



Preservation Guidelines for High-Volume Roadways

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TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES



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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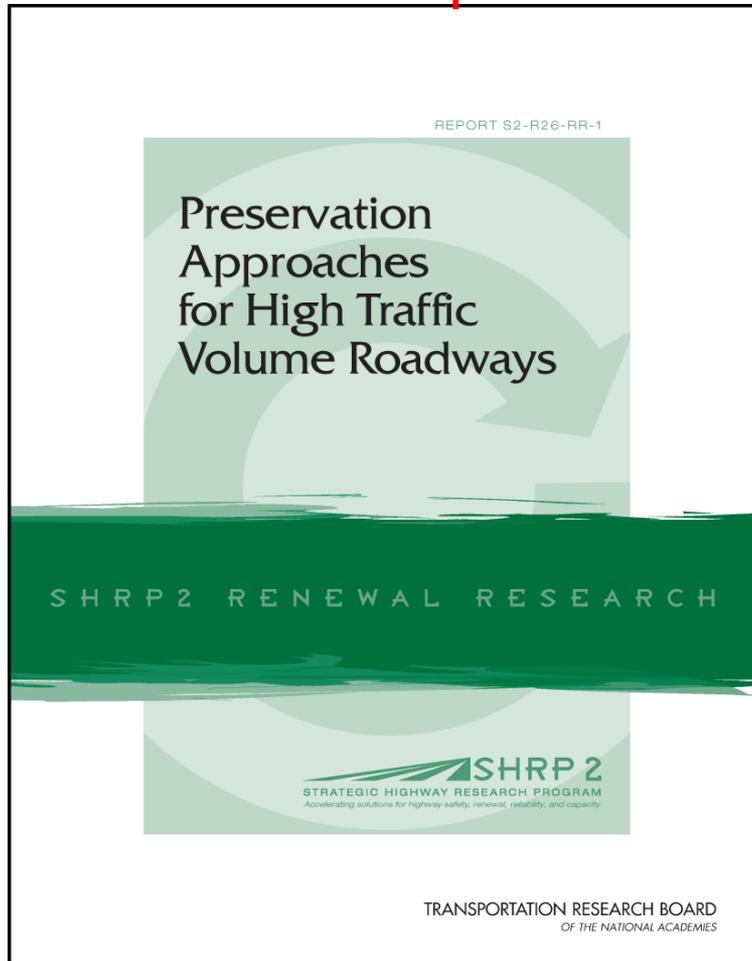
SHRP 2 R26—Preservation Approaches for High Traffic Volume (HTV) Roadways

- 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

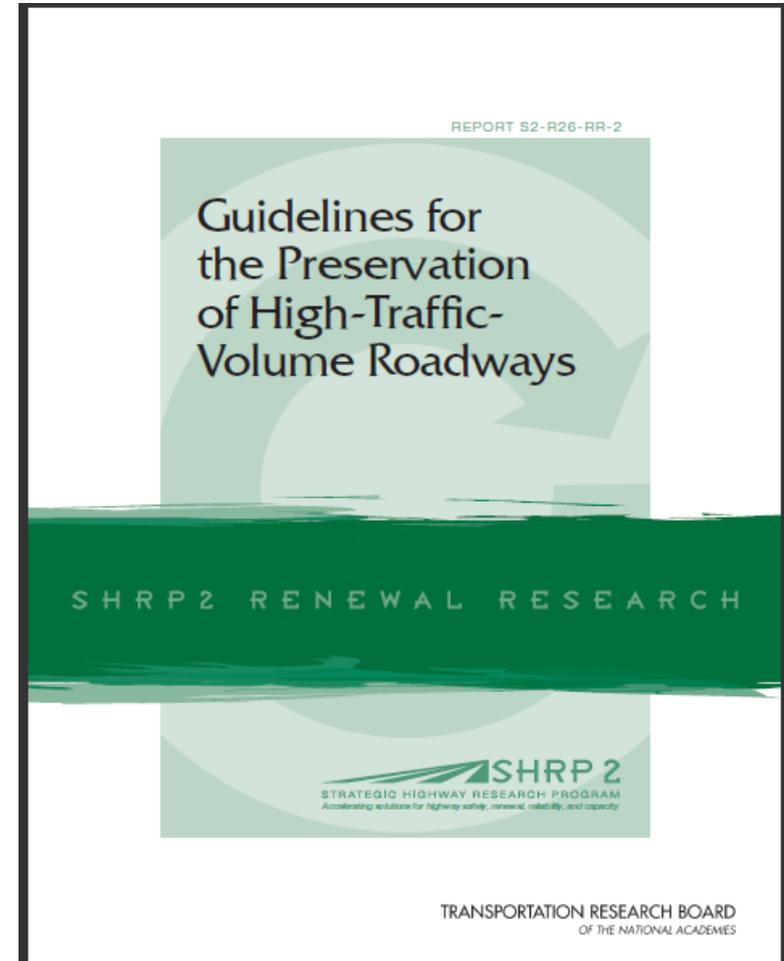


SHRP 2 R26 Products

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

Pavement Preservation Guide – Implementation

- 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





Implementation Assistance Program for R26



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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Questions?

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SHRP2 at AASHTO:
<http://SHRP2.transportation.org>



R26 Implementation Assistance Program: State Summary

R26 - Preservation on High-Volume Roadways

Your guide to the best options for extending pavement life.

State	Entity	Assistance Opportunity	Projects
AZ	DOT	Lead Adopter	4
DE	DOT	Lead Adopter	2
DC	DOT	Lead Adopter	4
GA	DOT	Lead Adopter	3
KY	KYTC	Lead Adopter	4
ME	DOT	User Incentive	3
MA	DOT	Lead Adopter	4*
MN	DOT/MnRoad	Lead Adopter	1
MO	DOT	Lead Adopter	4
PA	DOT	Lead Adopter	3
RI	DOT	Lead Adopter	4
TN	DOT	User Incentive	4
WA	DOT	Lead Adopter	4
WI	DOT	User Incentive	4

*Massachusetts proposed one large project with four R26 technologies.