

Asset Management Systems – Laying the Groundwork for Cutting Edge Safety Analysis Tools

Background

State DOTs are establishing and upgrading Asset Management Systems as foundations for better decision-making. SAFETEA-LU requires the development of State Strategic Highway Safety Plans which include safety analyses for all public roads. While the transportation bill does not specifically address a road inventory for safety analyses, the intent certainly dictates an inventory to perform the safety analyses. States strive to have comprehensive roadway inventory and traffic data collection programs; however, they are not geared to collecting data that may be required for safety analysis by a new generation of safety analysis tools. These required data include geometrics, such as intersection inventories and more complete roadway segment data (e.g., median barrier type, details regarding horizontal curves) and more traffic data on local roads. There is clearly a need for better coordination and integration of data from various asset management systems with safety programs in states and local agencies.

Convincing state and local agencies to further expand basic asset management systems to include more data elements needed for safety programs and analyses will likely require marketing to asset managers. These enhanced asset management inventories can provide mutual benefit to asset managers and safety professionals.

Purpose of Workshop

To bring together representatives from asset management and safety to establish a stronger relationship between the two communities. In this workshop this will be accomplished by the following:

- Exchange information about the challenges and opportunities facing the communities with a primary focus on the collection of data and maintenance of data systems.
- Provide information about new safety analysis tools such as the Highway Safety Manual (HSM), the Interactive Highway Safety Design Model (IHSDM), Resurfacing Safety Resource Allocation Program (RSRAP), and the SafetyAnalyst.
- Discuss the data system needs required for these tools and the role of the Model Inventory of Roadway Elements (MIRE).

These tools are needed to pave the way for highway agencies to explicitly consider safety in all phases of highway development and to raise safety to a higher level in transportation investment decision making. These tools are data-driven and require crash, roadway, and

traffic volume data. There has been initial development of the MIRE that defines the critical inventory and traffic data elements needed to meet current safety analysis needs and the data needs arising from this new generation of analysis tools. State and local jurisdictions could also benefit from a standardized inventory of roadway and traffic elements.

Location of Workshop

Portland, Oregon at the 8th National Conference on Transportation Asset Management scheduled for October 18, 2009. More information about the conference can be found at <http://trb.org/conferences/2009/Asset/Announcement.pdf>

Expected Outcome

A potential course of action on how to better integrate asset management programs with safety programs.