AASHTO TSP·2
Bridge Preservation

Steve Varnedoe, P.E.
Ed Welch, P. E.
National Center for Pavement Preservation
Northeast Bridge Preservation Partnership
Hartford, Conn.
September 28, 2010
Discussion Topics

- Need for a Bridge Preservation Focus
- TSP·2 Bridge Preservation Project Tasks
- Establishing Regional Partnerships
- Sustaining successful partnerships
Welcome from the NCPP Team!

The National Center for Pavement Preservation:

- Established in 2003
- Affiliated with the MSU College of Engineering
- Quasi-Governmental, Non-Profit Enterprise
- Focused on Outreach, Education, and Research in the area of System Preservation
- Experienced Staff of Practitioners with extensive agency backgrounds
- Principal Clients include: AASHTO, FHWA, NCHRP, State and Local Agencies, Industry

AASHTO
The Voice of Transportation
AASHTO TSP·2 Oversight Panel

- John Barton, TXDOT, Chair
- Roy Rissky, KDOT, Mississippi Valley Rep.
- Peter Weykamp, NYSDOT, NASHTO – Rep.
- Vacant, WASHTO Rep.
- Bruce Johnson, ODOT, Subcommittee on Bridges & Structures
- Judith Corley-Lay, NCDOT, Subcommittee on Design-Joint Technical Committee on Pavements
- Colin Franco, RIDOT, Subcommittee on Materials
- Leonard Evans, ODOT, Subcommittee on Transportation Asset Management
- Butch Wlaschin, FHWA Liaison
- Mark Bush, AASHTO Program Manager
AASHTO TSP·2 Background

- Approved By AASHTO BOD 2005
- Contract with NCPP Executed 2006
- Three Phases- Multiyear Implementation
- Funded Through Voluntary State Contributions of $20,000 per Year
  - Approved for 100% Federal SP& R Funds
  - Separate Pavement and Bridge Technical Services and Facilitated Regional Partnerships
  - Travel costs covered for 2 State Reps to each
Need for a Bridge Preservation Focus

- Aging Infrastructure
  - Median bridge age approaching 45 years
  - Historical, “Worst First” approach will not address growing needs
  - Decline in the number of deficient bridges reaching plateau

- Asset Management
  - Network vs. individual bridges (project)
  - Management of bridges vs. BMS
  - Bridge Preservation is a key strategy
Need for a Bridge Preservation Focus

- Declining Revenues
  - Federal and State level reductions
  - Competition for resources
  - Influenced by economy and fuel efficiency
- Congress
  - Calls for increased accountability
  - Mandated performance measures and targets
  - Current focus on reducing deficient bridges
Need for a focus on Bridge Preservation

- Traditional or “Worst First” approach
  - Needs are prioritized based on “worst bridges”
  - Good bridges are generally ignored
  - Corrective maintenance and repairs based on inspections
  - Needs grow, network conditions decline
  - Most agencies follow this approach due to HBP formula

- Preservation approach
  - Keeps good bridges in good condition
  - Balanced program
  - Applied asset mgmt. -Engineering, Business, Economics
  - Checks deterioration and reverses network decline
  - Eligible for HBP funds, incentive needed
Need for a Bridge Preservation Focus

➢ Support and expand on the activities of the AASHTO SCOM and SCOBS
➢ Engage a broader group of state practitioners, industry and academics
➢ Meet critical need for Technology Transfer
➢ Enhance coordination and avoid duplication of effort by bridge groups
➢ Provide a “one stop shop” for Bridge Preservation
TSP·2 Project Tasks

- Provide a Registered Professional Engineer with Bridge Maintenance and Preservation Expertise to Serve as a Subject Matter Expert (SME), Oversee Technical Transfer and Support Bridge Preservation Regional Groups

- Integration of the TSP·2 Bridge Preservation Program with Existing TSP·2 Pavement Program, and Website with Research and Resources
TSP·2 Project Tasks

- Coordination of Regional Partnerships to identify and develop research needs and topics
- Explore and Facilitate Telecommunication and Training Opportunities, Information Exchange, Best Practices and Methods Dissemination
- TSP·2 Oversight Panel Support
TSP·2 Bridge Preservation Priorities – Year 1

