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Where can I find more information?
- Purchase the HSM:
  http://bookstore.transportation.org
  - Search under code HSM-1
  - Cost: $325 (Members), $390 (Non-members)
  - Discounts are available for those states taking HSM training
- IHSDM:
  http://www.tfhrc.gov/safety/ihsdm/ihsdm.htm
- SafetyAnalyst:
  http://www.safetyanalyst.org
- Crash Modification Factors Clearinghouse:
  http://www.cmfclearinghouse.org
- HSM Training Courses:
  http://nhi.fhwa.dot.gov

For more information, visit the Highway Safety Manual website at www.highwaysafetymanual.org
Why a Highway Safety Manual?

Prior to this first edition of the HSM, there were no widely accepted tools for engineers to use to quantify the potential for reductions in crash frequency and severity when making transportation facility design and operations decisions. As a result, safety considerations often carried little weight in the project development process, limiting the ability of transportation professionals to discuss and act upon safety-related recommendations during project development. An effective resource was urgently needed to quantify and predict the expected crash frequency of elements considered in road planning, design, construction, operation, and maintenance.

The HSM begins to fill this gap, providing transportation professionals with knowledge, techniques, and methodologies to quantify the safety-related effects of transportation decisions – similar to the way operational impacts are quantified in the Highway Capacity Manual and environmental impacts are calculated through the NEPA process. The HSM provides the best factual information and tools in a useful form to facilitate roadway decisions based on the explicit consideration of their effects on potential future crash frequency and severity.

Benefits include an improved decision-making process for applying safety treatments, resulting in potential cost savings to highway agencies. Time spent justifying a safety decision can be reduced by conducting a definitive, science-based analysis; and safety elements can be integrated in the most cost-effective manner in the project development process. In the end, the HSM provides tools to support improved traffic safety management and a reduction in the frequency and severity of traffic crashes.

What types of benefits are expected with its use?

- Safety improvements
  - Improve the decision-making process and effectiveness of countermeasures to reduce the number and severity of crashes.
- Cost savings
  - Decisions can be made based on quantitative evaluations that predict crash reduction associated with improvements, instilling confidence that safety funds are being applied most effectively.
  - Time spent justifying a safety decision will be reduced by conducting a definitive, science-based analysis.
  - Integrate safety elements in the most cost-effective manner in the project development process.

**System Planning**
Identify needs and program projects

**HSM Application - Part B**
- Identify sites most likely to benefit from safety improvement
- Identify targeted crash patterns for the network
- Prioritize expenditures for efficiency

**Operations and Maintenance**
Modify existing conditions to maintain and improve safe and efficient operation

**HSM Application - Part B and C**
- Identify crash patterns at existing locations
- Evaluate safety effectiveness of potential countermeasures
- Modify policies and design criteria for future planning and design

**Project Planning & Preliminary Engineering**
Identify alternatives and choose the preferred solution

**HSM Application - Part B**
- Identify targeted crash patterns for the project
- Evaluate countermeasures’ costs and effectiveness
- Compare change in crash frequency to predict safety effect of alternatives

**Design and Construction**
Develop design plans and build projects

**HSM Application - Part C**
- Evaluate how performance measures are impacted by design changes and construction
- Assess potential change in crash frequency during design exception evaluation