

**Minutes Of The
AASHTOWare Bridge Management Task Force Meeting
November 7 - 8, 2019 Portland, OR**

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General Information – Meeting of the Bridge Task Force

Date: Wednesday, November 6, 2019

Participants:

AASHTO	Judy Tarwater	AASHTO	Project Manager
SCOA	Tim Armbrecht	Illinois DOT	SCOA Liaison
T&AA	Will Holmes	Kentucky TC	T&AA Liaison
BrM Task Force	Eric Christie	Alabama DOT	Vice-Chair
	Derek Constable	FHWA	FHWA Liaison
	Beckie Curtis	Michigan DOT	Bridge Management
	David Hedeon	Minnesota DOT	Bridge Management
	Kent Miller	Nebraska DOT	Bridge Management
	Craig Nazareth	Rhode Island DOT	Bridge Management
BrDR Task Force	Todd Thompson	South Dakota DOT	Chair
			Bridge Rating (BrR)
BrM Contractor	Josh Lang	Mayvue	Bridge Management
	Zac Boyle	Mayvue	Bridge Management
	Anthony Hutskow	Mayvue	Bridge Management
Guests	Tim Jennings	AASHTO	T&AA
	Bruce Novakovich	Oregon DOT	BrM End User

General Discussion

Eric Christie convened the meeting at 11:40am.

Agenda Item 00: Review Agenda / Assign Minutes Recorder

Judy Tarwater and Anthony Hutskow will take the meeting minutes. The agenda was reviewed. One agenda item was added. Agenda Item 8c: Multimedia

Agenda Item 01: Prior Business

1a. Review September Meeting Minutes

Minutes from the September 19, 2019, Task Force meeting held in Louisville, KY were reviewed and approved as-is.

1b. Review September Meeting Summary Minutes

The Summary Minutes for the September Task Force Meeting in Louisville, KY were reviewed and approved as-is.

Agenda Item 02: Project Update

2a. Budget and Schedule

Mayvue presented the budget report for the FY20 MSE contract. All billings reported include invoices issued through 10/31/19. The overall budget spent to date = 36.21% while the MSE task completion as of 10/31/19 = 33.42%. Mayvue identified several MSE line items that are currently projected to have an



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overrun similar to what was experienced with the FY2019 MSE. The line items projecting an overrun are Project Management, Customer Support, Maintenance, and Meetings.

The group discussed that Customer Support seemed to be a minor overrun (2% overrun for the first four months). Mayvue identified that the total did not reflect certain customer support hours that Mayvue decided not to invoice (including roughly half of the Caltrans customer support hours expended). Caltrans is trying to add its signs inventory to BrM and Mayvue is supporting them through this process including providing a free demo site.

Mayvue asked the Task Force for direction on how to show true costs within the budget update (i.e. how to report actuals v. amounts invoiced). This information will be important for discussions on establishing future budgets, etc. The Task Force made the decision to have Anthony generate an additional chart going forward which will reflect “true” costs which may not be shown otherwise. (Some examples of these costs include non-billed customer support hours, BrMUG efforts that were not billed, i.e. the third party developer contractor’s meeting).

The Task Force had a brief discussion on the status of the South Carolina (SCDOT) work plan. The SCDOT service unit project will likely be managed by HDR project management services, for the SCDOT. The Task Force asked to review the SCDOT work plan. Anthony forwarded the latest versions of the SCDOT and Michigan DOT service unit work plans to the Task Force.

There was an additional discussion on how the two work plans (SCDOT and MIDOT) will work together, along with the user community. Mayvue advised that the plan is to build the FDS for SCDOT or Michigan DOT and make it available to the BrM user community. While the plans will be made available for review and comment, these reviews cannot slow down the service unit projects with the states. If a state has service units available, and they are willing to commit those service units to enhance the FDS, the comments can be considered for incorporation as long as the changes do not slow down the Michigan and South Carolina development efforts.

Mayvue presented the budget report for the BrM 6.3 Project contract. All billings reported include invoices issued through 10/31/19. The overall budget spent to date = 59.88%. TM1 (Task Force Directed Work) is 29% complete. FP1 (Enhancements to the Inspection Assignment Module), FP2 (NBI Deterioration Updates), FP3 (Tunnel Work Candidates – Tunnel Module Enhancements), FP4 (Schedule Processes Functionality) and FP5 (Other Enhancements) are all 75% complete as of 10/31/19.

2b. Customer Support Statistics

Mayvue presented an overview of the customer support hours by agency as of 10/31/19. California, Kentucky, Michigan, and Tennessee have used support hours exceeding 50. Kansas, Oregon, and Texas have used support hours exceeding 25. The customer support hours to date are consistent with the last few years. The hours are projected to be over 2,000 customer support hours again this fiscal year.

