Michigan Adopts the Safe System Approach in the Strategic Highway Safety Plan

In the past, the Michigan Department of Transportation (MDOT) used a more traditional approach to transportation safety – placing responsibility for traffic safety on individuals and focusing on improving human behavior, controlling speeding through education and enforcement, and reacting based on crash history. However, like most States, fatal and serious injury crashes weren't coming down fast enough. So, when it was time to update their Strategic Highway Safety Plan (SHSP), MDOT pushed for the inclusion of the Safe System Approach (SSA).

The Governor's Traffic Safety Advisory Commission (GTSAC) agreed and the SSA was incorporated and took center stage in the SHSP—notably, within the mission of the document.

Under the direction of the GTSAC, the SHSP update focused on eliminating fatalities and serious injuries (instead of reducing) and changed its mission to "Applying the Safe System Approach through statewide strategies and initiatives that accommodate human mistakes and injury tolerance levels to move Michigan Toward Zero Deaths." With that mission front and center, Michigan was intentional about considering proactive systemic safety measures in its SHSP that anticipate and design for human mistakes and addressing potential risks

instead of treating roadways based only on past crashes. This is consistent with the SSA principles that safety is proactive and should introduce redundancy in the system.

To emphasize and operationalize the new mission, the state of Michigan went a step further and used the SSA elements of safe speeds, safe vehicles, safe roads, safe road users, and post-crash care as an umbrella for the SHSP strategies. The more traditional "5Es"—Engineering, Education, Enforcement, Emergency Response, and Equity fall under that umbrella and fit into different SSA principles. For Michigan, the 5Es make the SSA elements tactical.



Michigan felt that combining the SSA with the more traditional 5Es of traffic safety was a winning combination that would result in shared responsibility within redundant layers of protection, while making the SSA principles approachable for practitioners.





"We see the SSA and 5Es as complementary," said Mark Bott, former State Traffic and Safety Engineer for MDOT. "The Safe System Approach is the framework and tool to drive to zero deaths, the 5Es are how we implement it on the roadways."

The key strategies in Michigan's SHSP are based on emphasis areas. Then, they are organized under the corresponding SSA element(s), followed by one or more of the appropriate "Es" that provide an explanation of each strategy's potential benefit.

Below are examples of strategies that are organized by the SSA elements and the "Es" for two emphasis areas:

Emphasis Area: Impaired Driving

- Safe Road Users
 - Education: Support public information and education campaigns on the dangers of impaired driving through cutting-edge media appealing to various target audiences.
 - Education: Provide enhanced training for all sectors of the criminal justice and substance use disorder communities to implement behavior-changing strategies at each step of the system.
 - Enforcement: Support impaired driving enforcement, with a special emphasis on High-Visibility Enforcement (HVE) using tactics proven to reduce fatalities and severe injuries.
 - Enforcement: Provide recommendations related to impaired driving policies and legislative efforts based on scientific data to take a proactive data-driven approach to addressing impaired driving rather than an emotional reactionary approach.
- Safe Vehicles
 - Enforcement: Promote efforts to support sobriety courts and the use of ignition interlocks by expanding programs to reach more qualified impaired driving offenders and reduce recidivism.

Emphasis Area: Pedestrian and Bicycle Safety

- Safe Road Users
 - Engineering: Recognize successful pedestrian and bicycle safety initiatives by identifying existing and new research practices, programs, or initiatives that are successful or innovative.
 - Education: Raise awareness of pedestrian and bicycle safety by improving motorist, bicyclist, and pedestrian knowledge and behavior.
 - Enforcement: Provide recommendations related to pedestrian and bicycle safety legislation by identifying inconsistencies or gaps in current law pertaining to pedestrian and bicycle safety.





- Safe Roads
 - Engineering: Identify and promote the use of best practices when designing and operating transportation facilities by looking at network connectivity as well as pedestrian and bicycle facilities throughout Michigan.
 - Engineering: Achieve TZD by supporting, promoting, and implementing the TZD National Strategy
- Post-Crash Care
 - Equity: Determine focus communities, cities, and agencies for priority assistance by reducing crashes and injuries among pedestrian and bicyclists in identified communities across the state.

Lastly, fatal and serious injury crashes disproportionally affect communities of color, people living in rural areas, people with disabilities, and older adults. Michigan's commitment to the Safe System Approach underscores that the system should address the safety of all road users, and everyone should arrive at their destinations safely. The State incorporates the SSA throughout the SHSP to achieve that vision. Through the SSA, Michigan also believes it can reach zero deaths by addressing potential crash risks through a holistic view of safety. Under the SSA umbrella, implementing the SHSP is a shared responsibility, and Michigan has invited everyone to play a role in creating a safe transportation network for all road users.

To learn more, read the full Michigan SHSP: <u>https://www.michigan.gov/msp/-</u>/media/Project/Websites/msp/ohsp/1_March-2023/2023_2026_MI_SHSP_v7.pdf.





