Butte-Silver Bow TSAC Meeting

presented to
Butte-Silver Bow Transportation Safety Advisory Committee

presented by
Cambridge Systematics, Inc.
Audrey Wennink

April 19, 2012

Transportation leadership you can trust.
Welcome and Introductions - Roger Ebner

CTSP Goal - All

Safety Data Presentation by Emphasis Area – Audrey Wennink

Emphasis Area Selection – All

Setting a Summit Date – All

Next Steps – Audrey Wennink

Questions and Open Discussion - All
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
Plan Development Process

- Establish TSAC
- Collect and review data
- Establish Goal
- Identify Safety Emphasis Areas
- Identify strategies to address emphasis areas
- Define performance measures and means of monitoring progress
- Assign implementation responsibilities
- Review and finalize plan

We are here
## Work Plan and Timeline

<table>
<thead>
<tr>
<th>Activity</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kickoff Meeting</td>
<td>March 21, 2012</td>
</tr>
<tr>
<td>Establish Goal and Select Emphasis Areas</td>
<td>April</td>
</tr>
<tr>
<td>Identify Current Strategies</td>
<td>May</td>
</tr>
<tr>
<td>Safety Summit</td>
<td>June</td>
</tr>
<tr>
<td>Draft Plan</td>
<td>July</td>
</tr>
<tr>
<td>Final Plan</td>
<td>August</td>
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</tbody>
</table>

We are here
Safety Goal

What do you intend to accomplish through the Butte-Silver Bow CTSP?
Crash Severity (2006-2010)

### Butte-Silver Bow Five-Year Averages (2006-2010)

#### Crashes

<table>
<thead>
<tr>
<th>Fatal Crashes</th>
<th>Incapacitating Injury Crashes</th>
<th>Injury Crashes</th>
<th>PDO Crashes</th>
<th>Total Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>23</td>
<td>118</td>
<td>526</td>
<td>671</td>
</tr>
</tbody>
</table>

#### Fatalities/Injuries

<table>
<thead>
<tr>
<th>Fatalities</th>
<th>Incapacitating Injuries</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>28</td>
<td>168</td>
</tr>
</tbody>
</table>

*Source: MDT-Safety Management System, 2012*
CTSP Goals - Sample Approaches

- 20 percent reduction in current severe injuries (fatalities + incapacitating injuries)
- Reduction of a specific number of severe injuries, based on a 3 to 5-year average
- One death is one too many – zero fatalities
- Reduce fatal and incapacitating injuries by half by 2030 (MT CHSP)
Goal Characteristics

- SMART Goals are
  - Specific
  - Measurable
  - Achievable
  - Results-focused
  - Timebound
Examples - Traffic Safety Goals

Iowa

To reduce motor vehicle fatalities to a ten-year annual average of less than 400 deaths by 2015 (45 lives saved per year).

Michigan

Reduce traffic fatalities from 1,084 in 2007 to 850 in 2012.

Reduce serious traffic injuries from 7,485 in 2007 to 5,900 in 2012.

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)
Butte-Silver Bow Safety Goal

- Develop during meeting
Potential Emphasis Areas
What is an “Emphasis Area?”

- A priority safety issue for Silver Bow County based on data and community input

- A safety issue for which community focus and resources will be applied with the intention of improving transportation safety and achieving the goal(s) of the CTSP

- Emphasis Areas can change over time – to reflect progress and changing conditions or needs
Selection of Emphasis Areas

- **Impact** – Where can we have the biggest impact? Will strategies in this area significantly reduce the number of fatalities and serious injuries?

- **Data Availability** – Are there enough reliable data available to accurately identify, prioritize, and articulate the problem?

- **Cost** – Is the cost to implement effective strategies in this area prohibitive? Do we have the resources needed to address the problem?
Selection of Emphasis Areas
Consider . . .

- **Loss of Life** – What is the extent of loss of life related to this emphasis area?

- **Serious Injuries** – What is the extent of serious injuries related to this emphasis area?

- Where have there been *significant increases* in the last several years?

- Where has the level of fatalities and injuries reached a plateau?
Selection of Emphasis Areas

**Feasibility**

» What can realistically be accomplished over the next 3 to 5 years?

» Are there enough resources and tools?

» Will the TSAC have stakeholder support?

» Do safety stakeholders have the necessary technical expertise?

» Will there be public support?
“The 4 E’s of Safety”

- Engineering
- Education
- Emergency Response
- Enforcement
<table>
<thead>
<tr>
<th>Category</th>
<th>All Crashes 2006-2010</th>
<th>All Crashes 2001-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American (Fatalities Only)</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Unbelted</td>
<td>217/254</td>
<td></td>
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<tr>
<td>Train Involved</td>
<td>4/1</td>
<td></td>
</tr>
<tr>
<td>Inattentive Driving Related</td>
<td>719/1013</td>
<td></td>
</tr>
<tr>
<td>Animal Related</td>
<td>125/96</td>
<td></td>
</tr>
<tr>
<td>Speed-Related</td>
<td>648/814</td>
<td></td>
</tr>
<tr>
<td>Asleep/Fainted/etc. Related</td>
<td>45/70</td>
<td></td>
</tr>
<tr>
<td>Bicycle Involved</td>
<td>9/21</td>
<td></td>
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<tr>
<td>Pedestrian Involved</td>
<td>16/28</td>
<td></td>
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<tr>
<td>Intersection/Intersection-Related</td>
<td>1433/1814</td>
<td></td>
</tr>
<tr>
<td>Motorcycle Involved</td>
<td>67/42</td>
<td></td>
</tr>
<tr>
<td>Large Truck Involved</td>
<td>179/229</td>
<td></td>
</tr>
<tr>
<td>Older Driver Involved</td>
<td>559/704</td>
<td></td>
</tr>
<tr>
<td>Young Driver Involved</td>
<td>1099/1281</td>
<td></td>
</tr>
<tr>
<td>Alcohol/Drug-Related</td>
<td>229/226</td>
<td></td>
</tr>
<tr>
<td>Run-Off-The-Road</td>
<td>923/1094</td>
<td></td>
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</tbody>
</table>

