



SHRP2 Implementation Advisory  
Committee - June 25, 2014

# SHRP2 Renewal Implementation Update

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U.S. Department of Transportation  
Federal Highway Administration

AMERICAN ASSOCIATION OF  
STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

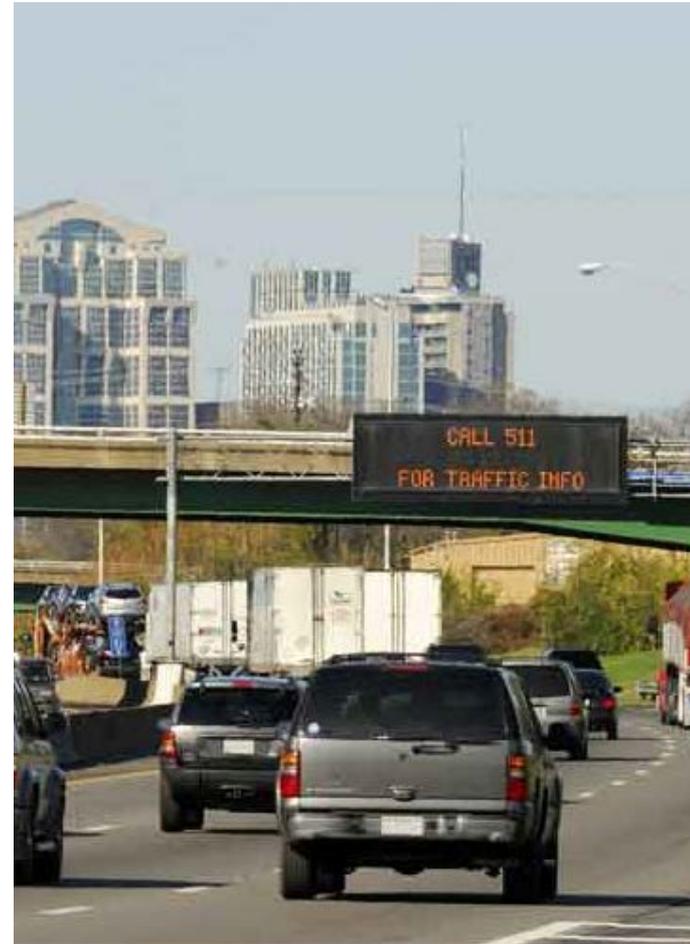
**AASHTO**  
THE VOICE OF TRANSPORTATION

TRANSPORTATION RESEARCH BOARD  
OF THE NATIONAL ACADEMIES



# What we will cover

- Renewal Program Update
- Renewal Implementation Projects
- Implementation Assistance Program Round 4 Products



