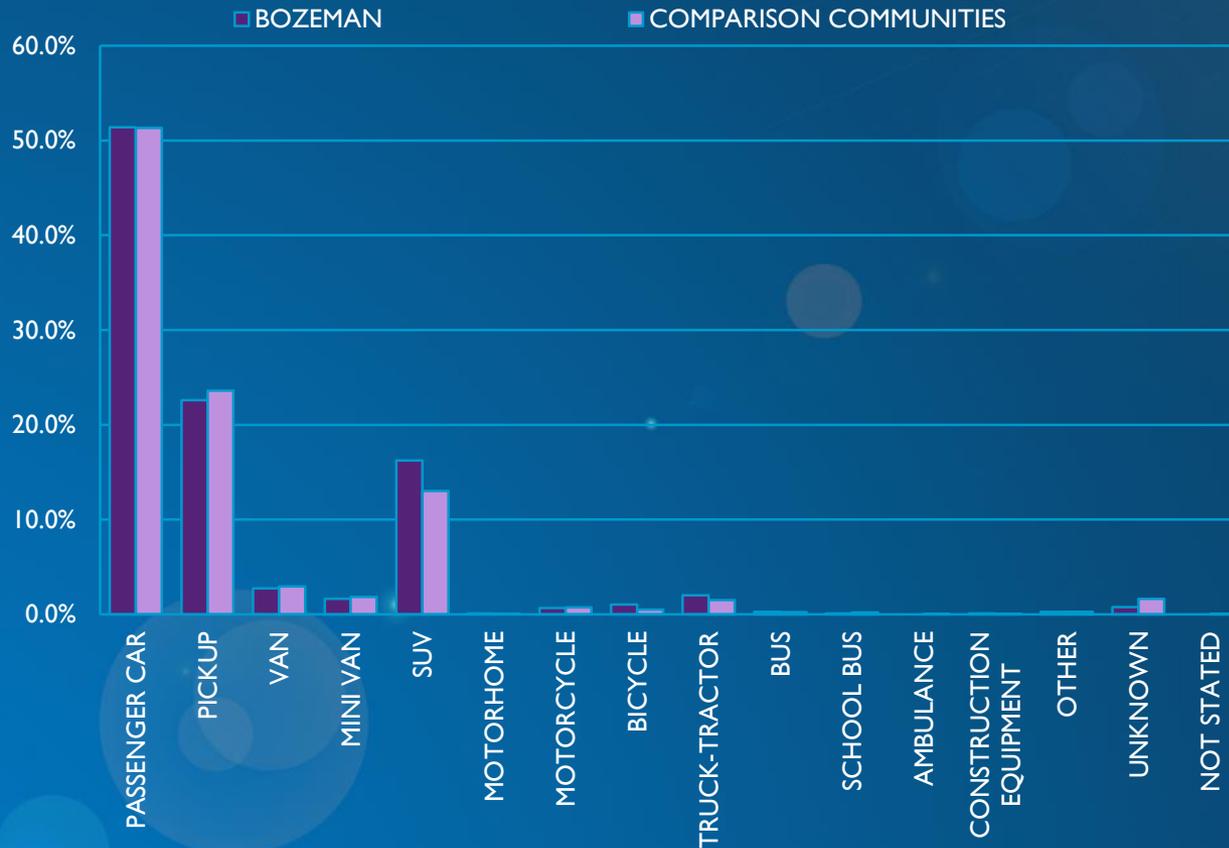
# Bozeman Vehicles in a Crash by First Harmful Event (2006-2010)