2c. Service Unit Project Status Report

Judy Tarwater presented the service unit status report as of 10/29/19. A majority of the service unit projects are on track. Mayvue will continue to send service unit status reports to all agency end user



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designees. Future communiques will also include information on the service tickets submitted by the licensee during the reporting period.

2d. License Revenue Report

Judy Tarwater provided a summary of FY20 license activity (and revenue) as of 10/29/19.

License Type	Quantity
BrM Evaluation License	1
BrM Educational License	1
HAO Service Units	25*
BrM Local/Small Agency License	2
Local/Small Agency Support	1
Service Units	391**
BrM Super Site License	43
BrM Developer License	3***
Hosted Consultant License	1

*DDOT, RMTA, Iowa DOT, and New York University

**127 Service Units purchased by MIDOT, 173 Service Units purchased by SCDOT

***Bentley Systems, Bridge Intelligence, and iENGINEERING

2e. Service Unit Allocation Report

Judy Tarwater provided a summary of service unit activity as of 10/29/19. 391 new service units have been purchased in FY20.

Agenda Item 03: FHWA Report

Derek Constable provided the following FHWA update.

NBIS Regulation Update & Coding Guide Update

- MAP-21 requires an NBIS update to include (a) the methodology, training, & qualifications for inspectors, and (b) the frequency of inspection with consideration of risk-based approach.
- NBIS update and Coding Guide update to be made available in Federal Register for viewing on 11/12/19 <https://www.federalregister.gov/documents/2019/11/12/2019-23929/national-bridge-inspection-standards> with the public comment period starting on 11/12/19.
- 60-day comment period for both
- Final publishing targeted for mid-2019

National Tunnel Inventory and Inspection Program

- Compliance metrics have a two-year rollout with some metric assessments made in late 2019. All metrics will be assessed in 2020.
- The Divisions should now be coordinating with their State DOTs on the 2019 review.

Asset Management Plans

- Initial TAMPs submitted by 04/30/18. FHWA has certified the processes of all States.



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- 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 posted January 2019
- Upcoming;
 - Case study on life-cycle planning implementation (Kansas assisting)
 - Documenting best practices for developing TAMPs
 - Guidance on relationship between asset management and performance management
 - Fully implementing management systems and incorporating preservation into TAMPs
 - States that were not able to clearly identify their investment strategies by the 5 work types (initial construction, maintenance, preservation, rehabilitation, reconstruction) because of the extenuating circumstances of this being the first year of this requirement, need to address during the June 2020 annual demonstration of implementation.

TPM – Transportation Performance Management

- Targets were reported to FHWA in 2018. State targets found at <https://www.fhwa.dot.gov/tpm/reporting/state/>
- Mid-performance period reports are due 10/01/20.
- FHWA resources for bridge TPM:
 - NHI one-day instructor lead bridge training. Schedule from NHI website.
 - NHI web-based bridge training. Free 90-minute training presents the fundamentals of the bridge TPM requirements including measures data and calculations. Good for people new to bridge TPM. Schedule from NHI website.
 - FHWA procedure for computing the measures
<https://www.fhwa.dot.gov/tpm/guidance/hif18023.pdf>

Miscellaneous

- FHWA Element Submittal Checks updated and being coded. If anything changes based on feedback received during coding, updated documents will be provided.
 - Adjusted terminology where there are now several types of discrepancies
 - fatal errors and critical errors that prevent uploading to the database and result in rejection by the system
 - errors that need corrected before FHWA acceptance of the submittal
 - “checks” which represent data that *may* be invalid and that agencies must validate before the next annual submittal. (FHWA does not want agencies to force their data to conform if the data represents a valid situation.)
 - Additions compared to previous Checks are the inclusion of some new “checks” and verification that element data submitted for all NHS bridges.
 - Will be used by FHWA starting with the submittal due March 15, 2020
- FHWA Workshop on BMS:
 - Six workshops scheduled and working on scheduling others (up to contract limit of 10)
 - VA Nov 12-14
 - ID Dec 3-5



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- NH Dec 10-12
- WV Feb 18-20
- WY April 7-9
- TX May 12-14

Agenda Item 04: FHWA Update to the NBIS

4a. Discussion on information presented during the NPRM webinar

Webinar re-scheduled for 11/13/19. No Discussion.

4b. NBIS Enhancements

Webinar re-scheduled for 11/13/19. No Discussion.

Agenda Item 05: Border Bridge Data (NBI and NBE)

The Task Force discussed the states' need to establish a standard process for BrM states to submit NBE data for border bridges to ensure the data submitted is consistent between both states. This is a difficult task with shared responsibilities, etc. In addition, each state may be capturing their data differently.

The Task Force discussed how the process is currently handled within their state and how the process could be improved to ensure the data entered for border bridges matches. They also discussed the need to be able to perform an import which excludes certain data that is unique for each state. Mayvue advised that the development such a facility should not be a significant effort; however, more requirements will need to be defined in order to proceed.

