

Features

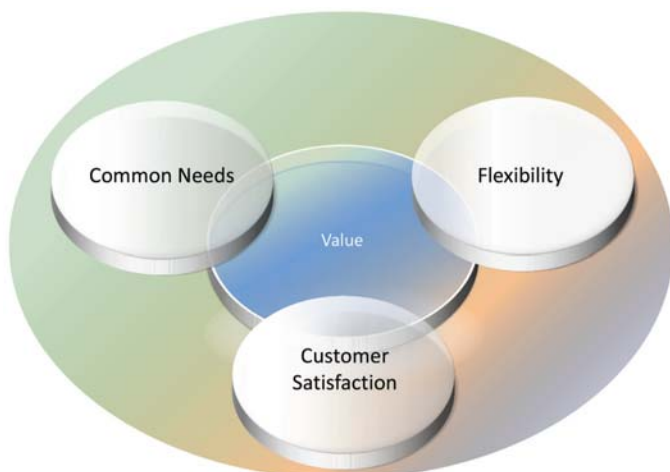
- ✓ Superstructure and substructure design in accordance with AASHTO LRFD Specifications
- ✓ Supports two or three dimensional bridge descriptions
- ✓ 3-D description serves as the basis for 3-D modeling and analysis
- ✓ Computational engines supports both line girder and 3-D analysis

AASHTOWare® Goals/Benefits

- ✓ Pooling resources to produce significant cost savings
- ✓ Software developed “by DOTs for DOTs”
- ✓ Best practices approach
- ✓ Focus on universal requirements – meet 90% of common needs
- ✓ Built in flexibility – allows software customization to meet unique needs (i.e. the remaining 10%)

Who uses AASHTOWare Bridge Design software?

State DOTs, Local Agencies, plus District of Columbia, Puerto Rico, FHWA, Canadian Provinces, engineering design consultants, and educational institutions within the jurisdiction of AASHTO Member and Associate Member Departments



About the Software

AASHTOWare Bridge Design uses a common database with AASHTOWare Bridge Rating to allow an organization to store a detailed description of each bridge, which is independent of the analytical engine, method of analysis, and specification.

Among the benefits are:

- ✓ Design a bridge using multiple analysis programs and versions of the LRFD specification from the same description and input
- ✓ Upgrading and/or replacing components of the system, including the structural analysis engine, specification checking software, and user interface while preserving the basic bridge data
- ✓ Easily linking to other related software systems, including bridge management systems such as AASHTOWare Bridge Management

With the completion of the first phase of the AASHTOWare Bridge Design and Rating Modernization project, AASHTOWare Bridge Design 6.8.3 delivers the modernized AASHTO analytical engine along with the legacy engine. The modernized engine improves on the analysis runtime performance of all structure types.

Standalone tools delivered with AASHTOWare Bridge Design 6.8.3:

- ✓ Prestressed Concrete Design Tool
- ✓ Regression Comparison Tool

Product Information

- ✓ AASHTOWare Bridge Design & Rating Technical Support - <https://aashto.mbakercorp.com>
- ✓ Rating & Design Bridge User Group (RADBUG) - <http://aashtobr.org>
- ✓ AASHTOWare - <https://www.aashtoware.org>
- ✓ AASHTOWare FY2019 Catalog - <https://www.aashtoware.org/wp-content/uploads/2018/07/FY-2019-AASHTOWare-Catalog-FINAL.pdf>

Current Features

Bridge Configurations and Capabilities

Superstructures

- ✓ Simple spans, continuous spans, hinges (steel and reinforced concrete)
- ✓ U. S. customary and S.I. units
- ✓ Girder-line and 3D-FEM analyses
- ✓ Parallel and flared girder configurations
- ✓ Reinforced concrete tee beams, slabs, I-beams, and multi-cell box beams
- ✓ Reinforced concrete box culverts
- ✓ Pre-stressed concrete box, I, tee, and U-beams (precast, pre-tensioned, and continuity for live load)
- ✓ Harped strands and de-bonded strands
- ✓ Steel rolled beams (including cover plates)
- ✓ Steel built-up plate I-girders
- ✓ Steel welded plate I-girders (including hybrid)
- ✓ Parallel, tapered, parabolic, and circular webs
- ✓ Transverse and longitudinal stiffened
- ✓ Frame structure simplified definition
- ✓ 3-D analysis of steel and concrete multi-girder superstructures
- ✓ 3-D analysis of curved steel multi-girder superstructures

Substructures

- ✓ Analysis and spec-checking of bridge piers including wall, hammerhead and multi-column pier bents
- ✓ Single drilled shaft for substructure

Design Review/Specification Checking Features

- ✓ LRFD specification checking with detailed computation reporting
- ✓ Design ratio graphs and summary reports
- ✓ Wizards for simplifying the modeling of steel and pre-stressed concrete bridges
- ✓ AASHTO engine for LRFD design reviews/ specification checking

LRFD Design Capabilities

- ✓ Prestressed Concrete Design Tool
- ✓ Shear Stirrup Design Tool
- ✓ Shear Stud Design Tool
- ✓ Flange to web weld design
- ✓ Reinforced Concrete Box Culvert Design Tool

Output Reporting Features

- ✓ Sophisticated set of output reports to help the designer understand the performance of a new bridge
- ✓ Tree-structured graphical representation of the LRFD specification indicates whether each article is passed

- or failed and provides access to the detailed calculations for the bridge and the specification text
- ✓ Suite of X-Y plots show moments, shears, deflections, and other valuable information

Licensing

Description	Annual License Fee (Effective July 1, 2018)	Annual License Fee (Effective July 1, 2019)
Single Workstation	\$ 10,000 (first copy) \$ 8,500 (copies 2+)	\$ 10,000 (first copy) \$ 8,500 (copies 2+)
Unlimited Users		
• AASHTO Member	\$ 37,500	\$ 37,500
• Non-Members	\$ 50,000	\$ 50,000
Special Consultant Option	\$ 5,000 per copy	\$ 5,000 per copy
Agency Sponsored	\$ 33,000 (10)	\$ 33,000 (10)
Consultants	\$ 60,000 (20) \$ 90,000 (30+)	\$ 60,000 (20) \$ 90,000 (30+)
Developer	\$ 500	\$ 500
Educational (classroom instruction)	FREE	FREE

The complete list of licensing options with full explanation can be found at

<https://www.aashtoware.org/products/bridge/bridge-ordering>

Service Units are optional fixed-fee units of contractor-provided service offered to licensees for consultation and support to assist in implementation or customization of the software.

Contacts

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