Source: MDT-Safety Management System, 2012

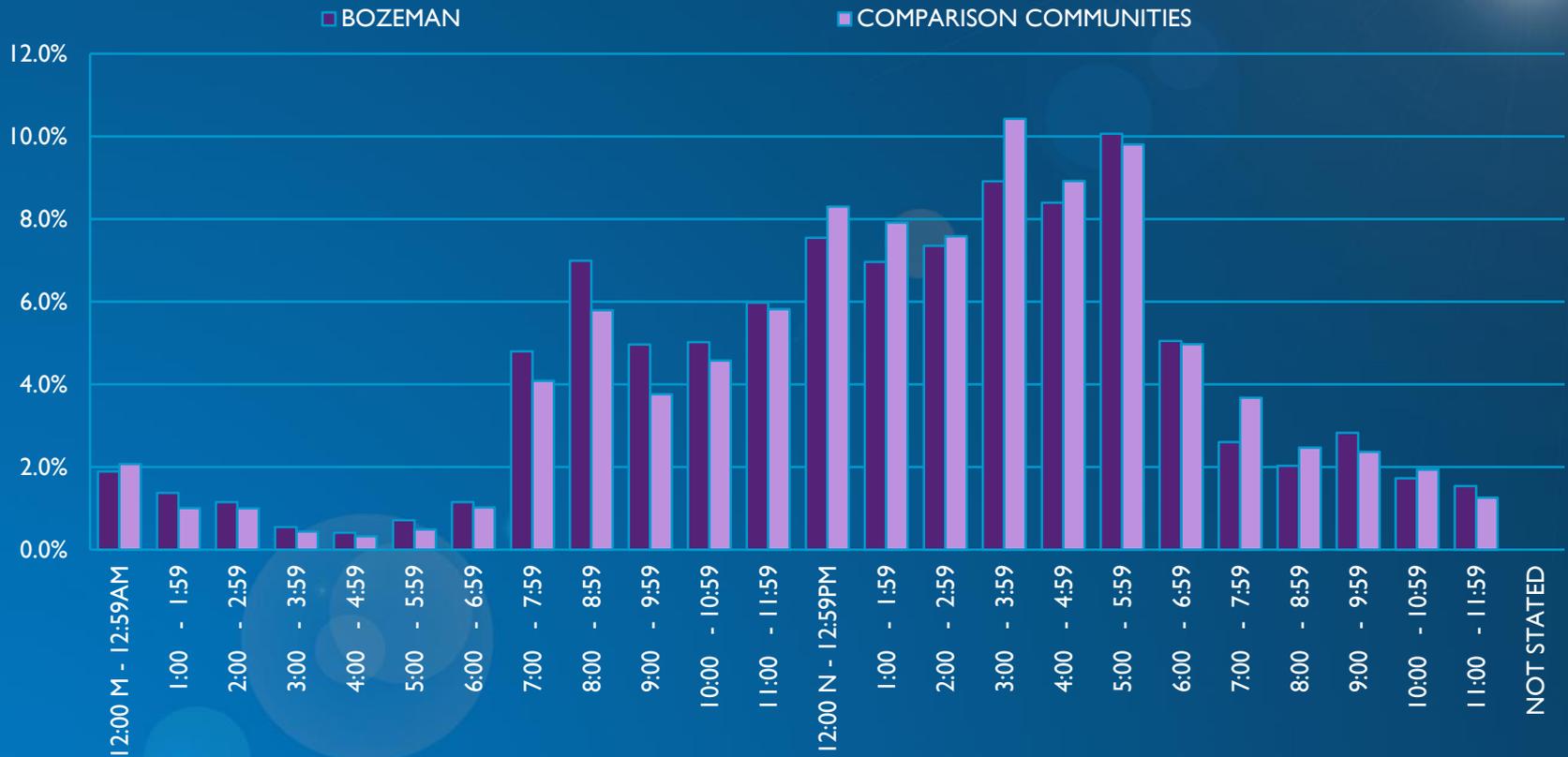
# Other Factors

# Bozeman Vehicle