August 10, 2018

Where Can I get Information about Pavement ME Design?

- AASHTOWare's web site at www.aashtoware.org/pavement/

- ARA's Support Site at www.me-design.com

AASHTOWare's Site provides information on

- ✓ licensing
- ✓ ordering
- ✓ technical matters
- ✓ user support
- ✓ training

www.aashtoware.org/pavement/

ARA's Pavement ME Design web site provides

- ✓ software download information
- ✓ release notes
- ✓ access to technical help
- ✓ access to the tools
- ✓ climatic data
- ✓ webinars

www.me-design.com

Enhancements in v2.5 released July 2018

1. Manual of Practice Integration
2. Modulus API
3. MasterTCModel File API
4. Report Customization
5. Enhanced Project Comparison
6. Maintenance Strategy Tool
7. Integration of MERRA Climate Data for Flexible Pavements

8. Transliteration of Analysis Executables to C#

9. Tensile Strength for Level 1 Inputs

10. Recalibration - New flexible and flexible rehab pavement designs (including semi-rigid) have undergone recalibration as a result of the technical audit changes and the new MERRA-2 climate data set.

11. The Asphalt Pavement Design System (APADS) now runs 100-year designs.

Upcoming Training Webinars on FY18 Enhancements

August 1

- Manual of Practice Integration into the Pavement ME software.
- Customization of output reports.
- Enhanced Comparator Tool.
- Use of MERRA climate data.

August 14

- Continue answering questions on use of the MERRA climate data. (if needed)
- Preventive maintenance considerations.
- Temperature dependent indirect tensile strength.

August 21

- Calibration coefficients of the transfer functions and prediction models. This webinar will focus solely on the recalibration of the flexible and semi-rigid pavements

