SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

Organizing to Improve Travel-Time Reliability

Road users see the benefits of managing highway operations

Given that traffic congestion caused by weather, crashes, and special events creates more than 50 percent of all motorist delay, processes to better manage traffic operations and leverage existing capacity will make the highway system more reliable and reduce the cost of congestion for drivers, freight operators, and other users.

Several new tools to help agencies advance their business practices and their organizational structures are now available from the second Strategic Highway Research Program (SHRP2). Taken together, they provide a structure to modernize current practices, mainstream traffic operations in the state or local department of transportation, and, ultimately, help agencies better plan for and address nonrecurrent congestion on their systems.

Helping Transportation Agencies Address Travel-Time Reliability at Every Level of Their Organization

The Solution

A new suite of guides and tools will assist transportation agencies in **evaluating and improving their organizational capabilities to conduct effective and efficient operations.** This includes integrating travel-time reliability into planning, programming, and project delivery processes while overcoming interdepartmental and interagency barriers to improving highway operations.

Together they offer:

- The tools for an agency to conduct an assessment of their organizational structure and business practices for effectiveness in managing travel-time reliability through traffic operations.
- Case studies that show how other states have adjusted their business processes to better handle traffic incident management, work zone management, and other business functions related to travel-time reliability.
- A system and templates for advancing an agency's ability to improve systems operations and management.

Leveraging the Existing Capacity of the Transportation Infrastructure Through Better Traffic Operations

FOCUS AREA:
Reliability (L01/L06)

Comprehensive approach that includes an assessment tool, guide, and technical assistance to optimize systems operations.

Save Lives

- Faster incident clearance reduces secondary crashes.
- Improves work zone management and operations, resulting in safer and less congested work zones.

Save Money

- Better travel-time reliability allows commuters and freight operators to avoid costly delays.

Save Time

- Tools lead to reduced traffic congestion and traveler delay.
- Preventive measures mitigate problems before serious delays and bottlenecks occur.

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The first product, *Integrating Business Processes to Improve Travel Time Reliability* (L01), focuses on integrating business processes to allow DOTs to improve reliability through management of incidents, weather, work zones, special events, traffic control devices, fluctuations in demand, and bottlenecks.

The second product, *Institutional Architectures to Advance Operational Strategies* (L06), provides a comprehensive and systematic examination of ways agencies can be more effectively organized to successfully execute operations programs that improve travel-time reliability. It includes a self-evaluation guide, and identifies all the elements needed to improve activities for business processes, systems and technology, performance management, culture, organization and workforce, and collaboration.

To implement these products, technical assistance will be provided to state and local transportation agencies through a step-by-step process that includes an assessment of existing activities, and identification and development of an action plan to move forward.

The Benefits

Organizing agencies to integrate systems operations and management strategies at all levels will enable state DOTs to better leverage existing capacity and resources to provide better travel-time reliability and reduce nonrecurrent congestion.

How can you learn more?

For more information, contact Stephen Clinger at FHWA, stephen.clinger@dot.gov; Gummada Murthy at AASHTO, gmurthy@aashto.org; David Plazak at TRB, dplazak@nas.edu.

A web-based tool, *Systems Operations Management Guidance*, is available on the AASHTO website at www.aashtosomguidance.org. The following resources are available online and from the TRB Bookstore:

- **Integrating Business Processes to Improve Travel Time Reliability:** http://www.trb.org/Publications/Blurbs/165283.aspx
- **Guide to Integrating Business Processes to Improve Travel Time Reliability:** http://www.trb.org/Publications/Blurbs/165284.aspx
- **Institutional Architectures to Improve Systems Operations and Management:** http://www.trb.org/Publications/Blurbs/165285.aspx
- **Guide to Improving Capability for Systems Operations and Management:** http://www.trb.org/Publications/Blurbs/165286.aspx

About SHRP2 Implementation

The second Strategic Highway Research Program is a national partnership of key transportation organizations: the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the Transportation Research Board. Together, these partners conduct research and deploy products that will help the transportation community enhance the productivity, boost the efficiency, increase the safety, and improve the reliability of the Nation's highway system.

Strategic Highway Research Program

U.S. Department of Transportation | Federal Highway Administration

American Association of State Highway and Transportation Officials ● Transportation Research Board

TBG041112181811WDC