- Establish Regional Bridge Preservation Partnerships and conduct initial meetings
- Upgrade the TSP·2 Website to incorporate bridge preservation
- Provide Technical assistance to member agencies
Establishing Regional Partnerships
Partnerships and Meeting Schedule for 2010

- Southeast - April 27 - 29, Orlando
- Northeast - September 28 - 30, Hartford
- Midwest - October 12 - 14, Detroit
- Western - Nov. 30 - Dec. 2, Sacramento
Partnership Start-Up Process

- Identify regional champions
- Conduct conference calls to generate interest and awareness
- Develop Regional Directories
- Identify host state for initial meeting
- Agenda development (subcommittee)
- Initiate outreach - flyers, invitational letters, phone calls, emails
- Meeting logistics and invitational travel
Bridge Preservation Hot Topics

- Definition of Bridge Preservation
- Performance Measurement
- Funding Eligibility
- Treatment timing and effectiveness
- Transition to AASHTO CoRe Element Inspection process (condition based)
- Communicating the benefits of bridge preservation
- Training (All levels)
- Research
- Testing, evaluating and deploying new materials
Partnership Operations

- Governance
  - Adoption of By-laws
  - Election of Steering Committee and Officers
- AASHTO funds participating member agency travel, lodging, meals for 2 participants
- Vendor and other participant registrations fund additional activities and funds remain in the regional partnership

AASHTO
The Voice of Transportation

TSP 2
Transportation System Preservation Technical Services Program
SEBPP Meeting-Orlando

- Excellent attendance
  - Nearly 90 participants
  - 12 of 13 Southeast states participated
- Strong Industry support - 10 Vendors
- Adopted By-laws
- Elected Steering Committee and Officers
- Developed a Work Plan
SEBPP Action Plan 2010-2011

- Identify liaisons and establish linkage to other Bridge Preservation Groups
- Further Bridge Preservation research - advance, follow, support, foster volunteers
- Advance the development of Bridge Preservation performance measures
- Work with industry and agencies to increase uniformity of specifications
- Support development of a Bridge Preservation treatment/strategy toolbox
- Bridge Preservation Advocacy - marketing/education
VDOT Bridge Management Practices

Home › VDOT Bridge Management Practices

Speakers: Anwar Ahmad
Organization:

Anwar Ahmad
Virginia Department of Transportation

SEBPP Workshop - Orlando, Florida
VDOT Bridge Management Practices
Anwar S. Ahmad, P.E.
Assistant State Bridge Engineer
April 28, 2010

*If the video is stuttering, pause it and wait for the blue video bar to load a bit more, then press play again to resume watching
“We are already late; we don’t have time to stop for gas.”
Sustaining Successful Partnerships

- Recognize and communicate the benefits and opportunities afforded by this unique agency-industry-academic forum
- Ensure that the right agency staff attend and participate
  - Participants should be able to influence agency processes and programs and must be a champion of bridge preservation
- Develop dynamic action plans with deliverables of value to the region-
  - Requires committed leadership and participation
  - Must be able to demonstrate value added by the program
Sustaining Successful Partnerships

- Follow through and follow up
  - Scheduled conference calls or webinars
  - Engagement of all members in work activities
- Ensure Financial sustainability
  - Program dependent upon state voluntary contributions
  - Active industry, academic and local government participation can significantly enhance partnership capabilities
Are we Preaching to the Choir?
Questions?

Ed Welch
TSP 2
Bridge Preservation Engineer
(603) 224-5792 Work
(603) 545-9620 Mobile
(603) 224-5792 Home
welch.ed@egr.msu.edu
eswelch@comcast.net
356 Mountain Rd
Concord, NH 03301

Steve Varnedoe, P.E.
Associate Director
National Center for Pavement Preservation
2857 Jolly Road
Okemos, Michigan 48864
(517)432-8220 • Fax: (517)432-8223
Cell: 919-812-5278
email: varnedoe@egr.msu.edu
www.pavementpreservation.org
Questions?

www.tsp2.org