Agenda Item 06: BrM 6.3 Project Status

Testing

The Task Force discussed the need for an interactive walk-through of the BrM 6.3 features for the Testing TAG. The recorded training videos did not fulfill the TAG's need exactly.

- For future BrM releases, Mayvue should plan to host a walk-through webinar. The webinar would include a half-day session to familiarize the Testing TAG members with the release functionality and to provide direction on how to test. This up-front discussion will avoid testers spinning their wheels trying to understand how to effectively test the release.
- Mayvue is open to whatever the TAG needs to properly test and will plan on holding a walk-through session for each future beta release including a scheduled walk-through on 11/14/2019 (was originally scheduled for 11/8/19).
- If modules are involved in a release, the TAG must have a deeper understanding of the functionality.
- In the past, the Testing TAG attended an onsite training/testing session with the Contractor. The Task Force discussed the possibility of resuming future testing efforts with an onsite session in Pittsburgh.
- The training videos should be generated and released after the walk-throughs.
- The preferred approach would be to release the beta version and give the TAG a few days to look at it. Then follow it up with an interactive walk-through.
- For awareness, with a move to a more Agile approach of updating a demo site as development and alpha testing is complete, this will require multiple walk-throughs.
- Mayvue reported that the current testing approach (focused testing as the demo site is updated) has been positive and we now have a steady stream of testing and tickets submitted.



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- In the past, irregular testing cycles were experienced and beta testing could drag on as a result. Additionally, continuous installation / IT problems could delay testers weeks before they could truly start testing.
- Micro-releases via a demo site provides more rapid testing and feedback for Mayvue.

Schedule

- The demo site has been updated with all bugs fixed.
- The release currently on the demo site will be tested for a few more weeks followed by the distribution of the release candidate to the TAG.
- Scheduled Tasks are working (Josh Lang personally tested this functionality).
- Bruce Novakovich brought up a potential 6.3 showstopper – the tunnel work candidate ID field.
 - Mayvue: If we have the ID field it must be required and filled in.
 - Bruce: If it must be auto-populated, remove the field.
 - Rename the field (not ID) since it's not being used as an identifying field. It is simply a label for users to sort and group.
 - Mayvue will drop the field to the bottom of the page and make it non-populated for sorting. Move it below source and rename it. Leave it as a blank field.
 - Mayvue is not touching the bridge screen in version 6.3. The plan would be to eventually pull it from the bridge. Bridge will not have it auto populated. We don't want to touch bridge just yet because we don't know how agencies are using this field. Someone could be using the bridge candidate ID for something critical to their operations.
 - Change the name from Tunnel Work Candidate "ID" to "Label".
 - Change the Bridge Candidate ID name to Bridge Candidate Label.

Functionality

- Grid controls on the page were discussed. The grid controls cannot be modified (that's the way it works). Mayvue is still using the old engine. To compete controls, Mayvue would need to rebuild the entire page from scratch.
 - When we deviate from the standing development approach it needs to be documented in a consistent place (e.g. FDS and work plan).
 - Going forward – Mayvue should make it clearer to the Task Force what the SUs donated will get them. Eric may have added in more SUs to develop this Tunnel Work Candidates page with controls.
- Script vs. adding a few parameters.
 - Work candidates are shared across all asset types and are currently auto populated.
 - Mayvue agreed to develop a script for the five identified fields as described in the FDS. However, the Task Force subsequently made the decision to not proceed with the development of the script.

The Task Force agreed that a presentation topic at the next BrMUG should be identifying the difference between how BrM bridge functionality works and how other asset types work.

- 6.3 Modules
 - The Schedule Reports was much more difficult than Mayvue originally anticipated.
 - Josh Lang described work candidate functionality for multi-assets



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- The Task Force identified there is no unit of measure. It mirrors what the bridge module is doing now even though it looks a little different.
- Mayvue showed the Scheduled Processes functionality to the Task Force, demoing how to set it up.
 - Mayvue completed the batch script.
 - Initial thoughts were to add one more thing to this filter – e.g. status.
 - Selection criteria may work. We'll just have to see how it works for agencies. May have a workaround.
 - No action item for Mayvue to change anything at this point regarding the filters.
- Mayvue advised that the user must specify an email address to send the scheduled process from. That is, agencies will need to create an account that exists for this purpose. Mayvue expects support tickets to roll in for this functionality.
- NBI Deterioration profiles – users can assign bridges (shows which profiles your bridges are assigned to).
 - Added results by deck area percent and intervals
 - Make sure documentation explains the part about adding to the profile
 - If a new bridge is added and the user forgets to assign it to a deterioration profile, it will be automatically assigned to the default filter.
- Inspection Assignment allows the user to define an inspection or groups of inspections to a team of users.
 - Inspection Assignment has an email function.
 - How do teams work? Does the person who starts it have complete control, do all team members have control or do they only get certain parts of the inspection? Not defined yet.
 - Users can select from the map. Mayvue showed the clustering option within the map. The map shows the symbols for the type of inspections.
 - Craig Nazareth mentioned that it would be nice to see all the bridges on the main map. Maybe just highlight the selected bridges with a different color. No action item currently for this.
 - The user can also filter for the type of inspection.
 - There is no limit to the number of bridges in a group or how many teams an inspector is assigned.
 - Once an inspection is assigned, the flow stops. An inspector will get an email but it doesn't show in the software that a bridge is assigned out. Will Holmes suggested researching the process ESRI uses to work with Work Force.
 - Comments on the provided 6.3 training videos - The walkthrough will flush out a lot of the issues. Not submitted at this time.