# SHRP2 Moving Forward

## Renewal Focus Area Update

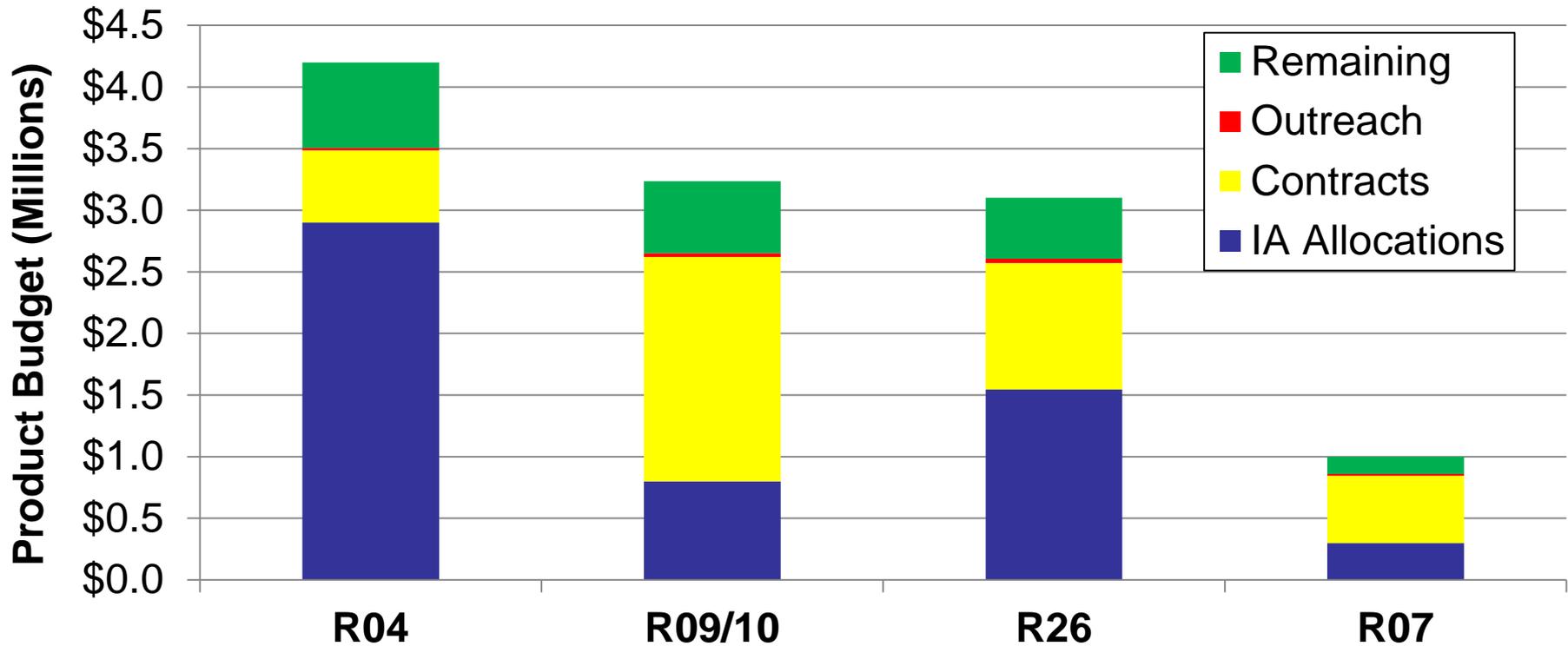


# Renewal Focus Area Snapshot

- 25 products in 5 key categories (Pavements, Structures, Project Delivery, Non Destructive Testing, Utilities/Railroads)
- \$40.2 million budget for implementation to be used over a 4-6 year time period
- Completed implementation plans for 19 products
- 10 Renewal products featured in Round 1-3 of Implementation Assistance
- 6 additional products will be featured in Round 4
- All 25 products are being advanced at this time

# Product Funding

## Products Featured in IAP Rounds 1-3



IAP Round:

RD-1

RD-1/2 (R09)  
RD-1 (R10)

RD-1

RD-2

IA funding:

\$2.9M (allocations)