Butte-Silver Bow Fatal/Incapacitating Crashes by Emphasis Area

Note: Unbelted and Native American data represent number of people, not crashes
Butte-Silver Bow
Injury Crashes by Emphasis Area

Note: Unbelted and Native American data represent number of people, not crashes
Potential Emphasis Area Detail
Roadway Departure

- Of 98 roadway departure fatal/incapacitating crashes, only 9 occurred in snowy weather; 14% of injuries occurred during snow.

- One-third of fatal/incapacitating roadway departure crashes and 15% of injury crashes involved alcohol.

- More than 50% of fatal/incapacitating injury roadway departure victims were not belted; 27% of injury crash victims were unbelted.

- Majority of roadway departure crashes are on interstates; 15-19% on county roads.

- 1/3 of injury crashes (roadway departure) involve young drivers’ 16% of fatal/incapacitating involve age 45-49.

- Factors involved: speed, careless/inattentive driving, alcohol.
Among young drivers ages 18-20 experienced the most serious crashes

Almost ¼ of young driver injury crashes involved alcohol or drugs (14% of fatal/incapacitating)

Young Driver crash factors: speed, alcohol, careless/inattentive driving, failed to yield, disregarded traffic signs

41% of fatal/incapacitated young driver occupants were unbelted

17% of injured young driver survivors were unbelted
Potential Emphasis Area
Intersections

- Intersection fatal/incapacitating crashes – 36% at unsignalized intersections, 36% at stop sign
- Intersection injury crashes – 34% at uncontrolled intersections, 36% at signals, 26% at stop sign
- 26% of fatal/incapacitating crashes at intersections involve ages 55-64
- 32% of injury crashes at intersections involve young drivers (age 15-24)
Potential Emphasis Area
Older Drivers (65+)

- Older driver factors:
  - Failure to yield
  - Disregarded traffic signs
  - Speed
  - Careless/inattentive

- More than a third of fatal/incapacitated older driver victims were not belted

- Most older fatal/incapacitating crashes involve single vehicle

- Older first harmful event – collision with another vehicle

- Most older injury crashes involve multiple vehicles
Potential Emphasis Area
Inattentive

- Most inattentive fatal/incapacitating crashes on Interstates (9) and County roads (5)

- Largest age groups for inattentive fatal/incapacitating:
  - 45-49 (5)
  - 20-24 (4)

- Largest age group for inattentive injury crashes: 15-19 (59)

- Most inattentive injury crashes on local streets (67) and U.S. Highways (46)

- Slightly more males involved in inattentive crashes
Potential Emphasis Area
Occupant Protection

- Nearly 50% of fatal/incapacitated victims were unbelted

- 68% of fatal/incapacitated unbelted victims were male; majority of unbelted injuries (56%) involved males

- 25% of injury victims were unbelted

- Age 15-19 largest category of unbelted injuries
Emphasis Area Voting

- Each person gets 10 sticker “dots”

- Use them to select your preferred emphasis areas for Butte-Silver Bow, based on data presented

- You can put them all on one area or across multiple areas

- The goal is to select up to 3 Emphasis Areas
Summary of Emphasis Area Voting Results

• Add following voting
Next Steps
Safety Summit

- Set Date
- Identify potential locations
Next Steps

Define current safety activities in emphasis areas

Safety Summit

» Finalize date/location for Safety Summit
» Determine how to promote Safety Summit
» Determine groups individuals to invite to Safety Summit

Homework:

» What safety programs are currently in place?
» What more should or could be done?
Open Discussion
Pedestrian/Bicycle Issues (2006-2010)

- 8 fatal/incapacitating, 7 injury pedestrian crashes
- 1 fatal/incapacitating, 6 injury bicycle crashes

Pedestrian fatalities and injuries have occurred on all roadway classifications (Interstate, State Highway, County Road, Local)

Most pedestrian fatal/incapacitating/injury crashes during daylight

Four pedestrian fatalities involved walking in roadway

Serious bicycle crashes occurred on local streets or U.S. highways
Property Damage Only Crashes by Emphasis Area

- Train Involved
- Inattentive Driving Related
- Animal Related
- Speed-Related
- Asleep/Fainted/etc. Related
- Bicycle Involved
- Pedestrian Involved
- Intersection/Intersection-Related
- Motorcycle Involved
- Large Truck Involved
- Older Driver Involved
- Young Driver Involved
- Alcohol/Drug-Related
- Run-Off-The-Road