# AASHTO Essential Library



# AASHTO Essential Library

AASHTO publishes numerous technical standards and guidelines through the work of the association's technical committees, whose members are comprised of representatives from the state departments of transportation—the nation's transportation experts. AASHTO standards and guidelines are utilized by transportation agencies across the nation and worldwide.

This AASHTO "Essential Library" includes those AASHTO publications considered to be the preeminent and most foundational technical standards, guidelines, and transportation-related reports related to the design, construction, operation, maintenance, and administration of highways, streets, bridges, and related transportation structures and facilities.

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### **BRIDGES & STRUCTURES**

### AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION

#### Item Code: LRFDBDS-9

The AASHTO LRFD Bridge Design Specifications are intended for use in the design, evaluation, and rehabilitation of bridges. The specifications employ the Load and Resistance Factor Design (LRFD) methodology, using factors developed from current statistical knowledge of loads and structural performance. This new 9th edition includes revisions to almost all sections of the specifications. It supersedes the 8th Edition, published in 2017. 2020. 1,920 pp.

PDF DOWNLOAD Code: LRFDBDS-9-UL | List Price: \$520 | Member Price: \$385 LOOSELEAF Code: LRFDBDS-9 | List Price: \$650 | Member Price: \$481 LOOSELEAF & PDF COMBO Code: LRFDBDS-9-PUL List Price: \$910 | Member Price: \$674 PDF DOWNLOAD 5-USER Code: LRFDBDS-9-IP5 | List Price: \$2,207 | Member Price: \$1,635 PDF DOWNLOAD 10-USER Code: LRFDBDS-9-IP10 | List Price: \$4,127 | Member Price: \$3,057

### STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION

Item Code: HB-17

These standards are designed for the maintenance and rehabilitation of older, existing bridges and related structures, constructed prior to the adoption of the Load and Resistance Factor Design (LRFD) standards. **2002. 1,028 pp.** 

PDF DOWNLOAD Code: HB-17-UL | List Price: \$304 | Member Price: \$225 LOOSELEAF Code: HB-17 | List Price: \$380 | Member Price: \$281 LOOSELEAF & PDF COMBO Code: HB-17-PUL List Price: \$532 | Member Price: \$394

### AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, 4TH EDITION

Item Code: LRFDCONS-4

These specifications are intended for use in the construction of bridges. They employ the Load and Resistance Factor Design (LRFD) methodology and are designed to be used in conjunction with the *AASHTO LRFD Bridge Design Specifications*. This 2017 4<sup>th</sup> edition supersedes the 2010 3<sup>rd</sup> edition and subsequent interim revisions. **2017. 564 pp.** 

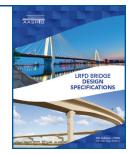
PDF DOWNLOAD Code: LRFDCONS-4-UL | List Price: \$398 | Member Price: \$295 LOOSELEAF Code: LRFDCONS-4 | List Price: \$528 | Member Price: \$391 LOOSELEAF & PDF COMBO Code: LRFDCONS-4-PUL | List Price: \$739 | Member Price: \$548

### MANUAL FOR BRIDGE EVALUATION, 3RD EDITION

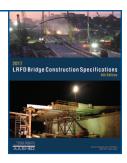
Item Code: MBE-3

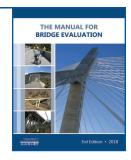
This manual has been developed to assist bridge owners by establishing inspection procedures and evaluation practices that meet the National Bridge Inspection Standards (NBIS). The manual is divided into eight sections, each representing a distinct phase of an overall bridge inspection and evaluation program. This 2018 3<sup>rd</sup> edition supersedes the 2011 2<sup>nd</sup> edition and subsequent interim revisions. **2018. 699 pp.** 

PDF DOWNLOAD Code: MBE-3-UL | List Price: \$378 | Member Price: \$280 LOOSELEAF Code: MBE-3| List Price: \$473 | Member Price: \$350 LOOSELEAF & PDF COMBO Code: MBE-3-PUL | List Price: \$605 | Member Price: \$448A