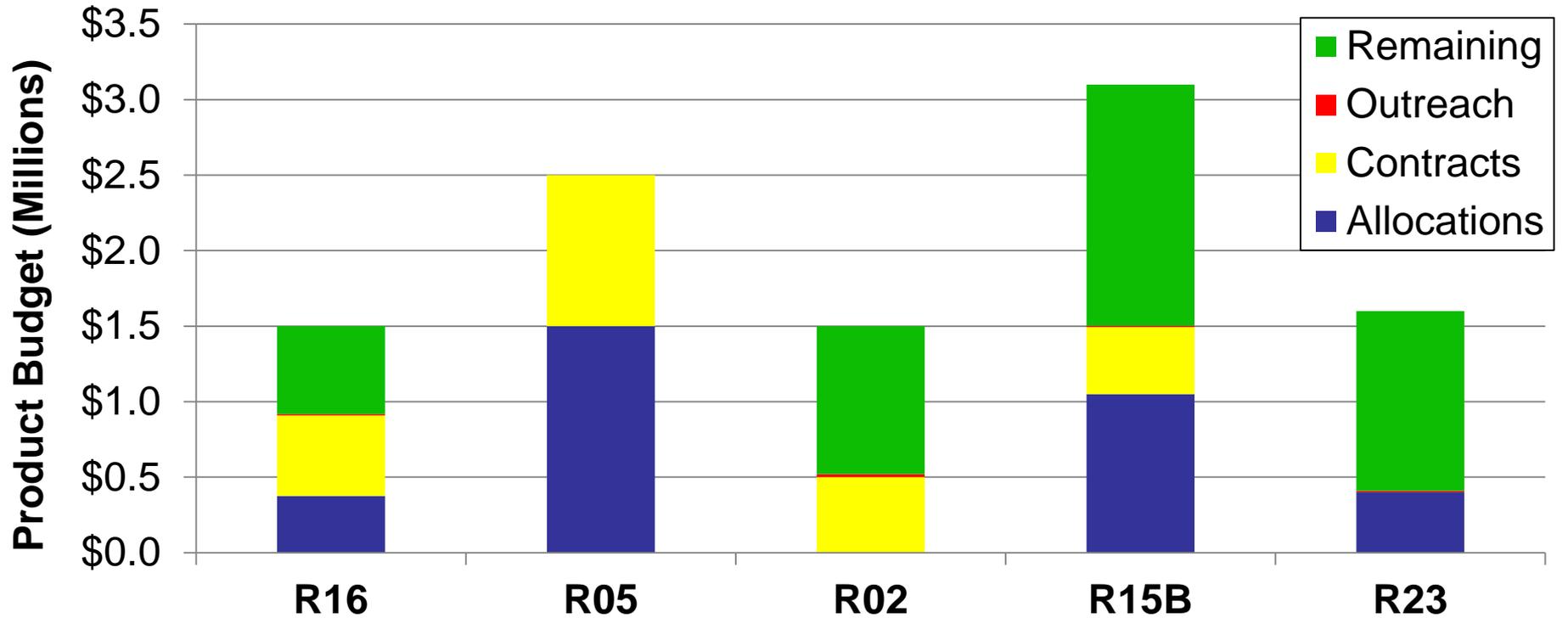
\$800K (allocations)  
\$50K (in-kind)

\$1.6M (allocations)

\$300K (allocations)

# Product Funding - Continued

## Products Featured in IAP Rounds 1-3



IAP Round:

RD-2

RD-3

RD-3

RD-3

RD-3

IA Funding:

\$375K (allocations)

\$1.5M (allocations)

\$500K (in-kind)

\$ 1.1M (allocations)

\$400K (allocations)  
\$100K (in-kind)

