

NCHRP 20-07 AASHTO *Pavement Management Guide* Update

In 2010, Applied Pavement Technology, Inc. (APTech) was contracted by the National Cooperative Highway Research Program (NCHRP) to update the American Association of State Highway and Transportation Officials (AASHTO) *Pavement Management Guide* in order to better address the current needs of pavement management practitioners.

AASHTO has supported the development and use of pavement management since the early 1980s. Pavement management provides a systematic approach to managing a pavement network, enabling agencies to evaluate the consequences associated with various investment decisions so they can determine the most cost-effective use of available funds for their roads, streets, and highways. Pavement management works effectively in a number of agencies where the recommendations from pavement management are part of an overall asset management program. In 1990, AASHTO published the *AASHTO Guidelines for Pavement Management Systems*, which introduced the concepts, explained the differences between network- and project-level analyses, outlined the components of a pavement management system, and documented the steps to implement a computerized system. In 2001, AASHTO published the *Pavement Management Guide* (Guide), which explained pavement management in much more detail. While many of the topics included in the Guide are still relevant today, there are several significant advancements that have taken place since 2001.

APTech's update of the Guide to incorporate these shifts includes the following changes

- Increased focus on managing pavements rather than on pavement management software.
- Increased emphasis in the use of preventive maintenance treatments as part of a pavement preservation program.
- Advances in technology that improve data quality and integration.
- Recent initiatives impacting the types of data required by pavement management, such as
 - Changes to the Highway Performance Monitoring System (HPMS).
 - Development of a new Pavement Health Track Analysis Tool by the Federal Highway Administration (FHWA).
 - Calibration and verification activities associated with implementing the new Mechanistic Empirical Pavement Design Guide (MEPDG).
- Increased reliance on performance measurement and asset management principles.