Agenda Item 07: BrMUG Follow-up Discussion

7a. Meeting Discussion / Feedback

The Task Force discussed the fact that the changes to the FHWA Coding Guide may present an opportunity to bring more states on board with the inspection capabilities of BrM. This will be a big marketing opportunity for AASHTOWare to get the word out on the necessary changes to BrM and the anticipated costs needed to upgrade BrM to support the new NBIS Coding Guide. Through this effort we may also be able to bring outside entities on board with using BrM going forward. The project can be scoped based on the initial release of the coding guide and the details can be refined once the comment period has passed and the coding guide has been finalized.



7b. BrMUG Survey Responses

The Task Force discussed the possibility of holding training sessions during the 2020 BrMUG. If the decision is made to include training sessions during the 2020 BrMUG, the following topics, introduced by the user community, should be considered.

- LCCA (8)
- Deterioration Modeling (5)
- Management / Project Planning (3)
- Inspection data QA/QC (3)
- Inspection process flow
- Developing custom Crystal Reports (2)
- Creating and managing network policies
- Running a needs list
- Web services for data transfer

BrM Marketing:

- The Coding Guide Update solicitation might be the right time to get into the states that do not currently license BrM. We need to be prepared for this push and look for opportunities to reach the decision-makers.
- We need to be positioned to move forward with a solicitation and marketing activities shortly after the guide is released. Licensees should be expecting a solicitation in the near term. We won't get everyone to participate, but our agencies understand it's going to be a significant effort to undertake and accomplish. We shouldn't have to sell them on the need for a solicitation.
- BrM needs to lead the pack on this front (getting out in front of the states) to ensure our competitors do not get ahead of us.
- The Task Force needs to have a plan in place; however, we have to have the final version of the coding guide first.

The Task Force also discussed the possibility of offering specific benefits to agencies that contribute to the solicitation such as free training or data migration (NBI portion only). This approach could support the agency in moving to the next version. We will not be able to support custom systems given the fact that an attempt to support agency customizations could be problematic

7c. Agency Risk Assessment

Mayvue presented the Agency Risk Assessment document which was recently updated to include feedback from the BrMUG meeting. The table provided Mayvue's assessment of each state's vulnerability to potentially drop their BrM license. This assessment should be a great tool to assist the Task Force in identifying state licensees which should be targeted proactively. Mayvue's recommendation is to proactively target these vulnerable states to determine hesitations, confusions, and/or perceived lack of functionality and address before the state decides to drop BrM or issue an RFP.

The BrM Agency Risk Assessment will be a standing agenda item for upcoming Task Force meetings.



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Anthony Hutskow will update the Agency Risk Assessment document based on Task Force comments received and will post the document on SharePoint and make it available to Tinika Fowlkes.

7d. BrM Mailing List Server

The Task Force discussed user community feedback on their need for a list server solution to support communication within the BrM user community. Mayvue uses MailChimp, AASHTO uses Constant Contacts, and Baker uses a self-subscribe user mailing list. A list server solution could potentially be used for the distribution of the quarterly newsletter. However, the BrM user community is interested in a list serve environment that that could be used to communicate with each other.

Agenda Item 08: BrM Enhancements

Anthony Hutskow recently sent emails to the top 10 BrM priority enhancement champions. (This completed action item 2019-BrM-096.) The champion emails provided the recipients with detailed information necessary to support moving the priority enhancement forward, including:

- the latest version of the FDS (if available)
- an FDS template document (if the FDS hadn't been started) to help agencies define the requirements
- a list of agencies who voted on the enhancement, to include contact information
- a list of previously committed dollars by state (if applicable)
- and, instructions for the next steps.

The Task Force made the decision to include a summary of the top 10 enhancement efforts in the quarterly status update as another reminder to the community. Mayvue reminded the Task Force that they are using Task Force Directed Task funds under the FY2020 MSE to support this effort. The Task Force also discussed that, with the upcoming coding guide changes, the best approach for the 2019 priority enhancements might be to sit tight. Right now, there is no planned release for next year.

