

AASHTOWare Bridge Design-Rating (BrDR) Task Force Summary Meeting Minutes
June 16 - 18, 2015
Boise, ID

Table of Contents

| | |
|--|---|
| General Information – Meeting of the Bridge Design & Rating Task Force | 3 |
| Agenda Item 0: Review Agenda/Assign Minutes Recorder | 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..... | 3 |
| 2a. Update on Phase 18 (FY2014) | 3 |
| 2b. Update on Phase 19 (FY2015) | 3 |
| 2c. Update on 6.7 Release Work Plan | 4 |
| 2d. Update on Modernization | 4 |
| 2e. Update on FE Engine Modernization Work Plan | 4 |
| Agenda Item 3: Update on BrD/BrR Licensees (FY 2015)..... | 4 |
| 3a. Product Report | 4 |
| 3b. Service Unit Report | 4 |
| 3c. Licensing Options | 4 |
| 3d. Evaluation Software Report | 4 |
| Agenda Item 4: Support and Maintenance Report | 4 |
| 4a. Incident and Support Summary..... | 4 |
| 4b. Progress on Bug Resolution | 4 |
| 4c. Enhancement List Update | 4 |
| 4d. Maintenance Issues | 5 |
| 4e. Bug Policy | 5 |
| Agenda Item 5: Update on 6.7 | 5 |
| 5a. Progress and Schedule Review | 5 |
| 5b. TAG Update | 5 |
| Agenda Item 6: Update on Modernization | 5 |
| 6a. Architecture Document..... | 5 |
| 6b. Finite Element Engine Conversion Status | 5 |
| 6c. Solicitation Document Draft..... | 6 |
| 6d. Solicitation Project Work Plan Draft | 6 |
| 6e. Development Plan – 48 months, Approach 2 + Enhancements | 6 |
| 6f. Engine Modernization and Interop Estimate | 6 |
| 6g. P/S Design Tool Revised User Interface Mockups and Estimate | 6 |
| Agenda Item 7: Enhancements..... | 6 |
| 7a. Steel Design Tool - Requirements | 6 |
| 7b. Release 6.8 Maintenance Issues | 7 |
| 7c. Rating Tool Estimate | 7 |
| 7d. Diaphragm Rating Enhancement in 6.8 | 8 |



| | |
|---|----|
| 7e. 6.8 Project Work Plan FP7 – Substructure LRFR Rating of R/C Caps..... | 8 |
| 7f. Caltrans Service Unit Request..... | 8 |
| Agenda Item 8: Miscellaneous Topics | 8 |
| 8a. Digital Signature | 8 |
| 8b. Frequently Asked Questions Updating (email from Dean, 3/11)..... | 9 |
| 8c. SharePoint Document Retention Policy | 9 |
| 8d. Status of RIPI for Regression Comparison Tool..... | 9 |
| Agenda Item 9: Third Party Issues | 9 |
| 9a. Long-term Strategy | 9 |
| Agenda Item 10: User Group..... | 9 |
| 10a. Summary Minutes from April Meeting | 9 |
| 10b. Non-Voting Users’ Discussion Minutes | 9 |
| 10c. RADBUG Planning | 9 |
| 10d. Customer Survey | 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. International Licenses | 12 |
| 14b. Special Consultant Option Licensees | 12 |
| 14c. Third-Party Add-Ons | 12 |
| 14d. Future of Bundling Modules (Post-Modernization)..... | 12 |
| 14e. University Licensing | 12 |
| Agenda Item 15: Marketing Activities | 12 |
| 15a. Marketing General..... | 12 |
| Agenda Item 16: Review Action Item list from this meeting..... | 12 |
| Agenda Item 17: Task Force Executive Session (as needed) | 12 |



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

Date: Tuesday, June 16, 2015 – Thursday, June 18, 2015

Participants:

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|-----------------|---|---|---|
| AASHTO | Judy Skeen Bruce Johnson | AASHTO Oregon DOT | Project Manager SCOJD Liaison |
| BrDR Task Force | Todd Thompson Joshua Dietsche Jeff Olsen Dean Teal Amjad Waheed Tom Saad | South Dakota, DOT Wisconsin DOT Montana DOT Kansas DOT Ohio DOT FHWA | Chair Bridge Rating (BrR) Bridge Design (BrD) Bridge Design (BrD) Bridge Rating (BrR) FHWA Liaison |
| BrDR Contractor | Jim Duray Herman Lee Matt Farrar Dan Gorley Shanon Murgoitio | Baker Baker Idaho DOT Idaho DOT Idaho DOT | BrDR Contractor BrDR Contractor SCOBS T-18 Chair |

Notes Taker: Amjad Waheed / Judy Skeen

Agenda Item 0: Review Agenda/Assign Minutes Recorder

Todd Thompson opened the meeting at 11:05 AM. Amjad Waheed was assigned as the meeting minute recorder.

