

**Summary Minutes Of The
AASHTOWare Bridge Design-Rating (BrDR) Task Force Meeting
April 2 - 3, 2019
Alexandria, VA**

Table of Contents

General Information – Meeting of the Bridge Design & Rating Task Force	3
Agenda Item 0: Review Agenda/Assign Minutes Recorder	3
0a. Update on BrDR Task Force Membership.....	3
Agenda Item 1: Prior Business	3
1a. Review January Meeting Minutes.....	3
1b. Review Action Items	3
Agenda Item 2: Financial Overview and Work Plan Summary	4
2a. Update of the FY2019 MSE Work Plan	4
2b. Update on 7.0 Project Work Plan (June 2019).....	4
2c. Update on 7.1 Project Work Plan (June 2020)	4
Agenda Item 3: Update on BrDR Licenses (FY2019)	4
3a. Product Report.....	4
3b. Service Unit Report.....	4
3c. Evaluation Software	5
Agenda Item 4: Support and Maintenance Report.....	5
4a. Incident and Report Summary	5
4b. Progress on Bug Resolution	5
4c. Enhancement List Update.....	5
4d. Maintenance Issues	6
Agenda Item 5: Enhancements	6
5a. Analysis Temporary File Management (AI 2019-BrDR-018).....	6
5b. Enhance Fatigue Life Evaluations	6
5c. T-18 Proposed Ballot Items	7
Agenda Item 6: BrDR 7.1	7
6a. Contract Modification #1	7
Agenda Item 7: Modernization	8
7a. Project Update	8
7b. 2019 Q1 Status Report	8
7c. TAG Update	8
7d. 6.8.4 and 7.0 Beta Testing.....	8
Agenda Item 8: Miscellaneous Topics.....	8
8a. 7.0 License Activation and Management.....	8
8b. 2019 Newsletter	8
Agenda Item 9: Third-Party Issues.....	9



9a. Long-term Strategy	9
Agenda Item 10: User Group	9
10a. Summary Minutes from the January Meeting	9
10b. 2018 RADBUG Meeting Follow-up Actions	9
10c. 2019 RADBUG Meeting	9
10d. 2019 Survey.....	10
10e. RADBUG SWAG Suggestions.....	10
Agenda Item 11: Work Plans.....	10
11a. Planning Estimates	10
11b. Future Work Plans	10
Agenda Item 12: FHWA Update	10
Agenda Item 13: Five Year Projection for BrDR.....	12
Agenda Item 14: Licensing Issues	12
14a. Third Party Add-ons.....	12
14b. Design Tools	12
Agenda Item 15: Marketing Activities.....	12
Agenda Item 16: Review Action Item list from this meeting	13
Agenda Item 17: Task Force Executive Session (as needed).....	13



General Information – Meeting of the Bridge Design & Rating Task Force

Date: Tuesday, April 2, 2019

Participants:

AASHTO	Judy Tarwater	AASHTO	Project Manager
SCOA	Tim Armbrecht	SCOA	SCOA Liaison
T&AA	Will Holmes	T&AA	T&AA Liaison
BrDR Task Force	Todd Thompson	South Dakota DOT	Chair
	Mark Bucci	Louisiana DOTD	Bridge Rating (BrD)
	Joshua Dietsche	Wisconsin DOT	Bridge Rating (BrR)
	Michael Johnson	Idaho TD	Bridge Rating (BrR)
	Dean Teal	Kansas DOT	Bridge Design (BrD)
	Tom Saad	FHWA	FHWA Liaison
	Vinacs Vinayagamoorthy	California DOT	Bridge Rating (BrR)
BrM Task Force	Beckie Curtis	Michigan DOT	Bridge Management
	Mark Faulhaber	Kentucky TC	Bridge Management
BrDR Contractor	Herman Lee	Michael Baker, International	BrDR Contractor
	Geoff Trees	Michael Baker, International	BrDR Contractor
Guests	Keith Platte	AASHTO	Project
	Vicki Schofield	AASHTO	Safety Anal / Pvmnt
	Jonathan Mallard	VDOT	Bridge Design-Rating
	Lubin Gao	FHWA	

Notes Taker: Judy Tarwater and Josh Dietsche

Agenda Item 0: Review Agenda/Assign Minutes Recorder

Todd Thompson opened the meeting at 8:00am. Todd welcomed new Task Force member, Michael Johnson (Idaho TD), AASHTO guests, Lubin Gao (FHWA) and Jonathan Mallard (Virginia DOT). Everyone performed self-introductions.

