Task 1: Assemble Comprehensive List

Purpose

Assemble an initial comprehensive list of strategies associated with target crash type.

Description

Initial list of strategies MnDOT identified to reduce road departure crashes using the NCHRP 500 series.

| Objectives | Strategies | Relative Cost to Implement and Operate | Effectiveness | Typical Timeframe for Implementation | Workshop Strategy |
|--|---|--|------------------------|--|----------------------|
| 15.1 A Keep vehicles from encroaching on the roadside | 15.1 A1 Install shoulder rumble strips | Low | Tried | Short | |
| | 15.1 A2 Install edgelines "profile marking", edgeline rumble strips or modified shoulder rumble strips on section with narrow or no paved shoulders | Low | Experimental | Short | |
| | 15.1 A3 Install midlane rumble strips | Low | Experimental | Short | |
| | 15.1 A4 Provide enhanced shoulder or delineation and marking for sharp curves | Low | Tried / Proven | Short | |
| | 15.1 A5 Provide improved highway geometry for horizontal curves | Moderate | Proven | Long | |
| | 15.1 A6 Provide enhanced pavement markings | Low | Tried | Short | |
| | 15.1 A7 Provide skid-resistance pavement surfaces | Moderate | Proven | Medium | |
| | 15.1 A8 Apply shoulder treatments *Eliminate shoulder drop-offs *Shoulder wedge *Widen and/or pave shoulders | Low | Experimental Proven | Medium | |
| 15.1 B Minimize the likelihood of crashing into an object or overturning if the vehicle travels off the shoulder | 15.1 B1 Design safer slopes and ditches to prevent rollovers | Moderate | Proven | Medium | |
| | 15.1 B2 Remove/relocate objects in hazardous locations | Moderate to High | Proven | Medium | |
| | 15.1 B3 Delineate trees or utility poles with retroreflective tape | Low | Experimental | Short | |
| 15.1 C Reduce the severity of the crash | 15.1 C1 Improve design of roadside hardware | Moderate to High | Tried | Medium | |
| | 15.1 C2 Improve design and application of barrier and attenuation systems | Moderate to High | Tried | Medium | |

Source: NCHRP 500 Series

Short (<1 year) Medium (1-2 years) Long (>2 years)