

## ARRANGING A CLASS

### AVAILABILITY & COST

The cost of the Slurry Seals & Micro-Surfacing training class varies depending upon the number of attendees, the training venue, and whether or not refreshments and lunches are provided. However, **prices typically range between \$100 and \$200 per person for the one-day class.**

The NCPP periodically schedules classes based on current demand, but for organizations that desire in-house training for several employees, we can arrange a special course offering at your location upon request. To find out when the next class is scheduled to take place, or to have your name added to our notification list, **please call the NCPP at (517) 432-8220.**

### MORE INFORMATION

For more information on the Slurry Seal & Micro-Surfacing class, a detailed cost quote, or to arrange a training session for your organization, contact **Patte** at **(517) 432-8220**, or email [ncpp@egr.msu.edu](mailto:ncpp@egr.msu.edu).

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## Pavement Preservation:

### Slurry Seal & Micro-Surfacing Training Course



and

MICHIGAN STATE  
UNIVERSITY

[www.pavementpreservation.org](http://www.pavementpreservation.org)

# PAVEMENT PRESERVATION: SLURRY SEAL & MICRO-SURFACING

## ABOUT THE COURSE

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This one-day course is intended to provide participants with a comprehensive understanding of slurry seal and micro-surfacing systems. The principal focus is to offer pavement practitioners the essential skills for selecting good candidate pavements, designing and estimating projects, and gaining awareness of good construction practices. Upon the conclusion of the course the participants will possess the necessary knowledge to achieve excellent success with slurry seals and micro-surfacing projects.

## WHO SHOULD ATTEND?

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This course is suitable for the following groups:

- State Highway Agencies, County Road Commissions, Municipal Street Departments, Consultants, or any person interested in maintaining and preserving good pavement conditions.
- Engineers, managers, superintendents, designers, estimators, technicians, and inspectors with an interest in learning technical details about the slurry seal and micro-surfacing processes and application techniques.

## BENEFITS OF ATTENDING

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As budgets get tighter, pavement owners are looking for cost-effective ways to use their dollars. Treatments such as slurry seal and micro-surfacing offer a ready solution and one that can put dollars back in the budget.

Course participants will increase their understanding of how thin surface treatments achieve success and gain the maximum benefit for the road user and the agency.

## WHAT IS INCLUDED?

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All participants will receive a resource notebook containing all class materials. Course facilitators are experienced in both network and project level pavement preservation practices gained in operating agencies and academia.

Classes are conducted with appropriate refreshment and lunch breaks.

Certificates of completion will be provided to all participants who complete the class and attendees will be eligible to receive continuing education credits (CEUs) from Michigan State University. Attendees should dress in comfortable, casual attire.

## COURSE CONTENT

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**Introduction** – Discussion of the history of slurry seals and micro-surfacing, the differences between these treatment techniques, typical specification requirements, and principles of project selection to enable proper selection of the appropriate candidate pavements for treatment. The introductory module will also provide an overview of the pavement preservation concept, and the advantages of preservation to agencies with respect to improved performance and lower overall costs.

**Materials** – Each of the primary material components of slurry seals and micro-surfacing will be presented and discussed in detail. Asphalt emulsions will be introduced, and will include discussion of the use of polymer-modifiers and other additives. Aggregate gradations, types,

chemical properties, and physical properties will be examined with respect to their impact on treatment performance and constructability. For micro-surfacing treatments, the role of Portland cement, fly ash, and other setting additives will be presented, as will a discussion on the importance of water quality in both slurry seals and micro-surfacing.

**Design** – Information on mix designs will include discussion of material availability issues, mixing proportions, common test requirements, unique mix design requirements for slurry seals and micro-surfacing (e.g. wet cohesion and Schulze-Breuer), field sampling and testing, and estimating material quantities and expected field production rates.

**Equipment** – The equipment module of the class will include descriptions and operating principles of placement machines (continuous-run and truck-mounted), spreading equipment (spreader boxes, rut-filling boxes, and strike-offs and drags), and support equipment (feeder trucks, loaders, screeners, and sweepers).

**Construction** – The construction module will focus on practical best-practice methods for slurry seal and micro-surfacing treatment field placement. Topics covered will include project pre-planning, traffic control, material stockpile management and handling, surface preparation (crack filling, dig-outs, pavement marker removal, sweeping, and casting protection), appropriate ambient conditions for treatment application, the types of applications (tack coats, full-width courses, scratch coats, and rut filling), accelerated project requirements, inspection points, troubleshooting, and post construction evaluation.

**Business Processes** – Discussion will include payment methods, the use of warranties, assessing the value of innovations (product enhancements), and the development and importance of project documentation.