Type – All Crashes (2006-2010)



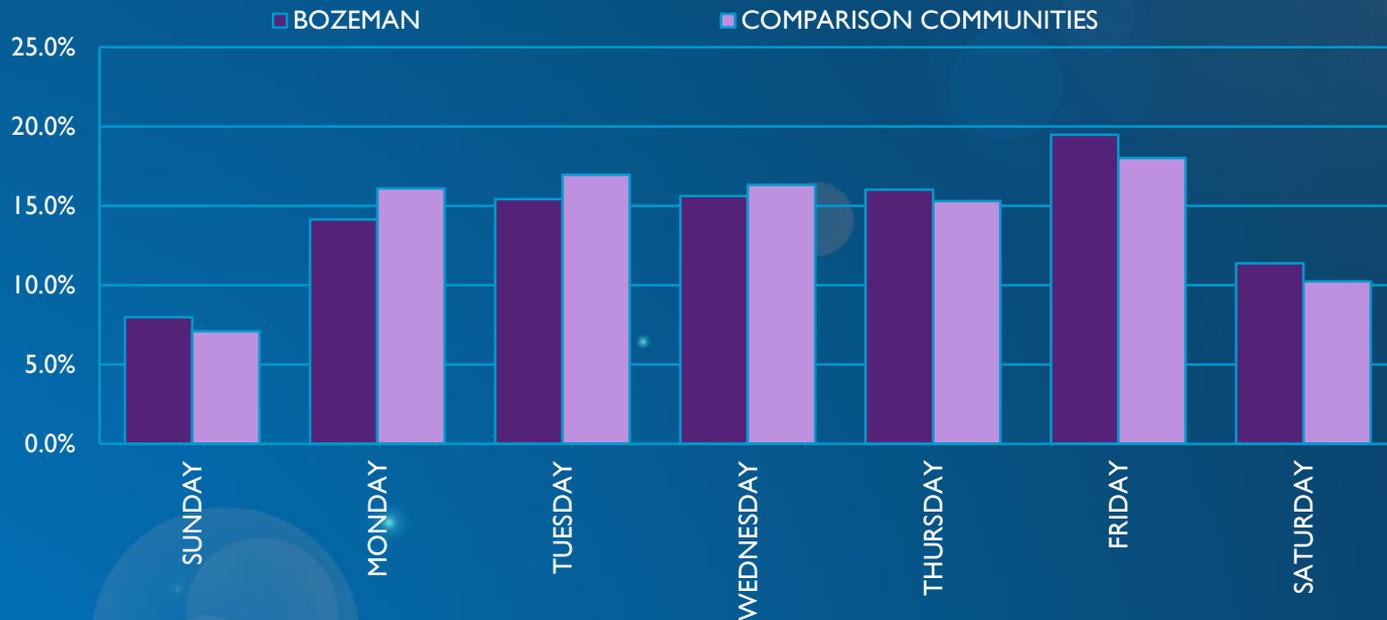
Source: MDT-Safety Management System, 2012

