

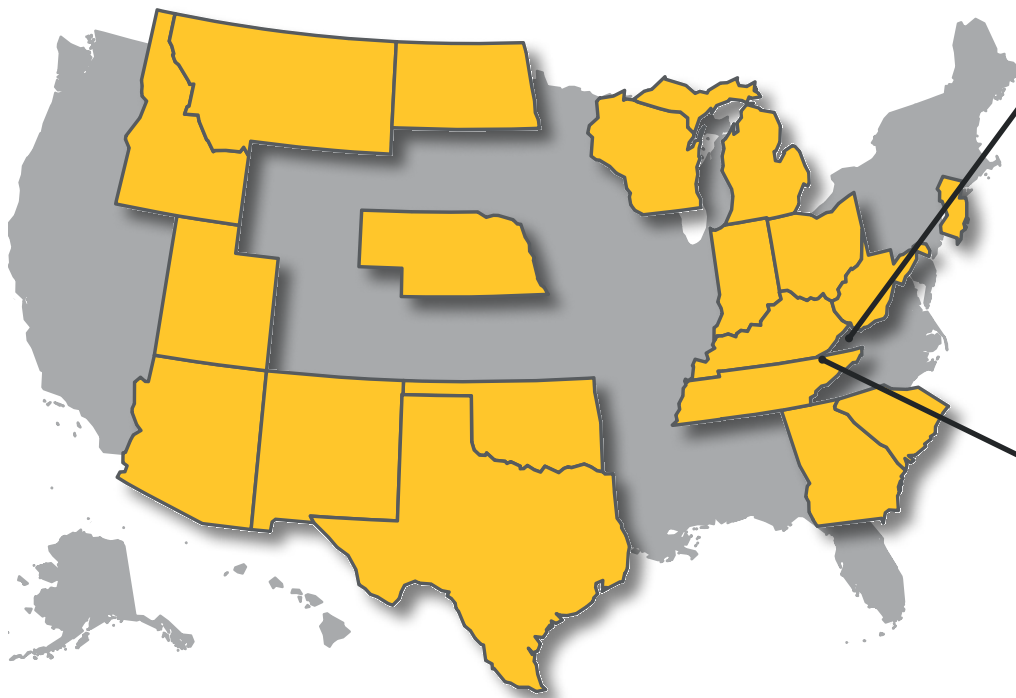
High Injury Road Network Safety Process Documentation

This document highlights how multiple local agencies are developing High Injury Networks by using EPDO weighting as the performance measure within AASHTOWare's Network Screening applications, providing a more comprehensive and proactive approach to assessing roadway safety risk.

Process Overview

Local agencies across the country are increasingly expected to ground their safety strategies in data-driven analysis. One of the most effective tools for this critical work is the creation of a high-injury network. This network highlights the segments, intersections, and corridors in their community where a disproportionate share of severe crashes occur. Ranking these roadways in a single list makes it easier to plan targeted safety investments where they will have the greatest impact.

Several local agencies, including Regional and Metropolitan Planning Organizations, as well as those at the city and county level, are using AASHTOWare Safety to create a high-injury network for their roadways. High-injury networks are an essential part of local transportation safety planning. For example, they are one requirement for some federal grant funds. Programs such as the Safe Streets and Roads for All (SS4A) initiative require data-backed evidence of safety needs. A ranked list of roadways seeing high-severity crashes is crucial to show where serious safety issues are concentrated in these communities.



The Kingsport Metropolitan Transportation Planning Organization (KMTPO) in Tennessee generated a Network Screening for the intersections in its MPO boundaries and ranked them on the ePDO performance measure.

The Knoxville Regional Transportation Planning Organization in Tennessee generated a high-injury pedestrian Network Screening by filtering only the pedestrian crashes in Knoxville, removing interstate crashes, and ranking these segments by EPDO.

