

Developing New Business and Operational Guidance Ensuring Timely and Quality HPMS Data Submittal

September 25, 2015

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Overview



U.S. Department of Transportation
Federal Highway Administration

HPMS Submittal Project – Objectives

- Improve timeliness and quality of submittals
- Establish a business process template that states can use to organize themselves for updating and submitting HPMS
- Improve FHWA's understanding of state challenges and obstacles in meeting requirements
- Build relationships between FHWA SMEs and HPMS coordinators
- Reduce burden on FHWA to identify and resolve HPMS quality issues
- Improve accuracy and validity of highway needs forecasts

Challenges

- HPMS is a subsidiary use of state data
- State DOT data collection cycle may not correspond with HPMS cycle
- State DOT mileage certification process can be time consuming
- HPMS coordinators rely on other departments for much of their data

Expert Study Panel

- Select state DOT staff will be technical review panel and help formulate document
- Possible contributors from Colorado, Virginia, Oregon, Florida, Georgia, Minnesota, Ohio and others.
- TRB-like committee role
- Meetings in person at central location and by webinar

Identify Exemplary Practices

- Identify 9 states
- Understand process success factors:
 - Management structure and top-down support
 - Staffing, scheduling and business processes
 - Documentation and process institutionalization
 - Understand coordination FHWA regional offices and other departments
- Understand technical processes
 - Focus on data acquisition of key data elements
 - Roadway inventory, pavement quality, traffic data, sampling, spatial organization, etc.

Business Process Checklist/Guidebook

- Background – HPMS, relevance to performance based management, current submittal schedule/process
- Generalized timeline and workflow
 - Detailed examination of the collection and assembly of the parts that make up the whole in process flow format
- How to create effective teams
 - Working effectively with internal/external partners, having strong leadership backing
- Data validation
- Case studies

Data Quality Checklist

- A declaration (of sorts) that the HPMS data are accurate, and have been vetted and reviewed.
- Questions to be considered:
 - Should it provide signatures (names and titles) of managers, data contributors, analysts and reviewers?
 - In how much detail should the quality review process be detailed? Should it be more than a checklist?
 - Are there consequences if the checklist response is inaccurate/misleading?

Project Principals

- Don Vary (Project Manager) - State DOT long range planning, FHWA ARNOLD, FHWA Functional Classification Guidebook
- Praveen Pasumarthy (Principal Investigator) – State DOT needs analysis, extensive use of HERS-ST and NBIAS
- John Wisdom (Task Support) – GIS data expert, FHWA ARNOLD project
- Gordon Proctor (Support) – SME, planning and asset management, Ex-Ohio DOT Planning Director

Schedule

Month	Final Deliverables								Draft Deliverables							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Task 1 – Project Management																
Kick-off meeting	■															
Kick-off meeting notes/summary	■															
Draft and final work plan	■	■														
Project management plan and notes	■	■														
Quarterly and monthly progress reports	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Updated MS PowerPoint slide deck documenting project	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Team meetings and teleconferences	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 2 – Organizing Expert Study Panel																
Draft and final study panel participant list			■	■												
Task 3 – Identifying and Documenting States with Exemplary Practices																
Draft exemplary practices manual										■						
Final exemplary practices manual											■					
Task 4 – Estab. Efficient Data Collection Processes and Business Model Checklist																
Draft manual of practice and checklist												■				
Final manual of practice and checklist													■	■		
Task 5 – Developing a Self-Certifying HPMS Data Quality Checklist																
Draft data quality checklist															■	
Final data quality checklist																■

■ Meetings