

**2020
Comprehensive
Highway Safety
Plan Update**

Advisory
Committee
Meeting #2
May 2020



VISION ZERO 
zero deaths · zero serious injuries

**MONTANA DEPARTMENT
OF TRANSPORTATION**



Old Business

Confirm Emphasis Areas



New Business

Safety Target Methodology

Emphasis Area Data Analysis

Review National Proven
Countermeasures

Discuss Montana Programs and
Associated Gaps

Discuss Montana Needs/Issues and
Potential Strategies

Identify Champion, Partners and
Resources

Old Business- Determine Emphasis Areas

- Roadway Departure
- Intersection Related Crashes
- Impaired Driving
- Unrestrained Occupants
- Speed Related
- Inattentive/ Distracted Driving

Schedule



May 14, 2020

CHSP 2020 Update - SCHEDULE

Task Name	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1 Outreach									
2 SWOT									
3 Data									
4 Advisory Committee				◆	◆		◆	◆	
5 Research/Prove Safety Countermeasures									
6 Emphasis Areas									
7 Plan Development									

◆ meeting

Roadway Departure

Vehicle leaves travel lane resulting in a collision



58%

of all motor
vehicle
deaths &
serious
injuries
involved a
roadway
departure

- 46% involved an impaired driver
- 43% involved an unrestrained occupant
- 26% were speed related
- 22% involved inattentive and distracted driving

Roadway Departure Occurrence

93%

of all
roadway
departure
deaths &
serious
injuries
occurred in
rural areas

Of all rural area roadway
departure related fatalities &
serious injuries

95% involved unrestrained
occupants

- 94% involved impaired driving
- 94% were speed related

Roadway Departures – Drivers Age

Age Group		Age Group	
20-25	22%	44-49	9%
26-31	17%	50-55	7%
32-37	12%	56-61	6%
38-43	10%	62-67	4%
14-19	10%	68+	3%

Roadway Departure Occurrence- When

Roadway departure related fatalities and serious injuries most often occurred –

- 46 % occurred during the summer months of **July, August, June, and September**
- **Saturday** was the day most often that road departure related fatalities occurred.
- 30% occurred during the hours of 2-7 p.m.

National Roadway Departure Safety Strategies- FHWA *Proven Safety Countermeasures*

Strategic approach to Reduce Roadway Departures

- **Keep Vehicles on Roadway**

The most cost-effective solution to reduce the number of crashes, injuries, and fatalities due to roadway departure is to focus efforts on implementing countermeasures that will keep vehicles on the roadway. Improving pavement friction, alerting drivers with rumble strips, enhancing delineation along horizontal curves, and improving nighttime visibility are effective practices .

- **Provide for Safe Recovery**

Once vehicles have left the travel lane, providing an opportunity to reenter the travel way safely is a priority. Providing shoulders, safe pavement edges, and clear zones are effective means to provide this opportunity for drivers to recover safely.

- **Reduce Crash Severity**

Hardware, such as barriers, sign supports, and work zone devices are commonly used to reduce the potential severity of crashes on the roadside. Crash testing is used to evaluate the crashworthiness of these devices.

Current CHSP Roadway Departure Strategy Efforts

Education/ Communication	Enforcement	Engineering	EMS
<p>Driver Skills Trainings , Various Safety Partners</p>	<p>High visibility enforcement to address factors related to roadway departures, MHP & Local LEOs.</p>	<p>Safety improvements to mitigate run offs at curves & geometric design for safer transition & recovery of errant vehicles, MDT T&S Eng.</p>	<p>Coordinate communication among emergency responders to clear scene in a safe and quick manner & reduce potential impacts to the traveling public. MHP</p>
<p>PSAs & safety improvement educational brochures, MDT T&S Eng.</p>	<p>Operation Safe Driver, MDT Motor Carriers & MHP</p>	<p>Variable speed limits & message signs inform traveling public of changing roadway conditions & events, MDT Maintenance</p>	
<p>Road reporting system & web- site provide road conditions & incidents, MDT Maintenance</p>			

Intersection Related



In or related to an Intersection

21%

of all motor vehicle deaths & serious injuries were intersection related.