The agenda was reviewed and four items were added.

- Added 7d. Diaphragm Enhancement in 6.8
- Added 7e. 6.8 Project Work Plan FP7 – Substructure LRFR Rating R/C Caps Only - \$76,000
- Added 7f. Caltrans Service Unit Request
- Added 14e. University Licensing

Agenda Item 1: Prior Business

1a. Review January Meeting Minutes

Minutes from the April 8 – 9, 2015 Task Force Meeting in Boston, MA were reviewed and approved with the following change:

- Page 12, third paragraph under 6d, second sentence should read “**Beta testing** for phase two is expected to take 6 months.”.

1b. Review Action Items

Jeff reviewed the Action Items.

Agenda Item 2: Financial Overview and Work Plan Summary

2a. Update on Phase 18 (FY2014)

Baker advised that all the tasks are 100% complete except for FP2 Prestress Concrete Design Tool, which is 80% complete. The 6.6 Project will expire on 06/30/15. The remaining tasks (FP2) and monies will be transferred to the P/S Design Tool Project via a contract modification.

2b. Update on Phase 19 (FY2015)

The Fixed Price Maintenance (FP1) is 92% complete. With SCOJD approval of FY15 MSE



Contract Mod #2, the FY15 MSE is expected to be completed within budget.

2c. Update on 6.7 Release Work Plan

All of the tasks shown at 80% indicate that they are in Beta Testing. FP2 and FP3 are at 0% and will be billed after the Release.

2d. Update on Modernization

Baker projects that all the funding budgeted will be spent.

2e. Update on FE Engine Modernization Work Plan

Rob Moore is well beyond 50% complete. 80% of engine conversion and testing is complete. The test cases for the slow solver were converted first. The FE Engine Modernization contract will expire 09/30/15. Baker expects the work to be complete by July or August.

Agenda Item 3: Update on BrD/BrR Licensees (FY 2015)

3a. Product Report

Judy Skeen presented a product license summary report developed from the Excel output from AASHTOWare Manager. The report included licenses ordered as of 06/08/15.

Judy directed the Task Force to the full report which is posted on SharePoint.

The full report includes FY2015 licenses and FY2016 licenses ordered to date.

- sorted by Agency Name
- shaded by license type

The FY2014 report will be dropped off after June 2015.

3b. Service Unit Report

Baker recently sent emails to all the DOTs with service units on the books to advise them of their current service unit balances. The Task Force suggested that Todd Thompson will include the purpose of SUs in his quarterly Email updates.

3c. Licensing Options

Baker suggested to discuss the licensing options of new Design tools so that the software is built accordingly. Discussion on future licensing models will be covered under agenda item 6, Modernization.

3d. Evaluation Software Report

Software evaluation surveys were discussed. It was decided that if we don't get a response to the first survey request within a month, Baker will send a second request for the evaluator to complete the survey. If no response to our second survey request, we will drop it.

Agenda Item 4: Support and Maintenance Report

4a. Incident and Support Summary

Baker presented the new format for the Defect History Report. 18 bugs have been added since the Boston meeting. Currently there are 17 total unresolved BrDR bugs (of the total bugs submitted in calendar year 2015).

4b. Progress on Bug Resolution

Baker reviewed Maintenance Progress reports for 6.7 and 6.8 releases as of 06/04/15. For the 6.7 Release, all of the 205 incidents reported have been resolved. For the 6.8 Release, out of 54 total reported incidences, 17 remain open. The 37 incidences that have been resolved to date will be included in the 6.7 release. (It was noted that some of the 54 JIRA bug incidents are duplicates, i.e., the same bug reported by more than one user organization.)