# SHRP2 Moving Forward

## Renewal Implementation Projects



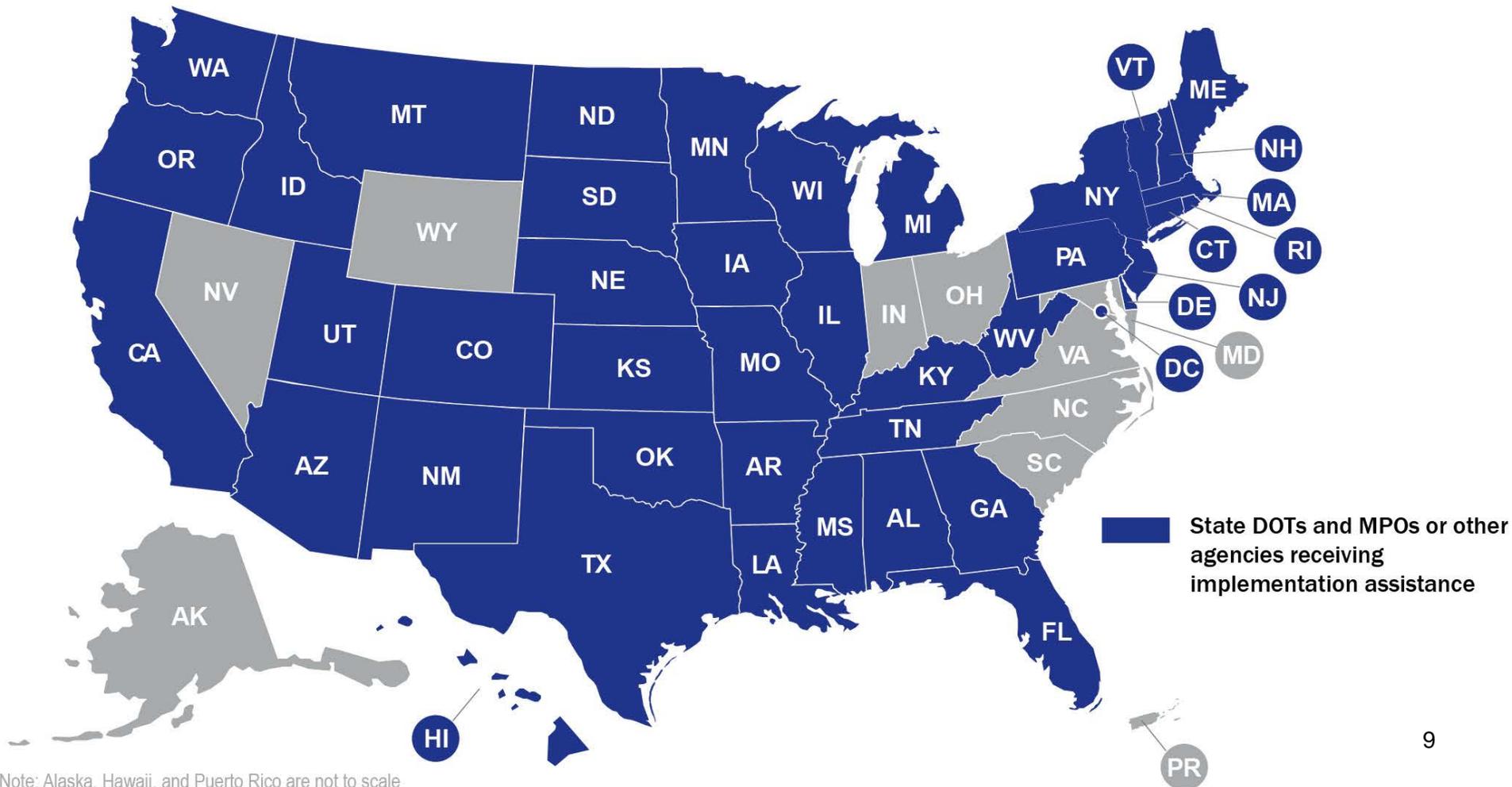
# Renewal Projects Underway

- 41 states engaged
- Implementing 10 Renewal products
  - First round - **4 renewal products**
  - Second round - **3 renewal products**
  - Third round - **4 renewal products**
- 116 Renewal Projects are in process



# Renewal Focus Area

*Transportation Agencies Begin Implementing SHRP2  
Rounds 1,2, and 3 Products – FHWA/AASHTO Implementation Assistance Program*



Note: Alaska, Hawaii, and Puerto Rico are not to scale

# Innovative Bridge Designs – R04

## Activities:

- 7 states (including the Gila River Indian Community) receiving IAP funds
- Most of the construction will be complete 2014
- Regular teleconferences to share information
- Showcases scheduled in Missouri and Arizona with two others in planning
- Four peer exchanges planned for 2015
- PBES workshop at 2015 TRB meeting

# Innovative Bridge Designs

## Project Details for a few of the R04 Projects:

### Rhode Island – East Providence – Interstate On-Ramp

- Current bridge in need of replacement
- Closure must be less than 30 days
- Total cost \$1.9 million

### Wisconsin – Road Over I-39/90

- ABC being applied to pier construction
- Total cost \$6.9 million
- Precast columns and caps on cast-in-place footings

### Kentucky – Knox County, Stewarts Creek Bridge

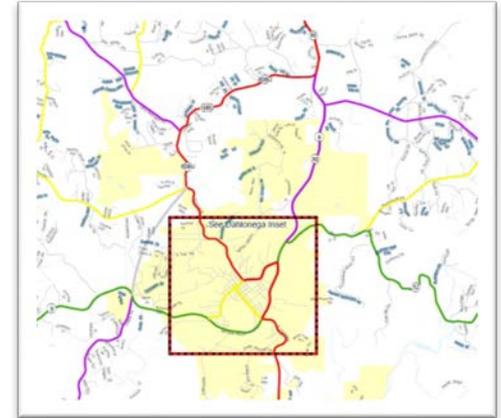
- 3 weeks max closure; project duration 38 days
- A+B bidding;
- Total cost \$700,000
- two bridges; galvanized and painted steel superstructure