# Bozeman Crashes by Time of Day (2006-2010)



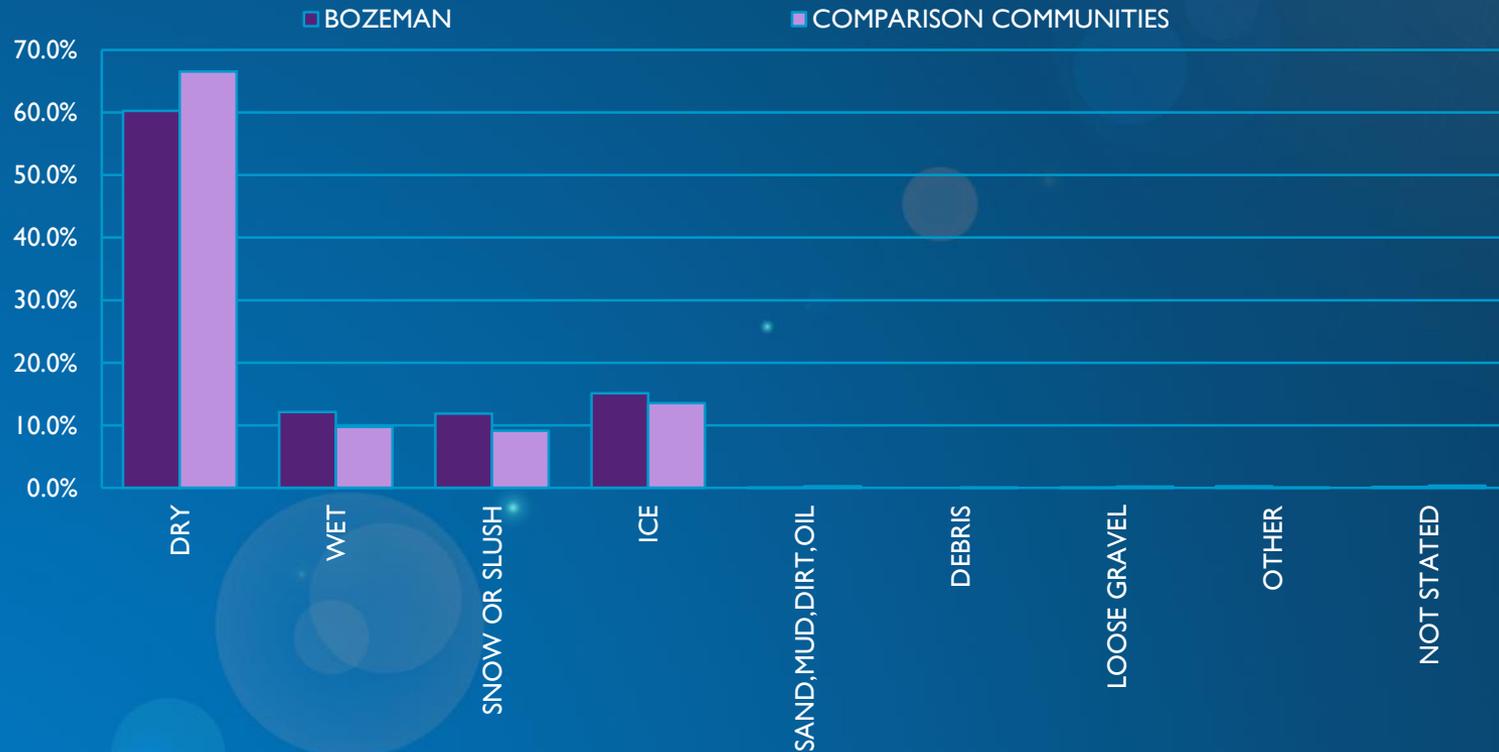
Source: MDT-Safety Management System, 2012

# Bozeman Crashes by Day of Week (2006-2010)



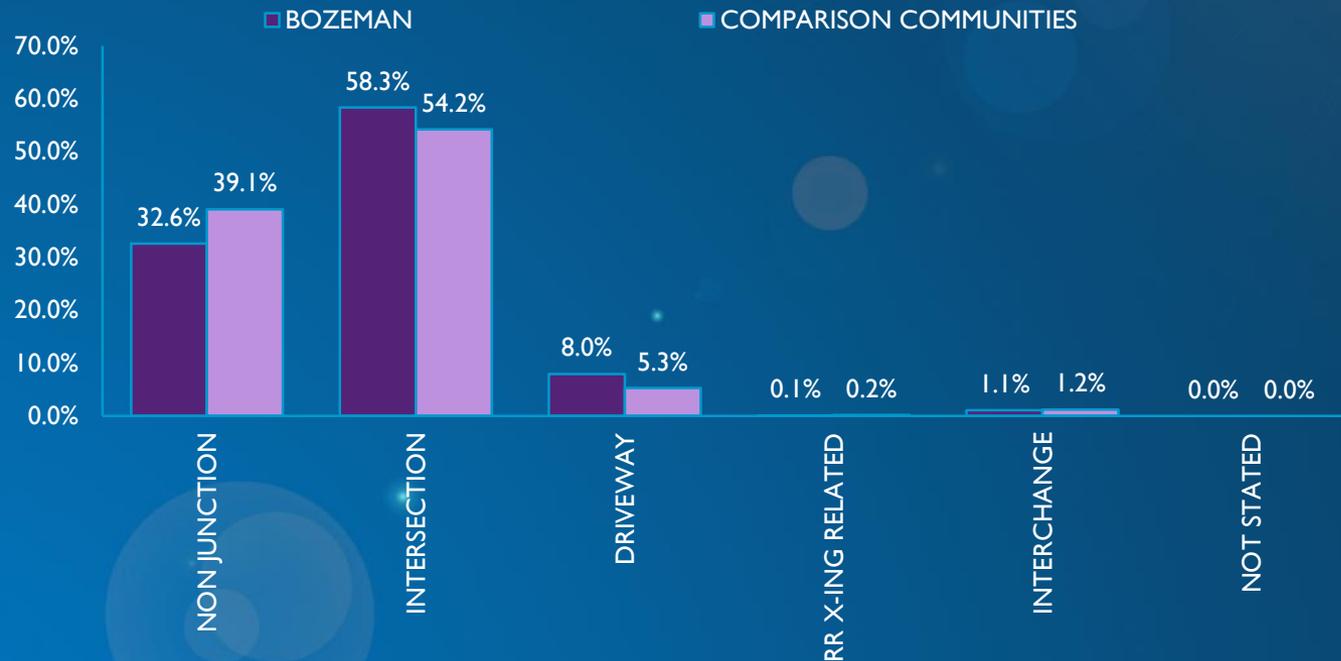
Source: MDT-Safety Management System, 2012

