SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

NDToolbox (R06)

Advances in high-speed nondestructive testing procedures for both design evaluation and construction inspection to reopen facilities faster



Challenge

As highway agencies strive to meet public demands to deliver durable and needed infrastructure faster and with limited resources, they need to be certain that their testing procedures are thorough, reliable, and fast. Existing nondestructive testing techniques need to evolve to keep pace with increasing demand for improved facilities with minimal construction-related delays.

Solution

Nondestructive testing (NDT) techniques developed through SHRP2 advance the state of practice in seven rapid renewal applications to enable inspection of existing and newly-constructed roads, bridge decks, and tunnels. These techniques result in quicker reopening times, and have shown significant benefits in field testing, including shorter inspection times, cost savings, earlier identification of deterioration and wear on bridge decks and pavements, and more efficient tunnel inspections.

This product provides decision makers with the information to ensure thorough, reliable, and safe inspection to achieve long-term performance and maximum service life of infrastructure. NDT contributes to faster, more efficient processes for state DOTs and local transportation agencies. The ability to reopen expanded or rehabilitated facilities faster reduces traffic maintenance costs, while the preventative maintenance approach identifies problems before they require extensive repairs. By using NDT techniques, repairs are completed faster, more safely, and with minimal impact on motorists.

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

Save Money

Save Time

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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