



U.S. Department of Transportation
Federal Highway Administration
Office of Infrastructure

FHWA Briefing

BrM User Group Meeting 2019 September 17-18 • Louisville, KY

Derek Constable
Bridge Management Engineer
FHWA Office of Bridge & Structures

Four status updates:
NBIS update
TAMP
TPM
FHWA BMS Workshop

NBIS Regulation Update

- Public comment period is upcoming (NPRM).
- Reconciling comments from White House Office of Management and Budget.
- Then will be published in the Federal Register with 60-day comment period.
- Specifications for the National Bridge Inventory will be made available for comment with NBIS.
- After comment, FHWA must finalize, receive final approval, and publish for implementation.
- For current status refer to USDOT site
<https://www.transportation.gov/regulations/report-on-significant-rulemakings>



note: current estimated date of publishing for public comment is 09/23/2019 per USDOT website (needs updated)

Asset Management Plans

- **Initial TAMPs** submitted by 04/30/18. FHWA has certified the processes of all States.
- **Complete TAMPs and demonstrated implementation** submitted by 06/30/19. Approved TAMPs found at <https://www.fhwa.dot.gov/asset/plans.cfm>
- Monitor the FHWA AM page for new and updated resources.
 - Q&As consistently updated.
 - Life-cycle planning handbook recently posted.
- Upcoming;
 - Case study on life-cycle planning implementation.
 - Documenting best practices for developing TAMPs.
 - Guidance on relationship between asset management and performance management.
 - Fully implementing management systems and incorporating preservation into TAMPs.

Transportation Performance Management

Bridge Performance Measures	
Performance Period Start	Jan. 1, 2018
2- & 4-Year Targets Reported	Oct. 1, 2018
Mid-Period Report & FHWA 2-Year Significant Progress Determination	Oct. 1, 2020
End-Period Report & FHWA 4-Year Significant Progress Determination	Oct. 1, 2022



- Resources:
 - FHWA procedure for computing the measures
<https://www.fhwa.dot.gov/tpm/guidance/hif18023.pdf>
 - NBI mid-year data archive used to calculate measures (per regulation). Published in UPACs.
 - NHI 1-day instructor lead bridge training
 - NHI 90 min web-based bridge training
 - State targets found at
<https://www.fhwa.dot.gov/tpm/reporting/state/>

Mid-Period Report is for reporting progress towards achieving 2-year targets and allows for adjustment of targets. Report is followed by FHWA significant progress determination.

End-Period Report is for reporting progress towards achieving 4-year targets. Report is followed by FHWA significant progress determination.

FHWA procedure for computing the measures:

- Keep in mind ultimately it is FHWA that calculates the baseline, two- and four-year measure values, and compares to State targets when determining if significant progress was achieved.
- Keep in mind the dataset FHWA uses is a mid-year published dataset (June 15) that precedes the October 1 TPM report of the same year.

NHI Training:

- NHI website provides instructions for scheduling.
- Web-based training posted to NHI website in January 2019. This free and approximately 90 minute training presents the fundamentals of the bridge TPM requirements including measures data and calculations. Should be informational to people new to bridge TPM.

FHWA Workshop on Bridge Management Systems

- This new workshop is intended to help remedy a knowledge gap among the bridge community.
- A **technical workshop** about how BMS software function and can be used (does not address FHWA requirements).
- Covers the fundamentals of BMS modeling and analysis, not the details of particular software.
- 3 days
- Starting in 2019 (announcement will be sent to State bridge management leads & FHWA Division Bridge Engineers)!!!



Currently there is not a national level workshop or training on BMS software. At one time FHWA offered training on the FHWA sponsored Pontis software, however that software is no longer maintained.

This new workshop will be a technical workshop that will cover the fundamentals of BMS modeling and analysis.

Since most BMS software are proprietary the content does not cover the details of particular software, however the workshop format allows for discussion surrounding the host agencies software and supporting practices. This will help link the content fundamentals to how they are/may be applied by the host agency.

The workshop is now available for scheduling. Announcements were sent to State bridge management leads and FHWA Division Offices.

FHWA Workshop on Bridge Management Systems

Workshop Modules:

<p>Why/How</p> <ul style="list-style-type: none"> • Purpose and Value of BMS • Features & Workflow <p>Inputs</p> <ul style="list-style-type: none"> • Inventory & Condition Data • Goals, Objectives, Measures • Deterioration Modeling • Actions, Costs, Effects Modeling • Life-Cycle & Agency Costs Modeling • Functional Improvement & User Costs Modeling • Risk Assessment & Mitigation Modeling 	<p>Analysis</p> <ul style="list-style-type: none"> • Benefit-Cost Analysis • Optimization & Prioritization <p>Outputs</p> <ul style="list-style-type: none"> • Investment Strategy Simulation • Project & Program Planning • Communication & Reporting <p>Implementation</p> <ul style="list-style-type: none"> • BMS Implementation Steps • Integrating Business Processes & BMS • Investment Strategy Development, Measures Validation & Selection, Target Setting
---	---


 Federal Highway Administration
 U.S. Department of Transportation

The included modules are intended to bring understanding to how BMS function and are used (help absolve the black box perception).

- First two modules explain the value of using a BMS and their features and workflow, by presenting the parts and showing how they talk to each other.
- Next seven modules explain the inputs that are required in the form of data, objectives and measures, and models.
- Next two modules explain the core analysis functions intended to maximize benefits and/or minimize cost.
- Next three modules explain the outputs including the results of different investment strategies and their included programs of projects.
- Last three modules explain the aspects of implementing BMS including setting up a BMS and integrating it with business processes that will supply the needed inputs and use the outputs (fyi ... example inputs supported by business processes include inventory/condition data, action effectiveness data, cost data and associated QC/QA; example business processes that use outputs include planning processes for TAMP and STIP, and program and project development processes).

QUESTIONS?