The agenda was reviewed. No additional items were added.

0a. Update on BrDR Task Force Membership

Michael Johnson is filling Ping Lu's remaining term with an initial term of April 1, 2019 through June 30, 2020. With the end of Bruce Novakovich's and Mark Faulhaber's second three

year terms, Kent Miller (NEDOT) will fill Bruce's position and David Hedeem (MNDOT) will fill Mark's position beginning July 1, 2019. Kent and David will be invited to attend the June Task Force meeting.

Agenda Item 1: Prior Business

1a. Review January Meeting Minutes

Minutes from the January 30 – 31, 2019 Task Force Meeting in Long Beach, CA were reviewed and approved as-is.

1b. Review Action Items

Vinacs reviewed the Action Items and provided updates to the Task Force.



Agenda Item 2: Financial Overview and Work Plan Summary

2a. Update of the FY2019 MSE Work Plan

Baker provided an update on the FY2019 MSE work plan as of 02/28/19.

2b. Update on 7.0 Project Work Plan (June 2019)

Baker provided an update on the Modernization Project work plan as of 02/28/19.

2c. Update on 7.1 Project Work Plan (June 2020)

Baker has started developing mockups that will be used to enhance the PS Design Tool and to create the Steel Design Tool. With that said, Baker’s recent focus has been on fixing bugs for 7.0 beta 1 in preparation for beta 2.

Agenda Item 3: Update on BrDR Licenses (FY2019)

3a. Product Report

Judy Tarwater presented a product license summary report developed from the Excel output from AASHTOWare Manager. The report included licenses ordered as of 03/19/19.

Item	FY17	FY18	FY19	Sponsoring Agency
Bridge Design - 120-Day Evaluation License	12	5	1	
Bridge Design Developer License	2	2	1	
Bridge Design Educational License	7	11	12	
Bridge Design Single Workstation Option	4	3	2	
Bridge Design Special Consultant Option	34	39	27	
Bridge Design Unlimited Option	15	16	16	
Bridge Design/Rating Service Units	94	94	38	
Bridge Rating - 120-Day Evaluation License				
Bridge Rating - 120-Day Evaluation License	23	16	5	

Item	FY17	FY18	FY19	Sponsoring Agency
Bridge Rating Agency Sponsored Consultant Licenses	3	3	4	ILDOT, MIDOT, OHDOT, VADOT
Bridge Rating Developer License	5	6	8	
Bridge Rating Educational License	7	11	12	
Bridge Rating Single Workstation Option	25	59	22	
Bridge Rating Special Consultant Option	348	438	348	
Bridge Rating Unlimited Option (Members)	39	41	35	
Bridge Rating Unlimited Option (Non-Members)	N/A	N/A	11	
Sponsored Consultant Licenses (Bridge Rating) - No Fee	59	139	115	ILDOT
Sponsored Consultant Licenses (Bridge Rating) - No Fee	87	107	91	MIDOT
Sponsored Consultant Licenses (Bridge Rating) - No Fee			97	OHDOT
Sponsored Consultant Licenses (Bridge Rating) - No Fee	85	84	78	VADOT
PGSuper Professional		2	3	KDOT, MassDOT, ORDOT
BridgeLink Professional		1	2	ITD, MSDOT

3b. Service Unit Report

Baker presented the service unit summary report. 38 new service units have been purchased in FY2019. 6 Manitoba IT BrM service units were transferred to BrDR. With the recent service unit donations by Caltrans (36.0), Illinois DOT (2.0), Minnesota DOT (1.2) and Mississippi DOT (2.1) to support enhancements to be included in BrDR 7.1 contract mod #1, to date, 66.3 service units have been donated for core product development this fiscal year.



3c. Evaluation Software

The current summary of BrDR software evaluations was reviewed.

Agenda Item 4: Support and Maintenance Report

4a. Incident and Report Summary

Baker presented the Defect History Report through release 6.8.3. Forty-nine (49) new defects have been added since the Task Force meeting in January 2019. The total number of defects reported were 2559. Currently, 2328 defects have been resolved; 93 defects are not reproducible; 5 defects need more information; and 133 defects are unresolved (four of which are critical issues, an increase of one since the January Task Force meeting).

