



# 2015 Update for AASHTO TSP2 NBPP Coatings Group Activities

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# NBPP Coatings Group History & Evolution

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- Presentation of “FDOT New Directions in Steel Corrosion Protection” at 2012 SEBPP Annual Meeting
- SEBPP Coatings Group (2012 thru 2014)
  - A Rational Approach for Planning Bridge Repainting Projects Report
  - Report Calculator
  - SEBPP Survey of Best Practices for Coating Structural Steel
- NBPP Coating Group (2014)

# NBPP Coatings Group Make-Up

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- DOT General Bridge Practitioners
- Consultants
- Suppliers
- NTPEP Members
- AASHTO SCOBS Members
- AASHTO SCOM Members
- TRB Members
- Contractors?

# NBPP Coatings Group Strategic Plan

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## **NBPP Steel Bridge Coatings Group Strategic Plan**

Updated: March 6, 2015

*“DRAFT”*



### **Executive Summary**

The Strategic Plan for the AASHTO TSP2 National Bridge Preservation Partnership (NBPP) Coatings Group is a guide to help NBPP Coatings Group members serve the needs of the highway bridge community by promoting the development of long term, cost effective recoating methods for the prevention and or mitigation of corrosion of steel bridge structures to protect their performance and extend their service life. This Strategic Plan will also serve as the focal point for:

1. Promote innovation and research in the development of high performance bridge coating systems.
2. Advance the state-of-the-art practices to maximize the service life of bridge coating systems.
3. Partner with groups such as, AASHTO: SCOBs, SCOM, SOM; TRB, NTPEP, FHWA, SSPC, NACE, NASA, Army Corp of Engineers, AREMA, NAVTEC, NAVFAC, and State and Local DOT agencies to: improve and promote effective prevention or mitigation of corrosion of steel bridge structure through recoating practices and to increase the longevity of steel bridge recoating protection systems.
4. Promote training and certification requirements for agency, contractor, supplier, and inspection personnel.
5. Facilitate the development of and promote the adherence to effective specifications for the application of steel bridge coating systems for both shop and field work.

The NBPP Coatings Group intends to use this plan to identify and prioritize Group activities, measure progress, and direct its resources and expertise in support of preserving the nation's bridge infrastructure. Effective steel protective coatings and other corrosion mitigation strategies will not only extend the service life of the coating systems but also the bridge superstructures they protect, which is the ultimate goal. The Group's Vision, Mission and key activities include, but are not limited to the following:

### **Vision**

To optimize prevention or mitigation of corrosion through bridge maintenance coatings by sharing and facilitating the exchange of best practices with bridge owners, industry, practitioners, and academia. This would include promoting research and innovation enabling the investigation and introduction of new, beneficial technologies.

- Vision
- Mission
- Goals
- Strategic Objectives
- Work Plan and Actions

# NBPP Coatings Group Activities & Pursuits

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- Domestic Scan “Bridge Recoating Best Practices”:
  - Selection of Project by AASHTO
  - Technical Endorsements:
    - i. AASHTO TSP-2 MWBPP
    - ii. AASHTO TSP-2 NEBPP
    - iii. AASHTO TSP-2 SEBPP
    - iv. AASHTO TSP-2 WBPP
    - v. AASHTO SCOBS T-9
    - vi. AASHTO SCOBS T-18
    - vii. AASHTO SCOM
    - viii. TRB

# Domestic Scan: “Bridge Recoating Best Practices”



AASHTO is soliciting topic proposals for a Calendar Year 2015 US Domestic Scan Program (NCHRP Panel 20-66A). Each selected scan topic will be investigated through site visits to three to six locations for approximately a two week period or less (type 1), by webinar, (type 2) peer exchange, or (type 3) conducted by a group of eight to 12 transportation professionals with expertise in the selected topic area. Proposed topics should meet the following criteria:

- Address an important and timely need for information by transportation agencies;
- Are of interest to a broad national spectrum of people and agencies;
- Are complex and also “hands-on,” meaning they lend themselves particularly well to exploration through on-site visits; and
- Are sufficiently focused that the tour participants are able to investigate and understand key issues in the limited time available on the tour.

Before submitting your proposal it is highly recommended that you read [What Makes a Good Scan Topic Proposal](http://www.domesticscan.org/what-makes-a-good-scan-topic-proposal) <http://www.domesticscan.org/what-makes-a-good-scan-topic-proposal>

This form is designed to collect the full length of your proposal. Sections requiring essays have unlimited space for you to use. Contact information has some limited text. **Use your TAB → key to advance to the area where you need to complete information.**

Proposals should be returned no later than **OCTOBER 15, 2014**.

