

Minnesota DOT Traffic Signals 101 Workshop

Date: January 12, 2012

Location: Hiway Federal Credit Union – Community Room
840 Westminster St
St Paul, MN 55130

Purpose: This is a one day introductory traffic signal course designed to enable entry-level traffic personnel to acquire a basic knowledge of a traffic signal. The course study will be broad and basic. After completion of the course, the student will have an understanding of how/why a signal is installed, what a signal agreement is and will have a basic understanding of signal plans, operations and component names. Each participant will receive a course manual.

Course Objectives

- ✓ Learn what initiates a traffic signal and why it is installed
- ✓ Discuss traffic signal agreements
- ✓ See images and descriptions of common traffic signal field components
- ✓ Be introduced to typical signal design plans
- ✓ Learn about a variety of controller and cabinet configurations
- ✓ Determine the location of signal heads and loop detectors
- ✓ Review the pedestrian requirements at traffic signals
- ✓ Discuss traffic signal preemption (EVP and Railroad)
- ✓ Review maintenance and timing requirements

Workshop Presenters

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Agenda

One Day Course

TIME	TOPIC	COMMENTS
8:00	Introduction & Registration	<ul style="list-style-type: none">✓ Background✓ Course objectives
8:15	Why?	<ul style="list-style-type: none">✓ Who initiates a signal✓ Traffic Signal Warrants✓ Associated Manuals
8:45	Signal Agreements	<ul style="list-style-type: none">✓ What Agreements Cover✓ Cost Splits
9:00	Field Components	<ul style="list-style-type: none">✓ Field component images and discussion
9:45	Break	
10:00	Introduction to Plan Sets	<ul style="list-style-type: none">✓ Typical Plan Sheets✓ Laying out a signal plan
10:40	Controllers and Cabinets	<ul style="list-style-type: none">✓ Types of signal controllers✓ Cabinet types and components
11:30	Lunch	
12:30	Field Operations	<ul style="list-style-type: none">✓ Controller Timing✓ Types of Control (pretimed, actuated)✓ Actuated Controller Operations✓ Coordinated Signal Systems
1:45	Signal Head and Loop Placement	<ul style="list-style-type: none">✓ Signal Head Placement✓ Loop Detector Placement
2:00	Pedestrians	<ul style="list-style-type: none">✓ Safety✓ Pedestrian Timing Requirements (Walk, FDW)✓ MN MUTCD Requirements
2:15	Break	
2:30	Advanced Warning	<ul style="list-style-type: none">✓ Advanced Warning Flashers
2:45	Signal Preemption	<ul style="list-style-type: none">✓ Introduction to Emergency Vehicle Preemption✓ Introduction to Railroad Preemption
3:00	Special Provisions	<ul style="list-style-type: none">✓ Spec Book✓ Special Provisions and Proposal
3:15	Maintenance	<ul style="list-style-type: none">✓ Maintenance Categories and Responsibilities✓ Actions✓ Retiming
3:30	Adjourn	

Course Hours

Each participant will receive 6.5 Professional Development Hours (PDH's) for this course which shall be noted on their training certificate.