4c. Enhancement List Update

The Beta TAG Enhancement Buckets and BrDR Enhancement List were reviewed. Seven new enhancements were added to the BrDR Enhancement List since the previous Task Force meeting in Boston.

- BrDR-591 Display hinges in schematic
- BrDR-594 Plotting Lateral Moment



- BrDR-596 Connection Type Between Stringers and Floor Beam
- BrDR-601 Add splice locations to the bridge schematic
- BrDR-612 Dog-legged framing plan
- BrDR-613 Post-tensioned Precast RC I beams
- BrDR-631 Square Rebar needs to be added to ALL concrete and culverts

Currently two enhancements are scheduled for the BrDR 6.8 release.

- BrDR-138 NSG vehicle analysis on Floor System Superstructures
- BrDR-380 Replace stress-strain Compatibility with PCI equations

Additional enhancements will be considered for inclusion in 6.8 following RADBUDG voting and Task Force prioritization.

Baker will clean up and re-categorize JIRA tickets entered prior to the establishment of the revised issue categories. Baker estimates the effort can be accomplished in less than one day.

4d. Maintenance Issues

No discussion

4e. Bug Policy

The Bug Policy document will be referred to as the Issue Policy going forward. Amjad asked to apply the new Issue Policy to old issues also.

Agenda Item 5: Update on 6.7

5a. Progress and Schedule Review

Beta 4 was distributed and it was decided that the Beta 4 version will be used for the acceptance build. There are no critical release bugs outstanding. NYSDOT (Brenda Crudele) has reported an issue with getting different results for splice analysis calculations than the results that Baker is producing in-house (JIRA ticket 498). Montana DOT performed an independent

test and found their results are consistent with the results NYSDOT is getting. Resolution of this issue is on-going. The goal is to have the production release ready by 06/25/15 for distribution.

5b. TAG Update

TAG testing was conducted in May in Pittsburgh, PA. Dean Teal reported that the testing went well and the effort was worthwhile.

Agenda Item 6: Update on Modernization

6a. Architecture Document

Baker handed out the latest version of the Architecture Document. The following items have been added to the Architecture Document since the April Task Force meeting.

- Section 1, Executive Summary – new section
- Section 6, Proposed Architecture and Design - minor changes to Section 6.1.2, Analysis
- Section 7, Technology Choices – additional technical definitions
- Section 8, Comparison with Legacy System and Design Alternatives – minor changes
- Section 12, Appendix B – Legacy System – description of the legacy architecture

The Task Force asked Baker to include additional language in Sections 1 and 6 to describe the Domain Layer (API) to specifically spell out that the Domain Layer (API) provides interface capabilities for third party software providers to interface with BrDR.

6b. Finite Element Engine Conversion Status

The Finite Element Engine conversion is approximately 60% complete. Rob Moore has been working with the original slow solver. The next step will be to convert the fast solver (DSS solver). As a component of that effort Rob will be working through all of his test cases. Finally, Rob



will be working to review the code to look for optimization opportunities.

6c. Solicitation Document Draft

The Modernization Solicitation document is almost complete. The solicitation funding will be collected over four years. The participating agency may either opt to pay total committed amount in first year (FY2016) or commit funding during year FY2016 through FY2019.

The Modernization development will be completed in three years. The development in the fourth year would focus on enhancements to the modernized system.

The Task Force plans to have the solicitation document finalized and forwarded to the states for funding prior to the RADBUDG meeting.

6d. Solicitation Project Work Plan Draft

The Modernization Project Work Plan distributed to the Task Force in April will be updated to include more detail on the BrDR product features. Baker plans to have the work plan completed by the end of the month. The Modernization Work Plan will be distributed to the member agencies with the Modernization Project solicitation documentation.

Baker handed out and discussed an example window list for the project work plan. The document details the components of each window in the user interface to document the number of windows, tables and sub tabs as well as the hours/resource and the estimate for total hours. Other team members are developing similar lists for the windows associated with other areas of the code. When complete, this documentation will provide detailed information on the costs associated with the conversion of the user interface.

6e. Development Plan – 48 months, Approach 2 + Enhancements

Baker presented and discussed Draft 10 of the Modernization Estimate – 48 months, Approach 2 + Enhancements. Approach 2 includes the Interop Layer. The largest benefit to the States is that it provides a performance enhancement to software at an earlier date (release at the end of year 2), which was the number one driver from the modernization workshop study.

