AASHTOWare Pavement ME Design™



About the Software

AASHTOWare Pavement ME Design is the next generation of pavement design software. It is built upon the NCHRP mechanistic-empirical pavement design guide. AASHTOWare Pavement ME Design is a production-ready software tool to support the day-to-day operations of public and private pavement engineers. It reflects a change in the methods and procedures engineers use to design pavement structures by taking advantage of the advances in material mechanics, axle-load spectra and climate data for predicting pavement performance.

It calculates pavement responses (stresses, strains, and deflections) and combines them with other pavement, traffic, climate, and materials parameters to predict the progression of key pavement distresses and smoothness loss over time for hot-mix asphalt (HMA) and Portland cement concrete (PCC) pavements. These outputs are the basis for checking the adequacy of a trial design.

AASHTOWare Pavement ME Design is a powerful program that incorporates a user-friendly interface with several functional, stability, and performance enhancements. These include improved runtime, automatic update notification, an SI version, inclusion of highway capacity limits, climate data viewers and climate summaries, batch processing, multi-project editing, project compare tool, error checking for individual inputs and forms, provisions for sensitivity analysis, thickness optimization, ability to import back-calculation data, database functionality at enterprise and workstation level, a structural response query tool, and improved reporting.

Pavement ME Design Tools:

- 1. **DRIP** performs hydraulic design computations for the subsurface drainage analysis of pavements;
- 2. XML Validator checks for errors present in the xml files and for recommended ranges for data values;
- 3. **MapME** creates ME Design project files (DGPX) seeded with geospatially-referenced information relevant to the analysis and design of the pavement;
- 4. File and analysis APIs Tools include JULEA and ICM;
- 5. **Calibrator** helps with local calibration efforts so the user can determine whether there is any bias in the predictions; establish the cause of any bias if found through the calibration process; and optimize the calibration coefficient of the transfer function(s) for each distress to eliminate bias and minimize the standard error of the estimate;
- 6. **rePave Scoping** provides guidance for deciding where and under what conditions to use existing pavement as part of roadway renewal projects. To access this tool, go to http://pavementrenewal.org/; and
- 7. **Backcalculation** generates backcalculation inputs from Falling Weight Deflectometer (FWD) files to the software for rehabilitation design.

Licensing Fees¹ and Options

Subscription Service (V3.0)

Web-based subscriptions are only available for version 3.0 of the software. Costs are dependent on the number of user seats desired by the agency. The number of users that may access the system at a time is limited by the number of seats purchased by the agency. Agencies may register any number of users for the service.

¹ The support included in the license fee covers the software installation and confirmation it runs correctly; the license administration package works for site licenses; and general instruction about the software.

Description	Annual License Fee
Single User Subscription	\$8,000
Subscription Service – 9 concurrent seats	\$32,050
Subscription Service – 14 concurrent seats	\$48,050
Subscription Service – 20 concurrent seats	\$64,000

Individual License

The individual workstation license is used by one person at a time and operates in standalone mode.

Description	Annual License Fee
Single user	\$8,000

Site License

A site license is based on the maximum number of concurrent users accessing the program through a single license server in the network. A site license requires a connection to the internet when installing the software. A site license permits cities/counties, and contractors/consultants employed by the licensing agency access to the product on the Member Department's network.

Description	Annual License Fee
Site License – up to 9 concurrent users	\$32,050
Site License – up to 14 concurrent users	\$48,050
Site License – up to 20 concurrent users	\$64,500

Backcalculation Tool

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

Description	Annual License Fee
Single user	\$1,300

Educational License

A no cost specially modified version of the AASHTOWare Pavement ME Design software is available to educational institutions within the jurisdictions of AASHTO Member Departments, and/or Associate Members to use only for instructional purposes in the classroom. For more information, go to:

www.aashtoware.org/products/pavement/pavement-ordering.

International License

AASHTOWare Pavement ME Design is available for licensing to organizations located outside the United States and that do not have membership in AASHTO, and AASHTO has made arrangements for these entities to license the software through Applied Research Associates, Inc. (ARA). For information about license fees, technical support and training, contact ARA at (217) 356-4500 or pavementmedesign@ara.com.

Service Units





AASHTO established an arrangement with the contractor, ARA, for agencies to acquire special fixed-fee increments of contractor-provided service for consultation and support to assist the agency with such things as preparing, loading and customizing data and customizing the user interface, calibrating and training. Service Units can be ordered in units of \$13,500, which <u>cannot</u> be prorated and shall be paid upon receipt of the invoice. This fee includes the AASHTO administrative costs. Each service unit provides \$12,200 in ARA contractor services.

Additional Information

Please visit the AASHTOWare website at <u>www.aashtoware.org</u> or contact:

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