

Illinois Technology Transfer Center

2014 – 2015 Training Program



State of Illinois
Illinois Department of Transportation



Illinois Department
of Transportation



Federal Highway
Administration

Illinois Technology Transfer Center Training Program

The Technology Transfer (T²) Program is a nationwide effort financed jointly by the Federal Highway Administration and individual state departments of transportation. Its purpose is to transfer the latest state-of-the-art technology in the areas of roads and bridges by translating the technology into terms understood by local and state highway or transportation personnel.

This booklet replaces our training newsletter. After reading all information on our training classes fill out and return the appropriate forms for registration. Please review our enrollment policy as we have limited seating in some of our classes and in most cases, our seating is open to Local Agency Personnel, on a first-come, first-serve basis. If you are not able to attend a class, please contact us so we may offer the spot to those people on our waiting list. Notifying us in advance of substitution of students would also be appreciated.

If you have any additional questions regarding our Training Program, please contact us as listed below.

Illinois Technology Transfer Center
Illinois Department of Transportation
2300 South Dirksen Parkway – Room 205, Springfield, IL 62764
Fax (217) 785-7296
Email us at T2LRSDOT@dot.il.gov

Local Policy and Technology Engineer
VACANT

Technology Transfer Program Manager
Gwen Montgomery
Email: Gwen.Montgomery@illinois.gov
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Technology Transfer Support Staff
Gabie Richardson
Email: Gabrielle.Richardson@illinois.gov
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Visit our Website at <http://www.idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/technology-transfer-center/index>

Enrollment

The courses listed on the following pages constitute the Technology Transfer Training Program. These courses are scheduled to be presented on the dates shown and at the locations indicated. As you view the list, note that many of the courses have PREREQUISITES, especially those relating to math or computers. Instruction is geared toward those students who have the necessary prerequisite skills. These classes are all tuition-free unless otherwise noted. Travel, meals, and lodging expenses, are always the responsibility of the student.

ENROLLMENT:

We invite your agency to enroll students in the classes you desire by filling out the appropriate enrollment form(s). Please type or clearly print the enrollment information completely as this information will be entered in our computer system for later use in emails, mailings, rosters, and certificates. Return the enrollment form by using one of the following methods:

BY MAIL:

Illinois Department of Transportation
Bureau of Local Roads and Streets
Technology Transfer Center
2300 South Dirksen Parkway, Room 205
Springfield, IL 62764

BY FAX:

You may fax your enrollment form by dialing (217) 785-7296

BY EMAIL:

You may email your enrollment form to T2LRSDOT@dot.il.gov, Gwen.Montgomery@illinois.gov, or Gabrielle.Richardson@illinois.gov

It is important that you send your enrollments in early. Some classes fill up quickly and we may not be able to schedule additional classes.

In cases of excess enrollment, some attendance restrictions will be imposed and in cases of insufficient enrollment, classes may be cancelled. Enrollment in a class will be handled in accordance.

You or the contact person designated on your enrollment form will receive an email approximately 3 weeks prior to the class confirming your registration and giving the classroom information. All others will be notified by email that they have been placed on a waiting list and will be contacted if there are further cancellations.

CANCELLATION POLICY:

If a student is unable to attend, it is the agency's responsibility to cancel before the day of the class. Frequent no shows may result in your agency receiving lower priority in future enrollments.

CONSULTANT POLICY:

Enrollment for Consultants will be allowed in all Technology Transfer Training classes with the exception of Local Agency Only classes. Due to the popularity of our classes, we must limit each Consulting firm to a maximum of 4 per class.

CERTIFICATES:

A Certificate of Completion will be awarded to approved students (see note below) who successfully complete the final examination for the class. In those classes where final exams are not given, a Certificate of Attendance will be awarded. The majority of T² Classes meet the requirements for Professional Development Hours (PDH's). The number of PDH's given per class can be found with the course description; however, it is the students responsibility to ensure that the course meets the continuing education requirements of their license. If you have any questions, contact Gwen Montgomery at Gwen.Montgomery@illinois.gov

Course Descriptions

Communicating Through COLORS

PURPOSE: To help participants identify their own color (temperament) style and that of their supervisors, peers, and/or subordinates. In addition, it will provide a new understanding of learning and communication styles that are in keeping with the color style of others.

