BUILDING THE NEXT GENERATION

AASHTOWare BRIDGE® PRODUCT NEWSLETTER

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BrDR

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July • 2020

Letter from the Chair



G reetings from the AASHTOWare Bridge Task Force. It seems like a lot has happened since our 2019 newsletter. First and foremost, I hope and pray that you and your families are safe and healthy during this global pandemic. Our everyday lives and work environments have changed so

much in these last four months. Working remotely became the norm for many of us where -previously telecommuting was an outlier. Many of us now find ourselves back in the office while some remain working remotely for the foreseeable future.

AASHTOWare can only be successful through the efforts of our volunteers working together to promote the products within our agencies. We welcome Jeff Ruby from Kansas DOT to the AASHTOWare Bridge Task force as a representative to Bridge Design effective July 1, 2020. Again this year, we had several well qualified and excited folks apply for task force membership, which made for a difficult decision. Jeff's strong background in bridge design will allow him to provide Task Force insight from a bridge design perspective. Jeff is replacing Joshua Dietsche (Wisconsin DOT) whose regular term ended June 30, 2020. Dean Teal's (Kansas DOT) special term also ended at the end of June. We wish Joshua Dietsche and Dean Teal well as they step away from their task force roles; we are extremely appreciative of their diligence and tireless efforts to support AASHTOWare Bridge Design-Rating.

Bridge Management 6.3 was released in February 2020. This latest release includes updates and added functionality to several areas of the system. For additional information, please see the BrM 6.3 overview information included in the Letter from the Vice Chair.

Bridge Design-Rating 6.8.4 was released in October 2019 and a maintenance patch was released in May 2020. BrDR 6.8.4 includes over 200 incidents being addressed and updated to support the AASHTO Manual for Bridge Evaluation, 3rd Edition. BrDR 6.8.4 is the final release of the legacy software and will be sunsetted in June 2022.

This past year, AASHTO issued a request for proposals and selected a new contractor to provide maintenance, support, and enhancement services for AASHTOWare Bridge

Design-Rating. The new contractor, ProMiles Software Development Corporation, may be familiar to some agencies that use their oversize/overweight permitting software. While we have a new contractor, many of the familiar names and faces are now members of the ProMiles core team. We thank Michael Baker International for the long partnership we had with the AASHTOWare Bridge Design-Rating products for over 20 years.

While the change in contractors provides us with the opportunity to explore alternate development directions, including opportunities for hosted service offerings in the future, the hard stop and restart introduced a delay in getting the modernized BrDR 7.0 product completed and delivered. Beginning in March 2020, BrDR 7.0 development under the ProMiles contract was resumed. We are particularly excited about the inclusion of automated testing tasks that are included in the new development contract. The additional testing ProMiles has introduced during the development cycle will improve the quality of the BrDR 7.0 product going forward prior to alpha and beta testing of future releases to effectively reduce the number of issues that have previously made their way into the production release. BrDR 7.0 is scheduled for release in December 2020.

The task force is working to refine the enhancements to be included in the BrDR 7.1 release. The scope of the BrDR 7.1 work plan is expected to be finalized following the RADBUG meeting. Thanks to George Huang and Caltrans for hosting the 2019 RADBUG meeting in South Lake Tahoe, CA last July. There were many great presentations by both users and the BrDR development team. The 2020 RADBUG meeting was scheduled to be held in New Orleans, LA; however, due to the cancellation of all AASHTO in-person meetings during this timeframe, the user group officers are working to virtualize the agenda to develop a series of webinars to present the meeting and training content. The user group web page (http://aashtobr.org/) has a lot of great information including presentations from previous RADBUG meetings.

Again, we are only successful because of all our volunteers. Whether you are a task force member, user group officer, or a member of one of our Technical Advisory Groups (TAGS), all this effort only helps and improves the product. This product is ours.

> —Todd Thompson, P.E. • AASHTOWare Bridge Task Force Chair

New BrDR Contractor: ProMiles Software Development Corporation

In February 2020, ProMiles was brought on board as the new BrDR contractor. This concluded the four month RFP solicitation process to support the Enhancement and Support of AASHTOWare Bridge Design-Rating. ProMiles assembled a unique team of bridge engineers, software ProMiles

architects, software developers, QA analysts, and customer support personnel. The core of this project team consists of the key personnel from the previous contractor who have in-depth BrDR knowledge and bridge engineering expertise, augmented by ProMiles personnel with experience and expertise in OS/OW routing, hosting and cloud computing, and automated testing. The ProMiles project team is uniquely positioned to complete the modernization of the AASHTOWare Bridge Design-Rating software and progress toward the next frontier of both bridge engineering and computing technology advancements.