# Bozeman Crashes by Road Condition (2006-2010)



Source: MDT-Safety Management System, 2012

# Bozeman Crashes by Relationship to Junction (2006-2010)



Source: MDT-Safety Management System, 2012

# Initial Findings

- Safety Belt Use
- Young Drivers
- Distracted/Inattentive Driving
- Intersection Crashes

# **Safety Vision**

# Bozeman Vision

- Where does Bozeman want to be in the future regarding transportation safety?
- Example Vision Statements
  - » Bozeman will have the safest transportation system of any community in MT
  - » Bozeman will establish a culture of safety on its roadways
  - » Vision Zero

# Bozeman Safety Vision

- All travelers arrive safely at their destination

# CTSP Goal

# Bozeman Five-Year Annual Averages (2006-2010)

## Annual Crashes

Fatal Crashes	Incapacitating Injury Crashes	Non-Severe Injury Crashes	PDO Crashes	Total Crashes
2	8	163	556	666

## Annual Fatalities/Injuries

Fatalities	Incapacitating Injuries	Non-Severe Injuries
2	9	189

Source: MDT-Safety Management System, 2012

# Examples - Traffic Safety Goals

## Butte

---

*To reduce motor vehicle crashes by 20 percent by 2017, from an annual average of 671 crashes to an annual average of 537 crashes.*

## Shelby/Toole County

---

*Reduce annual average severe crashes within Toole County by one third from 2010 to 2015, resulting in an average of no more than four severe injury crashes per year.*

## Cheyenne, WY

---

*Reduce fatal and serious injury crashes by 10 percent from 2008 to 2020  
(Reduction of 3.5 fatal and serious injury crashes per year)*

# CTSP Goals - Sample Approaches

- 20 percent reduction in severe injuries (fatalities + incapacitating injuries)
- Reduction in a specific number of severe injuries
- Percent reduction in total crashes
- One death is one too many – zero fatalities
- Reduce fatal and incapacitating injuries by half by 2030 (MT CHSP)

