



SHRP2 Products Guide TSMO

Conversation and Advance Initiatives at State DOTs



U.S. Department of Transportation
Federal Highway Administration



The second Strategic Highway Research Program (SHRP2) was created through a partnership of the Federal Highway Administration (FHWA), the Transportation Research Board (TRB), and the American Association of State Highway and Transportation Officials (AASHTO) to find new solutions to enhance the productivity, boost the efficiency, increase the safety, and improve the reliability of the Nation’s highway system. The Reliability suite of SHRP2 tools featured several innovative products that have advanced Transportation Systems Management and Operations (TSMO) and helped State departments of transportation (DOTs) elevate and prioritize TSMO programs.

To understand how the SHRP2 program has advanced TSMO initiatives, see what State DOT leaders have said about their own experiences.

“ I think what FHWA has done with SHRP2 is fantastic. The Capability Maturity Model is what we used to essentially launch our TSMO division. But we used a lot of SHRP2 products, such as the Traffic Incident Management product, in our department. We developed performance measures for the division—what gets measured gets done, and that was an important element for me.”



—Brent Cain, Division Director for Transportation Systems Management Operations, Arizona DOT

“ I encourage everyone to take advantage of SHRP2 Reliability tools. It’s really important to understand as an agency where you stand, so start with that Capability Maturity Model to see where you are and how you need to adjust to get where you want to be. As a CEO, why wouldn’t you want to know that?”



—Russell McMurry, Commissioner, Georgia DOT

“ The SHRP2 products, specifically around the traffic incident management training, have been incredibly valuable for operations and moving the needle on incident management. We had a tanker fire in Colorado when I was there and I think a lot of people thought it would be a long-lasting, disruptive event. It was disruptive, but we got the road open the next day mostly because of the coordination between the fire department, the first responders, and our DOT folks. Because they had trained together, they had worked together, they had been brought together, it went so much better than you would have expected. The interstate was open the next morning and the public thought ‘Wow, that’s how government should work.’”



—Shailen Bhatt, Former Director, Colorado DOT

“ I think SHRP2 was a very important investment for the future and a key component of that was the Reliability part of SHRP2. One of the best things it gave us was the National Operations Center of Excellence—it really spawned the creation of that, which is a collaboration between ITE, AASHTO, and ITS America. That center helped capture the knowledge coming out of the SHRP2 Reliability program and put it in a form that’s more consumable for those who operate the system day-to-day.”



—Jeff Paniati, Executive Director, Institute of Transportation Engineers
Former Executive Director, FHWA

“ A few SHRP2 products really supported us. The Guide to Organizing Transportation Agencies to Advance Systems Operations and Management product helped support the development of our traffic operations program, our new division. We used the Capability Maturity Model self-assessment to help us analyze where we’re at as an agency and come up with some action items to help push us forward and develop a TSMO program plan. The Traffic Incident Management product also really helped us—that training created great relationships and partnerships all across Tennessee.”



—Brad Freeze, Director of the Traffic Operations Division, Tennessee DOT

“ Washington State has been fortunate enough to have received implementation support for eight different SHRP2 Reliability products, such as the Regional Operations Forum, Capability Maturity Model, the Reliability tools, Traffic Incident Management, and several others. To summarize what those products meant to us as an agency—they created a conversation of innovation for us, to look at what’s next for us, which may not have happened without SHRP2 products. It set very clear focus areas for us. We have to have TSMO be part of us—not champion-driven, but fully integrated. The other part is making sure we think of TSMO proactively, and not reactively.”



—Monica Harwood Duncan, Statewide Traffic Operations Engineer, Washington State DOT

“ SHRP2 has helped transportation agencies develop their TSMO programs and elevate their level of performance in providing safe, reliable, multimodal transportation networks. For example, we developed analytical tools that measure and forecast reliability as a key driver in making investment decisions. We also developed more partnerships to help clear traffic incidents more quickly, improving safety for motorists, emergency responders and our workers.”



— Scott Marler, Director, Iowa DOT

“ I think it’s so important that as practitioners we continue to support the need for research. I worked with the Transportation Research Board on the development of the Reliability tools that came out of SHRP2. Those tools were primarily focused on operations. One of the most successful tools and one of the most important approaches we’ve developed is the Capability Maturity Model. It allows practitioners to answer a series of questions to see where they fall in a level of maturity in operations. We grade ourselves harder than others would and we’re our own worst critic. But it’s a healthy way to learn because once you go through that process, it starts to show you what the benefits will be to a transportation system if you make some changes.”



—Carlos Braceras, Executive Director, Utah DOT

“ The most important thing any State can do is look at the tools available. SHRP2 created this whole suite of tools, like those Reliability tools, and I would encourage everyone to learn what those tools are and then figure out a plan to incorporate some. I’ve been involved in SHRP2 since its very first meeting and while there were lots of really difficult decisions going through the research projects, it’s been so rewarding to watch States pick up different products and find what works for them.”



—Kirk Steudle, former Director, Michigan DOT

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Additional information can also be found at:

AASHTO SHRP2 Reliability page at <http://shrp2.transportation.org/Pages/Reliability.aspx>

FHWA SHRP2 Reliability site at <https://ops.fhwa.dot.gov/shrp2/index.htm>