



## **American Traffic Safety Services Association Model Training Specifications**

**Certified Flagger  
Traffic Control Technician  
Traffic Control Supervisor  
Traffic Control Design Specialist  
Operation and Application of Truck-Mounted Attenuators  
Pavement Marking Technician  
High Friction Surface Treatment Inspection and Installation  
Guardrail Installation Training  
Traffic Signal Fundamentals and Technologies**

Worker, pedestrian and motorist safety remain a national concern. With the lack of consideration given to day-to-day operations, the need for timely changes and revisions to traffic control plans as well as expert work site management persists.

Designating a responsible individual and specifying minimum training, skills, knowledge, authority and duties will ensure a skilled person will be accountable for effective oversight. The Federal Highway Administration requires that highway agencies designate a qualified person at the project level who is responsible for traffic control on each project.

Part 6 of the Manual on Uniform Traffic Control Devices states the following:

“Individuals who are knowledgeable (for example, trained and/or certified) in the principles of proper TTC should be assigned responsibility for safety in TTC zones. The most important duty of these individuals is to check that TTC devices on the project are consistent with the TTC plan and are effective for motorists, bicyclists, pedestrians, and workers.”

It further states:

“Each person whose actions affect TTC zone safety, from the upper-level management through the field workers, should receive training appropriate to the job decisions each individual is required to make. Only those individuals who are trained in proper TTC practices and have a basic understanding of the principles (established by applicable standards and guidelines, including those of this Manual) should supervise the selection, placement, and maintenance of TTC devices used for TTC zones and for incident management.”

The Code of Federal Regulations (23 CFR Part 630 Subpart J) provides for a responsible person as well as other requirements for traffic safety in highway and street work zones. Specifically, it states:

“Responsible person. The highway agency shall designate a qualified person at the project level who will have the primary responsibility and sufficient authority for assuring that the traffic control plan and other safety aspects of the contract are effectively administered. While the project or resident engineer may have this responsibility, on large complex projects another person should be assigned at the project level to handle traffic control on a full-time basis.”

It further states:

“Training. All persons responsible for the development, design, implementation, and inspection of traffic control shall be adequately trained.”

In an effort to encourage a high level of performance and safety, public agencies have shifted towards a “performance-based contracting” approach. This approach focuses on raising the bar on safety awareness, practices and reducing risk to workers out on the nation’s roadways, while discouraging poor performance.

Establishing requirements for written documentation, daily reports, and work site job responsibilities will lead to improved safety. The attached model specifications are intended to address the essential elements of roadway safety professionals’ duties and responsibilities. Each state and highway agency may make revisions and modify the model specifications to meet their specific needs, however, content related to personal requirements, responsibility, documentation and duties should be included.

## Certified Flagger

### **Certified Flagger Student:**

Student shall pass an approved, minimum 4-hour Flagger certification course with a grade of 70% or greater that addresses fundamental principles of temporary traffic control, flagging standards and guidelines, proper flagging procedures, flagging equipment, basic techniques, and special considerations. The course shall have less than 30 minutes of video viewing time with 3 hours, 30 minutes of classroom instruction, which will include demonstration of the proper flagging techniques by each student and a written exam. Class size should be limited to no more than 15 students to ensure that optimal instructor/student interaction is achieved. Recertification shall be maintained at a minimum interval of 4 years.

### **Certified Flagger Instructor:**

Instructor shall pass an approved Traffic Control Technician course, Traffic Control Supervisor course, Flagger certification course and Flagger Instructor Training course with a grade of 90% or greater and have training in adult education. The Flagger Instructor Training course shall be a minimum of 16 hours and address effective training skills, basic presentation techniques and proper course preparation, and include individual presentations of a Flagger certification course.

## Traffic Control Technician (TCT)

### **TCT Student:**

Student shall pass an approved, minimum 8-hour TCT course with a grade of 80% or greater that addresses standards and uniformity, fundamental principles, temporary traffic control zone components, traffic control devices, other traffic safety devices, installation and removal of typical applications and pedestrian and worker safety issues.

Student shall be certified by an organization with an independent certification body. Certification requirements include passing an approved TCT course, having 1 year of temporary traffic control experience and providing 2 professional references to verify work experience. Recertification shall be maintained at a minimum interval of 4 years.

### **TCT Instructor:**

Instructor shall pass an approved TCT course with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of temporary traffic control experience, have training in adult education and be TCT certified.

## Traffic Control Supervisor (TCS)

### **TCS Student:**

Student shall meet all TCT student requirements and shall also pass an approved, minimum 16-hour TCS course with a grade of 80% or greater that includes hands-on exercises and addresses applicable standards and guidelines, traffic control devices, human factors, the component parts of a temporary traffic control zone, traffic control plans, typical projects, legal aspects of temporary traffic control, nighttime work considerations, flagger control, decision-making processes and supervisory skills.

Student shall be certified by an organization with an independent certification body. Certification requirements include passing approved TCT and TCS courses, having 2 years of temporary traffic control experience at a supervisory level or in responsible charge and providing 2 professional references to verify work experience. Recertification shall be maintained at a minimum interval of 4 years.