4b. Progress on Bug Resolution

Baker reviewed Maintenance Progress reports for the 6.8.4 release as of 03/27/19. Out of 209 total reported incidences, 126 have been resolved and 83 are assigned for resolution. All 83 currently unresolved incidences are expected to be resolved before the production version of the software is delivered.

Baker reviewed Maintenance Progress reports for the 7.1 release as of 03/27/19. Out of 55 total reported incidences, 9 have been resolved and 46 are assigned for resolution.

The Task Force discussed the relative level of effort to spend on bug fixes for the legacy product moving forward. Consensus was that only critical bugs would be addressed and only before the sunset date. Users will be strongly encouraged to upgrade to the fully-supported 7.0.

4c. Enhancement List Update

Baker presented an update on the Enhancement List.

Eight (8) additional enhancements have been added to the TAG Enhancement List since the last Task Force meeting.

Schematic	BRDR-2047	Refresh schematic images based on UI inputs
Import	BRDR-2072	Importing Bridge Data from CtBridge Analysis Software into BrR software
Useability	BRDR-2073	Privileges, Database and Configuration Issues
Miss Function	BRDR-2074	Load Rating Tool doesn't show precomputed data exists
Useability	BRDR-2093	POI Ranges
Schematic	BRDR-2096	Add apply button to schematic level control
Technical	BRDR-2103	Culvert Adjacent Vehicle - When using LFD Permit Operating to analyze culverts, adjacent vehicles cannot be run as can be done for a bridge.
Output	BRDR-2114	NYS DOT Request for Load Rating Report
Technical	BRDR-2131	3rd Edition MBE Fatigue Equation (7.2.3-1) should use 2.2 factor instead of 2

During the Beta Testing there was a lot of discussion relating to how we might be able to 'clean up' the enhancement list. The TAG reviewed all the enhancements which have been added to the list since the time the TAG last reviewed the list. The 'short' list is no longer short and with the modernized system many of the enhancements currently on the list may no longer be pertinent in the new system.

- The Task Force discussed the possibility of purging the existing Enhancement list to allow the list to be more easily managed. The enhancement list was previously purged six years ago; however, since then the list has continued to grow.



- The current process for list management involves the Beta TAG short listing the enhancements based on the importance of each issue. Judy Tarwater then sends the list to all End User Designees and posts the list in the RADBUG Registration web site so that all users can review any of the incidents. This process allows the members to vote on any issues that are important to them during the RADBUG meeting. Each vote from an Agency with unlimited license gets 37 points and Consultants with an unlimited license get 27 votes and so on. Enhancements with the highest vote count are considered for inclusion in the next release.
- Features that are missed during the development process are typically added to the Maintenance bucket. Because of budget limitations, not all Maintenance bucket issues will get fixed.
- The Task Force discussed the JIRA issues that are identified as duplicate incidences. Currently, the person reporting an issue needs to add his/her name as watcher to receive correspondence. It is suggested that the person's name of the duplicate incident automatically be added to the original incident as watcher so that all the correspondence about the issue will be shared with this person. The Task Force also discussed JIRA issues that have been "accepted" (meaning the issue was resolved satisfactorily), but not closed by the developer. The Task Force recognizes these can cause issues; however, no decision was made on how to resolve.

The Beta Testing TAG is currently reviewing the current enhancement from enhancement 1193 going forward. The TAG will also be asked to provide the Task Force with input on managing the enhancement list going forward. Feedback

from the TAG will be discussed during the June Task Force meeting.

4d. Maintenance Issues

A maintenance budget will be set aside in the BrDR MSE to support maintenance related issues identified in BrDR 7.0.

Agenda Item 5: Enhancements

5a. Analysis Temporary File Management (AI 2019-BrDR-018)

Baker presented details for an enhancement to allow user to specify custom file paths for bridge analysis caching, XML file referencing, and bridge backup. This will allow the application to better accommodate various agency IT configurations and give the use more flexibility in using the application. User limitations currently experienced when they are not connected to the VPN would be eliminated with the implementation of this enhancement. Baker recommends adding this to BrDR 7.1 or later. The Task Force made the decision to include this enhancement in the BrDR 7.1 .

5b. Enhance Fatigue Life Evaluations

Baker identified some of the comments made by Caltrans TAG as "enhancement". Caltrans TAG did not participate in the discussion the last time the Fatigue Life Estimation issue was discussed; however, the Caltrans TAG noted that three of the four fatigue life estimations listed in the MBE were not incorporated when this feature was added to the software. Some of the issues were missed during the review and development process when this was incorporated.

