

**COURSE NUMBER**

FHWA-NHI-134084

**COURSE TITLE****Fundamentals of Materials Used for Concrete Pavements - WEB-BASED**

This training is provided by the Transportation Curriculum Coordination Council (TCCC) in partnership with NHI to review integrated materials and construction practices for concrete pavement. It is the first training of its kind offered by NHI, and we would like to give special recognition to the TCCC for their efforts. This training is recommended for the Transportation Curriculum Coordination Council levels II - IV. This course is primarily intended for inspectors and technicians.

The materials used in Portland cement concrete play an extremely valuable role in the performance of the concrete. This training covers both the non-reactive and reactive materials used in Portland cement concrete. This would include the aggregates, curing compound, reinforcement, and the materials that are chemically reactive.

This module is part of a curriculum from the "Integrated Materials and Construction Practices for Concrete Pavement" manual developed through the National Concrete Pavement Technology Center at Iowa State University. The other Web-based training modules include:

- FHWA-NHI-134075 TCCC Hardened Concrete Properties - Durability
- FHWA-NHI-134085 TCCC Incompatibility in Concrete Pavement Systems
- FHWA-NHI-134087 TCCC Mix Design Principles
- FHWA-NHI-134095 TCCC Early Age Cracking
- FHWA-NHI-134096 TCCC Basics of Cement Hydration
- FHWA-NHI-134097 TCCC Fresh Concrete Properties
- FHWA-NHI-134098 TCCC Construction of Concrete Pavements
- FHWA-NHI-134100 TCCC QCQA for Concrete Pavements
- FHWA-NHI-134101 TCCC Design of Pavement
- FHWA-NHI-134102 TCCC Troubleshooting for Concrete Pavements

OUTCOMES

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

- Identify materials used in Portland cement concrete
- Describe the importance of each material and the role it plays in the performance of the concrete
- Describe how each material reacts with the other materials to obtain strength, permeability, workability, etc.

TARGET AUDIENCE

This training is designed for FHWA, State, and local agencies and their industry counterparts involved in the process to assure that the materials used in Portland cement concrete meet specification requirements and are compatible to provide good, durable concrete. It is applicable to anyone desiring a better understanding of the materials used in Portland cement concrete.

TRAINING LEVEL: Intermediate

FEE: 2017: \$25 Per Person; 2018: N/A

LENGTH: 2 HOURS (CEU: 0 UNITS)

CLASS SIZE: MINIMUM: 1; MAXIMUM: 1

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