6f. Engine Modernization and Interop Estimate

Baker handed out and discussed the Phase 1 estimate for the conversion of the analysis engine with the legacy user interface. Detailed estimates for Phases 2 and 3 have not been developed given the fact that all the enhancements have not yet been identified. Enhancement requests will be discussed during the RADBUDG meeting and will be voted on after the meeting. Phases 1 and 2 of the Modernization Project, to be funded by the solicitation, will support the modernization of the software. Phase 3, BrDR Enhancements, will be funded via BrDR licensing fees.

6g. P/S Design Tool Revised User Interface Mockups and Estimate

Baker handed out and discussed the estimate developed to implement ribbon control for Design input navigation. Based on the proposed mock-ups, the Task Force made the decision to forego moving forward with user interface changes to incorporate user interface functionality that more closely resembled Microsoft Word ribbon functionality. Moving forward with the ribbon look and feel would likely lead to additional challenges in the future.

Agenda Item 7: Enhancements

7a. Steel Design Tool - Requirements

Baker presented the steel design tool requirements and a two phase plan. Baker advised that the steel tool is different from pre-



stress design but there are also many similarities. Baker suggested keeping rolled beam and the plate girder design separate. Both designs will have many constraints including but not limited to maximum depth, minimum and maximum plate sizes, plate thicknesses, etc. defined by the user. Baker noted that the optimization in design program Simon is for a constant depth member. The Task Force reviewed and discussed the steel design tool requirements and made several suggestions to Baker, such as adding ADTT, fatigue check and Strength II design in the steel design tool requirements. A flow chart will be developed and included with the mock-ups.

7b. Release 6.8 Maintenance Issues

Baker provided estimates of top 7 items.

VI 11958 (Rate for both positive and negative LL demand regardless of the sign of factored total demand): VI 11958 estimate was provided. It was removed from the list as the Task Force is still waiting for clarification from T-18 sub-committee. Todd will approach T-18 and get clarification on this.

VI 12091 (STR-I Limit State removed from box culvert analysis when permit analysis only is specified): The estimate was provided. It will require updating culvert engine.

VI 12757 (Refined Analysis – LRFR, MBE update – some incorrect LL factors): No estimate was provided. This issue needs to be dropped as this can be established through 3D-analysis – no enhancement needed.

JIRA 499 (LRFD 6th Edition 2013 Interim culvert LL distribution updates): The estimate was provided.

JIRA 452 (Duplicate Bar mark definitions allowed in culverts): The estimate was provided. Enforce

unique names for Bridge Work Space (BWS) tree items.

JIRA 269 (Remove “Uniform Load Contra flexural Points” from view analysis report): The estimate was provided. They will be removed from the Analysis Results window and the Report tool.

JIRA 12135 (Bridge Alternative Wizard – Culvert): The estimate was provided. This enhancement will add bridge alternative wizard for culvert.

Baker added that the estimate for VI 11958 may be revised based on the T-18 Sub-committee clarification.

The Task Force discussed the estimates and advised Baker to start working on enhancements #s VI 12091, JIRA 499, JIRA 452, JIRA 269 & VI 12135.

The Task Force also discussed NYSDOT’s requested enhancement JIRA 567 (Request adding the functionality of allowing for an additional steel thickness on a new bridge for weathering steel.) The Task Force members noted that adding additional thickness for weathering steel is not a common practice among member states. AASHTO LRFD Design Specification have no such requirement specified to make it a maintenance item. If NYSDOT desires, it can fund this enhancement using their Service Units.

The Task Force also decided to add more enhancements from the Enhancement Bucket list. On Dean Teal’s recommendation, the Task Force advised Baker to start developing detailed estimates for five more enhancements.

7c. Rating Tool Estimate

Baker presented an estimate for the development of an R/C Beam Rating Tool. The Idaho Transportation Department (ITD) is



interested in providing funding via service unit donation to support the development of the rating tool which would support reinforced concrete beam, pre-stressed concrete, steel and R/C slab structures. The rating tool does not include culverts. This rating tool will use pre-computed data from AASHTO engine and analyze several bridges at a very fast pace. Baker explained that developing this tool will require modifying AASHTO engine to collect pre-computed data.