Fatigue Load Factor changes which were introduced in the 2017 and 2018 T-18 ballot items will be incorporated into the software via ongoing spec updates. This issue is being revisited due to the Specification Update to the MBE.



5c. T-18 Proposed Ballot Items

Baker presented the following estimates developed to support proposed T-18 Ballot Items.

- Implement Manual for Bridge Evaluation 2020 Interim Specification
 - This item is just database changes that can be implemented in 7.0. The Task Force directed Baker to move forward with this item.
- Update to Manual for Bridge Evaluation as per Proposed T-18 FAST Act Vehicle Ballot Item in 7.0
- Update to Manual for Bridge Evaluation as per Proposed T-18 FAST Act Vehicle Ballot Item in 6.8.4
- Update to Manual for Bridge Evaluation as per Proposed T-18 Steel Shear Capacity Ballot Item in 7.0
- Update to Manual for Bridge Evaluation as per Proposed T-18 Steel Shear Capacity Ballot Item in 6.8.4
- Update to Manual for Bridge Evaluation as per Proposed T-18 Culvert Ballot Items
 - Tim Armbrecht advised that there will likely be additional ballot items to come from the NCHRP 15-54 study in future ballots.

Agenda Item 6: BrDR 7.1

6a. Contract Modification #1

The Task Force made the decision to include the following in the BrDR 7.1 contract modification #1.

Judy Tarwater reported that the BrDR 7.1 Project Service Unit Donations forms to support components of the BrDR 7.1 contract mod #1 have been received and the respective service units have been transferred for Task Force use on

BrDR 7.1 enhancements. The service unit donations are as follows.

BrDR 7.1 Work Plan Task	Donor Agency
FP02 - Steel Design Tool (delta) task	RIPI Funding 2019
FP03 - SUP-1619 Schedule Based RC I beam with post tensioning	Caltrans
FP03 - SUP-1619 Schedule Based RC I Beam with post Tensioning	MSDOT
FP04 - BRDRSUP-1620 Phi factor for moment MCB PT	Caltrans
FP05 - BRDRSUP-1621 LLDF for one or two cell box girder bridges	Caltrans
FP06 - BRDRSUP-1622 Limiting lever rule on single lane	Caltrans
FP07 - BRDRSUP-1623 Limit applic range values to lever rule	Caltrans
FP08 - BRDRSUP-938 User-defined load distribution (DC2) to MCB webs	Caltrans
FP09 - BRDRSUP-1624 Establish LLDF using full box case to set interior LLDF	Caltrans
FP10 - BRDRSUP-936 Difference in skew between adjacent supports override	Caltrans
FP11 - SUP-1627 Range of applicability for slabs	Caltrans
FP12 - BRDRSUP-1628 Report writer for girder-floorbeam-Stringer system	Caltrans
FP34 – User Group Enhancements (NEW TASK)	
FP35 - BRDRSUP-553 Implement 3D FEM and 3D FEM-Vehicle Path analysis for superstructure with hinges (NEW TASK)	ILDOT
FP36 - BrM web service integration (NEW TASK)	RIPI Funding 2020
FP37 - Rating Tool Permit Analysis Settings (AI 2018-BrDR-063) (NEW TASK)	MNDOT
FP38 - Temporary File Management enhancement	

Baker advised that the FP38 item could potentially be ready in time for inclusion in 7.0.



Agenda Item 7: Modernization

7a. Project Update

The BrDR Modernization Contract Mod #2 was approved by SCOA and forwarded to Baker for execution on 03/25/19.

Baker advised that beta 1 testing began last week with 13 members of the BrDR Beta Testing TAG and Jeff Olsen, Baker contract Beta Tester, testing the software at the Baker offices in Pittsburgh. 160 issues were submitted to the JIRA testing center; however, some of the issues are duplicate/global issues. Internal Baker testers are still continuing to find bugs. Beta 2 will be delivered at the end of April with beta builds expected to be release every two weeks thereafter.

The preference is to release 6.8.4 in June and release 7.0 after users have had an opportunity to provide feedback to Baker. Only 6.8.4 can be used to compare the results produced by the Legacy and Modernized engines to ensure the accuracy of the modernized engine, since only the 6.8.4 version has the modernized engine and Legacy engine. Any fixes made to the 6.8.4 modernized engine will be incorporated into the 7.0 version.

