



# Traffic Engineering, Operations & Safety Manual

## Chapter 12 Safety

### Section 2 Traffic Safety Planning

#### 12-2-1 Wisconsin Strategic Highway Safety Plan

August 2023

Wisconsin's [Strategic Highway Safety Plan \(SHSP\)](#) is a statewide, comprehensive, and data-driven plan that implements the framework for supporting the safety goals. This plan identifies and examines a variety of issue areas and provides tasks with the most potential to reduce roadway crashes. By working with community partners such as law enforcement, emergency responders, health care providers, and local County Traffic Safety Commissions, WisDOT is committed to keep travelers safe on our roads. The SHSP examines a variety of factors that affect highway safety in Wisconsin. Goals of the SHSP include:

- Improve Safety Culture, Safety Data, and Safety Technology
- Reduce Driver Distraction/Improve Driver Alertness
- Reduce Alcohol and Drug-Impaired Driving
- Reduce the Incidence and Severity of Motorcycle Crashes
- Improve Driver Performance (Teens, Older and Competent)
- Improve Non-Motorist Safety
- Improve Safety of Intersections
- Increase Occupant Protection
- Curb Aggressive Driving/Reduce Speed-Related Crashes
- Reduce Lane Departure Crashes
- Improve Work Zone Safety

The SHSP provides direction for future safety programs and strategies that are implemented in Wisconsin. This document is a requirement by the Federal Highway Administration. Each plan is developed in a cooperative process with Local, State, Federal, Tribal, and other public and private sector stakeholders.

#### 12-2-2 Zero in Wisconsin

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In pursuit of the goals identified in Wisconsin's SHSP, WisDOT has advocated for [Zero in Wisconsin](#), a program that advocates for safe driving practices and strives to eliminate all preventable traffic-related deaths on Wisconsin roadways. WisDOT does not tacitly accept deaths and injuries; its citizens and state policy makers work together towards achieving zero fatalities and serious injuries on our roadways.

The program provides information and resources about occupant protection, impaired driving, distracted driving, speeding, and aggressive driving, as well as pedestrian and bicycle safety.

Transportation safety involves a multifaceted approach to improve safety. [Community Maps](#) was developed to help support and enhance traffic safety planning, resource allocation, and decision support at the local level. This provides the public and local agencies a statewide map of all law enforcement reported motor vehicle crashes.

#### 12-2-3 Safe System Approach

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The Safe System Approach aims to eliminate fatal and serious injuries for all roadway users. This is accomplished by minimizing the risks involved in using transportation systems. It is a holistic approach that accounts for human mistakes and human vulnerability with redundancies in place to protect users. The Safe System Approach is comprised of the following principles:

- Death and serious injury are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Shared responsibility
- Safety must be proactive
- Redundancy is crucial

The Safe System Approach aims to design and operate our vehicles and infrastructure to anticipate human error to minimize the risk of fatal and serious injuries. This is accomplished by utilizing roadway design or having redundancies in place so that if a crash takes place the impact energy on the human body occurs at a tolerable

level. It also seeks to expand the availability of vehicle systems and features that prevent and minimize the impact of crashes. The Safe System Approach also aims to enhance the survivability of crashes with prompt emergency medical care, while also facilitating a safe work environment for first responders via effective incident management practices.

There are five elements to the Safe System Approach that build on one another to create layers of protection for all road users. These are: safe road users, safe vehicles, safe speeds, safe roads, and post-crash care. With each of these elements in place, it creates a holistic approach to minimize fatal and serious injuries.

**Figure 1:** The Safe System Approach Principals and Elements



**Safe Roads Measures:** Systematic, Systemic and Spot Infrastructure Improvements, Design, Education, Training, Awareness, Technology, Legislation, Data

**Safe Road Users Measures:** Education, Training, Awareness, Enforcement, Technology, Data, Legislation

**Safe Vehicles Measures:** Technology, Legislation, Education

**Safe Speeds Measures:** Design/Target Speed, Education, Training, Awareness, Enforcement, Infrastructure Improvements, Technology, Data, Legislation

**Post-Crash Care Measures:** Quick Crash Scene Clearance, Quick Emergency Response, Crash Analysis, Education