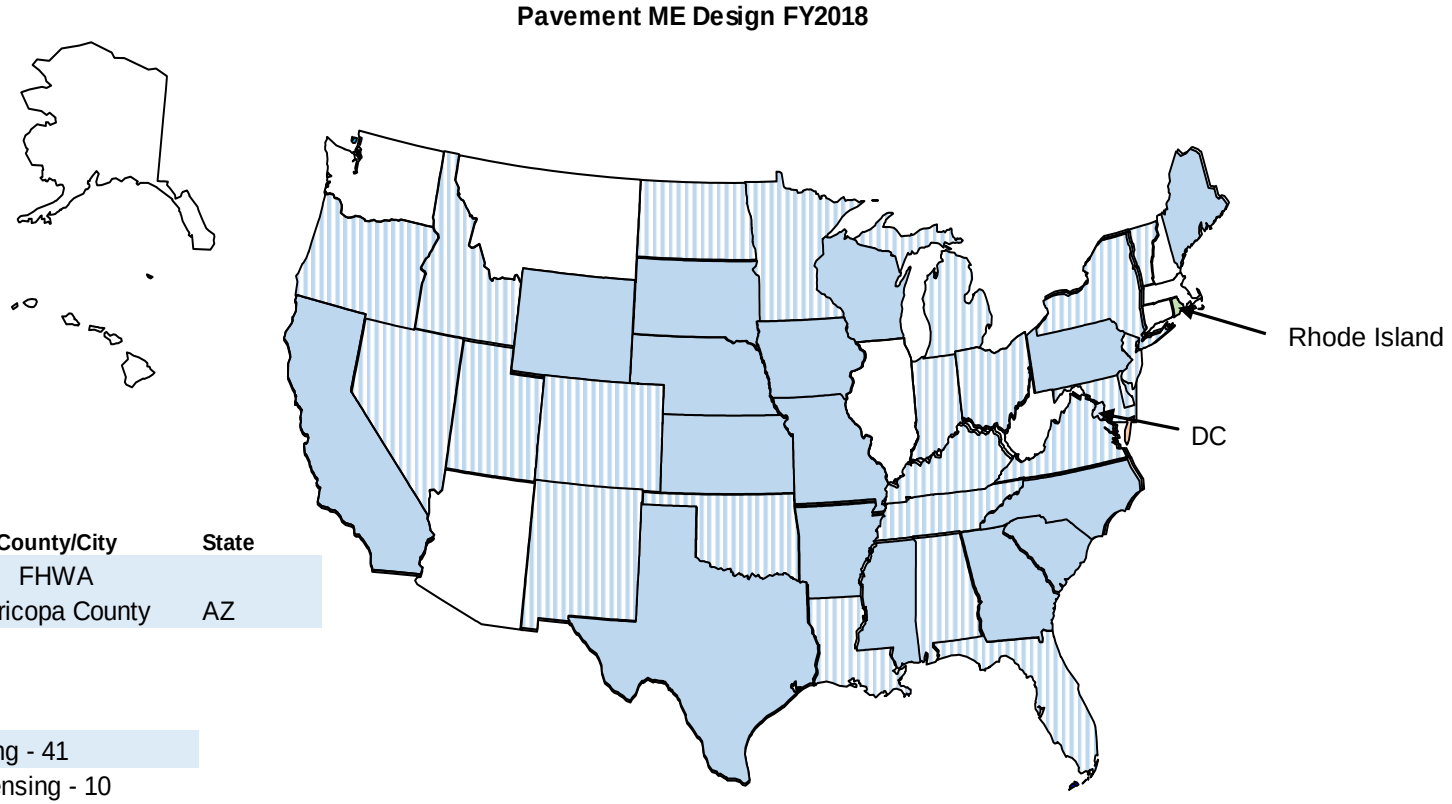
Enhancements Planned in FY2019

- Calibration Tool (The Calibrator) – a tool to assist in local calibration efforts that is independent of the user as much as possible. It will help the user accomplish the following three objectives for each distress transfer function.

  1. Determine whether there is any bias in the predictions.
  2. Establish the cause of any bias if it is found through the calibration process.
  3. Optimize the calibration coefficient of the transfer function(s) for each distress to eliminate bias and minimize the standard error of the estimate.

- Top-down cracking model from NCHRP 1-52

AASHTOWare Pavement ME Design Licensee Map – FY18



County/City	State
FHWA	
Maricopa County	AZ

licensing - 41
not licensing - 10

Licensing to date in FY19

AASHTOWare Pavement ME Design Licensee Map

Licensing

Nova Scotia is evaluating

Additional License Types

	2018
No Cost Educational	64
Private Sector and Universities	115

International

2017 – Brazil, China(2), Hong Kong, Columbia(2), India, Lebanon, Norway, Peru, Qatar, Republic of Guatemala, Saudi Arabia, South Korea(2), Sweden, Turkey, United Arab Emirates(2) and United Kingdom(2).

2018 - Brazil (2), Chile, China, Colombia (2), Guatemala, Hong Kong, Jordan, Lebanon, Liberia, Norway, Peru, Poland, Qatar (3), Saudi Arabia, South Korea (3), Spain, Sweden, Turkey, UAE (2), UK (2)

Licensing in FY 2019

Single user	$ 5,800
Site License – up to 9 concurrent users	$23,100
Site License – up to 14 concurrent users	$34,700
Site License – up to 20 concurrent users	$46,200
Backcalculation Tool	$ 1,250
Service Units (about 65 hours)	$13,500

- ARA manages international licenses

Backcalculation Tool

The Pavement ME Deflection Data Analysis and Backcalculation Tool is a standalone software program that can be used to generate backcalculation inputs from Falling Weight Deflectometer (FWD) files to the AASHTO Pavement ME Design software for rehabilitation design.

Although the tool is included with the Pavement ME Design software, it can also be licensed separately and used as a standalone single user application.

A training presentation is available at http://me-design.com/MEDesign/Webinars.html .

Web Technology

- Move from a single user desktop application to a web technology based software application.
- The current ME Design analysis software components exist as stand-alone CLI programs that require an external file system exclusively for all input and output, and are built with a variety of software programming languages, runtimes, and dependencies.
- A web technology application will improve the efficiency of the pavement designer by simplifying the user interactions with the software so the user can more effectively focus on designing pavement.
- Nov 30, 2017 - Completed a new web technology application as a “minimally viable product” (MVP), containing only the minimum inputs required to run a single ME Design analysis type, new JPCP, to assess the effort to make the move.

- Completed the transliteration work resulting in all of the code now being written in C#. The analysis executables existed in three different languages (C#, C++, and FORTRAN). Testing has confirmed consistency.

- The Task force reviewed a five year budget projection and recommends increasing license fees 10% each year for four years (FY2020 through 2023) to cover the cost of the project.

- Work is planned to begin in FY2019.

SHRP2 R23

The rePave scoping tool from the SHRP2 R23 project is an interactive web-based pavement design scoping tool that provides guidance for deciding where and under what conditions to use existing pavement as part of roadway renewal projects. It is being transferred to AASHTO to be included in the Pavement ME Design tool box. Incorporation of the rePave tool is expected to be completed in the second quarter for 2019.

AASHTOWare Pavement ME Design Product Task Force

John Donahue - Missouri DOT - Chair
Marta Juhasz - Alberta Transportation – Vice Chair
Patrick Bierl, Ohio DOT
David Holmgren, Utah DOT
Clark Morrison – North Carolina DOT
Bob Shugart – Alabama DOT
Karen Strauss, Oregon DOT

Liaisons:
Tom Yu, FHWA
Felix Doucet, Ministère des Transports du Québec - TAC
Shane Marshall, Utah DOT - SCOA
Travis Tackett, Florida DOT - TAA

Other Activities

The next annual Pavement ME Design User Group meeting is scheduled for November 7 & 8, 2018 in Nashville, TN

For Additional Information:

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