



Montana Department of Transportation

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EXHIBIT 5  
DATE 2/20/15  
HB 415

February 16, 2015

TO: REPRESENTATIVE STEVE LAVIN  
FROM: KEVIN CHRISTENSEN, P.E.  
MDT Construction Engineer  
RE HB 415 – Revise Laws Governing Highway Work Zones

Senator Lavin,

Setting proper speed limits in work zones is very critical for two important reasons; work zone safety and speed differentials. The safety of all workers within the work zone is the utmost concern with the Montana Department of Transportation. Engineering judgment used to determine proper speed limits is based upon the nature of the project, roadway and roadside conditions, and whether or not workers are present. Overall, the goal is to identify a speed that is safe and reasonable for existing work zone conditions.

Setting speeds that are safe and reasonable will also help reduce speed differentials. Operating speeds do not have a strong correlation to crash frequency; rather it is the variance in vehicle speeds. A primary source of speed differential is the credibility drivers have with posted speed limits. Unreasonable low speed limits and leaving reduced speed limits in place after the work activity is removed greatly diminishes driver's trustworthiness. In general, motorists will only reduce speed through work zones only if they clearly see a perceived need to do so. Therefore, it is essential proper speed limits are posted for both the safety of workers and road users and for the believability of drivers.

The Montana Department of Transportation has developed guidelines to establish proper work zone speed limits. The Standard Specifications for Road and Bridge Construction, 2014 Edition contains Table 618-5, Traffic Control Speed Limits in Construction Zones. These speed limits are dependent upon roadway conditions, activities, and the presence of workers. The correlation between speed limits and activities were developed through extensive research, experienced field implementation, and evaluation with other state departments of transportation. The Manual on Uniform Traffic Control Devices approved by the Federal Highway Administration is also used as a guide for posting proper speed limits within work zones.

A Montana Department of Transportation Engineering Project Manager is the field representative for the Department and is responsible for direct project oversight and documentation. The Engineering Project Manager along with the Traffic Control Contractor evaluates existing conditions and activities in order to establish proper speed limits based upon Table 618-5. These speed limits are monitored and adjusted during the life of the project by focusing on continually changing conditions. Project field inspectors who report directly to the Engineering Project Manager also monitor speed limits to insure compliance with Table 618-5.

Establishing and maintaining speed limits both safe and reasonable are accomplished through shared responsibilities between the Montana Department of Transportation and the traffic control contractor.

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**TABLE 618-5  
TRAFFIC CONTROL SPEED LIMITS IN CONSTRUCTION ZONES**

Speed Limit	Activity Description
Existing	<ul style="list-style-type: none"> <li>-Construction activities are 30 feet (9.2 m) beyond the edge of the traveled way and construction vehicles are not crossing the traveled way.</li> <li>-Construction activities suspended during winter shutdown or prolonged periods of time, based upon roadway conditions.</li> <li>-Holiday weekends and no work days when work is not in progress and PTW has not been impacted.</li> <li>-Interstate merging tapers.</li> <li>-Survey crew activities not on the PTW or parking shoulder.</li> </ul>
65 mph	<ul style="list-style-type: none"> <li>-Two-lane two-way traffic on interstates.</li> <li>-One-lane one-way traffic on interstates with no activities in closed lane.</li> </ul>
55-65 mph	<ul style="list-style-type: none"> <li>-One-lane one-way traffic on interstates with activities encroaching on closed lane.</li> <li>-Two-lane two-way non-interstate traffic traveling on non-impacted roadway surfaces when construction activities are suspended or not present, based upon roadway conditions.</li> </ul>
45-55 mph	<ul style="list-style-type: none"> <li>-Interstate crossovers.</li> <li>-Two-lane two-way non-interstate traffic traveling on impacted roadway surfaces when construction activities are suspended or not present, based upon roadway conditions.</li> <li>-Two and four-lane roadways with construction activities within the clear zone but not encroaching on the shoulders and/or driving lanes.</li> </ul>
45 mph	<ul style="list-style-type: none"> <li>-Seal coat operations on interstates, increased to 55 mph once initial brooming roadway is completed.</li> <li>-Interstate roadways with construction activities on shoulders.</li> </ul>
35 mph	<ul style="list-style-type: none"> <li>-Seal coat operations on two-lane two-way and multiple-lane two-way roadways, increased to 45 mph once initial brooming roadway completed.</li> <li>-In advance of flagging stations or temporary traffic signals.</li> <li>-Interstate and multiple-lane roadways with construction activities in closed lane(s), within the work zone only.</li> <li>-Two-lane two-way roadways with construction activities on shoulders.</li> </ul>
25 mph	<ul style="list-style-type: none"> <li>-Temporary diversions on graveled surfaces.</li> <li>-Pilot car queues.</li> <li>-Survey crew activities within the traveled way. (non-interstate)</li> <li>-Two or multiple-lane roadways in an urban area with construction activity in a lane, within the work zone only.</li> </ul>