The Transportation Research Board is one of six major divisions of the National Research Council, which serves as an independent adviser to the federal government and others on scientific and technical questions of national importance, and which is jointly administered by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board’s varied activities annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy’s purposes of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities.

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* Membership as of August 2014.
PERFORMANCE MANAGEMENT IN PRACTICE

3 INTRODUCTION
Performance Management in Practice: Working Together to Improve Results
Hyun-A Park, Mara Campbell, and Daniela Bremmer

The articles in this issue are designed to support progress in performance management by transportation agencies. Actively managing and improving performance demonstrates that the transportation community is delivering efficient and effective services to the nation’s travelers and is making the best use of resources.

6 The Benefits of Performance Management: A Chief Executive Officer’s Perspective
Kirk T. Steudle

When a state department of transportation (DOT) starts measuring performance and communicating the results, everyone in the state benefits, reports the author, Director of Michigan DOT, who traces out the initiatives and successes under his state’s “ready and adaptable” model incorporating a “data-driven decision-making process.”

9 Integrating Performance Measures into States’ Long-Range Transportation Plans
Mike Hancock

Across the country, a new era of performance-based, long-range transportation planning is strengthening the accountability and transparency of states’ transportation programs and is improving decision making, according to the author, a state DOT chief executive, who describes successful models from three states.

13 Telling Our Stories Powerfully, One Data Set at a Time
Mara Campbell and Julie Lorenz

The information gathered through a performance management system gains power when communicated successfully to specific audiences. The authors offer proven practical tips and examples to help DOTs communicate data to build support for decisions, ensure accountability, and tell stories of progress.

18 Organizational Support for Performance Management
Carlos Braceras

In the past two decades, Utah DOT has pursued a simple but clear mission: to optimize resources with performance-based measures to ensure a safe, well-maintained, free-flowing transportation system. The author, the agency’s executive director, presents the four goals that define the department’s strategic direction, along with practical case studies.

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24 Evaluating Transportation System Performance: Mapping Out a National Framework
Jeffrey F. Paniati

The Moving Ahead for Progress in the 21st Century Act (MAP-21) is creating a new framework at the national level for evaluating surface transportation system performance.

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25 Performance Management for All: Building on the States’ Robust Foundation
Frederick G. (Bud) Wright

Transportation agencies’ experience with performance management will serve as a foundation for the MAP-21 requirements, this author affirms; the challenges ahead include balancing state and federal investment priorities; setting and coordinating targets; and addressing data issues.

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26 Partners in Performance: Working Together to Transform the Nation’s Transportation System
Jeffrey F. Paniati

Documenting planned investment strategies and outcomes with nationwide consistency will clarify the link between investments and results at the local and national levels, allowing decision makers to understand investments that lead to improvements in performance and to identify smarter investment strategies, the author maintains.
28 Transportation Performance Management: Theory and Practice, Challenges, and Strategies for Success
Gregory Slater and Frances Harrison

Performance management is easy to describe but difficult to get right, the authors observe. Implementing performance management—aligning people, processes, data, and analytical tools—can take several years and requires iteration and adaptation. Presented are key steps, common challenges, and strategies for success.

34 Transportation Asset Management and Performance Management: A Symbiotic Relationship
Ananth Prasad

Transportation asset management describes a performance-based approach for managing transportation system physical assets; performance management describes the application of the same basic principles to a broader set of objectives; the author shows how each approach has influenced and stimulated the evolution of the other.

36 Moving from Reactive to Strategic Decision Making: Ten Basic Steps Toward Performance Management
Trish Hendren

Using examples from the Washington Metropolitan Area Transit Authority, the author illustrates 10 steps to help organizations start down the performance management path—proven ways and practical insights that can help an organization shift from reactive to strategic decision making.

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The Four Corners area of the Southwest United States is home to many American Indian nations, applying research results to address transportation challenges on tribal lands.