

**COURSE NUMBER**

FHWA-NHI-133123

**COURSE TITLE****Systems Engineering for Signal Systems Including Adaptive Control**

Note: This course will offer special pricing to the following groups: Local Agencies - \$75.00 per person; State DOT's - \$200.00 per person. The reduced prices are being provided by the FHWA Office of Operations.

Systems Engineering for Signal Systems Including Adaptive Control is a two-day course aimed to assist transportation professionals to identify the needs for improved traffic operations and utilize systems engineering principles for the implementation of traffic signal operational improvements. This course will provide traffic operations managers and personnel a comprehensive view of what is required before, during, and after the implementation of a new traffic control system. Adaptive signal control is used as the example throughout the course.

The overall goal of this course is to assist traffic operations staff in identifying traffic control system objectives and needs to facilitate planning, designing and implementing a new traffic control system. The FHWA document, Model Systems Engineering Documents for Adaptive Signal Control Technology (ASCT) Systems, (FHWA-HOP-11-027) is used for the exercises of this course.

**OUTCOMES**

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

- Engage stakeholders
- Gather information needed for systems engineering process
- Evaluate and resolve constraints
- Assemble a concept of operations
- Extract requirements
- Document verification and validation process
- Develop a procurement strategy
- Assemble a systems engineering analysis
- Describe the systems engineering process

**TARGET AUDIENCE**

Professionals responsible for the planning, design, management or operation of traffic signal systems. This includes engineers, and technicians (advanced) of state/local agencies, consultants, and FHWA Operations staff.

**TRAINING LEVEL:** Basic

**FEE:** 2017: \$500 Per Person; 2018: N/A

**LENGTH:** 2 DAYS (CEU: 1.2 UNITS)

**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30

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