7b. 2019 Q1 Status Report

The Task Force reviewed the draft March 2019 BrDR Modernization Status Report.

7c. TAG Update

Dean Teal reported that there have been a lot of changes to the membership of the BrDR Testing TAG as a result of his aggressive recruiting effort. Thirty-three (33) users have agreed to test BrDR 6.8.4/7.0. Seven (7) new members have joined the BrDR Testing TAG:

Thirteen (13) members of the Testing TAG attended the onsite training last week in Baker's Pittsburgh offices. Based on the testing response thus far, the Task Force made the decision to

move ahead with plans for a second testing session in the Baker office.

7d. 6.8.4 and 7.0 Beta Testing

The Task Force discussed possible barriers to beta testing participation. Installation/IT issues were identified as one. The preference is for beta testers to be working in the same environment as their production version, but it's not always feasible to install beta versions on short notice. The Task Force discussed the possibility of offering a hosted environment for beta testing.

Agenda Item 8: Miscellaneous Topics

8a. 7.0 License Activation and Management

Baker presented information on their research and recommended solution for license activation and management going forward (beginning with version 7.0). The key end user BrDR licensing strategy complaint from the consultant licensees, is that BrDR cannot be used in a virtual environment. The cloud-controlled network floating environment would alleviate their need for a virtual environment. In addition, in the cloud-controlled network floating environment, license keys will longer have to be de-activated on one workstation to move the license key to another workstation.

8b. 2019 Newsletter

There was discussion on the format of the newsletter; hard copy vs. digital. The taskforce will continue to produce a hard copy for distribution this year, while also considering other e-delivery methods now and into the future. Jan Edwards sent an example (via e-mail) of an AASHTOWare Project e-newsletter and Todd forwarded (via e-mail) several examples of formats used by other AASHTOWare products. The taskforce will re-visit how we distribute our news at either the August or October/November meeting.



The taskforce discussed what content should be included in the 2019 newsletter.

Agenda Item 9: Third-Party Issues

9a. Long-term Strategy

In terms of a long-term strategy for BrDR collaboration with third party developers, discussions have been largely tabled during modernization activities.

The Task Force also discussed the possibility of scheduling a RADBUG breakout session for Third Party Developers during the 2019 RADBUG meeting to provide API training.

Agenda Item 10: User Group

10a. Summary Minutes from the January Meeting

The summary minutes for the January BrDR Task Force meeting in Long Beach, CA were provided. Judy Tarwater will post these on the SharePoint site for Task Force review and comment. Once in final form, the summary minutes will be forwarded to David Schroeder (Secretary RADBUG) for posting on the RADBUG website.

10b. 2018 RADBUG Meeting Follow-up Actions

The Task Force discussed the questions from the consultant users and the best method to communicate responses. At this point, it was decided that it would be best to address at the upcoming taskforce meeting. During their presentations at the RADBUG meeting, Judy or Todd to include:

- Consultant users with an agency-sponsored license should work through their state-sponsor to submit enhancement requests.
- Consultant users with a super license can submit enhancement requests through JIRA at any point.
- Judy/Todd to walk through the hierarchy of the AASHTOWare program (possibly in the consultant breakout), stressing that the program is driven by the State DOTs.

10c. 2019 RADBUG Meeting

To date, 24 people have registered for the 2019 RADBUG. George Huang is continuing to reach out to the user community for presentation topics and presenters. Judy Tarwater presented the current draft agenda which incorporates the presentation topics and presenters who have committed to date. Following the Task Force meeting Judy Tarwater will send a reminder 'Call for Presentations' email for the 2019 RADBUG to the BrDR user community to help George Huang fill the remaining slots on the agenda (AI 2019-BrDR-028).

Due to time limitations, discussions on this topic were limited. Presentation slots are largely filled. The Task Force agreed to discuss content for the training sessions at the June Task Force meeting. For reference, possible agenda topics previously discussed include the following. These were not discussed in detail at the Task Force meeting.

- Potential Presentation Topics (Baker or Task Force)
 - New features are included in the 2019 release and will be included in 2020 release.
 - Suggested workaround to users by Baker
 - Rating of curved steel plate girder and LRFR for truss using BrR - Baker
 - Baker's presentation from TRB (BrDR presentation on AASHTO LRF bridge design capabilities)
 - Troubleshooting 3D modeling issues
 - Training session for Third Party Developers?
- Potential Presentation Topics (Users)
 - The experience of using BrD, especially involving sub-structure analysis.
 - The experience of using BrR
 - The experience of using PS Design Tool



- The experience of using Regression Test Utility
- The experience of using the Rating Tool for permitting system
- Software workaround and potential new features or enhancement for BrDR
- Timber bridge rating with BrDR

The Task Force did agree that the regression testing tool should be included in one of the training sessions.