**IMPORTANT NOTE on How to save your document:** LastNameFirst Initial. underscore\_Organization Acronym \_CY2015.

Saved Document Name Example: VitaleM\_AASHTO\_CY2015  
If you have more than one, add a number after first initial: VitaleM1\_AASHTO\_CY2015

#### Domestic Scan Proposal Contact Information

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Member Department	Florida	Telephone number	(850) 410-5691
AASHTO Committee	SCOBs T-9 and T-18, SCOM Bridge Technical Working Group, TSP2 National Bridge Preservation Partnership (NBPP) Coatings Group, NBPP (MWBPP, NEBPP, SEBPP and WBPP), and TRB Bridge Preservation Committee	Date of submission	10/6/2014

**Title of Proposed Scan:** Bridge Recoating Best Practices

**Problem Statement** (What topic is to be examined? What drives the need for the scan? Why now?)

As of December 2013, there were 607,751 bridges in the U.S. national bridge inventory, and 181,095 of those bridges have steel superstructures. Recoating existing steel bridges is a large and costly part of state transportation agency needs. Many agencies are dissatisfied with the service life of recoating projects, and are faced with significant challenges in balancing available resources with major rehabilitation, reconstruction and complete replacement needs due largely to corrosion. According to a study by NACE titled: “Corrosion Cost and Preventive Strategies”, the annual direct cost of corrosion for highway bridges is estimated to be \$6.43 billion

- Scan Objectives:
  - Find out which States have the best recoating programs and why
  - Determine best Specifications
  - Determine best Coating Systems
  - Determine best Practices
- According to AASHTO, funding will become available on October 1, 2015

# Recommendations for Domestic Scan Team Member Make-up

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- Representation for all 4 AASHTO TSP-2 Regional Partnerships
- NTPEP Members
- Consultants
- General Bridge Maintenance Practitioners
- Contractors?

# NBPP Coatings Group Activities & Pursuits

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- Global Issues with regard to coatings:
  - Engineering Evaluations
  - Surface Preparation
  - Coating Application
  - Contractor, CEI and Owner Qualifications
  - Specifications
  - Better Coating Systems for new construction and recoating projects
  - Institutional Courage



# NBPP Coatings Group Activities & Pursuits

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## COLLABORATION WITH OTHER AASHTO SUBCOMMITTEES AND INDUSTRY:

- AASHTO SCOBS T-9 Subcommittee for Bridge Preservation
- NTPEP
- TRB
- AASHTO SCOM
- SSPC
- NACE
- NSBA
- Academia
- Fabricators
- Contractors?

# NBPP Coatings Group Activities & Pursuits

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- Global Short Term Goals:
  - Better quality workmanship
  - Longer lasting Coatings
- Global Long Term Goals:
  - Implementation of High Performance Coating Systems
  - Long term maintenance cost reductions



# NBPP Coatings Group Team

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- Jeff Pouliotte, Florida DOT, Chair
- Wayne Senick, Termarust Technologies, Vice Chair
- Regis Doucette, CHLOR RID, Secretary
- Anwar Ahmad, FHWA
- Atiq Alvi, T. Y. Lin
- J. Peter Ault, Elzly Technology Corporation
- Mark Barnes, Washington DOT
- Graham Bettis, Texas DOT
- Charlie Brown, Maryland SHA
- Derrick Castle, Kentucky Transportation Center
- Aaron Dacey, North Carolina DOT
- Andy Doyle, Georgia DOT
- Wayne Fleming, Virginia DOT
- Ted Hopwood, Kentucky Transportation Center
- Brian Hunter, North Carolina DOT
- Kevin Irving, AZZ Galvanizing Services
- Bruce Johnson, Oregon DOT
- Bobby Meade, Kentucky Transportation Center
- Jeff Milton, Virginia DOT
- Ronald Mondor, Termarust Technologies
- Dan Muller, North Carolina DOT
- Thomas A Stephens, Baton Rouge Department of Public Works
- Paul Vinik, Florida DOT
- Ed Welch, TSP-2
- Jonathan Fischer, Florida DOT

# Questions?

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**1. Here are the Highlights from VDOT's Road & Bridge Spec and the attached preparation requirements for galv'd surfaces under a Special Provision.**

**“(d) Hold Point Inspections: The following hold point inspections shall be accomplished for all coating methods and all field surface preparation and coating applications performed. Before moving to the next phase of work each of the**

**moving to the next phase of work, each of the following activities shall be confirmed and documented by the Engineer as it applies to the work specified per plans or the contract on new and existing structures:**

1. Cleanliness of surfaces prior to surface preparation
2. Surface preparation and cleanliness prior to primer application
3. Full coat primer prior to intermediate stripe coat



3.

4. Intermediate stripe coat prior to full intermediate coat

5. Full coat intermediate prior to finish stripe coat

6. Stripe coat finish prior to full finish coat

7. Full finish coat inspection

confirmed and documented by the Engineer as it applies to the work specified per plans or the contract on new and existing structures:

1. Cleanliness of surfaces prior to surface preparation
1. Surface preparation and cleanliness prior to primer application
1. Full coat primer prior to intermediate stripe coat
1. Intermediate stripe coat prior to full intermediate coat
1. Full coat intermediate prior to finish stripe coat
1. Stripe coat finish prior to full finish coat

## 7 Full finish coat inspection

The Engineer shall verify each of the seven step hold point inspections by means of visual and instrumentation methods. The Contractor shall be responsible for documenting the completeness of the work. The Contractor shall employ a Paint Quality Control Officer to accompany the Engineer during all