### **TCS Instructor:**

Instructor shall pass an approved TCS course with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of temporary traffic control supervisory experience, have training in adult education and be TCS certified.

## Traffic Control Design Specialist (TCDS)

### **TCDS Student:**

Student shall pass an approved, minimum 16-hour TCDS course with a grade of 80% or greater that addresses temporary traffic control design, design strategies, fundamental traffic engineering concepts, types of temporary traffic control activities, positive protection, nighttime work, construction techniques, roadway design and drafting skills. At least 30% of the course shall consist of hands-on exercises in traffic control design.

Student shall be certified by an organization with an independent certification body. Certification requirements include passing an approved TCDS course, having 1 year of work zone design experience in responsible charge and providing 2 professional references to verify work experience. Recertification shall be maintained at a minimum interval of 4 years.

### **TCDS Instructor:**

Instructor shall pass an approved TCDS course with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of temporary traffic control design experience, have training in adult education and be TCDS certified.

## Operation and Application of Truck-Mounted Attenuators (TMA)

### **TMA Student:**

Student shall pass an approved, minimum 4-hour TMA course with a grade of 80% or greater that addresses the application, operation and inspection of TMAs as well as personal safety considerations and TMA operator responsibilities.

Student shall be certified by an organization with an independent certification body. Certification requirements include passing an approved TMA course, having 1 year of temporary traffic control experience, possessing 6 hours of experience operating a TMA under the supervision of another certified TMA operator and providing 2 professional references to verify work experience. Recertification shall be maintained at a minimum interval of 4 years.

### **TMA Instructor:**

Instructor shall pass an approved TMA Trainer course with a grade of 90% or greater and have training in adult education. The TMA Trainer course shall be a minimum of 16 hours and address effective training skills, basic presentation techniques and proper course preparation, and include a 4-hour TMA course. Instructor shall be TMA certified.

## Pavement Marking Technician (PMT)

### **PMT Student:**

Student shall pass an approved, minimum 16-hour PMT course with a grade of 80% or greater that addresses specifications, contract management, constructability, design and layout, pavement marking removal and eradication, preparation, equipment, materials, installation, inspection and quality control.

Student shall be certified by an organization with an independent certification body. Certification requirements include passing an approved PMT course, having 2 years of pavement marking experience and providing 2 professional references to verify work experience. Recertification shall be maintained at a minimum interval of 4 years.

### **PMT Instructor:**

Instructor shall pass an approved PMT course with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of pavement marking experience, have training in adult education and be PMT certified.

## Pavement Marking Inspection (PMI)

### **PMI Student:**

Student shall pass an approved, minimum 16-hour PMI course with a grade of 80% or greater that addresses pavement marking standards, inspection protocols and compliance, inspection techniques for removal procedures, inspection procedures for various installation types, documentation, and quality assessment.

Student shall be certified by an organization with an independent certification body. Certification requirements include passing an approved PMI course, having 1 year of roadway construction inspection experience and providing 2 professional references to verify work experience. Recertification shall be maintained at a minimum interval of 4 years.

### **PMI Instructor:**

Instructor shall pass approved PMT and PMI courses with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of pavement marking experience, have training in adult education and be PMI certified.

## High Friction Surface Treatment (HFST) Inspection and Installation

### **HFST Student:**

Student shall pass an approved, minimum 8-hour HFST course with a grade of 80% or greater that addresses materials considerations, installation methods and equipment, surface inspection and preparation, residual aggregate removal and reclamation, post-installation procedures, and early-age and long-term surface monitoring.

### **HFST Instructor:**

Instructor shall pass an approved HFST course with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of HFST experience and have training in adult education.

## Guardrail Installation Training (GIT)

### **GIT Student:**

Student shall pass an approved, minimum 16-hour GIT course with a grade of 80% or greater that addresses standards, legal aspects, fundamentals of highway safety for proper barrier installation, performance and placement of products and systems, installation, inspection, maintenance, removal and common errors.

Student shall be certified by an organization with an independent certification body. Certification requirements include passing an approved GIT course, having 2 years of guardrail installation experience of which 1 year is at a supervisory level or in responsible charge, having training on guardrail products and systems used in the area in which the student works and providing 2 professional references to verify work experience. Recertification shall be maintained at a minimum interval of 4 years.

### **GIT Instructor:**

Instructor shall pass an approved GIT course with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of roadside safety or guardrail experience, have training in adult education and be GIT certified.

## Traffic Signal Fundamentals and Technologies (TSFT)

### **TSFT Student:**

Student shall pass an approved, minimum 12-hour TSFT course with a grade of 80% or greater that addresses signals and systems, signal warrants, signalized intersection safety, signal timing and optimization, signalized intersection capacity and emerging technologies.

### **TSFT Instructor:**

Instructor shall pass an approved TSFT course with a grade of 90% or greater, possess a civil engineering degree or equivalent experience, have a minimum of 5 years of traffic signals experience and have training in adult education.