SHRP2 – Contribution to Accelerated Bridge Construction

Matthew DeMarco
SHRP2 Renewal Program Engineer
FHWA Resource Center

Patricia Bush
Program Manager for Bridges and Structures
AASHTO
SHRP2 Delivery Status

- $232M in research under SAFETEA-LU
- $169M for implementation under MAP-21
- Delivered as **direct funding** and **technical assistance**
- Four IAP rounds delivered thus far, with two coming in 2015
150,000 Bridges Need Repair – SHRP2 is on the Job

Innovative Bridge Designs (R04)
Service Life for Bridges (R19A)
Implementing Eco-Logical (C06)
Minimizing Risk in Rapid Renewal (R09)
GeoTech Tools (R02)
Railroad-DOT Mitigation Strategies (R16)
Utilities Bundle (R15B, R01 A, R01 B)

Innovative Bridge Designs (R04)
Minimizing Risk in Rapid Renewal (R09)
Performance Specifications for Rapid Renewal (R07)
Project Management Strategies for Complex Projects (R10)
Railroad-DOT Mitigation Strategies (R16)

Nondestructive Testing for Bridges and Tunnels (R06 A/G)
Service Life Design for Bridges (R19A)
Who Are We?

RESEARCH – TRB

IMPLEMENTATION – FHWA/AASHTO

SUBJECT MATTER EXPERTS / LOGISTICS / MARKETING – CH2M Hill

TECHNICAL SME’s – Other Subconsultants
Implementation Assistance Program

21 IAP Field Projects Underway

- NDT for Bridge Decks
- PBES/ABC
- Service Life Design

United States map with stars indicating projects in different states.
30 IAP Bridge-Related Projects Underway

- NDT for Bridge Decks
- PBES/ABC
- Service Life Design
- Other Bridge-Related
20+ IAP opportunities coming in 2015

- NDT for Bridge Decks
- PBES/ABC
- Service Life Design
- Other Bridge-Related
Upcoming SHRP2

SHRP2 Implementation Assistance Program
SHRP2 Implementation Assistance Program

Proof-of-Concept Pilot

Lead Adopter

User Incentive
IAP Projects In Action
Innovative Bridge Design for Rapid Renewal (R04)

• Toolkit
  – Standard design plans for all bridge components
  – Design examples
  – Videos and peer exchange information

• Implementation States
  – Arizona, California, Iowa, Kentucky, Maine, Michigan, Missouri, New York, Rhode Island and Wisconsin
• Provides a convenient and efficient way to identify and apply geotechnical solutions
• 46 technologies, design issues and other variables
• Photographs, case histories and examples

• 14 States involved in implementation projects
Service Life Design for Bridges (R19A)

- Design Methods and Guidance for Service Life Design
  - Environmental factors, materials, new technologies for longer bridge life
  - Design examples
  - Training and webinars

- Iowa, Oregon, Pennsylvania, Virginia and Central Federal Lands (Hawaii)
• Model performance specifications in 5 categories
• 23 different specifications
  – Design-bid-build, design-build, design-build-warranty and design-build-operate-maintain
• Decision Tree and Writers Guide offer a step-by-step how to for developing the specifications
• States implementing are Alabama, Maine, Missouri, Pennsylvania and Vermont
Non-Destructive Testing Technologies (R06A and G)

- Decks (R06A)
  - Web based tool – selecting appropriate testing for specific applications
  - Identifies tests procedures, protocols and available standards
  - Eight states currently implementing

- Tunnels (R06B)
  - Web based tool – information on methods for mapping voids, debonding and other defects
  - Users manual and guide for evaluating the best NDT for the situation
  - Implemented by Colorado and Pennsylvania
Implementation Assistance
Rounds 6 and 7 Schedule

**Round 6**

- Product Webinars 5/15
- IAP Applications 6/15-7/15
- Selections Announced 8/15

**Round 7**

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Round 6 Products

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- Information on products and webinars for round 6 available??
For More SHRP2 Information

Matthew DeMarco
FHWA-OTS SHRP2 Engineer
(720) 963-3520
Matthew.DeMarco@dot.gov

Patricia Bush
AASHTO Structures Lead
(202) 624-8181
PBush@AASHTO.org

Simply Google “SHRP2”