

Feedback on HSIP Minimum Roadway Inventory Elements and Crash Data

December 2, 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
Mike Griffith, FHWA*
- Participation Information *Katy Jones, HSRC*
- HSIP Overview *Mike Griffith, 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 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 this regulation is to set forth policy for the development, implementation and evaluation of a comprehensive highway safety improvement program (HSIP) in each state



Highway Safety Improvement Program

- Program components:
 - Strategic Highway Safety Plan
 - Railway-Highway Grade Crossings
 - High Risk Rural Roads
- Reporting requirements:
 - Annual progress report
 - Annual 5% report
 - Annual grade crossing report



HSIP Data Requirements

- States should have traffic records systems capable of:
 - providing quality data for determining the safety status of all public roads
 - evaluating the effectiveness of safety countermeasures



HSIP Data Requirements

- Data must be provided:
 - To cover all public roads
 - To identify safety problems in terms of:
 - Total crashes
 - Traffic related deaths and injuries
 - Traffic volumes



HSIP Data Requirements

- Data sets should be capable of being ‘integrated’ to assist in identifying contributory factors of crashes
- The right data should be available to prioritize the safety issues within the SHSP and implement specific countermeasures through the HSIP



HSIP Data Requirements

- SAFETEA-LU requires states to use data to assess the effectiveness (over time) of projects implemented under Section 23 U.S.C. 148 (HSIP) for their effectiveness in reducing:
 - Fatalities
 - Injuries
 - Crashes



How Do We Get There?



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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

- Additional Webinar 12/16
- 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:
 - Carol Tan
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 - Bob Pollack
 - robert.pollack@dot.gov