TOPICS TO BE COVERED: Recognizing students own strengths and the strengths of others, building instant rapport with others, learning to speak the language of their listeners, enhancing the ability to understand how others process information, and modifying their own communication style to meet the needs of other communication styles.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Dealing with Difficult People

PURPOSE: To increase your recognition and understanding of difficult behavior in the workplace and to create a level playing field by exploring specific ways to approach and respond to difficult people. TOPICS TO BE COVERED: Understanding your reactions to difficult people,

exploring your attitudes and why you react as you do, ways to practice healthier responses to those who are making your life miserable and to enhance basic assertive communication skills.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Highway Engineering Principles

PURPOSE: To familiarize engineering and technical employees or refresh their knowledge of basic highway terminology and procedures used in conjunction with engineering applications and the management of streets and roads.

PREREQUISITES: Mathematics Refresher Course, Units 1 through 17, or equivalent; involvement in highway design or highway project development activities.

TOPICS TO BE COVERED: Basic mathematics; horizontal and vertical curves; slopes and grades; bituminous surface treatment; traffic, and a brief discussion of highway organization and funding. This course is geared toward new engineers, new technicians and other types of entry level technical positions such as planners, landscape architects etc., and is a refresher course on basic highway engineering topics for veteran engineers, technicians and planners. Teamwork and group problem solving and open discussion is encouraged throughout the course.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Highway Signing

PURPOSE: This course will provide the basic principles and requirements for highway signing contained in the MUTCD. It will also provide basic information for highway sign retroreflectivity requirements and highway sign fabrication.

TOPICS TO BE COVERED: There will be sessions focusing on sign retroreflectivity, regulatory signs, warning signs, guide signs, work zone signs, school zone signs, and sign fabrication.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Motor Fuel Tax Accounting

PURPOSE: This course will enable students to properly record and account for MFT funds utilized on local agency projects.

TOPICS TO BE COVERED: Accounting and uses of MFT funds as established by the Illinois Department of Transportation.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Manual on Uniform Traffic Control Devices (MUTCD) Training

PURPOSE: This course will provide the basic principles of the MUTCD. It will also provide guidance on the importance of compliance with the MUTCD and a general discussion on how and why devices are included in the manual.

TOPICS TO BE COVERED: There will be sessions focusing on the concept of Positive Guidance, Human Factors, and how they relate to proper traffic control, and highlights of each Part of the MUTCD.

LENGTH OF COURSE: 1 day

PDH's: 6.0

OSHA 10-Hour General Industry

PURPOSE: To provide safety training for highway personnel on several work related topics. Participants receive an OSHA safety certificate.

TOPICS TO BE COVERED: Intro to OSHA, electrical, hazard communication, walking/working surfaces, personal protection equipment, material handling, tools, fall protection, electrical, confined space, Emergency action plan/fire protection, health hazards, machine guarding, Blood Borne Pathogen, safety and health program.

LENGTH OF COURSE: 10 hours

PDH'S: 10.0

Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way Seminar

PURPOSE: This seminar includes presentations by the Office of the Illinois Attorney General, Federal Highway Administration – IL Division and Illinois Department of Transportation that will discuss the United States Access Board’s Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) that will impact highway agencies. It will also provide an overview of other state and federal laws affecting access for people with disabilities in the right-of-way.

TOPICS TO BE COVERED: PROWAG, ADA, EBA, and other federal/state laws and standards.

LENGTH OF COURSE: 1 day

PDH’s: 6.0

Retroreflectivity

PURPOSE: To explain the new federal regulations on sign retroreflectivity as required by the MUTCD.

TOPICS TO BE COVERED: Types of sheeting required, sign management, inventory and inspection will be covered.

LENGTH OF COURSE: ½ day

PDH’s: 3.0

Soils Field Testing and Inspection Course

(If you are interested in taking this class please contact Jody at Jody.Meador@illinois.gov.)

PURPOSE: S-33 Soils Field Testing and Inspection Course is a three day Specific Task Training Program (STTP) class for engineers or technicians who will be involved with performing field testing and inspection of subgrade, embankment, and shallow foundations for various structures.

TOPICS TO BE COVERED: Field moisture content along with the in-situ wet and (corresponding) dry densities, Family of Curves and One Point Proctor to determine the Standard Dry Density (SDD) and Optimum Moisture Content (OMC) of a given soil, percent compaction and percent of OMC, soil stability and strength in the field using a Static and Dynamic Cone Penetrometer, proper inspection of embankment construction, roadway subgrades and determine undercut and treatment depths, inspection and soil testing to verify or establish the adequacy of foundation material for box culverts and shallow structure foundations.