Mayvue provided an update to the FHWA element (NBE) validation check. The following issues were discussed.

- How can we get the latest validation checks to the users? Mayvue advised that the validation checks could be included in 6.3 if the Task Force considers it worth rushing to the user at this time.
- The delivery of the FHWA element validation check is about a year behind what was originally planned.
- This could be available as a database script. If a state wants to run it with 6.3, the option can be available to them. Mayvue could include it on their ShareFile space where the 6.3 release will be held to ensure it is available to all BrM agencies.
- The group discussed the level of effort and some of the trickiness with this update. Specifically, cross-checks are more complicated. Mayvue should phrase it the same way that FHWA phrases it...validate that the data is correct. Stick to their terminology. This does not include the NBI file checker... BrM still doesn't support that.
- Task Force made the decision to focus on the FHWA element validation rules for the time being.
- Josh's estimate is a couple of weeks to complete the script and make it available.
- Should Mayvue determine the FHWA validation rules script cannot be completed and included in the 6.3 release, the Task Force needs to be informed as early as possible.



8a. BrMUG Voting Results

The 2019 user enhancement priority list was reviewed.

		Champion?	2019 BrMUG Votes	Prev Est.	Previous Possible Funding	Action
1	QA/QC Module	ryan.cram@ky.gov	AK, CO, DE, FL, HI, ID, KY, MN, MS, NH, NJ, NM, ND, OH, RI, SC, SD, UT, VT, VA, WI, WY, PR ≥80 = DE, SC	35	HIDOT = 1 ITD = 5 KYTC = 5 RIDOT = 1 UTDOT = 1	Complete the FDS. Conduct Webinar
2	Funding by Allocation Project Category	todd.springer@vdot.virginia.gov	AK, CT, GA, HI, ID, IA, KS, MA, MN, NH, NJ, NM, ND, OH, OK, TX, UT, VA, WA, WI, PR ≥44 = GA, OK, TX	??	VDOT = ? GDOT = ?	Solicit reqmts from VA and GA. Create an FDS under Task Force directed work. Work with VA and GA to secure funding
3	Multimedia Interface	ryan.cram@ky.gov	AL, CO, HI, KS, KY, MN, NH, ND, OH, RI, SD, WI, WYM PR =80 = AL	22 - 39	HIDOT = 1 ITD = 1 KYTC = 4 RIDOT = 1 ALDOT = 4	Mark Faulhaber to send current FDS to the user community to solicit funding support.
4	VDOT - Ability to Schedule additional types of inspections with item 31		AL, AK, CA, FL, MA, MI, NM, VA, WI, WY =80 = MI			Solicit reqmts from VA. Mayvue to develop an FDS
5	HI - Optimizer look ahead rule		AK, DE, GA, HI, ID, IA, KS, MA, MN, NH, NJ, NM, ND, OH, TX, UT, VT, WI, WY =44 = TX			Solicit reqmts from HI. Mayvue to develop an FDS for the 'Easy Button' method.



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6	RI - Inspector Qualifications of all assets		AL, CO, ID, KY, MI, MS, NE, ND, RI, UT, WI, WY =50 = NE			Mayvue to work with Beckie Curtis to identify reqmts
7	Mobile Inspection		AL, CO, HI, IA, KY, MS, NM, ND, OK, TX, WI, WY, PR =43 = OK			No Action
8	Clearance Tab	ryan.cram@ky.gov	AK, CA, CO, ID, IA, KY, MS, NJ, RI, SD, UT, PR =40 = UT	7 - 10	ITD = 1 KYTC = 1 RIDOT = 1	Ryan Cram to send current FDS to the user community to solicit funding support.
9	Report Elements from Optimizer results		FL, GA, HI, IA, MA, MS, NJ, ND, OH, UT, VT, WA, PR			
10	Utility Value and Health Index		AK, CT, GA, ID, KS, MA, MS, NJ, ND, OH, RI, TX, UT, VT, WA, WI			
11	Detailing Results by Optimization		AK, GA, IA, KS, MA, NH, NJ, OH, TX, UT, VT =50 = MA			
12	Allow Multiple Report Writers		CA, KY, NE, OR, VA, WA =50 = NE, OR			
13	General Dashboards		AL, AK, CT, IL, KY, MS, NJ, OH, RI, SD			
14	Expanded Export/Import Options		AK, CO, CT, NH, VT, WI =30 = WI			
14	Training Videos (User Group will		AK, FL, KS, ND, OH, RI, PR			