ITD is interested in developing it in LFR; however, other states may be interested in also including LRFR. IDOT and Virginia DOT may be interested in partnering with ITD to help fund this enhancement. Ultimately, ITD would like for the tool to work with all structure types. Shanon Murgoitio will present their needs at the RADBUG to try to secure support from other DOTs to help in supporting the development effort.

Matt Farrar also provided information on T-18 committee discussions relating to creating a ballot item for load rating of older post-tensioned boxes. Following the LRFR code, some older structures give low rating at the inflection points. Caltrans is interested in revising the LRFD Code. T-18 is working on a ballot item. Matt encouraged the Task Force to include a stress-strain compatibility calculation to take advantage of the average stress-strain calculation for the inflection point.

7d. Diaphragm Rating Enhancement in 6.8

Baker explained a change is needed in the Diaphragm mock-ups. To make this enhancement work, bolts need to be defined up in the tree below the beam shapes, as bolts need to be fully defined before user moves down to the connector. The Task Force concurred with the change in the mock-ups and agreed to

moving it up in tree in the 6.8 version. No changes in FP7 estimate are needed.

7e. 6.8 Project Work Plan FP7 – Substructure LRFR Rating of R/C Caps

LADOT has informed that they cannot fund FP7 in 6.8 WP - rating of pier caps. The estimate for this enhancement was \$76,000.00. No work has been done according to Baker. LADOT priorities have changed so they are no longer interested in funding this enhancement. The Task Force decided to remove FP7 from the 6.8 work plan. The removal of this fixed price item will be included in a future contract modification. Baker was directed not to perform any work on it.

The Task Force decided to add a question regarding substructure ratings to the User Survey in order to gauge interest in an enhancement of this type.

7f. Caltrans Service Unit Request

Baker is working to develop the final cost estimates for Caltrans Service Unit work.

Agenda Item 8: Miscellaneous Topics

8a. Digital Signature

The Montana DOT has experienced issues with the downloading of BrDR software. The software download takes a long time to process and at the end of the process, the software fails to actually download because the software is not 'digitally signed'.

Baker employs a third party software to support secure software downloading of the software. Baker suggested adding a CHECKSUM process to the download process to see if that action solves the problem.

Todd mentioned that in the SDDOT they must add the BrDR executable to their white list in order to allow the BrDR executable so their antivirus software won't block the exe.



8b. Frequently Asked Questions Updating (email from Dean, 3/11)

Baker distributed and reviewed a handout of the current content of BrDR FAQs. The FAQs will be published on the website and also included in the BrDR 6.7 release.

8c. SharePoint Document Retention Policy

Judy Skeen informed the Task Force that there is currently no prescribed AASHTO SharePoint retention policy. It will be up to the Task Force if they want to develop and adopt a retention policy. The Task Force decided not to act on it any further.

8d. Status of RIPI for Regression Comparison Tool

Baker provided additional detail on the Regression Comparison Tool project in response to questions posed by T&AA. Based on the T&AA questions, it was decided to update the Regression Comparison Tool RIPI request to incorporate additional information on the project and on the purpose and proposed use of the tool.

Agenda Item 9: Third Party Issues

9a. Long-term Strategy

Josh Dietsche handed out and discussed the draft BrDR Third Party Software Policy.

The Third Party Policy document includes the following information.

- Summary of current developer licensees
- Policy and Standards – Compatibility, Issue Policy, Product Summary Sheet
- Third Party Exposure through BrDR – AASHTOWare Catalog, Marketing/Outreach

Baker to rename the OkiePros module within the API to 'Analysis API'. The API returns pass/fail codes from the analysis engine and creates a XML file for routing program.

Agenda Item 10: User Group

10a. Summary Minutes from April Meeting

The summary minutes for the April BrDR Task Force meeting in Boston were provided but have not been reviewed by the Task Force. Judy will post the summary minutes on the SharePoint discussion area for Task Force review and comment.

10b. Non-Voting Users' Discussion Minutes

During the 2014 RADBUG, the consultants met separately and developed a document summarizing their discussions. The document includes both current issues and a list of things they would like to see in future releases. The Task Force briefly reviewed the document and made the decision to review the issues over the next few weeks and send response suggestions to Dean for incorporation into the document.

Tom Saad suggested the Task Force consider holding webinars a couple of times a year to provide BrDR information updates to the user community.

