Course Number

FHWA-NHI-131103B

Course Title

Pavement Preservation: Design and Construction of Quality Preventive Maintenance Treatments

In preventive maintenance, the types of treatments and the timing of their applications provide highway agencies with a very broad range of life-extending treatment techniques and enable agencies to achieve their goals of enhancing pavement performance in a cost-effective and efficient manner while meeting their customers' need for an improved level of service.

This course targets those field personnel involved in constructing preventive maintenance treatments, including both buying agency's inspectors and the contractors' foremen and field crews. It contains modules on all of the categories of preventive maintenance treatments in widespread use today, focusing on the best practices for designing and constructing those treatments. It also addresses troubleshooting construction practices, so that participants can clearly identify the results of poor construction practices. This course is the second in a series of three courses (NHI 131115, 131103, and 131116) on the general subject of pavement preservation.

The 3-day version consists of Modules 1 and 4, with content selected by the hosting organization from topics in Modules 2 and 3. The course instructor will assist the host in selecting the most appropriate topics for the target audience and length of the session.

Module 1: Introduction to Preventive Maintenance

Module 2: Crack Filling and Sealing; Fog Seals, Sand Seals, Scrub Seals, and Rejuvenators; Slurry Seals and Microsurfacing; Chip Seals; In-Place Recycling; Thin and Ultra-Thin HMA Overlays

Module 3: Joint Resealing and Crack Sealing; Diamond Grinding and Grooving; Full-Depth Repairs; Partial-Depth Repairs; Load Transfer Restoration; Thin PCC Overlays; Undersealing

Module 4: Course Summary

Outcomes

Upon completion of the course, participants will be able to:

- Describe the benefits provided by preventive maintenance treatments
- Describe critical design factors for preventive maintenance techniques
- Describe the recommended procedures for the construction of the preventive maintenance techniques
- Identify critical post-construction/pre-opening inspection objectives
- Participants should be able to demonstrate mastery of the learning outcomes for the treatments they have learned.

Target Audience

Construction foremen and agency construction inspectors, up to and including middle managers. While it is aimed at those who have some familiarity with the equipment and materials used to construct effective preventive maintenance treatments, it should also be of value to those just starting out in the maintenance field. This course is also recommended for asset management team members.

Training Level: Intermediate

Fee: 2013: $500 Per Person; 2014: N/A

Length: 3 DAYS (CEU: 1.8 UNITS)

Class Size: MINIMUM: 20; MAXIMUM: 30

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