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	Form a Committee for Guidance)					
16	Performance Measures by Formula		AK, CT, MA, NJ, OH, TX, VT			
16	Project Completion Date by Year, More Detail, Open to Traffic		CA, CO, CT, MN, NJ, VT			
18	OR - Button to clean out database of junk		DE, ID, KY, MA, OH, OR, WA			
19	CAL - Enhance security multi asset		CA, ID, IL, WI =50 = IL			
20	OR - New inspection button on condition page and schedule inspection page		ID, KY, NH, OK, OR, WY			
21	Tool-Tip Functional Update		AK, CA, FL, KY, OH, RI, UT			
22	VDOT - Optimization two different structure weights		GA, IA, MA, NJ, OH, VA, WI			
23	CAL - Option to total defects to parent element		CA, KS, NH =38 = CA			
24	Ability to Activate/Deactivate Elements		AK, KS, MN, VT, WI			
25	Enhancing Mapping User Interface (Bounding Boxes, GIS Friendly)		CO, CT, KY, MS, ND, OH, RI, PR			
26	CAL - Framework tunnels or other assets types for the elements		CA, ID			
27	Multimedia for Tunnels		CO, ID, PR			
28	Need a Way for Admin. to View Current Users		CA, IL, KY, MS			

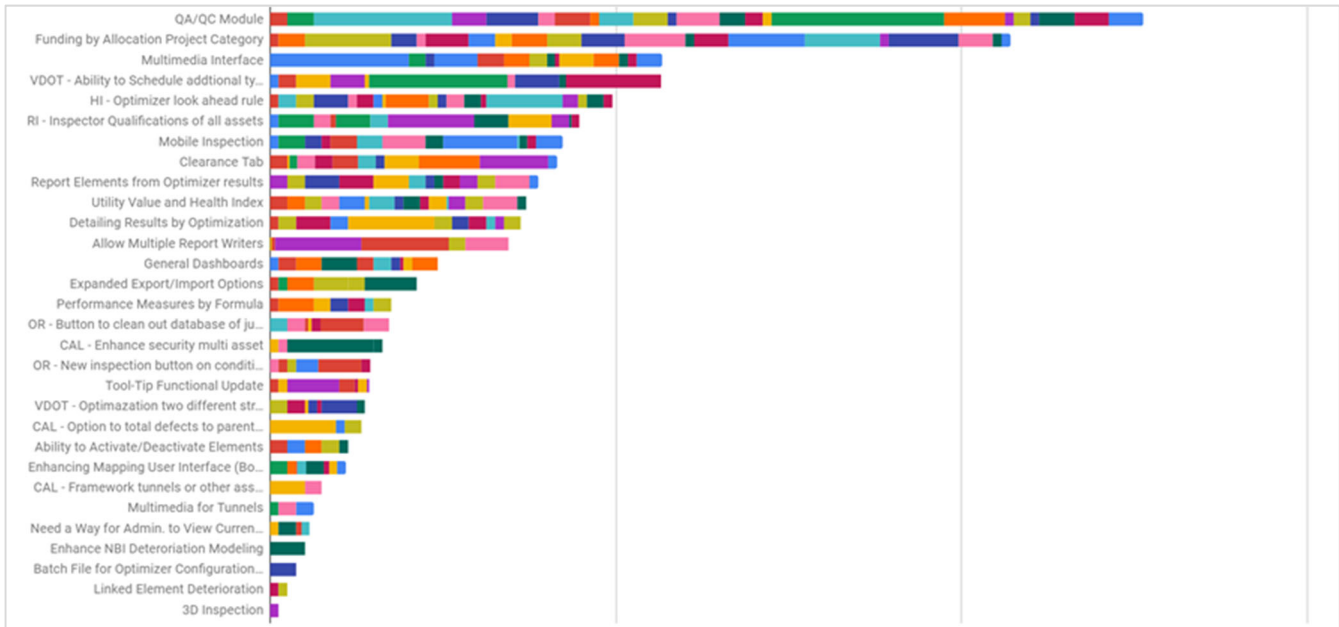


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29	Enhance NBI Deterioration Modeling		IL			
29	VDOT - Ability to conceal elements that are not part of the inspection		CO, VA			
31	Batch File for Optimizer Configurations & Tools for Analysis		NJ			
32	Linked Element Deterioration		OH, VT			
32	KY- Cross Sections as scheduling type of inspections		ID			
34	3D Inspection		UT			
34	Project Workflow		PR			
	LCCA, Bridge by Bridge		No Votes			
	Work Candidates for Tunnels		No Votes			
	Maintenance Records Module		No Votes			
	More Finite Control of Fields (Security by Role)		No Votes			
	Enhance Metric Reports		No Votes			



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8b. LCCA

The LCCA enhancement FDS has been finalized. The Task Force made the decision to move forward with a work plan to support the LCCA 18 month development effort.

Mayvue advised that they were not sure what to include in the draft work plan in terms of the release number. The Task Force made the decision to not include a specific release number in the project work plan, rather, the release number will be determined closer to the delivery of the LCCA enhancements.

8c. Multimedia

No discussion.

Agenda Item 09: BrM TAG Activities - Updates

9a. Testing TAG

No discussion.

