



SHRP 2 Update and Case Studies

SCOP/SCOPM Meeting

June 18, 2014



U.S. Department of Transportation
Federal Highway Administration



What is SHRP2?

Save lives. Save money. Save time.



- \$218 million, federally funded research program to address critical transportation challenges:

- Making highways safer
- Fixing deteriorating infrastructure
- Reducing congestion



- Collaborative effort of AASHTO, FHWA, and TRB



- Aims to advance innovative ways to plan, renew, operate, and improve safety on the Nation's highways

Focus Areas



Safety: Fielding the largest-ever Naturalistic Driving Study into driver behavior in order to reduce crashes and save lives



Renewal: Making rapid, innovative construction possible for “ordinary” projects



Reliability: Providing management and technical tools to reduce congestion through operations



Capacity: Systematizing collaborative decision making to achieve better, faster project decisions

The SHRP2 Capacity Charge from Congress

“Develop approaches and tools for systematically integrating environmental, economic, and community requirements into the analysis, planning, and design of new highway capacity”

Anticipated Outcomes and Value Added

- Get the right people at the table at the right time with the right information
- Make decisions that “stick”
- Avoid costly and time-consuming do-loops
- Serve environmental, community, and economic needs more closely
- Expedite delivery of new capacity



Priority Capacity Projects



- **Implementing Eco-Logical (C06)**
- **PlanWorks**
 - TCAPP (C01)
 - Performance Measures for Highway Capacity Decision-Making (C02)
 - Expediting Project Delivery (C19)
- **Economic Analysis Tools (Bundle)**
 - Economic Impact Case Studies (C03)
 - Economic Impact Analysis Tools (C11)
- **Advanced Travel Analysis Tools (Bundle) (C10/C04/C05/C16)**
- **Freight**
 - Freight Planning Guide (C15)
 - Freight Demand Modeling and Data Improvement (C20)

Reliability Strategic Rationale



Nonrecurring events account for more than half of congestion.

- Impact of these events on users is reduced travel time reliability (TTR).
- TTR is valuable to users.
- TTR is a good tool to measure performance and develop and target improvements.

What do we need to effectively use TTR?

- Ways to measure and monitor TTR.
- Integration of TTR into modeling, planning, programming, and design.
- Operations-oriented business practices, training.

Priority Reliability Projects



- **National Traffic Incident Management Responder Training (L12)**
- **Organizing for Reliability**
 - CEO Workshop on Operations (L31)
 - Knowledge Transfer System (L17)
 - Organizing Agencies for Systems Operations and Mgt (L06)
 - Business Processes for Reliability (L01)
- **Reliability Data and Analysis Tools (Bundle)**
 - Monitoring Programs for Reliability (L02)
 - Planning/Programming for Reliability (L05)
 - Reliability by Design (L07)
 - Reliability in the Highway Capacity Manual (L08)
 - Economic Analysis Tools (C11)
- **Regional Operations Forum (L36)**

Research to Implementation



Research Development Implementation

Research responds to known transportation challenges

A research product emerges and is refined through pilots and other activities

Potential implementation explored through knowledge transfer

Partner agencies select, prioritize, and prepare product for implementation

Product is marketed to users and integrated into standard practice