The Task Force discussed establishing a generic read-only JIRA account to allow special consultant option and agency sponsored licensees to gain access to information stored in JIRA. Once the generic account is established, an email blast will be sent out to all the current consultant licensees. Todd will also make users aware of the generic JIRA account in his quarterly email communique. Future consultant licensees will be made aware of the JIRA read-only account at the time they license the software.

10c. RADBUG Planning

The Task Force reviewed the current version of the RADBUG agenda. Baker will have four staff members in attendance at the RADBUG.



10d. Customer Survey

The Task Force reviewed and finalized the content of the Customer Satisfaction Survey (Member survey and Consultant survey). Judy will make the edits identified to the survey in the survey system and post and communicate the availability of the survey to the BrDR community.

The Task Force suggested to include a question about the rating of the substructures in the Users' Survey. The survey will close on 07/24/15.

Agenda Item 11: Work Plans

11a. Planning Estimates

Dean reported that the planning estimate is current.

11b. Future Work Plans

Baker advised that he is comfortable that the service unit work for Caltrans and ITD (steel, pre-stressed and reinforced concrete) and it will not negatively impact the BrDR Modernization efforts.

Development of the Work Plan for FY17 will begin during the October Task Force meeting. The Task Force discussed having a 'Plan B' to fall back on in the event that the BrDR Modernization project is not effectively funded.

Agenda Item 12: FHWA Update

Tom Saad provided the FHWA updates to the Task Force.

BrIM Webinar:

The Federal Highway Administration, Office of Bridges and Structures has worked over the last few years to determine the needs of the bridge industry when it comes to applying Building Information Modeling (BIM) methodologies to bridges. Recently, FHWA has contracted with CH2M Hill to review and summarize progress to date and further its development towards the goal of producing standardized bridge objects, digital definitions, and protocols that can be interchanged between different software

platforms (CAD, Design & Analysis applications, visualization, etc.) The work is being deployed and tested in Open BrIM version 3 (developed by Red Equation Corp.), which is an open source, cloud based system, using standard XML language. The intent is that standardized objects can be developed by software developers and/or end users. This concept will ultimately rely on active participation from the bridge community to develop sufficient standards to make the system robust.

FHWA has also contracted the National Institute of Building Sciences (NIBS), to review and evaluate the BrIM work as well as other existing and potential approaches to modeling bridges. In particular, NIBS is focusing on evaluating the building SMART Industry Foundation Class (IFC) standard which is widely used for modeling buildings, but is also being extended to cover civil infrastructure. NIBS has prepared a Summary Report reviewing the various options and providing a gap analysis of approaches that is being readied to share for industry review. The report includes modeling of a sample bridge using IFC as well as documentation of the required exchanges between software across the bridge lifecycle to identify how these could be implemented using buildingSMART and related ISO standards.

A webinar was offered to present the FHWA work progress to date and solicit feedback on the needs of the bridge industry and the direction taken on April 26, 2015. A recording of the webinar is available at <https://connectdot.connectsolutions.com/p4maxecu49/>

NHI Load Rating Training Courses:

NHI Course 130092, LRFR for Highway Bridges, was recently hosted by the Kansas DOT and will be delivered in Baton Rouge, LA in October, 2015.



Southeast States Load Rating Program Peer Exchange:

In August 2014 nine northeast states participated in a Load Rating Program Peer Exchange. The FHWA is following up on that successful program by hosting a Southeast States Load Rating Program Peer Exchange among 9 states (AL, FL, GA, KY, LA, MS, NC, SC, and TN) in Atlanta, September 1-3, 2015. The forum will allow states to share best practices and identify solutions to address load rating, posting and permitting program practices and procedures.

LRFR Webinar No. 15:

On March 25th and May 19th, FHWA hosted the 15th and 16th webinars in a series to promote the use of LRFR and improve load rating practices, nationwide. *Bridge Load Rating for Overweight Load Permitting - State's Practices (2) and (3)*, highlight practices for overweight permitting in the states of WI, VA, MI and NY. The webinars have been recorded and can be reviewed at the following site:

<http://www.fhwa.dot.gov/bridge/loadrating/>

New NHI Courses for Bridge Design and Analysis Engineers:

A new NHI course is available to engineers with a specific interest in Bridge Design and Analysis. NHI Course 130102, *Engineering for Structural Stability in Bridge Construction*, is a 2.5 day course to train participants on the behavior of steel and concrete girder bridges during construction and teach them to identify vulnerabilities and engineering methods to investigate the structure's strength and stability at each critical stage.