9b. Database TAG

The Database TAG received the 6.3 ERD in early November. Mayvue provided an overview of the 6.3 ERD as a component of this discussion. Josh Lang asked the Database TAG to review the ERD and provide recommendations on their specific needs in response to Mayvue’s multiple attempts to meet their needs, spending significant resources trying to design the perfect documentation. Mayvue advised that they would like a recommendation on the ERD content (e.g. what tool would they like and how would they like it to look)? One option discussed was the possibility of choosing 5 tables, drawing it out, and recommending the software. The solution must address the bigger issue which is that the complete ERD will be huge.



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The Task Force also discussed multi-asset type (e.g. signs, walls, etc.) database structures and how Mayvue will handle in these in the future as various other asset types are added to the database. The following issues were discussed.

- The options are flexibility vs. easy access to the database and pulling data out. The software cannot provide both options. Either decision will likely not satisfy everyone because requirements will be split.
- The database structure is currently structured such that data can be easily extracted and imported into BrM. This is very much appreciated by our users and is a staple of the BrM software (something other software tools don't allow).
- Users are allowed to build new fields/forms in the interface; however, the DBA must still be able to tie the data together.
 - All competitors are doing it without requiring a DBA (not aware of a software solution out there that allows the access that BrM does). No database scripts are run. Modifications to the database are handled through the software. Advantages – very flexible to users.
- It would be nice to create a new field and it just pops up but how often would that happen?
- No matter which direction we choose, some users will be happy, and some will not be happy with the future direction of the database – that's why it needs to be an open-ended conversation. What are the tradeoffs and what advantages? The further down the path we go with multi-asset this discussion will become more complicated.
- If you want a mass update you must write a SQL statement that's why our users are so used to working in the database.
- Multi-asset needs to drive this decision.
- Mayvue would like a meeting with the Database TAG to help flesh this out and get a plan in place on how to handle it. The database TAG has members representing both extremes.
 - The Task Force determined that T&AA should be involved in any decision – survey the states and make a recommendation. Specifically, Will Holmes should be pulled into the discussion.
 - In a perfect world, we would go away from SQL statements. Make it easy for an average user to pull and access the data. You'll still have access to the information, but it would be a different way. This would eventually become part of the bridge module as well. Start with the new assets entered BrM (signs, walls, dams, etc.).
 - Is this taking away a core function of BrM? How would it affect upgrades, etc.?
 - Ask the users what they prefer more – flexibility or accessibility, and give it to them in terms of actions (e.g. would you rather be able to pull the data)
 - No matter which way we go it's going to be a major change to what we're doing now. WE need to think this through.
 - Josh Lang and Craig Nazareth discussed with Will Holmes the need to secure T&AA involvement in the decision-making for future changes to the BrM database to support multi-assets. Will requested Mayvue to supply T&AA with a recommendation and accompanying summary of the preferred approach for the future database. Continued discussions with T&AA will be required

9c. Optimizer TAG

The Optimizer TAG has not yet been established. No discussion.



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Judy Tarwater provided the BrM TAG Task Force liaisons with information on the Bridge Task Force Zoom account and details on how to access the account for the purpose of scheduling future TAG meetings.

Agenda Item 10: BrM License Fee Business Case

The Task Force reviewed the BrM License Fee Business Case and made suggestions on how the document should be modified to address the BrM user community. Kent Miller volunteered to edit the document to focus on information for the intended audience.

Once in final form, the BrM License Fee Business Case will be distributed to the BrM user community. This information will accompany the impending BrM solicitation to support the NBIS Coding Guide changes.

During this discussion the Task Force made the decision to meet for 2½ days during the January 2020 Task Force meeting in Fort Myers, FL.

Regarding the estimates associated with the NBIS Coding Guide Changes, Mayvue advised that are working to produce estimates in three tiers:

- Kitchen Sink: everything that needs to be completed plus improvements to the software, setting it up for years of success. Includes fixing outdated items, various enhancements, new structure, etc.
- Realistic: what can be accomplished for what we anticipate raising through the solicitation.
- Worst Case Scenario: assuming not a large support through the solicitation, what is the basic needs to meet the federal standards.

Agenda Item 11: BrM 6.4 Work Plan

The Task Force reviewed the current draft of the LCCA Work Plan. LCCA is the only enhancement included in this work plan. Nothing is currently slated for 6.4 next year as LCCA is planned to take ~18 months. This approach is appropriate given the fact that users are/will be concentrated on the NBI coding guide changes.

The Task Force made the decision to hold back on moving additional enhancements forward given the impending need to make changes to support the coding guide changes. During the January 2020 Task Force meeting, the schedules and planned items for inclusion in the solicitation will be clearer. Mayvue is okay right now with not having another work plan (e.g. 6.4) besides LCCA. However, Josh advised that if we get to the January Task Force meeting and neither Michigan DOT nor South Carolina DOT work plans are signed, the story will be much different.