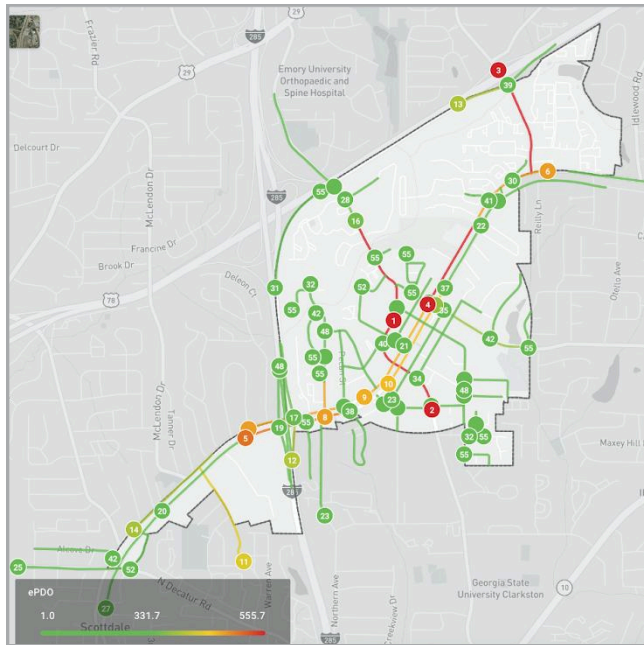
Customer Accounts - 21

This includes partnerships with state and local government and law enforcement agencies in 19 states.

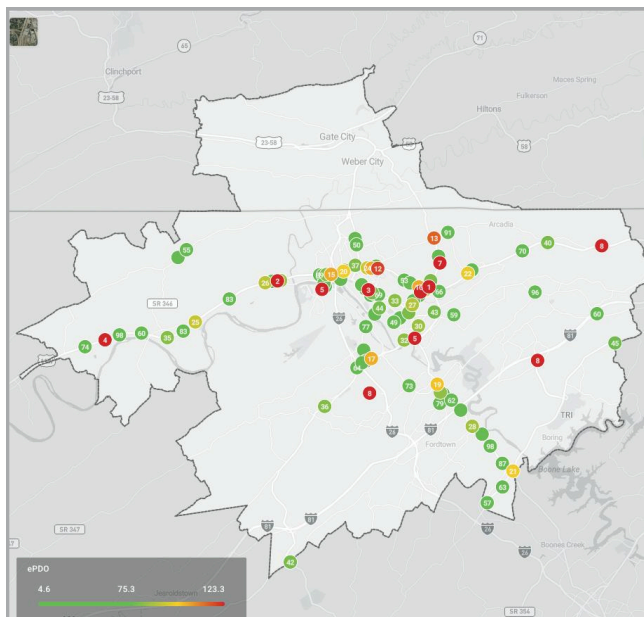
Over 3.7
Million
roadway miles

165 MPOs
have access today

42.6%
of all roads
within the nation



High-Injury Network Screening in Clarkston, GA



(High-Injury Network Screening generated by the Kingsport Metropolitan Transportation Planning Organization (KMTPO) in TN)

High-Injury Networks in Safety Planning

High-injury networks are essential for annual safety planning, helping MPOs and local agencies align with HSIP or set their own safety targets. They are also a core piece of Vision Zero, providing a foundation for strategies to eliminate serious injuries and fatalities.

Many agencies use AASHTOWare Safety to rank roads by EPDO (equivalent property damage only). EPDO assigns weighted values to crash severities—fatal crashes are weighted most heavily, serious injuries less but significant, and property-damage-only crashes the lowest. A higher EPDO score signals more severe crash outcomes on that roadway.

This approach helps planners look beyond raw fatality counts to identify corridors with high crash risk. It ensures repeated injury crashes are not overlooked, even when fatalities haven't yet occurred.

Conclusion

By flagging risky corridors early, agencies can address dangerous roadways before severe crashes happen, creating a proactive and balanced approach to safety planning.