Roadway Departure & Intersection Crashes CHSP Emphasis Area Meeting MDT Planning Conference Room A 2960 Prospect Avenue - Helena, MT Tuesday, July 19, 2016, from 10:30 am - 12:00 pm



zero deaths | zero serious injuries

#### Attendees:

Marcee Allen, Safety Engineer (FHWA)
Audrey Allums, Grants Bureau (MDT)
John Althof, Rail Safety, (MDT)
Melinda Barnes, Executive Director, BikeWalkMT
Jim Combs, Preconstruction (MDT)
Pam Langve-Davis, CHSP Program Coordinator, (MDT)
Don Matlock, Operation Lifesaver
Kraig McLeod, Safety Engineer, (MDT)
Chad Newman, Law Enforcement Liaison, (MDT)
Anna O'Donnell, AAA
Carl Peil, AARP
Roy Peterson, Traffic & Safety, (MDT)

## Approval of minutes -

A motion to approve the May 17, 2016 meeting minutes was made by Carl Peil to include the number of the 2015 Operation Lifesaver trainings conducted. Chad Newman second the motion. All present approve the minutes with the update as motioned.

### **New Business-**

Strategy 1 – Reduce and mitigate roadway departure crashes through data-driven problem identification and the use of best practices. Reported by Roy Peterson

Implementation Step: Variable Speed Limit (VSL) Study for Interstate 90 over Lookout Pass
Objective: Conduct feasibility study for developing a VSL system for implementation on I-90 at Lookout Pass.

The feasibility study developed a concept framework and initials concepts and cost estimate for MDT to follow if and when a VSL implementation is pursued at this location. Total cost for field infrastructure such as speed sensors, electronic signs, communication, cameras, etc. would be ~\$13 million. The study concluded that it would also cost about \$2.6 million on a yearly basis to maintain and operate this system. If it is given the green light in this year's upcoming legislative session, it would take about five years to get the system up and running.

Conclusion and Recommendations from the report:

The Operations Desk approach:

- Utilizes efficient use of manpower to manage the VSL system as well as perform other important and related functions
- Provides MDT with flexible options for future expansion into a full statewide Transportation Management Center (TMC)

- Use feasibility study to seek management direction regarding next steps for VSL
- Complete ongoing speed study
- If MDT decides to move forward with VSL in the I-90 project corridor the following next steps should be considered:
  - o Conduct further analysis to determine best location for the Operations Desk
  - Prepare a VSL system corridor implementation plan that would define in more detail the location of sensors and signs and clarify the power and communication approaches
  - Prepare a system Concept of Operations to define data collection and management,
     operation center function, communication protocols, and operational procedures
  - Develop High-Level System Requirements to define the system levels and expected functions, inputs/outputs, and outcomes

Next Steps: Pursue this project in the upcoming legislative session if it determined to be the best time for MDT.

**Strategy 2 – Speed-related roadway departure/intersection crashes.** Reported by Roy Peterson Implementation Step: Complete research study on the Safety Impacts of Differential Speed Limits on Rural Two-Lane Highways in Montana and then consider implementation of appropriate recommendations. http://www.mdt.mt.gov/research/projects/traffic/differential\_speed.shtml

### Objective:

- Evaluate driver speed selection as a function of posted speed and other site factors
- Evaluate traffic operational characteristics, including number of vehicles in a line, passing attempts in relation to posted speed limits and other site factors.

#### Research included:

- Task 1 Review of Literature and Practice
- Task 2 Collect and Analyze Operational Data
- Task 3 Collect and Analyze Crash Data
- Task 4 Trucking Industry Survey
- Task 5 Road User Survey
- Task 6 Develop Guidelines
- Task 7 Final Deliverables and Meeting

## **Research Study Conclusions:**

Collectively, the results provide substantial support for uniform 65 mph speed limits due to:

- Lower speed variance
- Lower overall mean and 85th percentile speeds
- Less frequent passing
- Less high risk passing
- Shorter platoons
- Fewer crashes
- Older motorist support

- Truck driver support
- Trucking industry support

### Speed limit policy recommendations:

- Further implantation of the uniform 65 mph speed limit should be considered
  - Selective implementation is advisable initially, and candidate roadways should possess
    - High traffic volumes (>3,000 ADT)
    - High truck percentages (>15%)
    - Limited passing opportunities (>40% no passing zones; few passing relief lanes; excessive horizontal curvature)
    - District 1 may provide ideal initial candidates
    - High volumes, crash rates, and platoon lengths
    - Statewide may eventually follow

Next Steps: Review highway corridors that meet the criteria shown above and provide recommendation to the Transportation Commission for approval.

## **Strategy 3- Reduce roadway departure and intersection crashes through education.** Reported by Brandi Hamilton, MDT Maintenance

Implementation Step - Conduct public awareness and education about roadway conditions, operations and management strategies. MDT maintenance has provided seasonal approved recommended suggestions for messages and topics to district staff. These messages can be rotated on the variable message signs to continue the momentum and awareness and conversation of Vision Zero and reducing fatal and serious injuries on public roadways.

Melinda Barnes requested that she recently heard an unidentified radio PSA that used terminology of vulnerable users and asked if that could be clarified to include all users. It was noted that it could be but needed to be identified with whoever the sponsor was. Audrey Allums noted that NHTSA has specific criteria that PSAs can only address /target roadway users identified through data as high risk. High risk roadway users identified in Montana are impaired drivers and non-users of occupant protection.

Noting that it will be September before our next meeting, team members are reminded that school will be back in session and PSAs and other outreach should consider the vulnerable school children and staff that will be walking and bicycling back to school. Anna O'Donnell said that AAA will be conducting Back To School messaging and will share more information.

Action Item: AAA Back to School link.

# Strategy 4 -Reduce and mitigate intersection crashes through data-driven problem identification and the use of best practices. Reported by Kraig McLeod

Implementation Step: Develop and implement an Intersection Safety Plan.

Status: Project is moving forward and tentatively scheduled to be completed in September.

> Action Item: Report out at September meeting

## Strategy 5: Support and increase enforcement of proper road use behaviors by all users in high-crash corridors and high-crash locations Reported by Roy Peterson

Implementation Step: Implement and support targeted enforcement to prevent intersections and roadway departure crashes.

#### Status:

- Peterson will be compiling speed limit data for the various segments on the interstate that were not raised to 80 mph to have it ready to be presented by Dwane Kailey at the Transportation Commission in September.
- Peterson to be presenting at Impaired Driving Conference in Jan/Feb.

#### Announcements -

Upcoming Dates/ Next Meeting & Adjournment

- Labor Day Mobilization campaign is scheduled to include social media, radio, and TV to reduce impaired driving
- Tuesday, September 20, 10:30 a.m.- noon
- Annual Transportation Safety Meeting, October 12 & 13, at the Radisson Colonial
- Tuesday, November 15, 10:30 a.m.- noon