The Task Force determined that the BrM version number will be determined at the time the LCCA enhancements are near delivery. Anthony to state in the draft work plan that the LCCA Module enhancements will be included in a future version of BrM.

The goal is for the Task Force to approve the LCCA work plan during the 11/14/2019 Task Force call assuming no major changes are required.

Agenda Item 12: FY2021 – Preliminary Discussion

12a. Catalog



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- Additional Licensing Options - Mayvue still needs to complete the consolidated write up for BrM training for next year's catalog
- Mayvue also discussed the need to market BrM as a software as a service (SaaS) solution in the next catalog.
 - This seems to be gaining momentum as a requirement.
 - Mayvue has experienced some recent roadblocks with hosting states because BrM is not offered as a SaaS solution. State DOT IT departments are shutting down the conversation because BrM is not called a SaaS solution.
 - There are differences between a hosted solution and a SaaS model.

12b. FY2021 MSE Work Plan

The FY21 MSE will be reviewed and finalized at the January 2020 Task Force meeting in Fort Myers, Florida. The first draft should include Mayvue's estimated price for the MSE contract.

The Task Force discussed the fact that there are only two bi-weekly calls scheduled for the remainder of the calendar year: 11/14/2019 and 12/12/2019. Due to needed discussion on the Coding Guide changes, the Task Force decided to schedule an additional call for 11/22/2019. The first call for 2020 is scheduled for 01/09/20.

There was a brief discussion about providing comments to the NBI Coding Guide as AASHTOWare Bridge to possibly give the comments more weight when being evaluated.

Agenda Item 13: Standard / Sample BrM RFP Documentation

Mayvue prepared and presented a BrM Frequently Asked Questions (FAQ) document for Task Force review and comment. The document was developed to support the ongoing increase in the number of states issuing requests for proposals (RFPs) for bridge/asset inspection and management systems. As agencies evaluate other software products or wish to relicense the AASHTOWare Bridge Management software, there may be state laws that require the agency to issue formal, competitive RFPs prior to selecting a software solution. As a result, the Task Force identified the need to develop this informational document to help interested agencies understand BrM's core features/functionality, appreciate the benefits of AASHTO's software development approach, and conclude that BrM is the best product to meet their states' requirements for managing its bridges and other critical infrastructure. In addition, if the agency determines that BrM is the most reasonable solution, these questions and responses can be used to help the agency develop firm requirements for its RFP.

The document currently contains the top 25 questions and answers that are considered to best represent the BrM software. Although there was not much discussion during the meeting, the Task Force raised no initial concerns with the document; however, they would like to review the documentation

Agenda Item 14: Review Action Items

Anthony Hutskow reviewed the action items recorded during the meeting.



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Agenda Item 15: Draft Quarterly Status Report Content

The Task Force decided to send out the next Quarterly Status report to the users in November in order to highlight the efforts being made to address the changes delivered with the new coding guide

Topics to be included in the Quarterly Update:

- Coding guide update and our strategy for pursuing the 2019 priority enhancements
- General 6.3 status update – anticipated timeline – copy the content from a previous update to show what version 6.3 all includes.
- FHWA updated NBE submittal checker will be included in BrM 6.3
- Include the list of the 2019 top priorities and identify the champions for each - Set a date as a deadline for when states should hear something from the champion
- Give users a heads up that some large service unit projects may be coming in the near term which will benefit the core software and provide enhancements such as QC/QA and multimedia. FDSs will be generated as part of the work plans. It is the Task Force’s intent to circulate these for user community reviews; however, comments will only be entertained if the states are willing to add onto the effort with service units and it won’t slow down the service unit project.
- Save the date for the 2020 BrMUG.
- Identify there’s an escalate button in JIRA Service Desk that users can use to escalate issues to the Task Force.

Agenda Item 16: South Carolina DOT and Michigan DOT (Inspection) Work Plans

Mayvue emailed the SCDOT and MIDOT work plans to the Task Force during the Task Force meeting. The work plans were also displayed on the projector. The group went through the commonalities between the requirements (planned FDSs) and discussed the high-level approach to how it's going to be handled.

- The goal is to have one large FDS that everyone approves and includes what South Carolina, Michigan, and other contributing states are interested in having included. - Once South Carolina approves an FDS it would be sent over to Michigan or vice versa as the starting point.
- If Mayvue were going straight into development this would be much more complicated.
- Next, Mayvue displayed the MIDOT inspection work plan and went through it with the group.
- The FDSs approved by MIDOT, or SCDOT, or combined will be sent out to the user community. If they want additional enhancements and will commit the funds.
- Mayvue will continue to keep the Task Force informed about the status of both work plans as revisions are made or the work plans are signed.

Agenda Item 17: Executive Session

The meeting adjourned at 4:15pm.



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