LENGTH OF COURSE: Half day, Full day, Half day

PDH’s: 12.0

(If you are interested in taking the *Soils Field Testing and Inspection* class please contact Jody at Jody.Meador@illinois.gov.)

Understanding Specifications

PURPOSE: This course will enable students to identify the different types of contract documents and explain the hierarchy of these contract documents, to understand the format and use of the Standard Specifications, and to determine when and how to write effective special provisions and plan notes.

PREREQUISITES: Involvement in highway design, highway project development, or highway construction activities.

TOPICS TO BE COVERED: Specifications, special provisions, pay items and plans.

LENGTH OF COURSE: 1 day

PDH's: 6.0

You & The Media

PURPOSE: You can never be too prepared for a media interview. Even the best pros make mistakes because they didn't take time to thoroughly prepare their message. This class will teach you how to effectively get your message across to the news media and how to build positive, productive relationships with the media. It will also help you overcome intimidation about working with the news media.

TOPICS TO BE COVERED: Preparing and drafting your key messages, deflecting negative questions, staying on track, how to convey a positive, strong message about your company.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Local Agency Only Classes

Concrete Structures

PURPOSE: This course will focus on construction inspection of the bridge substructure.

TOPICS TO BE COVERED: Updates of recent changes to bridge deck construction.

LENGTH OF COURSE: 1 day

PDH'S: 6.0

Flagger Training

PURPOSE: This class provides training to local agency personnel for their day labor and maintenance activities. It meets requirements established by the Manual on Uniform Traffic Control Devices (MUTCD) and the Occupational Safety and Health Administration.

PREREQUISITES: This course is available to local agency highway personnel holding a valid driver's license or an Illinois Identification Card from the Secretary of State.

TOPICS TO BE COVERED: Traffic control devices, the flagger's role in work zone safety, Illinois laws and responsibilities, and flagging procedures.

LENGTH OF COURSE: ½ day

PDH's: 3.0

Piling

PURPOSE: Introduction to foundation and piling inspection and testing procedures, field documentation, and discussion of problems encountered with piling installation.

PREREQUISITES: Probability of assignment to inspection and documentation of pile driving operation.

TOPICS TO BE COVERED: Determining energy requirements for hammers, blow counts, site safety, piling alignment, splicer requirements, bearing values, setting up of field books.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Portland Cement Concrete Paving Inspection

PURPOSE: This course will focus on construction inspection of concrete pavements.

LENGTH OF COURSE: 1 day

PDH'S: 6.0

Small Drainage

PURPOSE: This course will provide participants with the basics in Storm Sewer specifications and Pipe Culvert specifications.

TOPICS TO BE COVERED: Inspecting storm sewer pipe for conformance with plans and specifications, trench excavations and shoring, pipe installation and backfill, embankment construction and trenching operations for conformance with plans and specifications. Check length, gradation, and location of pipe for conformance with field conditions, installation and backfill of pipe for conformance with specifications and protection requirements of pipe to insure against overload damage. Determine field quantities for progress and final documentation of the pipe culvert pay item and field data to document the extra work payment required for removing and replacing unsuitable foundation material. Requirements of field data for progress and final documentation of storm sewers and trench backfill will be covered.

LENGTH OF COURSE: 1 day

PDH's: 6.0

Work Zone Safety

PURPOSE: This class provides training to local agency personnel for their day labor and maintenance activities.

TOPICS TO BE COVERED: Traffic control devices, traffic control plans, and work zone safety.

LENGTH OF COURSE: ½ day

PDH's: 3.0

National Highway Institute (NHI) Classes

The Illinois Department of Transportation and/or the Technology Transfer Center will not be handling enrollments for the National Highway Institute (NHI) classes this training season.

For additional information on NHI classes, visit their website at <http://www.nhi.fhwa.dot.gov/default.aspx>.

QC/QA Training

The Illinois Department of Transportation QC/QA Training is administered by Lake Land College.

For additional information on locations, schedules, and fees visit their website at: www.lakeland.cc.il.us/idotqcqa.

