**TPF-5(255) HSM Implementation Pooled-Fund Study**

**Survey of HSM Implementation Small Group**

**April 24, 2014**

**Summary of Discussion**

**Attendees**

Mike Colety, for Nevada DOT

Brent Jennings, Idaho DOT

P.D. Kiser, Nevada DOT

Dan Magri, Louisiana DOTD

John Miller, Missouri DOT

Gari Modi, Pennsylvania DOT

John Milton, Washington State DOT

April Renard, Louisiana DOTD

Ida van Schalkwyk, Washington State DOT

Chris Speece, Pennsylvania DOT

Priscilla Tobias, Illinois DOT

Jaime Tuddao, Nevada DOT

Derek Troyer, Ohio DOT

Matt Warren, Oklahoma DOT

Clayton Chen, FHWA

Ray Krammes, FHWA

Esther Strawder, FHWA

The **objective** of the meeting was to exchange ideas on the proposed survey of HSM implementation, including:

* Whom we should survey?
* What kinds of information do we want to obtain?
* How we should conduct the survey?

To provide context, Pooled-Fund State representatives prioritized future efforts as follows:

1. Peer exchanges
2. Guide on the scale and scope of HSM applications
3. **Survey of HSM implementation**
4. Guide on how to evaluate SPF performance
5. *Resource gap assessment to identify needs*
6. SPF calibration

The survey of HSM implementation ranked 3rd. The discussion included the resource gap assessment to identify needs, since the survey results should inform the assessment and the assessment should follow the survey.

As background, the following were comments were made by Pooled-Fund State representatives during previous meetings or in e-mail correspondence:

* There needs to be an extensive survey of HSM implementation in practice. Special consideration should be given to the disparity in usage of HSM; there is both lack of support and lack of knowledge that keeps partners from using HSM. Designing a way to capture these differences in a survey instrument would be useful.
* Strong effort should be made to make this cross cutting. It seems often that the safety group may be doing one thing and the designers or operations people another.
* This should be an extensive survey to determine the extent of HSM implementation. It should consider applications of the HSM not only on safety projects, but also in planning, the environmental process, project development, design, etc.
* What are other States doing, and how are they doing it?

Similarly, the following was a previous comment on the resource gap assessment:

* The idea of a resource gap assessment was intended as a process to determine what actions the current and future HSM community needs to take. This suggestion is intended to access the current status of HSM resources and then identify where gaps exist so the pooled-fund study makes a knowledgeable decision about future tasks to pursue.

The following summarizes Pooled-Fund Study representatives input on the 3 questions:

**Whom should we survey?**

* All 50 (?) State DOTs: All potential/desired users
  + Traffic Safety Engineer good 1st point of contact
  + Designers
  + Traffic Engineers
  + Planners
  + Note: We should ask “What is your role at the State DOT?” to get individual perspectives, and sort responses by role.
  + Note: Multidisciplinary perspective is important to get.
* Local agencies: MPOs, RPOs, Planners
* Consultants:
  + Note: If send to multiple people, do we get conflicting responses? Should we have a single point of contact that we ask to share with others and compile/reconcile?
  + State DOT can speak to what they expect/require of consultants; but not give consultant’s perspective
* Avenue to reach out to consultants? To local agencies?
  + Consultants: Through an association (e.g., ITE) or reach consultant through State DOT (200-300 in IL) May leave up to State how to reach.
  + To locals through LTAPs?
  + Does AASHTO track HSM purchases? Would they know purchases by consultants?

**What kinds of information do we want?**

* Roadblocks/obstacles to using HSM
  + What’s missing?
  + Data issues?
  + What problems? E.g., Calibration?
* How did you get started (along with all of the bumps in the road they came upon?
* What state are they at? How far have they gotten?
* What tools or resources could help overcome these challenges? Become more proficient in using?
* Is it part of policy? Procedures? Business process in planning? Project Development?
  + How did it come about? How did you implement?
  + What were challenges in doing so?
* Who within the State DOT is using? Safety? Other units too?
* Are locals using? How?
* What chapter did they use? At what stage of project development did they use?
* Where do they expect to go next?
* Lessons learned, regardless of how painful? What helped implementation move along? What didn’t work?
* What worked well and what was difficult as it relates to:
  + Organization and culture
  + Roles and responsibilities
  + Tools
  + Practices and processes in place or planned
  + Deliverables
* Use of tools (e.g., Safety Analyst, HSM Predictive Methods: Tools, Calibration; SPF development CMF implementation)
* Innovative uses of the HSM
* Level of complexity? (e.g., why not using)
* Understanding who is using, and what parts are they using, and who isn’t?
* If not using the HSM, what other scientific methods?
* For states/locals not active and, therefore, don’t know (and, therefore, may not be able to respond about roadblocks, we could ask about common roadblocks (e.g., whether they have the data elements necessary to use the HSM).
* Note: Some questions may apply only if a DOT is more advanced in terms of implementation.
* Note: We need to be attentive to the tradeoff between the length of the survey and the response rate. We will likely need to prioritize what we want to know and limit the number of questions we ask.

**How should we conduct the survey?**

* On line with as much response by check boxes, with some but limited open ended questions.
* Regarding the possibility of AASHTO conducting the survey under an agreement with FHWA, comments included:
  + AASHTO is a good avenue, through committee structure.
  + Probably easier logistically through AASHTO.
* Consider including the option to follow up with folks who respond to the survey?