10d. 2019 Survey

The last BrDR end user survey was conducted in 2017. Following the two year cycle, the Task Force made the decision to survey the user community again this year prior to the 2019 RADBUG meeting. Discussion focused on what we're looking to get out of the survey and the best way to ensure that the data that we collect is truly an accurate reflection of our community of users. Some questions that were posed and answered discussed:

- Who should get the survey? One representative per state?
 - There might be better value in sending the survey to a wider audience, even if we get multiple response per state; users from the same state may have different experiences with the product.
- What information do we want to collect?
 - Big-picture wish list
 - Future direction of the software
 - Some user satisfaction questions
- How do we get a better response?
 - Use targeted questions, based on the role chosen by the person filling out the survey.
 - Limited number of questions; much shorter than previous years.

10e. RADBUG SWAG Suggestions

The Task Force briefly discussed possible SWAG options for the 2019 RADBUG meeting. The following items were thrown out as possibilities.

- Umbrella
- Pop socket
- Yeti tumbler
- Sunglasses
- Laptop camera blocker

Agenda Item 11: Work Plans

11a. Planning Estimates

No discussion.

11b. Future Work Plans

Discussed under agenda items 5 and 6.

Agenda Item 12: FHWA Update

Tom Saad provided the following FHWA update.

FHWA's National Highway Institute (NHI) continues to offer a subsidy to State DOT's that are interested in hosting two of their new courses developed for bridge design and analysis specialists. The subsidies are available to help State's defray the costs of training. For States that host the courses for at least 30 engineers, NHI provides free admission for the first 15 State engineers. This subsidy applies to NHI courses 130122, *Design and Evaluation of Bridges for Fatigue and Fracture*, and NHI Course 130126, *Strut-and-Tie Modeling for Concrete Structures*. Please schedule to host a course, or attend a scheduled course, at www.nhi.fhwa.dot.gov/.

A 100% complete draft guide to aid structural engineers in the load rating of highway tunnel components is currently under review by a Technical Working Group of FHWA and State Highway Agency engineers. The FHWA's *Reference Guide for Load Rating of Tunnel*



Structures will provide guidance for load rating the nation's highway tunnels to meet the regulatory requirements and to ensure consistency and uniformity of load rating tunnel components. This reference guide provides technical aspects for the load rating of tunnel structures that meets FHWA's general load rating guidance and provides practical, representative step-by-step examples.

On March 28th, 2019, the Senate voted 95-1 to confirm Nicole Nason as the next Administrator of the Federal Highway Administration (FHWA), a position that has sat vacant since January 2017. Nason has served as an Assistant Secretary for Administration at the State Department and previously served as Administrator for the National Highway and Traffic Safety Administration (NHTSA) and as an Assistant Secretary at the Department of Transportation. She also worked at Customs and Border Protection and for several congressional committees.

The FHWA has finalized a report on shear analysis of concrete bridge elements. The synthesis report provides recommendations for the bridge community to address challenges that are commonly faced when rating concrete bridge components for shear. The report provides recommendations for improved implementation to increase the accuracy in establishing concrete element shear capacity. The FHWA intends to draft ballot items for AASHTO Technical Committee consideration and to develop comprehensive analysis examples that demonstrate how to most accurately compute the shear capacity of existing concrete bridge components.

A study on the impacts of truck platooning was recently initiated by FHWA to determine if the

effects of truck platoons will necessitate the need for additional guidance for bridge load rating engineers. There is concern that trucks operating in platoons may be able to operate with minimal headway distances, necessitating a need for additional guidance in the MBE for assessing bridges in corridors where platoons will operate. The results of this study will be available in early 2020.

FHWA is currently updating the National Highway Institute Course No. 130092, Load and Resistance Factor Rating of Highway Bridges to bring the course up-to-date with MBE revisions that have been adopted in recent years. The course was delivered in Virginia, West Virginia and New Jersey in recent months. You may register for open seats for courses that have been scheduled at <https://www.nhi.fhwa.dot.gov/course-search?tab=0&key=130092&res=1>. Additionally, you can find excellent Reference Manuals that were developed to coincide with many of the FHWA National Highway Institute Course curriculum that is developed for bridge design and analysis engineers at <https://www.fhwa.dot.gov/bridge>.

