



John Conrad
Reliability Products and Tools
*“To provide reliable travel times by
preventing and reducing non-
recurring congestion”*



U.S. Department of Transportation
Federal Highway Administration



THE PATH TO EXCELLENCE IN OPERATIONS FOR A STATE DOT

What areas should this DOT
target for improvement?

To Here

Which capabilities does the
DOT have to improve to get there?

From Here

21

SHRP2 Reliability Products

- **Organizational Assessment & Leadership**
 - Reliability Workshops for State and Public Sector Managers. (L31)
 - Guide to Organizing Transportation Agencies to Advance Systems Operations and Management (L06)
 - A Guide to Improving Travel Time Reliability by Integrating Business Processes (L01)
- **Support Systems and Communications**
 - A Framework for Improving Travel Time Reliability (L17)
 - Knowledge Transfer System (KTS)
 - Business Case Primer
 - Operations Center of Excellence
 - How to Communicate Reliability Information to Travelers (L14)
- **Training**
 - Coordinated Training for Traffic Incident Responders and Managers (L12)
 - Regional Operations Forums for Advancing Systems Operations, Management, and Reliability (L36)
- **Reliability Analysis Tools (L38)**



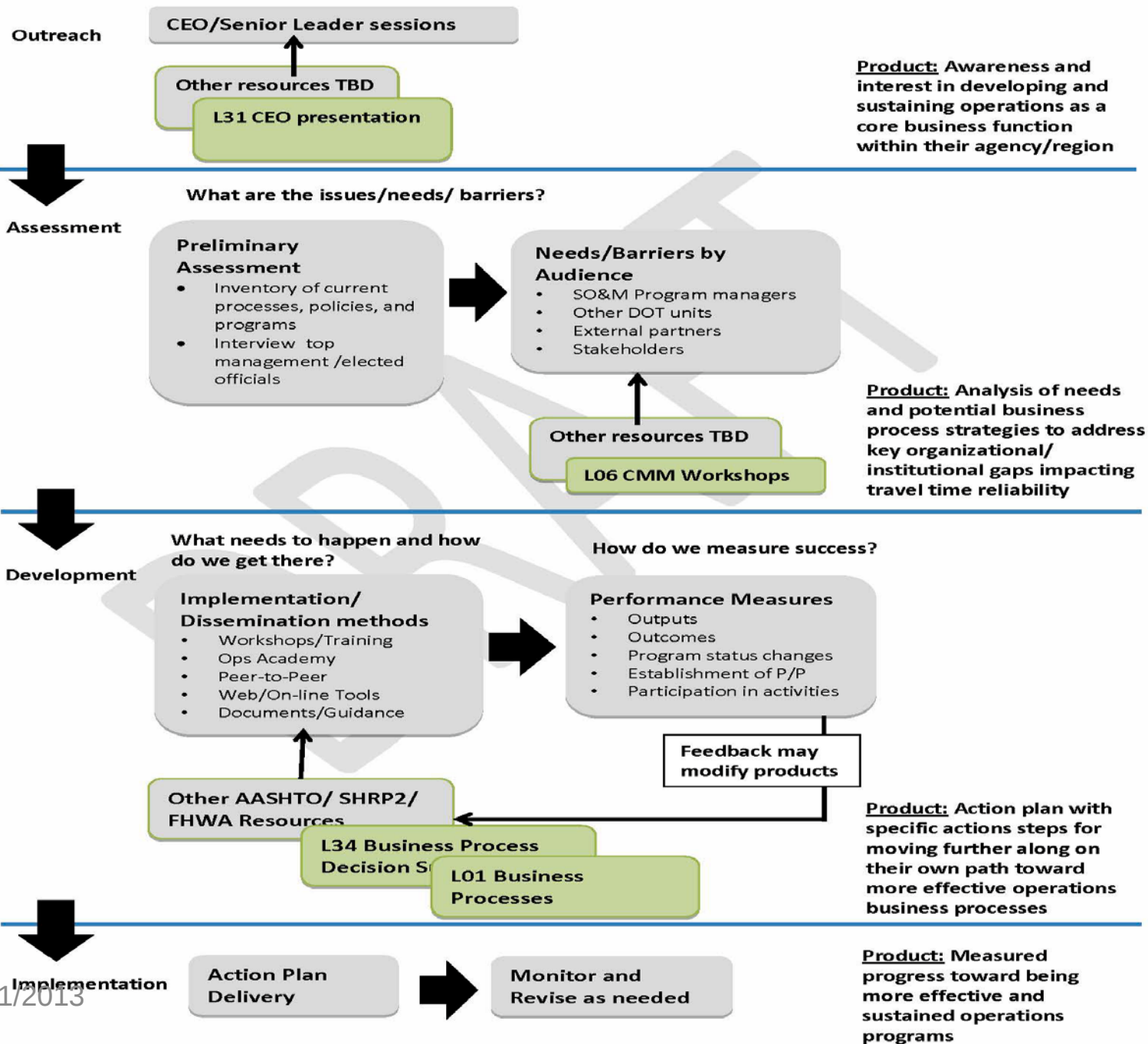
Reliability Products

Systems Operations & Management Capability Improvement Workshops (L06)

