MASTERFILE COPY

Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

Memorandum

To: Distribution

From: Roy A. Peterson, P.E.
Traffic and Safety
Engineer

Date: January 18, 2013

Subject: Advance Warning Flashers at Signalized Intersections

This memorandum updates the April 10, 2008 guidance regarding the use of Advanced Warning Flashers (AWF) at signalized intersections with the overall goal of providing statewide consistency in the use of these devices for the traveling public.

The main purpose of an AWF is to provide additional information to assist motorists in making safer driving decisions when approaching traffic signals in select locations. AWFs are not appropriate at all signalized intersections. The decision to install an AWF should be documented in an appropriate project report. These include a Preliminary Field Review report (PFR), Scope of Work (SOW) report, traffic signal warrant study or other document that requires the Traffic and Safety Bureau Chief to approve such installation. The analysis should include a corridor review for existing AWFs located at other intersections. These installations may no longer be necessary and should be removed at the time of installation of the new AWF.

AWF's should only be installed in locations based on a demonstrated addressable need. Locations that AWFs should be considered include but are not limited to intersections with:

- Limited sight distance – as defined in the current AASHTO green book and/or the Department's design manuals.
- High speed locations – those intersections with operating speeds greater than 60 mph.

When the decision is made to install AWFs, they should be installed and operated in accordance with the MUTCD and the Department's Traffic Engineering Manual. They should be operated in such a way that considers the mix of vehicles, their speeds, and the geometric profile of the highway.

The AWF used for new signal installations should include two amber LED beacons operating in a wig-wag fashion. The beacons should activate prior to the absence of green and continue flashing until the signal returns to green on that approach. Signs and beacons should be installed on an overhead structure

when the approach to the intersection consists of two or more travel lanes.

Conversion of existing AWFs to these guidelines

These guidelines apply to new installations. The Traffic and Safety Bureau will coordinate with the districts to develop an action plan to either upgrade or remove each existing AWF with the goal of having each AWF operate in a consistent manner and message. The goal is to develop an agreed upon action plan by March 29, 2013. This plan will then be used to program new projects or to incorporate the removal or upgrade of the existing AWF into a programmed project.

CC:
Dwane Kailey, P.E. - Acting Chief Engineer, Highways and Engineering Division
James A. Walther, P.E. - Preconstruction Engineer
Jonathon Swartz - Maintenance Administrator
Jeffrey M. Ebert, P.E. - District Administrator – Butte
Doug Wilmot - Acting District Administrator - Great Falls
Ed Toavs, P.E. - District Administrator - Missoula
Shane Mintz - District Administrator - Glendive
Stefan Streeter. P.E. - District Administrator - Billings
Roy Peterson, P.E. - Traffic and Safety Engineer
Danielle Bolan, P.E. - Traffic Operations Engineer
Ivan Ulberg, P.E. - Traffic Design Engineer
Kraig McLeod, P.E. - Traffic Safety Engineer
Julie Wotring, P.E. - Helena Traffic
Phill Balsley, P.E. - Helena Traffic
Erich Wulfekuhle, P.E. - Helena Traffic
Shane Stack, P.E. - Missoula District Preconstruction
Dustin Rouse, P.E. - Butte District Preconstruction
Steve Prinzing, P.E. - Great Falls Preconstruction
Jim Frank, P.E. - Glendive Preconstruction
Gary Neville - Billings Preconstruction
James Freyholtz – Kalispell Traffic
Glen Cameron – Missoula Traffic
Lee Alt – Butte Traffic
James Combs - Great Falls Traffic
Keith Bithell - Glendive Traffic
Luke Anderson – Billings Traffic
Stan Jonutis - Billings Traffic
Traffic and Safety File