# Bozeman Safety Goal

- Reduce fatalities and injuries by 25% by 2018

# Next Steps

# Next TSAC Meeting

- Additional data analysis
- Determine Emphasis Areas for Plan
- Finalize Goal

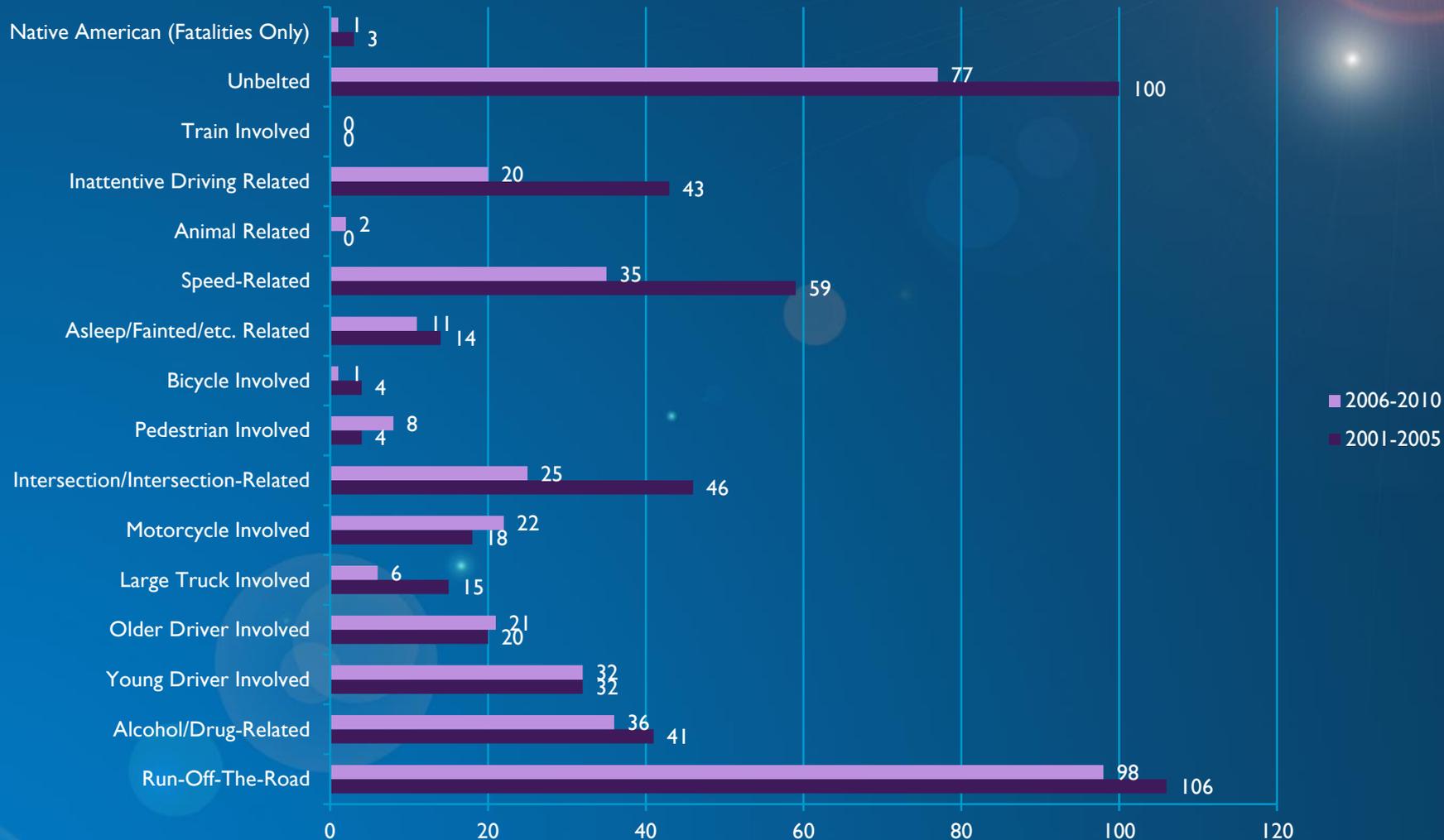
# Example:

## Butte-Silver Bow - All Crashes by Emphasis Area



Source: MDT-Safety Management System, 2012

# Example: Butte-Silver Bow Fatal/Incapacitating Crashes by Emphasis Area



Note: Unbelted and Native American data represent number of people, not crashes

Source: MDT-Safety Management System, 2012

# Next Steps

- Select dates & locations for next two meetings
  - » Develop agenda and materials
- Select potential dates & location for Safety Summit (January)
- Identify other potential TSAC members
- Homework:
  - » What are Bozeman's most significant transportation safety issues?
  - » What programs are currently in place?
  - » What more should or could be done?
  - » Think about Plan Goal for finalization at next meeting

# Open Discussion