Rhode Island

# Pavement Preservation on High-Volume Roadways – R26

- 13 states and DC engaged
- Quarterly conference calls
- Have created a 13 state users group that routinely meets
- Workshop in **Alabama** at NCAT
- **Rhode Island** showcase, July
- Marketing materials and pocket guide under development



Georgia - SR 60  
Mill and Thin  
HMA Overlay  
Test Site  
Location

# Precast Concrete Pavement Technology – R05



- Five lead adopters
- Pilot workshops in **Hawaii, Nevada**
- Presentations to **Delaware DOT**, Northeast Pavement Preservation Partnership
- TRB Committee Webinars in planning stage
- Technical assistance being provided to additional states

# Managing Risk in Rapid Renewal Projects – R09

- This product exemplifies full use of the various levels of IAP engagement
- Two pilots in **Florida** and **Georgia** were completed Round 1
- 4 Lead Adopters in Round 2, including Florida again
- Example of some of the Lead Adopters include:
  - 1. Florida DOT:** Train the facilitator session; Florida to acquire risk analysis/management software, update policies and procedures; conduct workshops
  - 2. Oregon DOT:** Workshop and technical assistance; I-5 South Jefferson interchange with US20
- Round 4 will feature User Incentives

# Innovative Management Strategies for Complex Projects – R10

- Five Lead Adopters in Round 1. Some examples include:
  - **Georgia DOT**: Northwest Corridor project; 30 miles of managed lanes on I-75 and I-575; **largest project in state history**; demonstration workshop held and report developed
  - **Michigan DOT**: I-94 and I-75 projects; workshop, project management plan developed for I-94; additional workshops to assess incorporating into standard MDOT project development and management practices

*“Being a part of this SHRP 2 Implementation Project will strengthen our ability to successfully manage complex projects like the Northwest Corridor in the future. Based on our managed lane system plan, we are sure to need the best tools available. “*

Keith Golden, Georgia DOT Commissioner

# More Renewal Products



## **Additional Products Offered in Rounds 1 – 3**

- GeoTechTools (R02)**
- Performance Specifications (R07)**
- Identification of Utility Conflicts and Solutions (R15B)**
- Railroad-DOT Mitigation Strategies (R16)**
- Pavement Renewal Solutions (R23)**

# SHRP2 Moving Forward

## Renewal in Round 4



# Implementation Assistance For Round 4 Products

- **Nondestructive Testing for Concrete Bridge Decks (R06A )**
- **Technologies to Enhance Quality Control on Asphalt Pavements (R06C)**
- **Tools to Improve PCC Pavement Smoothness During Construction (R06E)**
- **Nondestructive Testing for Tunnel Linings (R06G)**
- **Managing Risk in Rapid Renewal Projects (R09)**
- **Project Management Strategies for Complex Projects (R10)**
- **Service Life Design for Bridges (R19A)**
- **New Composite Pavement Systems (R21)**



# Round 4 Renewal Opportunities

<b><u>SHRP2 Solution</u></b>	<b><u>Proof of Concept</u></b>	<b><u>Lead Adopter</u></b>	<b><u>User Incentive</u></b>
<b>Technologies to Enhance Quality Control on Asphalt Pavements (R06C)</b>	2 for GPR, (≤\$50K) + in-kind	5 for Pave-IR, (≤\$60K in-kind)	
<b>Tools to Improve PCC Pavement Smoothness During Construction (R06E)</b>		5-10 (≤\$60K in-kind)	
<b>New Composite Pavement Systems (R21)</b>		5 (\$300K)	
<b>Nondestructive Testing for Concrete Bridge Decks (R06A)</b>		8 (≤\$100K)	
<b>Nondestructive Testing for Tunnel Linings (R06G)</b>	2 (≤\$250K)		
<b>Service Life Design for Bridges (R19A)</b>		4 (≤\$150K)	
<b>Managing Risk in Rapid Renewal Projects (R09)</b>			8 (≤\$30K)
<b>Project Management Strategies for Complex Projects (R10)</b>			8 (≤\$30K)

# Questions?



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