

National Cooperative Highway Research Program (NCHRP)

Research for Improved Highway Operations and Maintenance

**Report to the AASHTO Highway
Subcommittee on Maintenance**

Des Moines, Iowa, July 2015

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NCHRP- National Cooperative Highway Research Program

- **An AASHTO program sponsored by state DOTs**
- **Started in 1962**
- **Annual funding ~ \$40 million/year**
- **Contributes to advancements in all aspects of highways**
- **8 fields of research (Administration, Planning, Design, Materials and Construction, Soils and Geology, **Maintenance**, Traffic, and Special Projects**
- **25 Subject areas (e.g., economics, forecasting, pavements, bituminous materials, mechanics and foundations, **snow and ice control, maintenance of ways and structures, equipment, illumination and visibility, and special projects**)**

NCHRP: Goal-Oriented Research

- **Responds to state DOT needs: DOTs and AASHTO committees propose research topics; SCOR selects projects.**
- **Ensures applicability of the results: state DOTs and other sectors of the highway industry participate in monitoring the research.**
- **Results are published by NCHRP (reports, digests, synthesis, CD-ROMs, and Web documents) or by AASHTO (guides/manuals, specifications, and test methods), and often adopted by state DOTs and other organizations.**

Scope of NCHRP Projects Related to Maintenance

- **Pavement Maintenance**
- **Snow and Ice Control**
- **Bridges and Structures**
- **Roadside**
- **Maintenance Equipment**
- **Workforce Development**
- **Etc.**

Three Types of NCHRP Projects

(of Interest to the AASHTO Highway Subcommittee on Maintenance)

- **Research Projects**

Selected by SCOR once/year (March).

- **Research for AASHTO Standing Committee on Highways (20-07 projects)**

Selected by NCHRP Project Panel SP20-07 twice/year (May and October).

- **Synthesis of Information Related to Highway Problems (20-05 projects)**

Selected by NCHRP Project Panel SP20-05 once/year (May).

Publication/Dissemination of Project Reports

- ☺ Published by AASHTO**
- ☺ Available on AASHTO (SCOM) Website**
- ☺ Published in the NCHRP publication series (as NCHRP reports, syntheses, or research results digests)**
- ☺ Summarized and made available on NCHRP Website**

Published by AASHTO

- ☺ **AASHTO Maintenance Manual for Roadways and Bridges (2007)**
- ☺ **AASHTO Guide for Snow and Ice Control (1999)**
- ☺ **AASHTO Guidelines for the Selection and Application of Warning Lights on Roadway Operations Equipment (2009)**

Recent NCHRP Publications

- ☺ **Manual for Emulsion-Based Chip Seals for Pavement Preservation (NCHRP Report 680) – Also AASHTO Publication Code MBC-1-UL**
- ☺ **Decision Making for Outsourcing and Privatization of Vehicle and Equipment Fleet Maintenance (NCHRP Report 692) – Also AASHTO Publication Code EFM-1**
- ☺ **Determining Highway Maintenance Costs (NCHRP Report 688)**
- ☺ **State Department of Transportation Fleet Replacement Management Practices (NCHRP Synthesis 452)**

NCHRP FY 2016 - Summary

Programmed for FY 2016:

- **16 Continuation projects (\$11,780)**
- **45 New projects (\$19,060,000)**
- **Total 61 projects (\$30,840,000) in 18 problem areas (bridges, maintenance, materials, pavements, etc.)**
- **2 Projects related to maintenance (1 submitted by SCOM)**

NCHRP FY 2016 Selected Projects

- **NCHRP Project 14-37: *Guide Construction Specifications for Pavement Preservation Treatments: Chip Seal and Microsurfacing***
- **Project 14-38: *Triggers and Timings for the Placement of Pavement Preservation Treatments for Asphalt Pavements***

NCHRP FY 2016 Program

- **March 30-31, 2015: FY 2016 projects selected**
- **July-December 2015: 1st and 2nd panel meetings (develop RFPs and select agencies)**
- **February-March 2016: Contracting**

NCHRP FY 2017 Program

- **July 1, 2015: Solicitation of FY 2017 problem statements**
- **Oct. 15, 2015: End date for problem statements**
- **March 2?-2?, 2016: SCOR meeting/project selection**

More Information



NCHRP: Advancing transportation and meeting states' needs for more than half a century

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