

5.3.1

The Model Inventory of Roadway Elements (MIRE)

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Good roadway inventory information are a key to making sound decisions regarding the safe design and operation of roadways. AASHTO recently released the Highway Safety Manual (HSM) which provides tools to support improved traffic safety management and effect reductions in the frequency and severity of traffic crashes. For these tools to be effectively utilized they rely upon crash data, roadway inventory and traffic volume data.

The FHWA is about to release the Model Inventory of Roadway Elements (MIRE) Version 1.0. The MIRE is a recommended listing of roadway inventory and traffic elements critical to safety management. It provides standardized definitions and coding schemes for over 200 data elements. The MIRE elements are divided among three broad categories: roadway segments, roadway alignment and roadway junctions. The adoption of MIRE by State and local transportation agencies will make it easier to collect, store and use all types of safety data. It will facilitate the linkage of safety data with non-safety data and it will provide a necessary component to use a new generation of safety analytic tools (Safety Analyst) as indentified in the HSM.

In addition to the safety benefits expected to be realized through the adoption of MIRE, it can help encourage collaboration across departments and agencies, lead to innovative data collection techniques, promote coordination between data collection managers to reduce overlap and provide standardized coding to help agencies to better compare data across jurisdictions. The adoption of MIRE should benefit asset managers, infrastructure, operations and maintenance personnel as well.

For MIRE to be effectively implemented, jurisdictions will need to have the capability of geo-spatially locating the MIRE data elements. The FHWA is currently working on a pilot study to assess the viability and economic impacts of MIRE. Preliminary information from this pilot effort should be available.