Of all Intersection related deaths & serious injuries

- 25% involved an impaired driver
- 24% involved inattentive, careless, & distracted driving
- 21% involved unrestrained occupants

Intersection Related Occurrence

61%
of all
intersection
related
motor vehicle
deaths &
serious
injuries
occurred in
rural areas.

Of all rural intersection related deaths & serious injuries-

- 81% involved unrestrained occupants
- 74% involved impaired drivers
- 56% were speed related

Within Urban areas

- 73% involved **non-motorists**
 - 76% of bicyclist /intersection related occurred in urban areas
 - 71% of pedestrian/intersection related occurred in urban areas

Intersection Related- Driver's Age

Age Group		Age Group	
20-25	15%	38-43	9%
14-19	13%	50-55	9%
26-31	11%	44-49	8%
68+	11%	56-61	8%
32-37	10%	62-67	7%

Intersection Related Occurrence-When

Of all intersection related fatalities & serious injuries –

- 25⁰% occurred during the winter months of **January & February**
- 34⁰% occurred on **Fridays & Thursdays**
- 27⁰% occurred between the hours of 3-6 p.m.

National Intersection Related Safety Strategies- FHWA *Proven Safety Countermeasures*

- **Unsignalized Intersections**

Improve access management near unsignalized intersections;

Reduce frequency and severity of intersection conflicts through geometric design and

Improve visibility and sight distance at intersections at unsignalized intersections; (lighting, sight distance).

Improve driver awareness of intersections as viewed from the intersection;

- **Signalized & Innovative Intersections**

Mitigate crash frequency and severity with appropriate intersection traffic control and other infrastructure improvement;

Reduce operating speeds on specific intersection approaches, (high-speed intersection approaches);

Improve driver awareness and compliance with traffic control devices & /or traffic laws

Current CHSP Intersection Related Strategy Efforts

Education/Communication	Enforcement	Engineering
Promote/ Conduct evidence-based traffic education& driver skills training, Various Safety Partners	Enforcement red light running violations, MHP/ Local Law Enforcement (LLE)	Installation of intersection safety improvements, MDT T&S Engineering /local jurisdictions
Conduct public awareness re: traffic operation improvements, MDT T&S Engineering	Enforcement of intersection traffic violations by all users, MHP/LLE	Construct infrastructure design to reduce intersection related conflicts & collisions, MDT Engineering/local jurisdictions

Impaired Driving

Under the influence of alcohol &/ or drugs



38%

of all motor vehicle deaths & serious injuries involved an impaired driver.

Of all impaired fatalities & serious injuries -

- 71% involved a roadway departure
- 54% involved an unrestrained occupant
- 24 % were speed related

Impaired Driving Occurrence

89%

of all impaired driving related motor vehicle deaths & serious injuries occurred in rural areas.

Of all rural impaired driving fatalities & serious injuries –

- 94% involved roadway departure
- 93% involved an unrestrained occupant
- 88% involved inattentive, careless, or distracted driving
- 88% were speed related

Impaired Driving – Driver's Age

Impaired Driver Age Group		Impaired Drive Age Group	
20-25	22%	44-49	9%
26-31	17%	50-55	7%
32-37	12%	56-61	6%
38-43	10%	62-67	4%
14-19	10%	68+	3%

Impaired Driving Occurrence-When

Of all impaired driving related fatalities & serious injuries-

- 36% occurred during the three summer months of **July, August, and June.**
- 22% occurred on **Saturdays**
- 21% occurred during the time frame between **midnight-3 a.m.**

National Impaired Driving Safety Strategies *NHTSA- Countermeasures That Work*

Four basic strategies are used to reduce impaired crashes and driving under the influence.

- Deterrence: enact, publicize, enforce, and adjudicate laws prohibiting impaired driving so that people choose not to drive impaired;
- Prevention: reduce drinking and drug use and keep impaired drivers from driving;
- Communicate and outreach: inform the public of the dangers of impaired driving and establish positive social norms that make driving while impaired unacceptable; and
- Alcohol and drug treatment: reduce alcohol dependency or addiction among drivers.