Also, a course to provide instruction on the LRFD design provisions regarding fatigue and fracture prone details and fabrication of details prone to fatigue and fracture is being developed and should be available in 2016.

New FHWA BSE areas and engineers

FHWA recently restructured the BSE regions to improve communications between Division Bridge Engineers and the Office of Bridges and Structures (HIBS). The restructuring affects seven states in which they will be shifted to different regions. HIBS has recently named Samantha Lubkin as National Bridge and Tunnel Inventory Engineer and John Thiel as Senior Bridge and Tunnel Inspection Engineer. A replacement to fill John's former position as BSE – North is anticipated to be advertised soon.

NTIS:

The Final Rule to establish the National Tunnel Inspection Standards (NTIS) for highway tunnels is expected to be published in early July. The NTIS will require tunnel owners to establish a program for the inspection of highway tunnels, to maintain a tunnel inventory, to report the inspection findings to FHWA, and to correct any critical findings found during these inspections. All of this is consistent with the provisions of the Moving Ahead for Progress in the 21st Century Act (MAP-21). The NTIS will apply to all structures defined as highway tunnels on all public roads, on and off Federal-aid highways, including tribally and federally owned tunnels.

In preparation for Final Rule, the Office of Bridges and Structures (HIBS) is planning external webinars as part of the initial rollout. The dates for the external webinars will be dependent upon the Final Rule being published prior to the webinars and may change.

1st External Webinar

July 14, 2015, 1-3pm ET

This webinar is intended to share the requirements of the NTIS.

- Webroom:

https://connectdot.connectsolutions.com/tunnel_inspection/



- Dial-in: 888-363-4749, passcode: 4683702

2nd External Webinar

August 4, 2015, 1-3pm ET

This webinar is intended to respond to initial questions the stakeholders have with the NTIS.

- Webroom:
https://connectdot.connectsolutions.com/tunnel_inspection/
- Dial-in: 888-363-4749, passcode: 4683702

Lastly, HIBS is planning eight sessions of the NHI comprehensive tunnel inspection training beginning in the fall of 2015. These will be regional and HIBS will be sponsoring travel for two (2) State DOT personnel and one (1) Division office staff along with several FLH staff. More information on these training sessions will be available as planning is finalized.

Agenda Item 13: Five Year Projection for BrDR

Judy handed out the current BrDR Task Force Budget Projection spreadsheet (06/08/2015). Minor changes were suggested in the 5 Year Projection.

Agenda Item 14: Licensing Issues

14a. International Licenses

No discussion.

14b. Special Consultant Option Licensees

No discussion.

14c. Third-Party Add-Ons

No discussion.

14d. Future of Bundling Modules (Post-Modernization)

The Task Force discussed the possibility of establishing alternate software licensing options in the future to package the BrDR capabilities

and features via separate functional module licenses. Todd will take the lead in developing potential licensing model options for discussion during future Task Force meetings.

14e. University Licensing

The question was asked about why AASHTOWare does not allow universities to use the product educational licenses to conduct research. The Task Force discussed the fact that research projects are typically 'paid for' initiatives funded by the AASHTO member agencies.

Agenda Item 15: Marketing Activities

15a. Marketing General

The Task Force discussed marketing activities during the joint meeting on Tuesday.

- FHWA will provide a slot for each state to attend the pilot Tunnel inspection training sessions, which will be conducted in each of the four regional areas. (FHWA will fund the associated travel costs for the DOT attendee.)
- Western Bridge Engineers Seminar (September 9-11, 2015 in Reno, NV) – The Task Force discussed submitting an abstract to be approved for a BrDR presentation. Jeff will determine if MDOT will allow him to attend. If so, he will submit an abstract for a possible BrDR presentation.

Agenda Item 16: Review Action Item list from this meeting

Judy Skeen read the action items recorded during the meeting for the information of attendees.

The August BrDR Task Force meeting in Albany, NY is expected to conclude by noon on Thursday, August 6, 2015.

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

No Executive Session.

The meeting adjourned Thursday, June 18 at 1:45pm.

