SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

Performance Specifications for Rapid Renewal (R07)

Performance specifications to speed construction, reduce oversight, and encourage innovative approaches



Challenge

Conventional approaches to highway construction use prescriptive requirements that place the burden on owners to design, specify, and control the work. These requirements often hinder the innovation needed to deliver projects faster or find methods that minimize disruption. Performance specifications that emphasize desired results are needed to fully equip the contracting industry to provide creative solutions that result in faster project delivery, minimal disruption, and greater durability.

Solution

To help transportation agencies develop and implement performance specifications, SHRP2 created model performance specifications for various project types (pavements, geotechnical, bridges, etc.) and project delivery methods (design-bid-build, design-build, design-build-warranty, and design-build-operate-maintain). These specifications address issues related to project selection, specification development, procurement, and various other cultural and organizational changes that are necessary to achieve desired performance. The benefits of clarifying the desired performance of roads and bridges include: accelerated construction, greater control and ingenuity by construction contractors in deciding how to build, reduction of costly construction oversight, and more effective uses of construction management resources. This product provides owner agencies with the tools to reduce claims and inspection costs, and accelerate construction.

The product suite specifically includes a two-volume guide to writing specifications with a section targeted to the needs of executives, and a “how to” section for specification writers. Also included are guide specifications in the areas of Hot-Mix Asphalt and Portland Cement Concrete Pavement, concrete bridge deck, embankment/pavement foundations, other geotechnical application areas, work zone management, and quality management that can be used as templates.

Benefits

Specifying performance goals for rapid construction projects before work begins can help reduce costly oversight, and allow contractors to exercise ingenuity and apply resources more efficiently. This product suite and guide gives contractors and owner agencies the tools to reduce claims and inspection costs, further accelerate construction, and improve project quality.

The Implementation Assistance Program

Implementation assistance is available to help State departments of transportation (DOTs), metropolitan planning organizations (MPOs), and other interested organizations deploy SHRP2 Solutions. A range of opportunities is available to raise awareness of SHRP2 Solutions and to encourage early adoption of these products. Application periods are offered approximately twice per year. Each product selected for implementation assistance has the potential to deliver more efficient, cost-effective programs to meet the complex challenges facing transportation today.

Save Lives

Determining project goals before construction begins leads to streamlined, faster construction and reduced worker and motorist exposure to construction zone hazards.

Save Money

This solution accelerates project delivery while preventing costly oversight and encouraging the efficient application of resources, which reduces overall project costs.

Save Time

The efficient application of resources results in reduced claims and inspection costs that accelerate construction while improving quality, helping agencies deliver projects on time and on budget.

RENEWAL

One of four SHRP2 focus areas, Renewal products help transportation organizations rapidly build and restore highway infrastructure that lasts longer while minimizing user disruption and delay.

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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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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.

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