Current CHSP Impaired Driving Strategy Efforts

Education/ Communication	Enforcement/ Adjudication/Prosecution	EMS /Prevention/ Intervention/ & Treatment	Policy/ Legislation
Media Campaigns (ED/COM)	High-Visibility Spot Check Enforcement (ENF)	Alcohol Screening and Brief Intervention (PIT)	Alcohol-Impaired Driving Law Review (P/L)
Traffic Safety Resource Officer (TRSO) for training (i.e. SFST, DRE, ARIDE) (ED/ENF)	Law Enforcement Liaison (LEL) to support local law enforcement officers in conducting HVE activities (ENF) Compliance Checks (ENF)	Regular review of DUI toxicology & other drug impaired driving samplings to identify course of action in prevention, intervention and treatment. (PIT)	Monitor impact of marijuana legalization & crashes and countermeasures in peer states (P/L)
SOAR & Teen Peer-to-Peer, MDT(ED)	DUI Courts /Sanctions/ Monitoring	Responsible Beverage Service Training (Prevention)	
DUI Task Forces (ED)	Traffic Safety Resource Prosecutor (TSRP) trainer to ensure consistent adjudication of impaired driving violations. (ED/ENF)		

Unrestrained Occupants

No use or improper use



33%

of motor
vehicle
deaths &
serious
injuries
involved
unrestrained
occupants

Of all unrestrained occupant fatalities & serious injuries -

- 76% involved a roadway departure
- 60% involved an impaired driver
- 25% were speed related
- 21% involved inattentive, careless, or distracted driving.

Unrestrained Occupants Occurrence

94%

of all
unrestrained
occupant
deaths &
serious
injuries
occurred in
rural areas

Of all unrestrained fatalities & serious injuries that occurred in rural areas-

- 93% involved impaired drivers
- 91% involved inattentive, careless, or distracted driving
- 90% were speed related

Unrestrained Occupants-Driver's Age

Age Group		Age Group	
20-25	24%	44-49	10%
26-31	18%	50-55	8%
14-19	18%	68+	8%
32-37	13%	56-61	7%
38-43	11%	62-67	5%

Unrestrained Occupants Occurrence- When

- 33% unrestrained occupant fatalities & serious injuries most often occur during **July, August, and September.**
- 52% of all unrestrained occupant fatalities & serious injuries occur on **Fridays, Saturday, & Sundays.**

Timeframes that unrestrained occupant fatalities & serious injuries most often occur-

- **Midnight – 3 a.m.**
- **4-7 p.m.**

National Occupant Protection Safety Measures, *NHTSA –Countermeasures That Work*

The most effective strategy for achieving and maintaining restraint use at acceptable levels is well publicized high-visibility enforcement of strong occupant restraint use laws. The strategies three components must be done in coordination and are-

- Laws,
- Enforcement, and
- Publicity and Community Outreach.

Current CHSP Unrestrained Occupants Strategy Efforts

Policy/Legislation/Resource Development	Education/Communication	Enforcement
Support efforts to implement a primary seatbelt law. (PL)	Sustain and expand CPS certification training program /fitting stations (ED/PREV)	Training judges to ensure consistent citing & adjudication (ENF)
Support efforts to raise seat belt fine consistent with Child Passenger Safety (CPS) restraint law (PL)	Develop CPS materials with consistent message & distribution plan (ED/PREV/COM)	Support high visibility enforcement of current seat belt laws. (ENF)
Support enhancement & implementation of mandatory minor occupant protection law (PL)	Develop educational campaigns based on current research on effective messaging (ED/PREV/COM)	Encourage employer and state agencies seat belt policies (P/ENF)
Support local adoption of primary seat belt ordinances(PL)		



Speed Related

Exceeding the speed limit or driving too fast for the conditions.

