

**COURSE NUMBER**

FHWA-NHI-133122

COURSE TITLE**Traffic Signal Timing Concepts**

Traffic Signal Timing Concepts is a two-day course to assist in building technical expertise in signal timing by focusing on the relationship between network context and operational objectives to inform the design of signal timing parameters. The course will expand on the traditional signal timing process by incorporating an objectives and performance driven approach that leads to selection of appropriate computational methods for design and operation of traffic signal timing.

For many agencies, the design of signal timing parameters is an exercise in data collection and software driven optimization in response to citizen complaints. An ad-hoc complaint-driven processes with little documentation and infrequent attempts to quantify performance or improvements is not likely to lead to a well-managed, objective driven process for the timing and retiming of traffic signals, nor does it typically provide agencies with a good feel for the overall performance of their system. What is needed is an objective-driven, performance-oriented approach to traffic signal timing.

This course is very interactive and includes many exercises. Participants calculate various timing parameters by hand so they should bring a calculator to the course.

Completion of NHI #133121 is recommended but not required.

OUTCOMES

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

- Discuss an objectives-based signal timing process
- Describe operations objectives in the context of network configuration and traffic conditions
- Review phasing and timing
- Design cycle lengths
- Design green time and fixed intervals
- Design phase sequence and offsets
- Develop operational mode parameters
- Evaluate signal timing outcomes

TARGET AUDIENCE

Traffic Signal Timing Concepts is a two-day course for practitioners involved in or responsible for design, operations, or management of traffic signals including State/MPOs/Local Government personnel and consultants and contractors.

TRAINING LEVEL: Intermediate

FEE: 2021: \$325 Per Person; 2022: N/A

LENGTH: 2 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

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