SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

Organizing for Reliability Tools (L06/L01/L31/L34)

Improving Transportation Systems Management and Operations and fostering more reliable travel times through business and organizational solutions

Challenge

Building new transportation facilities to address growth and congestion has become increasingly difficult due to financial and space constraints. Agencies have a growing need to manage and operate the transportation network as effectively as possible to meet customers' demands for safety, mobility, and reliability. The use of performance measures, systems, and services to manage and operate the transportation system can improve safety, increase efficiency, and reduce the cost of congestion. This growing discipline, called transportation systems management and operations (TSM&O), is particularly important in addressing congestion related to unpredictable or non-recurring events, such as inclement weather or crashes, which account for more than half of all congestion, increase safety risks, and create costly disruptions to travelers' plans.

Agencies are looking for ways to assess and strengthen their TSM&O capabilities. SHRP2 research showed that implementing organizational and business process changes that build or enhance the TSM&O support structure can significantly improve the predictability of travel times.

Solution

Guide to Organizing Transportation Agencies to Advance Systems Operations and Management (L06/L31).

This solution offers a capability maturity model (CMM) framework that agencies use to conduct a detailed organizational self-assessment to identify ways to systematically improve their TSM&O capabilities. What began as a report and guide now includes facilitated workshops, an online self-assessment tool, and outreach materials. This product also provides a framework for using many other reliability-related SHRP2 Solutions.

Guide to Integrating Business Processes to Improve Travel-Time Reliability (L01/L34).

This guide and report demonstrate how agencies can successfully change business processes to support improved systems management and operations. SHRP2 is currently developing web-based version of the guide that will provide customized recommendations based user-provided input about its scenario. The solution will also include workshops that will help agencies apply the CMM process to a specific business process area, such as traffic incident management or managing work zones.

Benefits

With this bundle of SHRP2 Reliability solutions, agencies can evaluate their current organizational ability for TSM&O and then determine what steps to take to improve. Improved operations can lead to fewer crashes, less congestion and associated fuel consumption, and improved travel-time reliability.

What is the Organizing for Reliability Tools bundle?

Organizing for Reliability Tools is a set of tools that helps agencies assess their TSM&O programs and implement changes to technical and business processes in order to enhance the ability to manage unexpected congestion. This bundle of products includes:

> *Guide to Organizing Transportation Agencies to Advance Systems Operations and Management (L06/L31).*

Guide to Integrating Business Processes to Improve Travel-Time Reliability (L01/L34).

RELIABILITY

Products from the Reliability SHRP2 focus area help transportation organizations improve travel reliability by reducing congestion through incident reduction, management, response, and mitigation.

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Visit: www.fhwa.dot.gov/GoSHRP2
Learn more about products, case studies, and implementation assistance.

How can you learn more?

Visit: www.fhwa.dot.gov/GoSHRP2

- Additional product information
- Information about how this product is being used in the field
- Contact information for peers who are familiar with this product
- Links to research reports

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Save Lives

These solutions reduce secondary crashes through faster response times, protect responders by implementing standard procedures, and improve work zone management and operations, which together result in less congestion and safer roads.

Save Money

Better operations can reduce the number and duration of road closures. Early identification of potential problems and better planning for special events decreases costs and congestion for motorists as well as the freight industry.

Save Time

These products provide highway agencies and state DOTs with the tools to reduce traffic congestion and traveler delay. Preventive measures mitigate problems before serious delays and congestion occur.

About SHRP2 Implementation

The second Strategic Highway Research Program (SHRP2) is a partnership of the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), and the Transportation Research Board (TRB). TRB completed the research, and now FHWA and AASHTO are jointly implementing the resulting SHRP2 Solutions that will help the transportation community enhance productivity, boost efficiency, increase safety, and improve the reliability of the Nation's highway system.