The new AASHTOWare Bridge Design-Rating Technical Support website is live. This is your new technical support website, which has product updates, helpful tutorials and training handouts, support information, and lots more. To access the website, go to https://www.aashtowarebridge.com/bridge-rating-and-design/ and bookmark it for easy reference.

The new customer support email address is <u>BrDR@promiles.com</u>. All emails received will be automatically entered into the new BrDR Email Service Desk as support tickets and assigned to support agents with the required expertise. Customer satisfaction is tracked and reviewed as part of the continuous improvement process.

The ProMiles project team is excited about the opportunity to contribute to the bridge engineering community and looks forward to the challenges ahead.

AASHTOWare Bridge Design-Rating Version 6.8.4

Bridge Design-Rating 6.8.4 was released in October 2019 with specification checking updates for supporting the AASHTO Manual for Bridge Evaluation, 3rd Edition with 2019 Interim Revisions and a collection of updates that corrects BrDR Support Service Desk issues. In May 2020, Version 6.8.4 Maintenance Release 1 was released, focusing on the correction of modernized AASHTO analysis engine issues. This promotes agencies to start testing and adoption of the modernized engine. Version 6.8.4 is the last release of the legacy system; maintenance, specification updates, and support will cease effective June 30, 2022. Only critical bug fixes will be incorporated into Version 6.8.4 going forward. The BrDR Task Force and the development team strongly encourage users to start planning for the modernization upgrade as early as possible.

New Plan for the BrDR Modernization Project

The original BrDR Modernization Project was scoped to deliver a modernized system in two phases. The objective of the first phase was to deliver a modernized analysis engine. The first phase was completed and released, with exception of the substructure engine, in October 2018 as part of BrDR 6.8.3. The second phase of the project was to deliver a fully modernized BrDR software with a modernized user interface. The modernized user interface slated for delivery in phase two as part of BrDR 7.0 was partially complete at the end of 2019. A third phase with enhancements of the Load Rating Tool was added to the project in June 2018 for delivery with the modernized system. The development tasks to support the Load Rating Tool enhancements were complete at the end of 2019. Completion of the original modernization project, currently partially complete, would represent delivery of the fully modernized BrDR software, which would include both the modernized user interface and the previously released modernized analysis engine, and the Load Rating Tool enhancements.

Fast forward to 2020, when a new BrDR contractor assumed the responsibility of delivering the modernized system, the BrDR Task Force evaluated the immediate needs of the user community and the long-term needs to sustain the quality of the modernized system. A new work plan was developed to support the completion of the BrDR Modernization Project.

The primary purpose of the new work plan is to complete the development of the modernized substructure engine and the remaining development tasks for phase two (BrDR 7.0) of the original BrDR Modernization Project. In addition, the work plan includes specification checking updates for supporting the AASHTO LRFD Bridge Design Specifications, 9th Edition and the Manual for Bridge Evaluation, 3rd Edition with 2020 Interim Revisions. Enhancements of the Load Rating Tool are also included to upgrade the software design of existing components for handling use cases recently identified by agencies. With the modernized system architecture readily supporting robust external integration, this work plan includes tasks to develop an automated UI and regression testing framework and implementation for BrDR 7.0. These tests can be executed as part of the regular testing cycles, integrated with the automated software build process, and will become a standard practice for the modernized system going forward.

BrDR Modernized System: Shift-Left Testing Approach and Adoption of Automated Testing

Quality is key to positive business outcomes. To create a quality software product, the BrDR development team is embracing the "Test Early and Test Often" maxim. Catching defects early on is also the most cost effective way to ensure quality. The BrDR development team is practicing agile software development methodology with the shift-left approach of testing. The shift-left approach to testing is the "Test Early" half of the maxim. To embrace "Test Often," two tasks were included in the new BrDR Modernization Project work plan to incorporate the development and implementation of automated testing. Below are brief descriptions of the two automated testing tasks. Both automated testing tasks will become a standard practice for the modernized system going forward.



