Preservation Guidelines for High-Volume Roadways

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Renewal Focus Area

Develop design and construction methods that cause minimal disruption to the traveling public and produce long-lived facilities to renew the aging highway infrastructure.

Products address:
Bridges, nondestructive testing techniques, pavements, project delivery, utilities, and railroads.

Benefits:
• Rapidly installed, longer-lasting facilities that require less maintenance
• Reduced cost through rapid interventions that extend service life of original assets and streamline project planning
• Shorter construction times lead to less overall congestion
• Improved safety through shorter work zone exposure
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SHRP 2 R26—Preservation Approaches for High Traffic Volume (HTV) Roadways

• State of the practice
  • Comprehensive highway agency survey
  • Detailed literature review
  • Factors influencing treatment selection
    • Performance attributes
    • Constructability issues
• Treatment selection process
  • Treatment feasibility matrixes
  • Cost-effectiveness analysis
  • Treatment decision matrix
SHRP 2 R26 Products

Final Report

Guidelines Document
Pavement Preservation Guide – The Benefits

• Smarter selection of pavement options for high-traffic volume roadways
• Save DOTs money by delaying the need for and reducing the frequency of more costly major rehabilitation
• Reduce risk through a more targeted treatment selection process
• Improve safety through shorter-duration maintenance and rehabilitation
• Communicate and promote the value of the guidelines to states (and local governments)
• Provide technical assistance to early adopters and champions
• Develop a Technical Support Toolkit to support ongoing implementation efforts
• Host product demonstrations
• Conduct training
11 - Lead Adopter Incentives ($120,000)
• Funds for early adopters to offset implementation cost and mitigate risks
• Recipients required to provide specific deliverables designed to further refine the product

3 User Incentives ($75,000)
• Used to conduct internal assessments, build capacity, implement system process changes, organize peer exchanges, or offset other implementation costs
Kentucky’s Approach

• Opportunity to *expand program through studying a variety of techniques.*

• Using **SHRP2 matrix** (ADT, distress number, etc) and **pavement management database**, to identify possible candidate segments

• Currently **assessing different sites** (different pavement conditions)

• Will analyze skid, IRI, cracking, rutting, and other distresses
Pennsylvania’s Approach

• **Test several treatments**
  – Polymer modified Thin Overlays
  – Flexible Micro-Surfacing
  – Asphalt Rubber Gap-Graded Overlay

• **Desired outcome:**
  – Improve the performance of preservation treatments
  – Keep good roads good and make them last longer
  – Reduce traffic disruption due to construction
  – Improve safety
  – Increase smoothness
What’s Your Role?

• Apply for the next round of implementation assistance
  – 2nd round webinars July 18-26
  – Perf Specs, Railroad-DOT issues/strategies, managing risk
• Become a champion or lead state for the products that fit your program
• Identify key technical stakeholders and advocates within your states
• Carry the message back to your colleagues and peers
• Provide panel members for upcoming Implementation Planning Workshops
• Participate in technical transfer opportunities to help implement products
Pavement Preservation Guide

Final report: www.trb.org/Finance/Bookstore.aspx

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SHRP2 Research:
www.TRB.org/SHRP2

SHRP2 at AASHTO:
http://SHRP2.transportation.org
## R26 Implementation Assistance Program: State Summary

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<thead>
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<th>Assistance Opportunity</th>
<th>Projects</th>
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*Massachusetts proposed one large project with four R26 technologies.*