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### **DESIGN & TRAFFIC**

A Policy on Geometric Design of Highways and Streets

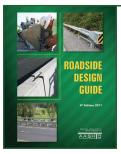


### POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 7TH EDITION (THE "GREEN BOOK")

Item Code: GDHS-7

The AASHTO "Green Book" contains the current design research and practices for highway and street geometric design. It provides guidance to engineers and designers who strive to make unique design solutions that meet the needs of highway and street users on a project-by-project basis. It describes how geometric design elements affect multiple transportation modes and recognizes the relationship between geometric design features and traffic operations. This 2018 7<sup>th</sup> edition, which supersedes the 2011 6<sup>th</sup> edition, presents an updated framework for geometric design that is more flexible, multimodal, and performance-based than previous editions. **2018. 1,047 pp** 

PDF DOWNLOAD Code: GDHS-7-UL | List Price: \$310 | Member Price: \$230 PAPERBACK Code: GDHS-7 | List Price: \$388 | Member Price: \$288 PAPERBACK & PDF COMBO Code: GDHS-7-PUL | List Price: \$543 | Member Price: \$403



### **ROADSIDE DESIGN GUIDE, 4TH EDITION**

Item Code: RSDG-4

This design guide presents a synthesis of current information and operating practices related to roadside safety and focuses on safety treatments that can minimize the likelihood of serious injuries when a motorist leaves the roadway. Developed for use by design engineers and professionals involved in roadside safety, it is considered a significant tool that combines current research with practical experience. This 2011 4<sup>th</sup> edition, which supersedes the 2006 3<sup>rd</sup> edition, has been updated to include hardware that has met the evaluation criteria contained in the National Cooperative Highway Research Program (NCHRP) Report 350: *Recommended Procedures for the Safety Performance Evaluation of Highway Features.* **2011. 356 pp.** 

PDF DOWNLOAD Code: RSDG-4-UL | List Price: \$243 | Member Price: \$180 PAPERBACK Code: RSDG-4 | List Price: \$304 | Member Price: \$225 PAPERBACK & PDF COMBO Code: RSDG-4-PUL | List Price: \$425 | Member Price: \$315 WEB-BASED Code: RSDG-4-WB1 | List Price: \$194 | Member Price: \$144 WEB-BASED 5-USER Code: RSDG-4-WB5 | List Price: \$826 | Member Price: \$612 WEB-BASED 10-USER Code: RSDG-4-WB10 | List Price: \$1,458 | Member Price: \$1.080 WEB-BASED 25-USER Code: RSDG-4-WB25 | List Price: \$3,402 | Member Price: \$2,520

#### Manual on Uniform Traffic Control Devices



### MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION Item Code: MUTCD-10

Developed by the Federal Highway Administration (FHWA), this manual is incorporated into Federal regulations as the national standard for traffic control devices on all public roads and bike paths. This 2009 edition supersedes the 2003 edition and subsequent revisions. **2009. 864 pp.** 

PAPERBACK Code: MUTCD-10 | List Price: \$75 | Member Price: \$75

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## **MATERIALS, TESTING & PAVEMENT**

### STANDARD SPECIFICATIONS FOR TRANSPORTATION MATERIALS AND METHODS OF SAMPLING AND TESTING, AND AASHTO PROVISIONAL STANDARDS, 40TH EDITION (THE "MATERIALS STANDARDS")

Item Code: HM-40

The AASHTO Materials Standards include the materials specifications, test methods, and provisional standards commonly used in the construction of highway facilities. The Materials Standards are updated three times per year, in April, June, and July. The Standards are available in paperback and as a PDF Download publication, which offers both single and multiple-user purchasing options. 2020. 5,445 pp.

