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**BRIDGE MAINTENANCE MANUAL  
CHAPTER 7  
FIELD GUIDE – SUBSTRUCTURE**

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Minnesota Department of Transportation  
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# Bridge Maintenance Manual

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## **Bridge Maintenance Manual:**

*Bridge Maintenance Reference Manual*, 2016 This document is a comprehensive manual on programs procedures and techniques for properly preserving and maintaining highway bridges This manual is primarily geared towards individuals involved in onsite bridge maintenance and preservation activities and those that supervise and manage these activities however many subjects may be of value to engineers and preservation specialists The BMRM is a revision and upgrading of the previous manual Improved bridge maintenance techniques are addressed and suggested procedures decision aid matrices and job order checklists are provided The purpose of the BMRM is to provide instructions and references for performing a wide range of useful and effective bridge concepts that can be adapted and expanded to provide solutions to specific bridge problems These procedures are not intended to override existing agency guidelines or policy but are to be used as a source of information when the need arises They are not intended as a substitute for consulting an engineer with appropriate qualifications to determine the proper repair method This manual has been developed as a reference to a new National Highway Institute course series on Bridge Maintenance consisting of an instructor led course Bridge Maintenance FHWA NHI 130108 and four web based training courses Fundamentals of Bridge Maintenance FHWA NHI 130107A Bridge Maintenance Painting FHWA NHI 130107B Maintenance of Movable Bridges FHWA NHI 130107C and Maintenance of Masonry Bridge Elements FHWA NHI 130107D

**Bridge Maintenance Manual** British Columbia. Ministry of Transportation and Highways, 1998

**Bridge Maintenance Manual** Pennsylvania. Department of Transportation, 2010

*AASHTO Maintenance Manual for Roadways and Bridges* Kenneth A. Brewer, American Association of State Highway and Transportation Officials, 2007

**Manual of Instructions**, 1940

*Bridge Maintenance Manual* Ron Purvis Associates, 200?

*Bridge Maintenance Manual of Instructions*, 1967

[Bridge Maintenance Manual](#) Iowa. Department of Transportation. Office of Bridges and Structures, 2014 The Bridge Maintenance Manual is published solely to provide information and guidance to bridge maintenance personnel when repairing bridges in the state of Iowa This manual is issued to secure so far as possible uniformity of practice and procedure in methods developed by experience Budgetary limitations volumes and types of traffic local conditions and other factors may render complete compliance with the guidelines set forth in this manual impossible or impractical This manual is not purported to be a complete guide in all areas of bridge maintenance and is not a substitute for engineering judgment

**Ohio Bridge Maintenance Manual (on-line Training Website)** Michael G. Fitch, Osama Ahmed Abdulshafi, James Barnhart, Ohio State University. Department of Civil and Environmental Engineering and Geodetic Science, Ohio. Department of Transportation, United States. Federal Highway Administration, 2002

*Maintenance Services Manual*, 1995

**AASHTO Movable Bridge Inspection, Evaluation and Maintenance Manual** American Association of State Highway and Transportation Officials, Subcommittee on Bridges and Structures Staff, 1998-01-01 This manual presents uniform guidelines and procedures for the inspection evaluation and

maintenance of the nation's existing movable bridge inventory. The manual provides information pertaining to the unique structural, mechanical, hydraulic, and electrical components and operational characteristics of a movable highway bridge. The manual was developed for bridge engineers, inspectors, and maintainers charged with operational and maintenance responsibility for these complex structures. Commentary adjacent to the text on the same page provides suggestions on implementing the guidelines and procedures of this manual and directs the reader to additional sources of information. The contents are organized in four primary parts: General Inspection, Evaluation, and Maintenance. The appendices contain supplementary information and are followed by a reference list, glossary, and index. *Fundamentals of Bridge Maintenance and Inspection*, 1997. **Excerpt [from] Manual for Bridge Maintenance Planning and Repair Methods, Volume 1, Repair Methods**. Florida. Department of Transportation. Office of Maintenance, 1978\*. **Manual for Bridge Maintenance Planning and Repair Methods**. Florida. Department of Transportation. Office of Maintenance, 1979\*. AASHTO Manual for Bridge Maintenance, 1987. American Association of State Highway and Transportation Officials, 1987. **Bridge Inspection and Maintenance Manual**, 1991. Aashto Bridge Maintenance Manual, 1989-06-01. *Manual for Highway Bridge Maintenance Inspection*. Indian Roads Congress, 1978. Operator and Organizational Maintenance Manual, 1989. Manual for Bridge Maintenance. American Association of State Highway and Transportation Officials, 1976.

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