



AASHTO

Maintenance Manual for Roadways and Bridges

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**American Association
of State Highway and
Transportation Officials**



Preface

This 2007 revision of the AASHTO Maintenance Manual is based on information gleaned from recent highway transportation literature on maintenance, and field visits and interviews conducted by Kenneth A. Brewer as the principal author under National Cooperative Highway Research Program (NCHRP) Project SP20-07, Task 170. This document was prepared under the guidance of the NCHRP SP20-07, Task 170.

Intended for persons early in their career in roadway and bridge maintenance, the *Maintenance Manual for Roadways and Bridges* will assist them in understanding the various processes, methods, and materials that are applied to maintain the bridge and highway system effectively. Also intended to be a dynamic document, the manual will need to be updated as research and applications change the relevant content sections. Historically, highway maintenance has encompassed personnel management, materials selection, equipment use, and application of methods to react to problems in bridges and roadways, budgeting, and planning. The field is now evolving into a new engineering science of its own, resulting from a synergistic combination of traditional civil engineering, industrial engineering, business management, materials science, industrial psychology, and environmental science. This manual is envisioned as the first step in documenting that transition; this first-generation text will lead and guide the professional development of the engineering managers of roadway and bridge maintenance in the beginning of the 21st century.

This manual, however, will need to be used in conjunction with your own agency's maintenance operation policy manual, maintenance standards publication, and organizational operation guides. The effective engineering manager of maintenance in the 21st century will have to supplement the education and experience brought to the maintenance position with self-study, continuing professional education, and on-the-job training in management principles and concepts.

Some illustrations and examples in this manual show a particular product, brand, trademark, agency, or company. AASHTO does not endorse any manufactured product, licensed process, or other proprietary item shown in this manual. All such illustrations are provided to make the accompanying text more understandable, and no reference to such items in this manual should be construed as an endorsement.

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