

WisDOT's Road Safety Management Process

How Crash Data is Used Throughout the Process

Network Screening

Crashes: Network Screening identifies outliers using Safety Performance Functions for Intersections, Segments and for any Pedestrian or Bicycle crashes.

Animal, work zone and parking lot crashes are removed for this step.

Tools: AASHTOWare Safety: Advanced Network Screening and Wisconsin Network Screening Spreadsheet (WINSS)

01

02

Diagnosis

Crashes:

For Diagnosis, review crashes from Network Screening and vet crashes.

Crashes that are treatable through an engineering solution should remain regardless of a specific pattern or trend.

03

Countermeasure Selection

Crashes: Countermeasure Selection involves reviewing the **crashes remaining from Diagnosis** and identifying countermeasures that can mitigate crashes or trends.

Tools: WisDOT's Countermeasure Selection Table, WisDOT's Crash Modification Factors Table, FHWA's Proven Safety Countermeasures, Intersection Control Evaluation (ICE), Engineering Judgment, and application of Design Standards

04

Safety Evaluation & Economic Appraisal

Crashes: For Safety Evaluation, include ALL crashes occurring at the location and analyze/model the countermeasure selected to mitigate the crashes. **ALL crashes would include animal, work zone, medical-related or other crashes that may have been removed during the vetting process or network screening step.**

Tools: AASHTOWare Safety: Alternative Design, IHSDM, Highway Safety Benefit-Cost Analysis tool (Method 1 Only)

05

Safety Effectiveness Evaluation

Crashes: Post-improvement evaluations should take place to evaluate the Safety Effectiveness of the countermeasure implemented. **Crash data that aligns with the performance measure to be evaluated should be used.** (e.g. Fatal and Injury Reduction, Crash Type Mitigation, etc.)