FHWA will host the Southwest States Load Rating Program Peer Exchange in the summer of 2019. This will be the sixth regional peer exchange in as many years and will allow load rating specialists from the States of Alaska, Arizona, California, Hawaii, New Mexico, Nevada, Oklahoma, Oregon and Texas to discuss challenges and share best practices in bridge load rating, posting and permitting.

The FHWA Bridge Load Rating Webinar Series sessions provide information on a wide range of bridge load rating topics and promote best practices in load rating analysis, posting and permitting. The webinars are available for



viewing at
<https://www.fhwa.dot.gov/bridge/loadrating/>.

Agenda Item 13: Five Year Projection for BrDR

There has been no change to the five year projection since the January 2019 Task Force meeting. There was no discussion on this agenda item.

Agenda Item 14: Licensing Issues

14a. Third Party Add-ons

No discussion.

14b. Design Tools

No discussion.

Agenda Item 15: Marketing Activities

15a. 2019 IBC Meeting – June 11, 2019 (National Harbor, MD)

Lubin Gao contacted Todd Thompson to offer the Task Force an opportunity to make a presentation at the FHWA Load Rating Workshop at the International Bridge Conference. (Possibly a presentation on the current functionality of BrDR and future directions?) 30 minute presentation + Q&A. The audience will be mainly comprised of engineers (40 – 80 people) from the consulting community.

Presentation Session - W-5: Bridge Load Rating, Posting and Permitting: Today and Tomorrow
Tuesday, June 11, 2019 (9:30 AM – 12:00 Noon)
Baker will provide the presenter name to Lubin Gao the week of April 8.

15b. Getting a Better User Experience

Sparked by Item 3c (feedback from a recent evaluation survey), the Task Force discussed new, better methods to get new users up-to-speed with the product. Suggestions discussed include:

- Creating a 1-page “Getting Started” document; a concise document to make a user’s initial foray into the product less intimidating.
- Build in more customer support hours into the base fee of the product (similar to what AASHTOWare pavement does?)
- Implement a larger initial fee for the project, with the understanding that there will be more support provided to new users
- Create a series of YouTube videos (or some other format easily accessible via a search engine)

To note, the following related items were discussed during the January taskforce meeting and referenced at this meeting.

- Users are typically directed to the Baker website. However, in the absence of specific direction to visit the Baker website, a majority of the users are unaware of the training information available on the site. How can we ensure users are aware of these great training tools? Can we ask the marketing group for assistance in this area?
- Caltrans has “Introduction to Virtis” and “RC Box example” PowerPoint training slide decks that are used within Caltrans for new users. These training materials are geared towards going through each step until the process is complete. New users are expected to follow each step in the PowerPoint presentations, yielding the same load rating results. RC Box example is based on a real bridge. Caltrans is also considering the addition of voice prompts to future versions of these presentation. Would training materials similar to the Caltrans PowerPoint slide decks (along with as-built plans and voice prompts) be appropriate to develop and make available to the wider user base?



- The Method of Solutions are included in the BrDR Help directory. The information provided within the BrDR help facility frequently answers many questions posed by BrDR users. Are BrDR users made aware of the location and content of this help facility?
- The current setup is having the support information available through the Help menu. Support information is included in the software download email. Is there a better way to ensure the users are aware of the Help facility?
- Should the AASHTOWare website be enhanced to link directly to the design examples on the Baker website (or host them directly on the AASHTOWare website)?

Agenda Item 16: Review Action Item list from this meeting

Josh Dietsche read the action items recorded during the meeting.

The Task Force discussed Task Force member transition planning as follows.

- Mike Johnson volunteered to assume the role of BrDR Beta Testing TAG Task Force liaison (currently Dean Teal)
- Vinacs Vinayagamoorthy volunteered to assume the BrDR Reports TAG Task Force liaison
- Mark Bucci volunteered to assume the role of BrDR Design Tool TAG Task Force liaison.

Agenda Item 17: Task Force Executive Session (as needed)

An Executive Session was held between 4:30pm and 5:00am on Tuesday afternoon and 5:15pm on Wednesday afternoon. Meeting was adjourned at 5:15pm.