Automated User Interface Testing

This task provides development and implementation of automated user interface tests for the Bridge Explorer, Library Explorer, and Bridge Workspace. The user interface tests will cover the creation of common bridge types and user interface functionalities like creation, modification, duplication, and deletion of Bridge Workspace items. These tests can be executed as part of the regular testing cycles or on as frequent a basis as necessary. The test results will be compared against benchmark data to ensure the user interface operations are functioning as expected. If any of the tests fail, detailed information will be added to the test log and the BrDR development team will be notified.

Automated Regression Testing

This task provides development and implementation of an automated analysis regression testing system for agency bridges. The bridge test cases will be populated with the bridges in the legacy system's regression testing database. A bridge feature matrix will be created to identify additional bridge test cases required for a robust test suite. The additional bridge test cases will be procured from the BrDR TAGs for National Bridge Inventory (NBI) bridges. The system will be integrated with the BrDR automated build process. These analysis tests will be run daily and compared against benchmark data to ensure expected analysis results. Detailed regression information will be added to the test log and the development team will be notified with test results. A user interface is included in this task to support a lite regression tool for agency use.

Table 1. Part of the Bridge Feature Matrix for Identifying NBI Bridges for Regression Test Cases

Member Types	SUPERFUE	ure Mente	er Subtype Curved	Bride with	Bridge with	ole Deptin	the Date Date	Rebas Allo	w Stew Diff	Stewarts Supports	Meme Spains
Steel Girder	G sys, G line, F sys, F line	P,B,R,N	N	Y	Y	s/x	S/X	Y for Gsys and Fsys	Y for Gsys and Fsys	Y for Gsys	Y for Gsy
Steel Floorbeam	F sys, F line, T sys, T line	P,B,R	N	N	Y	s/x	-	Y for Fsys and Tsys	Y for Fsys and Tsys	Y	N
Steel Stringer	F sys, F line, T sys, T line	P,B,R	N	N	Y	s/x	s/x	Y for Fsys and Tsys	Y for Fsys and Tsys	N	N
Steel Longitudinal Truss	T sys, T line	Dec, Throu, Half Dec	N	N	-	Cmd input	-	Y for Tsys	Y for Tsys	N	N
Steel Floor Truss	F sys, T sys	Detl stl	N	N		Detl truss	-	Y for Fsys and	Y for Fsys and	Y	N

BrM to Remain Federally Compliant—Solicitation Coming Soon

BrM supports the full life cycle of bridge management including bridge inventory management, inspection, life cycle planning, maintenance, capital program project selection, and preliminary planning.

- National Bridge Inspection Standards (NBIS) and Coding Guide changes, now named the Specifications for the National Bridge Inventory (SNBI), which are expected to be finalized in early 2021.
- Planning is underway for a BrM project to adopt and incorporate SNBI changes.
- AASHTO to reach out to FHWA to request approval for members to use State Planning andResearch (SP&R) funds at 100% federal participation (no agency match required).
- Stay tuned! We need your support to secure sufficient funding to make this project successful.



Letter from the Vice Chair



hope that everyone is staying well as we all learn to live with the "New Normal." While the pandemic has changed the way we live and work, the Task Force, along with Mayvue, has continued to move forward with the development of the AASHTOWare Bridge Management software. Throughout this newsletter,

you will find articles on the many new enhancements underway to deliver new content and improve functionality.

In February of 2020, Version 6.3 was released with the following key features:

- Component Level Deterioration updates to allow multiple deterioration profiles for each component
- Scheduled Processes to generate reports and run tasks/ services at scheduled intervals
- Tunnel Work Candidates
- Inspection Assignment Module
- Various enhancements detailed in a featured article in this newsletter on Bridge Management 6.3
- Various bug fixes

Version 6.4 is currently in development for a planned Fall 2020 release, with the following key features:

- Multimedia enhancements
- Addition of the remaining FHWA validation checks
- Addition of "Date Entered" and "Entered By" fields on the Tunnel Inspection page
- Various bug fixes and usability enhancements identified by the user community
- Integration of approved service unit customizations into core, including policy rule weighted element condition states and the availability of an improved Optimizer log

In addition, the Task Force would like to make sure the User Community is aware of enhancements to the Life Cycle Cost Analysis Module. The development of these enhancements is well underway, with involvement of the Testing TAG and Optimizer TAG at various stages of development. To learn more about the new LCCA enhancements, please see the article on page 8.