21%

of all motor
vehicle
deaths and
serious
injuries
were speed
related

Of all speed related fatalities & serious injuries –

- 72% involved roadway departures
- 43% involved an impaired driver
- 40% involved an unrestrained occupant

Speed Related - Occurrence

94%

of all speed related motor vehicle deaths and serious injuries occurred in rural areas

Of all speed related fatalities & serious injuries that occurred in rural areas-

- 90% involved unrestrained occupants
- 87% involved impaired drivers
- 81% involved inattentive, careless, or distracted driving

Speed Related- Driver's Age

Age Group		Age Group	
20-25	24%	56-61	10%
14-19	17%	38-43	10%
26-31	17%	50-55	10%
32-37	12%	68+	7%
44-49	11%	62-67	6%

Speed Related Occurrence- When

Of all speed related fatalities & serious injuries-

- 32% occurred during the months of November, December, and **July**.
- 51% occurred on **Fridays, Saturdays, and Sundays**
- 25% occurred between the hours of **3-7 p.m.**

National Speed Related Safety Measures

NHTSA- Countermeasures That Work

Speeding & aggressive driving involve traffic law violations.

- Traffic law enforcement is the basic behavioral strategy to include –
- Public outreach
- High visibility enforcement; and
- Speed Limits determined through engineering practices with considerations of other roadway factors.

Current Speed Related Strategies Efforts

Education/ Communication	Enforcement	Engineering	EMS
Public service announcements of high visibility traffic enforcement campaigns, MHP/MDT	High visibility traffic enforcement, MHP/Local Law Enforcement	Variable speed limits to inform public of changing weather conditions, special events or high-risk areas, MDT Eng.	Montana's Move Over Law (MCA 61-8-346) informs public on speed reduction around emergency vehicles, MT Leg.
Alive at 25 traffic safety driver training, MHP	Enforcement of Move Over Law, MHP	Installation of Move Over signs, MDT Maintenance	Traffic Incident Management (TIMS) training, MHP
Drivers Ed Speed management module & Adaptive Illustrated Drivers Manual, OPI			

Distracted Driving

(inattentive, careless, & distracted)



22%

of all motor
vehicle deaths
& serious
injuries
involved
inattentive,
careless, &
distracted
driving

Of all distracted driving fatalities & serious injuries –

- 59% involved a roadway departure.
- 32% involved unrestrained occupants
- 30% involved an impaired driver
- 23% were intersection related
- 15% involved speeding; and
- 11% involved a drowsy/sleeping driver

Distracted Driving - Occurrence

79%

of all distracted driving deaths & serious injuries occurred in rural areas outside of city limits.

Of all the distracted driving fatalities & serious injuries That occurred in rural areas –

- 93% involved roadway departures
- 91% involved unrestrained occupants
- 88% involved impaired drivers
- 81% were speed related

Distracted Driving - Driver's Age

Age Group		Age Group	
14-19 Years of age	12%	44-49 Years of age	8%
20-25 Years of age	14%	50-55 Years of age	7%
26-31 Years of age	12%	56-61 Years of age	10%
32-37 Years of age	10%	62-67 Years of age	8%
38-43 Years of age	9%	68+ Years of age	10%

Distracted Driving - Occurrence

- 49% occurred during the months of **July, August, September** and **June**.
- 32% occurred on **Fridays** and **Saturdays**.
- 31% occurred from **2 -6: 00 p.m.**

National Distracted Driving Safety Measures , *NHTSA- Countermeasures That Work*

Behavioral strategies for distracted and drowsy driving focus on removing underlying causes and promoting awareness of risky driving behaviors, and include-

- Laws & Enforcement
- Education & Communication
 - Employer Programs

Current Distracted Driving Strategy Efforts

Education/Outreach	Enforcement	Engineering
Distracted & drowsy driving module, OPI MT Teen Driver Education Curriculum.	Local law enforcement of community cell phone ordinances.	Implementation of rumble strips to alert drivers of errant vehicles/MDT Eng.
Peer-to-Peer Safety Campaigns, MDT/ community high schools	Employer-based traffic safety cell phone ban policies. Private & Public Agencies	
Only a Second YouTube educational video, MDT/public awareness		
Map of handheld electronic device bans, MDT/community awareness		

Role and Responsibility of Champion/ Co-Champion

- Ensure representation of the 4Es.
- Track CHSP Emphasis Area strategy activities
- Schedule and facilitate regular emphasis area meetings
- Document meeting minutes
- Report status and progress of activities
- Expand safety partner network.

Next Steps

- **Next Meeting – June 11, 2020**
- **Confirm Emphasis Area Chairs**
- **Discuss Strategies**
- **Develop Teams**
- **Implementation Plan**