FY 2015 Training Schedule

| Course | Start Date | Location | Course Number |
|--|-------------------|--------------|---------------|
| TT- Communicating through COLORS | | | |
| | January 29, 2015 | Libertyville | FY2015-007 |
| | February 24, 2015 | Effingham | FY2015-008 |
| | February 26, 2015 | Libertyville | FY2015-009 |
| | May 7, 2015 | Carbondale | FY2015-010 |
| TT- Dealing with Difficult People | | | |
| | January 7, 2015 | Mattoon | FY2015-011 |
| | March 5, 2015 | Carbondale | FY2015-012 |
| | April 30, 2015 | Libertyville | FY2015-013 |
| TT- Highway Engineering Principles | | | |
| | April 8, 2015 | Collinsville | FY2015-014 |
| | May 12, 2015 | Springfield | FY2015-015 |
| | June 4, 2015 | Schaumburg | FY2015-016 |
| TT- Highway Signing | | | |
| | November 18, 2014 | Mt. Vernon | FY2015-017 |
| | December 10, 2014 | East Peoria | FY2015-018 |
| | February 18, 2015 | Wheaton | FY2015-019 |
| TT- Motor Fuel Tax Accounting | | | |
| | March 31, 2015 | Schaumburg | FY2015-020 |
| | April 15, 2015 | Effingham | FY2015-021 |
| | May 19, 2015 | Springfield | FY2015-022 |
| TT- Manual on Uniform Traffic Control Devices | | | |
| | January 28, 2015 | Mattoon | FY2015-023 |
| | March 11, 2015 | Wheaton | FY2015-024 |
| | April 14, 2015 | Moline | FY2015-025 |
| | June 2, 2015 | Belleville | FY2015-026 |
| TT- OSHA | | | |
| | October 7, 2014 | Moline | FY2015-027 |
| | December 16, 2014 | Carbondale | FY2015-028 |
| | February 18, 2015 | Altamont | FY2015-029 |
| | March 24, 2015 | Bolingbrook | FY2015-030 |
| | April 15, 2015 | Wheaton | FY2015-031 |
| TT- Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way Seminar | | | |
| | November 19, 2014 | Schaumburg | FY2015-032 |
| | December 9, 2014 | Effingham | FY2015-033 |
| | February 3, 2015 | Urbana | FY2015-034 |
| | March 12, 2015 | Moline | FY2015-035 |
| | April 28, 2015 | Bolingbrook | FY2015-036 |

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|----------------------------------|-------------------|--------------|------------|
| TT- Retroreflectivity | | | |
| | March 26, 2015 | Springfield | FY2015-037 |
| | June 16, 2015 | Libertyville | FY2015-038 |
| TT- Understanding Specifications | | | |
| | March 18, 2015 | Schaumburg | FY2015-039 |
| | April 2, 2015 | Wheaton | FY2015-040 |
| | April 22, 2015 | Effingham | FY2015-041 |
| TT- You and the Media | | | |
| | November 20, 2014 | Belleville | FY2015-042 |
| | December 3, 2014 | East Peoria | FY2015-043 |
| | January 15, 2015 | Wheaton | FY2015-044 |

Local Agency Only Classes

| Course | Start Date | Location | Course Number |
|---|-------------------|-------------|---------------|
| STTP-S13 Concrete Structures | | | |
| | January 8, 2015 | Schaumburg | FY2015-045 |
| | January 14, 2015 | Springfield | FY2015-046 |
| TT- Flagger Training | | | |
| | October 23, 2014 | Belleville | FY2015-208 |
| | December 2, 2014 | Schaumburg | FY2015-209 |
| STTP-S19 Piling | | | |
| | February 5, 2015 | Springfield | FY2015-047 |
| | March 11, 2015 | Schaumburg | FY2015-048 |
| STTP-S21 Portland Cement Concrete Paving Inspection | | | |
| | March 19, 2015 | Schaumburg | FY2015-049 |
| STTP-S46 Small Drainage Structures | | | |
| | February 19, 2015 | Moline | FY2015-050 |
| | March 19, 2015 | Mattoon | FY2015-051 |
| BSE- Work Zone Safety | | | |
| | December 18, 2014 | Schaumburg | FY2015-052 |
| | February 3, 2015 | Moline | FY2015-053 |
| | March 3, 2015 | Altamont | FY2015-054 |

Flagger Training for Local Agencies Request Form

Flaggers are the most important members of your construction or maintenance crew. In order to protect your work zones, every flagger is required to know proper flagging procedures and use the appropriate equipment. Chapter 6E of the Manual on Uniform Traffic Control (MUTCD) contains all the flagger requirements and recommendations. The MUTCD may be downloaded at <http://mutcd.fhwa.dot.gov/index.htm>.