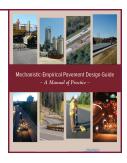
PAPERBACK Code: HM-40 | List Price: \$844 | Member Price: \$625 PDF DOWNLOAD SINGLE-USER Code: HM-40-UL | List: \$675 | AASHTO Member: \$500 PAPERBACK & PDF COMBO Code: HM-40-PUL | List: \$1,181 | AASHTO Member: \$875

### **MECHANISTIC-EMPIRICAL PAVEMENT DESIGN GUIDE, 3RD EDITION**

Item Code: MEPDG-3

This manual describes the pavement design methodology termed mechanistic-empirical (M-E) pavement design. Based on engineering mechanics that have been validated through extensive road test performance data, the manual presents information necessary for pavement design engineers to use the MEPDG design and analysis method. The manual references AASHTOWare Pavement ME Design™, M-E Pavement design software, commercially available through AASHTOWare, AASHTO's software development program. This 2020 3rd edition supersedes the 2015 2nd edition. **2020. 264 pp.** 

PDF DOWNLOAD Code: MEPDG-3 -UL | List: \$135 | AASHTO Member: \$100 PAPERBACK Code: MEPDG-3 | List Price: \$169 | Member Price: \$125 PAPERBACK & PDF COMBO Code: MEPDG-3 -PUL | List: \$236 | AASHTO Member: \$175 PDF DOWNLOAD 5-USERS Code: MEPDG-3 -IP5 | List: \$574 | AASHTO Member: \$425 PDF DOWNLOAD 10-USERS Code: MEPDG-3 -IP10 | List: \$1,013 | AASHTO Member: \$750

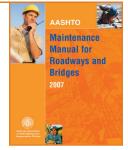




### AASHTO MAINTENANCE MANUAL FOR ROADWAYS AND BRIDGES, 4TH EDITION Item Code: MM-4

This manual describes the various processes, methods, and materials that are applied to maintain bridge and highway systems effectively. The manual is based on information gleaned from highway transportation literature on maintenance and from NCHRP SP20-07, Task 17 report. This 2007 4<sup>th</sup> edition supersedes the 1999 3<sup>rd</sup> edition. **2007. 372 pp.** 

**PDF DOWNLOAD** Code: MM-4-UL | List Price: \$35 | Member Price: \$26 PAPERBACK Code: MM-4 | List Price: \$44 | Member Price: \$33 PAPERBACK & PDF COMBO Code: MM-4 | List Price: \$61 | Member Price: \$46



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### HIGHWAY SAFETY MANUAL, 1ST EDITION

#### Item Code: HSM-1

This manual was developed to help measurably reduce the frequency and severity of crashes on American roadways, by providing tools for considering safety in the project development process. Its purpose is to assist practitioners in selecting countermeasures and prioritizing projects, comparing alternatives, and quantifying and predicting the safety performance of roadway elements considered in planning, design, construction, maintenance, and operation. It features a synthesis of validated highway research, procedures for including safety in project decisions, and analytical tools for predicting impact on road safety. **2010. 1,296 pp.** 

PDF DOWNLOAD Code: HSM-1-UL | List Price: \$540 | Member Price: \$400 PAPERBACK Code: HSM-1-M | List Price: \$675 | Member Price: \$500 PAPERBACK & PDF COMBO Code: HSM-1-PUL | List Price: \$945 Member Price: \$700



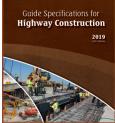
### MANUAL FOR ASSESSING SAFETY HARDWARE, 2ND EDITION Item Code: MASH-2

This manual, commonly referred to as "MASH," is a set of performance criteria developed to encourage consistency in the crash testing and evaluation of roadside safety features. It is designed for use by state departments of transportation and other agencies concerned with roadside safety design. It is designed to be consistent with, but not supersede, the AASHTO *Roadside Design Guide*, 4<sup>th</sup> Edition. This 2016 2<sup>nd</sup> edition supersedes the 2009 1<sup>st</sup> edition. **2016. 277 pp.** 