The Task Force is also looking ahead and planning for BrM Version 7.0, which will include the updates required to incorporate the proposed changes to the National Bridge Inspection Standards as well as the new Specifications for the National Bridge Inventory (SNBI). The work plan for BrM 7.0 will also include enhancements to improve the overall functionality and performance to ensure the longterm sustainability of the software. The Task Force is fully committed to being able to quickly move forward once the new rules have been finalized to provide the best solution for our users, ready to implement well in advance of the required due dates.

We want to thank the Kentucky Transportation Cabinet for hosting last year's Bridge Management User Group (BrMUG) meeting in Louisville. Thanks to David Fuqua and the rest of the Kentucky Transportation Cabinet bridge folks for being such great hosts. Unfortunately, the 2020 BrMUG in-person meeting has been cancelled due to the pandemic. However, the Task Force along with the User Group Officers are currently planning to host some version of the meeting virtually on September 1–2, 2020 as previously scheduled. We encourage agencies to participate in the user group meeting to help shape the future of the product and to learn what is new with the product since the 2019 BrMUG. Details on the 2020 Virtual BrMUG will be made available when finalized.

If there is anything the Task Force can do to improve your experience with the AASHTOWare Bridge Management

software, please feel free to contact us. The Task Force strives to provide the best bridge management software to meet the needs of all our users.

> —Eric Christie, P.E. • AASHTOWare Bridge Task Force Vice Chair

BrM Multimedia Module Enhancements

When determining what enhancements to pursue this year to expand the functionality of BrM, the Task Force was confident that multimedia was a good investment. Multimedia functionality is critical to the inspection and management of our assets. It is widely used by the BrM user community, it has been ranked high on the user groups' priority list for several years, and most importantly, enhancements to the multimedia functions within BrM would not be impacted by the upcoming coding guide changes. While BrM already offers multimedia functionality, the Task Force recognized that the multimedia enhancements identified by the user community would better serve users for years to come.

Multimedia enhancements consist of four major components:

- 1. Better organization of the current user interface fields as well as adding additional fields and features
- 2. Development of a widget to access multimedia files more easily from within specific tasks to eliminate the need to navigate to the multimedia task to view files
- 3. Enhanced security to provide more control
- 4. Building a foundation to better integrate BrM multimedia with multimedia from other platforms, with the option to create interfaces for specific platforms as needed

The Task Force is looking forward to the Version 6.4 release and the improved user experience that this brings our users.

Life Cycle Cost Analysis (LCCA) Update

LCCA enhancements were the highest priority enhancement voted for by the user community during the 2018 BrMUG meeting. In early 2020, the Task Force worked with the enhancement champion and the user community to develop the functional design specifications (FDS) for this enhancement to serve as the basis for the work plan to support this development effort. The LCCA enhancements developed under this work plan will enable agencies to create life cycle plans for each bridge and profiles to be used as part of a network analysis in terms of a refined life cycle cost for any given number of bridges.



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6	3	2022	Bituminous Overlay	Actions					٩
6	4	2023	Do Nothing						
6	5	2024	Do Nothing						
6	6	2025	Do Nothing						
6	7	2026	Do Nothing						
6	8	2027	Do Nothing						
6	9	2028	Bridge Replacement	Program: 000101(Bridge Replacement)					٩
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As of July 2020, Mayvue has reached the 50 percent development completion mark. Due to the extended timeline of the development effort, periodic demonstrations of the new LCCA user interface framework and backend functionalities are held for the members of the Testing and Optimizer TAGs to get upfront involvement and ensure alignment as soon as possible.

The Task Force and Mayvue will continue to hold walk-through webinars with the TAGs at significant development milestones. These walk-throughs are recorded and made available on the BrM YouTube channel.

Throughout the remainder of 2020, development and testing will continue. The Task Force will continue to provide updates via the quarterly status reports and other means to keep the user community apprised of the progress of this project.

BrM's Technical Advisory Groups (TAGs)

The BrM TAGs have been hard at work over the past year. The established groups (Testing TAG, Database TAG, and Optimizer TAG) actively assist the Task Force and Mayvue to establish best practices and solutions in their respective areas. This is accomplished by combining their unique DOT experiences, bridge inspection and management practices, and expertise of the BrM software to generate the pooled strategies and solutions that meet the wider need. Below is a brief description of the focus of each TAG.

