

Feedback on HSIP Minimum Roadway Inventory Elements and Crash Data

December 16, 2009



Highway Safety Improvement Program
Data Driven Decisions



U.S. Department of Transportation
**Federal Highway
Administration**



Safe Roads for a Safer Future
Investment in roadway safety saves lives

Webinar Agenda

- Welcome/Introductions *David Harkey, HSRC
Bob Pollack, FHWA*
- Participation Information *Katy Jones, HSRC*
- HSIP Overview *Erin Kenley, FHWA*
- GAO Recommendations *David Harkey, HSRC*
- Ideas for Implementation *All Participants*
- MIRE Lead Agencies *Carol Tan, FHWA*

Ways to provide feedback

1. Use the conference call line
 - Press 7 to access the operator
 - Press 7 again to be removed from the queue
 2. Use the question box in the upper right of your screen (use << to open window)
 3. Answer the polling questions posted
- Additional ways to provide feedback after the webinar will be provided at the end

Purpose of Webinar

- Present the Government Accountability Office (GAO) Report recommendations related to FHWA regarding the Highway Safety Improvement Program (HSIP)
- Obtain feedback from state and local practitioners on possible approaches for FHWA to address the recommendations

Highway Safety Improvement Program

- Established as part of SAFETEA-LU (2005) – replaced former Section 152 (Hazard Elimination Program)
- The purpose of the HSIP is to significantly reduce the occurrence of and the potential for fatalities and serious injuries resulting from crashes on all public roads.

Highway Safety Improvement Program

- Program components:
 - Strategic Highway Safety Plan
 - Railway-Highway Grade Crossings
 - High Risk Rural Roads
- Reporting requirements:
 - Annual Progress Report
 - Annual Transparency (5%) Report
 - Annual Railway-Highway Grade Crossing Report

HSIP Planning Process Elements

- 1) Collect and maintain safety records and data
- 2) Advance capabilities for safety data collection and analysis
- 3) Analyze available safety data
- 4) Conduct engineering studies and develop highway safety improvement projects
- 5) Establish priorities and implementation schedules for improvement projects

Collect and Maintain Safety Records and Data on all Public Roads

- *Encourages States to make databases more comprehensive :*
 - Crash
 - Roadway
 - Traffic
 - Vehicle

How Do We Get There?



GAO Report Scope

- Highway Safety Improvement Program (GAO-09-35), November 2008
- Questions addressed:
 - Steps taken to implement HSIP?
 - Results to date, including results for RRX and HRRR?
 - Provision of guidance and support from FHWA for planning, implementation, monitoring, and evaluation?
- Results reflect first year of HSIP

GAO Report Findings

- Inability to locate crashes off the state-system roads (half of the 25 states surveyed)
 - Impacts the 5% Report and problem identification on all public roads
- Inadequate (as judged by GAO) roadway inventory data
 - 11/25 states surveyed (state-owned roads)
 - 22/25 states surveyed (local roads)

GAO Recommendations (FHWA)

- (1) Define which roadway inventory data elements a state needs to meet federal requirements for HSIP
- (2) Set a deadline for states to finalize development of the required roadway inventory data
- (3) Require states to submit schedules to FHWA for achieving compliance with this requirement

Feedback Topics

- Required roadway elements?
- Application to all public roads?
- Schedule for implementation?

Topic #1

- Which roadway elements should FHWA require to allow for enhanced problem identification and evaluation as part of the HSIP?
- MIRE – Model Inventory of Roadway Elements
 - Review of safety analysis tools, other data systems, and state roadway inventories
 - Comprehensive – 202 proposed elements
- What subset of elements is most needed to support the HSIP?

Example Variable List

- **Roadway Segment**
 - Segment ID
 - Route Name
 - Alternate Route Name
 - Route Type
 - Area Type
 - Date Opened to Traffic
 - Start Location
 - End Location
 - Segment Length
 - Segment Direction
 - Roadway Class
 - Median Type
 - Access Control
 - Two-Way vs. One-Way Operation
 - Number of Through Lanes
 - Interchange Influence Area on Mainline Freeway
 - AADT
 - AADT Year
- **Intersection**
 - Intersection ID
 - Location
 - Intersection Type
 - Traffic Control Type
 - Major Road AADT
 - Major Road AADT Year
 - Minor Road AADT
 - Minor Road AADT Year
 - Intersection Leg ID
 - Leg Type
 - Leg Segment ID
- **Ramp**
 - Ramp ID
 - Date Opened to Traffic
 - Start Location
 - Ramp Type
 - Ramp Configuration
 - Ramp Length
 - Ramp AADT
 - Ramp AADT Year

Topic #2

- Should the requirement apply equally to all public roads?
- What issues may prevent such a requirement?

Topic #3

- What is a reasonable schedule for implementation?
 - Assume a list similar to the prior example
- Will the implementation need to occur in stages? If so, what factors will determine the staging (e.g., ownership, functional class, etc.)?

Additional Feedback

- TRB Listening Session 1/11
- www.hsisinfo.org/feedback
 - Public comments via the Web forum
 - Private comments via the comment form

Related “Lead Agency” Effort

- FHWA’s MIRE-implementation project will assist a limited number of volunteer “lead agencies” in
 - Collection of MIRE elements currently missing
 - Incorporation of these elements into a safety management information system and use in new analyses that support your HSIP
- Assistance will be provided by VHB, the current MIRE-development team
 - Work with agencies to identify MIRE elements to target
 - Work with agencies in identifying data collection methods
 - Provide assistance in actual data collection
 - Provide IT assistance in data processing, data integration and storage of data in agency’s MIS
 - Provide advice/assistance in new analyses

Related “Lead Agency” Effort (cont)

- Agency requirements
 - Compare existing inventory elements to MIRE elements to determine which MIRE elements are not currently collected
 - Choose “target MIRE elements” – those elements that the Agency wishes to collect
 - Provide VHB access to IT and key user staff, plus existing files and documentation.
 - Propose initial ideas on:
 - How the target elements will be collected
 - New analyses that will be performed with the new elements
- VHB will then work with chosen agencies to define the final plan; collect, process, integrate and store the data; and assist agencies in analysis efforts if needed.

Related “Lead Agency” Effort (cont)

- For more information:
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