The Technology Transfer Center offers Flagger Training as part of our training program. Classes may be scheduled at your facility provided the following conditions are met:

1. A minimum of 40 people is required to attend this training. (If you do not have this many employees, work with other local agencies in your area to organize a joint class.)
2. A roster of all attendees must be provided two weeks before the start date or the class will be cancelled.

Who should receive this training? This training is appropriate for any local agency employee who may perform as a flagger in emergency or non-emergency situations. This includes highway department employees (workers and supervisors), public utility employees, police officers, and firemen (volunteer and full-time).

If you would like to request a class in your area, please fill out the form below and mail it to the Illinois Department of Transportation, Technology Transfer Center, 2300 South Dirksen Parkway, Room 205, Springfield, Illinois 62764 or fax it at (217) 785-7296.

Flagger Training Class Request

Local Agency Personnel Only

Agency _____

Contact Person _____ Number of Students _____

Agency Address _____

City _____ State _____ Zip Code _____

Phone _____ Requested Training Date _____

Email Address _____

Training room on site? Yes No Could other agencies attend? Yes No

TV/VCR/SCREEN? Yes No

2014-2015 Training Program Enrollment Form



Please print or type the enrollment information completely as this information will be entered in our computer for later use on mailings, rosters, and certificates. Enter the three digit course number that follows the FY2015 year. You may return the enrollment form by fax to 217-785-7296, e-mail at DOT.T2LRSDOT@illinois.gov or by mail to the Illinois Department of Transportation, Local Roads and Streets, 2300 South Dirksen Parkway, Room 205, Springfield, IL 62764.

Student Name

Student E-mail Address

Course Numbers

FY15-_____ FY15-_____ FY15-_____

Name of Agency/Department

Phone Number

Fax Number

Business Address

Contact Person

City/State/Zip Code

Contact Person Email



Illinois Department of Transportation

STTP S-33 Soils Field Testing and Inspection Course

Course Objectives: This course prepares construction and materials personnel with the basic skills and guidance to properly perform field testing and inspection of subgrade, embankment, and shallow foundations for various structures. This course also describes common geotechnical problems and the remedial actions generally used to correct them.

Upon successful completion of the course, students should be able to:

- Determine the field moisture content along with the in-situ wet and (corresponding) dry densities
- Use the Family of Curves and One Point Proctor to determine the Standard Dry Density (SDD) and Optimum Moisture Content (OMC) of a given soil
- Determine percent compaction and percent of OMC
- Determine soil stability and strength in the field using a Static and Dynamic Cone Penetrometer
- Properly inspect embankment construction
- Check roadway subgrades and determine undercut and treatment depths
- Perform inspection and soil testing to verify or establish the adequacy of foundation material for box culverts and shallow structure foundations

Successful completion of this course meets consultant eligibility requirements for Department prequalification.

Course Materials: [Soils Field Testing and Inspection: Course Reference Manual](#)

If an updated version is available it will be provided in class.

Students will need to bring a pencil, calculator and note pad with them.

Enrollment: Please have one coordinator from your company contact Mr. Jody Meador at 217-782-0553 or preferably by email at Jody.Meador@illinois.gov to enroll students in a class. Each student will be put on a waiting list for the class of their choice. Two to three weeks prior to class start the student or coordinator will be contacted with confirmation of enrollment. If the student cannot be enrolled in the class, they will be contacted and asked for their second class choice.

There is no fee for this class at this time.

Schedule: Each class is three days. The first day starts at 1:00pm and ends at 4:30pm. The second day starts at 8:30 and lasts until 4:30pm. The third and final day starts at 8:30 and ends around noon. The 2014-15 training schedule is listed below:

Dates for the classes below are tentative and may be changed based on conflicts for the instructors or class rooms.

If 15 students haven't signed up three weeks prior to a class, that class will be cancelled.

**IDOT District One - Materials Laboratory,
101 West Center Court, Schaumburg, Illinois 60196**

- December 9-11, 2014
- January 13-15, 2015
- February 17-19, 2015
- March 17-19, 2015

**IDOT District Two – Assembly Room,
819 Depot Ave., Dixon, Illinois 61021**

- March 3-5, 2015

**IDOT District Eight – Training Room,
1102 Eastport Plaza Drive, Collinsville, Illinois 62234**

- January 28-30, 2015