- **Testing TAG:** The Testing TAG is critical to the development and release process. The Testing TAG interacts with the latest versions of the BrM software before it is released to the user community. The TAG members test new software releases using real life examples and DOT data to ensure the newly developed pages, modules, enhancements, and fixes meet the requirements, function properly, and support all users. The Testing TAG meets weekly during the software development cycle to collaborate and provide feedback to Mayvue prior to final release.
- Database TAG: The Database TAG's goal is to determine the best database solutions that work with both BrM and the DOT community. Database TAG member involvement begins early in the development process with reviews of entity relationship diagrams (ERDs) to ensure that data organization and structure makes the most sense, now and in the long term.
- Optimizer TAG: Recently established in 2020, the Optimizer TAG is focused solely on the BrM powerful engine: the Optimizer. The BrM Optimizer allows for top-down, bottom-up, or middle-out analysis and multi-objective prioritization to help an owner agency prioritize the potential work for an individual bridge, up to a network of thousands of structures. Since their creation, the project and program prioritization modules have been enhanced to adapt to the requirements in the TAMP and TPM rule makings and further refined by the Technical Review Team (TRT) to meet the needs of the participating states. Since that time, many states have started, made progress, or completely completed their calibration and use of the Optimizer driven modules. The Optimizer TAG will take advantage of the lessons learned, best practices determined, and enhancement needs identified to make continual progress on the efficiency and usefulness of the modules.

The TAGs are always interested in new members and fresh ideas. If you're interested in participating in a TAG, please reach out to any member of the Task Force or Mayvue for more information.

Solicitation to Remain Compliant with the Proposed Changes to the National Bridge Inspection Standards (NBIS) as well as the new Specifications for the National Bridge Inventory (SNBI)

BrM is synonymous with compliance. The changes to the BrM software to support the planned coding guide changes are expected to be significant. The Task Force and Mayvue have been planning for the release of the proposed changes for many months. This includes planning the necessary steps to ensure the software remains federally compliant and the mandated changes are implemented as soon as possible. The goal is for BrM agencies to focus their energy on the internal/

organizational changes needed to remain compliant. As a result, AASHTO plans to issue a solicitation to help fund the significant improvements and modifications in the coming year. The amount of the solicitation request will depend on the extent of the required changes but is expected to be around \$300,000 per agency.

An initial announcement was sent by Eric Christie in early May 2020 to 1) make the BrM member agencies aware of the forthcoming solicitation and 2) provide information on how solicitations are strategically used at times to pool funds to achieve defined large-scale objectives through work plans with the Contractor. This announcement also detailed options to help ease the impact to agency budgets, especially due to COVID-19 implications. Additional communication will be sent to the BrM end-user designees as the release of the coding guide changes approaches and becomes official.

Agencies that are interested in supporting the upcoming solicitation, or may have questions about the process, should reach out to Judy Tarwater (<u>jtarwater@aashto.org</u>) for further discussion. The Task Force asks that all member agencies consider participating in this important undertaking.

Status of the Mobile Bridge Inspection and Free Mobile Multimedia Applications



At the direction of the Task Force, Mayvue is actively developing a full-featured BrM mobile bridge inspection application. Over the past several months, Mayvue has worked with several volunteer agencies, with the goal of creating an application that streamlines the inspection process to save time, energy, and money by reducing the administrative burden and

inefficiencies that agencies face loading information (data, notes, and photos) into BrM.

For agencies that are interested in adopting the application, the mobile app will continue to evolve based on user feedback as well as the items already on the product roadmap:



The beta application is almost ready for download via the Apple and Android app stores. Interested agencies can view our "Mobile in a Minute" video series and/or join the beta group at <u>http://mobile.mayvue.com</u>. For additional information, please email Mayvue at <u>mobile@mayvue.com</u>.



While development on the BrM mobile application is in progress, Mayvue simultaneously released a free multimedia mobile application to address the agency-identified critical needs for a more efficient method to collect multimedia. Mayvue built and released a separate mobile application that focuses solely on simplifying the multimedia capture and BrM upload process. This application is available today, is free indefinitely, and works across all iOS, Android, and desktop devices. <u>Watch the video</u>.

If you want to learn more, or join the BrM agencies already using the application, please email Mayvue at <u>mobile@mayvue.com</u>.

AASHTOWare Bridge Website: New and Improved

The <u>https://www.aashtowarebridge.</u>

<u>com</u> website was recently updated to serve as a single point of reference for all modules within the AASHTOWare Bridge product suite (Bridge Management, Bridge Design, and Bridge Rating). Users can now quickly navigate between the modules in the site's header. This effort was undertaken to consolidate the AASHTOWare Bridge modules into a single site and to bring the site in alignment with AASHTOWare website standards.

