

## EXECUTIVE SUMMARY

Static warning signs for occasional hazards (SWSOH) are used to warn drivers of such hazards that may occur unexpectedly on the highway or the adjacent roadside. Examples of those hazards include warning signs for animal crossing, icy roads, falling rocks, etc. The fact that these signs are posted all the time while hazards occur occasionally or rarely raises questions about their effectiveness in improving safety. Specifically, over time drivers may become desensitized to the warning provided by these signs.

The current project includes an investigation into the effectiveness of static warning signs for occasional hazards. The information provided by this investigation is very important as highway agencies need to be assured about the feasibility of investing significant resources on installing and maintaining those traffic control devices. The project conducted a review of the current state-of-the-art and practice. Specifically, a literature search was conducted and included the most important studies on warning signs and devices including those that are not consistent with the Manual on Uniform Traffic Control Devices (MUTCD). Also, a questionnaire survey was sent to all 50 state Departments of Transportation (DOTs) and two Canadian provinces to review their practice concerning warning drivers of occasional hazards. The survey also included information on standard static warning signs as well as other unconventional warning devices. Twenty eight out of fifty two agencies participated in the survey representing a response rate of 54%.

Study results suggest that most survey participating states are not assured about the effectiveness of static warning signs for occasional hazards and that around 57% of those states have some sort of unconventional warning signs or devices in place. The survey also demonstrated a dire need in practice for further guidance on warning the traveling public of occasional hazards.