HSM Implementation Pooled Fund Study TPF-5(255) https://www.pooledfund.org/Details/Study/484

Quarterly Report July – September 2023

Participating Agencies: CA, CT, ID, IL, KS, KY, LA, MI, MO, MS, NC, NJ, NV, OH,
OK, OR, PA, TX, UT, WA, WI and WVTotal Funds Committed:\$1,595,000Total Funds Transferred to FHWA:\$1,508,558Total Funds Obligated:\$1,197,696Transferred Unobligated Funds:\$310,862

Activities Accomplished During Reporting Period (July 1 – September 30, 2023):

- A comment resolution meeting was held August 2nd for the Advancing Application of DDSA Task 2 comments received by several member states and FHWA. The states, FHWA and contractor discussed how to resolve the most critical comments for the final version of this Task's technical memorandum.
- A general pooled fund meeting was held August 17th, providing an update and continued data requests for the Advancing Application of DDSA project (more details below). The PFS discussed new potential project ideas, including the inperson peer exchange idea. The meeting provided updates on HSM2 development and announcements for other FHWA products, webinars and training of interest to HSM users. Following this meeting, a poll was sent out to collect the final votes from pooled fund members on whether to proceed with a peer exchange in 2024.
- Advancing Application of DDSA
 - The contractor (VHB) continued work on all three primary tasks 2) use of multiple analysis methods in alternatives analysis, 3) implementation approaches for NCHRP 17-62 (Improved Prediction Models for Crash Types and Severities), and 4) communications guide for explaining safety analysis to non-safety professionals.
 - The contractor presented updates on Task 3 with expanded details and a request from the pooled fund members to gather more information on models involving specific crash types and severities. In order to add value to the state of the practice, the contractor has recommended a new approach with this task to complement other NCHRP projects and HSM2 development. See below for the new approach and questions to pooled fund members.

Recommendation for Task 3 Guide

• Review projects completed since the HSM first edition

- Summarize methods used in HSM for crash type and severity as well as recommendations from completed research
- Lay-out key findings and develop recommendations on implementation approaches
 - Describe practical reasons for interest in more specific crash type and severity models
 - Include potential advantages and challenges
 - Comparison of methods for crash type/severity models
 - Identify Potential applications beyond HSM Part C
 - Provide project team recommendations on applications
- Questions to HSM Pooled Fund Study States
 - Have you tried implementing any of these products?
 - Do you have examples of success or difficulty?
 - Have you developed crash type/severity SPFs?
 - Are there any projects with crash type/severity implications you think we should include beyond the following?
 - NCHRP 17-54: Consideration of Roadside Features in the HSM
 - NCHRP 17-58: Prediction Models for Six-Lane and One-Way Arterials
 - NCHRP 17-62: Improved Prediction Models for Crash Types and Severities
 - NCHRP 17-68: Intersection Crash Predictions for the HSM
 - NCHRP 17-70: Development of Roundabout Crash Prediction Models
 - NCHRP 17-73: Systemic Pedestrian Safety Analysis
 - NCRHP 17-77: Guide for Quantitative Approaches to Systemic Safety Analysis
 - NCHRP 17-81: Proposed Macro-Level Safety Planning Analysis Chapter
 - NCHRP 17-84: Pedestrian and Bicycle SPFs for the HSM
 - NCHRP 17-85: Development and Application of Crash Severity Models for HSM
 - NCHRP 17-92: Developing SPFs for Rural Two-Lane Incorporating Speed
 - NCHRP 17-93: Updating SPFs for Data Driven Safety Analysis

Activities Planned for Next Quarter (October through December, 2023):

- A quarterly meeting is planned for November 21st, 2023. Quarterly meetings are now the third Tuesday of November, February, May and August from 11am-12:30pm ET.
- Work will continue on the three main tasks on Advancing Application of DDSA project.

- The contractor is finalizing the Task 2 technical memorandum and expects to present the major findings and guidance in the memorandum during the November 21 quarterly meeting.
- Member states should provide feedback on the questions on Task 3 (above). A revised first draft is expected by end of December, 2023.
- The contractor is finalizing case study examples in the Task 4 communications guide, addressing final comments and finalizing graphics that will be shown in the guide. FHWA plans to proceed to final review and publication as soon as practicable.
- FHWA hopes to continue to add funding commitments for the HSM2 Implementation Pooled Fund. To date during this reporting period, 17 states have committed to the study, totaling \$1.216M.