The relevant content has been migrated from the old websites with new content added. Information on AASHTOWare Bridge Management can be accessed through drop-down menus from the Bridge Management page:

• Support—Provides information on Mayvue support channels and details on how to secure supplemental support via BrM Service Units and BrM Hosting and Add-On (HAO) Service Units



- *Training*—Provides information on available BrM documentation and access to the BrM YouTube channel which features a variety of videos on BrM
- Links—A consolidated list of links to 'all things' BrM

Information on AASHTOWare Bridge Design-Rating can be accessed through drop-down menus from the Bridge Design-Rating page:

- Support—Provides information on release schedule, technical support resources, links to BrDR Support Service Desk, and support resources for different licensing options
- Training— Provides training handouts and other tutorials for learning how to use the software
- Downloads—Software patches (official Service Pack releases)
- *Technical Notes*—Provides supplemental documentation, announcements of changes, and patches (DLL updates) to specific Technical Notes where applicable
- *Frequently Asked Questions*—Provides answers for the most frequently asked general inquiries, technical, and non-technical questions
- Links—A consolidated list of links to "all things" BrDR

As always, if you have any suggestions on how to improve our website or have recommendations for additional content to be added, please let us know by emailing Mayvue (<u>BrM@mayvue.com</u>)—Bridge Management or ProMiles (BrDR@ promiles.com—Bridge Design-Rating.

Product

Websites

AASHTOWare® Bridge Management: https://www.aashtowarebridge.com/bridgemanagement/_

AASHTOWare® Bridge Rating and Design: https://www.aashtowarebridge.com/bridgerating-and-design/

2020 AASHTOWare Bridge User Group Meetings

Rating and Design Bridge User Group (RADBUG)

August 3–6, 2020—VIRTUAL Webinars RADBUG website: <u>www.aashtobr.org</u>

Bridge Management User Group (BrMUG)

September 1–2, 2020—VIRTUAL Webinars BrMUG website: www.brmug.com

For additional information on the bridge product user group meetings, please email jtarwater@aashto.org.

AASHTOWare Bridge Product Contractors

AASHTOWare Bridge Management

Mayvue Solutions, LLC P.O. Box 674 Bridgeville, PA 15017 Contact: Josh Lang, CEO Phone: 877-462-9883 Email: <u>BrM@mayvue.com</u>

AASHTOWare Bridge Design-Rating

ProMiles Software Development Corporation 1900 Texas Ave. Bridge City, TX 77611 Contact: Herman Lee, Project Manager Phone: 412-509-0587 Email: <u>BrDR@promiles.com</u>

AASHTOWare Bridge Task Force

Todd Thompson—South Dakota DOT Chair, Bridge Products Task Force

Eric Christie—Alabama DOT Vice Chair/Task Force member, BrM

Beckie Curtis—Michigan DOT Task Force member, BrM

Craig Nazareth—Rhode Island DOT Task Force member, BrM

David Hedeen—Minnesota DOT Task Force member, BrM

Kent Miller—Nebraska DOT Task Force member, BrM

Derek Constable—FHWA Task Force FHWA Liaison, BrM

Mark Bucci—Louisiana DOTD Task Force member, BrDR

Michael Johnson—Idaho TD Task Force member, BrDR

Jeffrey Ruby—Kansas DOT Task Force member, BrDR

Vinacs Vinayagamoorthy—California DOT Task Force member, BrDR

Tom Saad—FHWA Task Force FHWA Liaison, BrDR

Judy Skeen Tarwater—AASHTO Project Manager



About AASHTOWare®

The AASHTOWare technical service program has a rich history of serving its customers and being a leader in bringing the power of technology through automation to the public sector transportation industry.

As we look to the future, it is important that we build on this rich and robust tradition to create the next generation of technology solutions and continuously improve service to our customers. Our success is based on the commitment of hundreds of volunteers, in partnership with the private community, to produce quality products that meet the common needs of our customers. The challenges we face now and into the future are increasingly more complex than in the past. To ensure continued success as we establish our next generation of products and services, we will clearly focus on a mutually agreed upon set of principles and values to drive our strategic plan, vision, mission, goals and objectives.



American Association of State Highway and Transportation Officials

555 12th St. NW, Suite 1000, Washington, DC 20006 www.aashtoware.org | jtarwater@aashto.org | 512-963-1465



American Association of State Highway and Transportation Officials

