

NSBA Steel Bridge Workshop



**Smarter.
Stronger.
Steel.**

June 22, 2023 | 9:30AM – 3:30PM (ET)

Virtual Via Zoom - RSVP with link below. NSBA will send zoom meeting info 3 days prior to the event for those who have RSVP'd

[CLICK HERE TO REGISTER!](#)

Cost: Free

Agenda (5 PDHs) - You must register and be present (virtually) for the entire workshop to receive pdh credit.

Start Time	Topic	Presenter
9:30 AM	Welcome & Opening Remarks	• Eric Yermack - NJDOT/AASHTO T-9 • Bill McEleney - on behalf of NSBA
9:40 AM	NSBA Uncoated Weathering Steel Reference Guide	• Jennifer McConnell - University of Delaware • Tom Murphy - Modjeski & Masters
10:35 AM	NYSDOT Weathering Steel Experience & Maintenance	• Harry White - NYSDOT
11:30 AM	NJTA Weathering Steel Use and Practices	• Jean Laird - NJTA
12:00 PM	Lunch Break	
1:00 PM	Connecticut DOT Experience with Weathering Steel	• Mike Culmo - CHA Consulting
1:30 PM	Steel Bridge Coating Systems	• Ronnie Medlock - High Steel Structures • Jennifer McConnell - University of Delaware
2:30 PM	Duplex Coating Systems Guidelines	• Peter Ault - KTA-Tator
3:10 PM	Panel Discussion & Closing Remarks	• Group



Abstracts

NSBA Uncoated Weathering Steel Reference Guide – Jennifer McConnell, University of Delaware & Tom Murphy, Modjeski & Masters

This session will review this new document released by NSBA late last year. This guide is intended to provide guidance to bridge owners and designers on when it is appropriate to utilize uncoated weathering steel (UWS) in bridge construction, and how to design, detail, fabricate, construct, inspect, preserve, maintain, and repair weathering steel bridges.

NYSDOT Weathering Steel Experience & Maintenance – Harry White, New York State DOT

A review of NYSDOT experience with weathering steel and how that history is reflected in their current policies is presented. Topics such as selecting proper site conditions, designing for structure durability, bridge washing cycles, and bridge painting will be covered to assist engineers in understanding the benefits and pitfalls of this important material.

NJTA Weathering Steel Use and Practices – Jean Laird, New Jersey Turnpike Authority

NJTA has 837 bridges with steel superstructures, and 398 of them utilize weathering steel either as the primary framing or as a widening component. NJTA's weathering steel structures have performed well over the years, although some issues related to insufficient maintenance and adherence to FHWA design guidelines have been noted. These issues are mainly evident within areas of failed deck joints, and typically addressed through steel repairs and zone painting. Current NJTA design requirements specify the use of weathering steel on all Turnpike bridges with metallizing at joint areas. Formal design reviews are performed to ensure adherence to current NSBA guidelines.

Connecticut DOT Experience with Weathering Steel – Mike Culmo, CHA Consulting

The Connecticut DOT recently completed an investigation into the long-term performance of uncoated weathering steel in CT. The goal was to investigate the impact of several features including vehicular spray, vertical clearance, proximity to water (fresh and salt), and detailing practices. The presentation will include the findings of the study and recommendations for future use.

Steel Bridge Coating Systems – Ronnie Medlock, High Steel Structures & Jennifer McConnell, University of Delaware

The selection of a durability solution impacts project schedule and cost, and these impacts are balanced against expected in-service performance. Several options will be reviewed: uncoated weathering steel, painted systems, galvanizing, metalizing, and the use of A709 50 CR.. The discussion will include a fabrication perspective followed by discussion that will compare/contrast the performance of the systems based on a new testing protocol which is benchmarked by real world in-service data.

Duplex Coating Systems Guidelines – Peter Ault, KTA-Tator

This presentation will summarize the results of the recently completed NCHRP Project 12-117, Guidelines for Corrosion Protection of Steel Bridges Using Duplex Coating Systems. The research sought to develop guidelines for bridge owners on the use of duplex coating systems for corrosion protection of steel bridges. The objectives of this project were to (1) develop AASHTO-formatted guidelines for using duplex coating systems to extend the service life of steel bridges and (2) plan and conduct a workshop to demonstrate the use of the proposed guidelines to an audience of DOT staff and other stakeholders. The presentation will summarize both the technical results of the project and the resulting practical guidance.