- Business Processes
- Systems/ Technology
- Performance Measurement
- Culture
- Organization/Staffing
- Partnerships

Integrating Business Processes to Improve Reliability (L01)

- Guidebook (and e tool) for structured approach to analyzing key processes and gaps to improve reliability



Reliability Products

 KNOWLEDGE TRANSFER SYSTEM
Transportation Systems Operations & Management

Home | About | News | Resources | Glossary | FAQs | Events & Training | Contact Us | SHRP2 Home Search

Welcome

This website has been established for practitioners, researchers and policymakers to provide convenient access to key knowledge resources related to transportation reliability and systems operations and management (SO&M). It has been developed by the Strategic Highway Research Program 2 (SHRP 2) L17 project, and is updated with new research and state of the practice material as they become available.

[What does the website contain?](#)
[What are potential future enhancements?](#)

Headline News

Future Events

[All News »](#)

August 2012

U.S. Secretary Ray LaHood & Senior Transportation, Law Enforcement, Fire and EMS Executives to meet on Traffic Incident Management June 26 and 27, 2012 [Read more »](#)

Metropolitan ITS Infrastructure Deployment Estimate Updated [Read more »](#)

Primer available on "Creating an Effective Program to Advance Transportation System Management and Operations" [Read more »](#)

AASHTO Connected Vehicle Infrastructure Deployment Analysis [Read more »](#)



Making the Business Case

Find suggested language for communicating *your* business case »

Upcoming

MEETINGS & EVENTS

AUGUST 2012						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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Customized Knowledge Search

Find the key documents you need:

[Topical Industry Websites »](#)

[Searchable Knowledge Database »](#)

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Business Case Primer

- Who, what, when and how to communicate the business case for SO&M
- Simple guidance to assist in identification of target audiences and reasons to implement SO&M that resonate with each of them
- Strategies for being ready to deliver the message whenever the opportunity is available.

National Traffic Incident Management Responder Training Course

- Address NUG goals for TIM
 - Responder Safety
 - Safe, quick clearance
 - Prompt reliable, interoperable communications
- Training provides common core competencies and shared understanding
- Train the Trainer approach (FHWA Contract)
 - 40-60 additional sessions by 2014
- Requires state implementation plans
- E-learning and evaluation products in development

Regional Operations Forums

- 3 & 5 day regional education and training program for SO&M
- Expected curriculum for senior leaders and program managers
 - An overview of SO&M
 - The principles and application of the capability maturity model AASHTO Guide
 - Performance measurement
 - Incident management
 - Communicating with the media
 - Customer service
 - Integrating planning and operations
 - The relationship between SO&M and safety
 - Goods movement
 - Workforce development
 - Building a business case for SO&M
- Pilot Tests in 2013
- Business plan for long term sustainability

Reliability Products



Analytical Tools

- L02-Monitoring Programs for Travel Time Reliability
- L05-Incorporating Reliability Performance Measures into the Transportation Planning & Programming Process
- L07-Evaluation of Costs and Effectiveness of Highway Design Features to Improve Travel Time Reliability
- L08-Incorporation of Nonrecurring Congestion Factors into the Highway Capacity Manual
- C11-Reliability Sketch Planning Tool

SHRP2

Reliability Vision

Jeff Lindley, FHWA Associate Administrator for Operations



Operations activities...



- Influence travel demand (how much, when, where)
- Effectively manage traffic resulting from travel demand
- Anticipate and respond to planned and unplanned events (traffic incidents, work zones, bad weather, special events)
- Provide travelers with high quality traffic and weather information
- Ensure that the unique needs of the freight community are considered and included in all of the above

Why Does FHWA Focus on Improving Operations?

- To reduce / manage impacts of congestion
- To keep people and commerce moving – a healthy economy needs a reliable transportation system
- To improve the safety and sustainability of the highway system
- To make more cost effective investment of limited resources
- To promote a more proactive approach

Proactively Operating the System Requires:



- Real-time and forecasted information
- Measuring / monitoring performance
- Good analytical foundation / tools
- State of the art technologies and strategies
- Integration across system elements, jurisdictions, and modes
- An organization and workforce capable of managing all of the above

Links to SHRP2 Products



- L12 / 32A / 32B / 32C – Training for Traffic Incident Responders and Managers
- L01 / 06 / 31 / 34 – Organizing for Reliability Products
- L02 / 05 / 07 / 08 / 38 – Reliability Data Monitoring and Analytical Products
- L14 – Traveler Information and Travel Time Reliability
- L17 / L36 – Knowledge Transfer System / Regional Operations Forums

Takeaways



- Effective operation of the transportation system provides significant benefits
- Operating the system proactively is the key concept in realizing these benefits
- Implementation of SHRP2 reliability products will be vital to achieving the vision for proactive transportation system management and operations