PDF DOWNLOAD Code: MASH-2-UL | List Price: \$101 | Member Price: \$75 PAPERBACK Code: MASH-2 | List Price: \$127 | Member Price: \$94 PAPERBACK & PDF COMBO Code: MASH-2-PUL | List Price: \$177 | Member Price: \$131

## **CONSTRUCTION & RIGHT-OF-WAY**

#### AASHIO



### GUIDE SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 10TH EDITION Item Code: GSH-10

These guide specifications provide guidance for developing transportation contract specifications and are the national standard for best practices in highway and road construction. This consensus-based guide is used by states and local agencies as a standard requirement for roadway construction contracts and is a basis for those in developing their own construction specifications. This 2020 10<sup>th</sup> edition supersedes the 2008 9<sup>th</sup> edition. **2020. 546 pp.** 

PDF DOWNLOAD Code: GSH-10-UL | List: \$257 | AASHTO Member: \$190 PAPERBACK Code: GSH-10 | List Price: \$321 | Member Price: \$238 PAPERBACK & PDF COMBO Code: GSH-10-PUL | List: \$449 | AASHTO Member: \$333 5-USER PDF DOWNLOAD Code: GSH-10-IP5 | List: \$1,474 | AASHTO Member: \$1,092 10-USER PDF DOWNLOAD Code: GSH-10-IP10 | List: \$2,845 | AASHTO Member: \$2,107

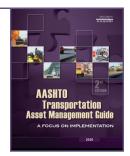
## **ASSET MANAGEMENT & PLANNING**

### AASHTO TRANSPORTATION ASSET MANAGEMENT GUIDE: A FOCUS ON IMPLEMENTATION, 2ND EDITION

Item Code: TAMGFI-2-UL

This guide aims to encourage transportation agencies to address strategic questions as they confront the task of managing the surface transportation system. Drawn from both national and international knowledge and experience, it provides guidance to state DOT decision makers, as well as county and municipal transportation agencies, to assist them in realizing the most from financial resources now and in the future, preserving highway assets, and providing the service expected by customers. **2020. 324 pp.** 

PDF DOWNLOAD Code: TAMGFI-2-UL | List Price: \$162 | Member Price: \$120 5-USER PDF DOWNLOAD Code: TAMGFI-2-IP5 | List Price: \$688 | Member Price: \$510 10-USER PDF DOWNLOAD Code: TAMGFI-2-IP10 | List Price: \$1,215 | Member Price: \$900



# **ADMINISTRATION & ECONOMICS**

### UNIFORM AUDIT AND ACCOUNTING GUIDE FOR AUDITS OF ARCHITECTURAL AND ENGINEERING (A/E) CONSULTING FIRMS, 2016 EDITION

Item Code: UAAG-4

This guide is designed as a tool for state DOT auditors, Architectural/Engineering (A/E) firms, and public accounting firms that perform audits and attestations of A/E firms. The techniques presented focus on examination, auditing, and reporting procedures to be applied to costs that are incurred by A/E firms for engineering and design-related services performed on various Federal, state, and local transportation projects. It provides general guidance only and is not meant to supersede the Federal Acquisition Regulation (FAR), which should be referenced when using this guide. **2016. 169 pp.** 

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**PDF DOWNLOAD** Code: UAAG-4-UL | List Price: \$13 | Member Price: \$0 (This publication is free of charge for AASHTO member organizations.)



### 2019 AASHTO SALARY SURVEY

Item Code: SS-19-OL

This survey provides job classifications and salary information on positions currently used by the state departments of transportation. It is intended to be used as a tool for human resources administrators and other professionals whose work involves studying and analyzing job classifications, writing job descriptions, and developing/designing pay structures unique to state departments of transportation. **2019. 100 pp.** 

PDF DOWNLOAD Code: SS-19-OL | This is a free report.

