



Illinois Interchange



Illinois Technology Transfer Center

Vol. 12 No. 3 Special 2004

Technology Transfer Center 2004 - 2005 Training Program

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Please pass this on to other interested parties in your office.



Illinois Department of Transportation
Bureau of Local Roads and Streets



Federal Highway Administration

2004 - 2005 Training Program

The courses listed on the following pages constitute the 2004-2005 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 THE PREREQUISITES for many of the courses, 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 enrollment form. Please *type or clearly print* the enrollment information completely as this information will be entered in our computer for later use on mailings, rosters and certificates. Return the attached 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 S. Dirksen Parkway, Room 205
Springfield, IL 62764

BY FAX. You may fax your enrollment form by dialing 217/785-7296.

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. Enrollments must be received no later than 3 weeks prior to a class. A letter of confirmation will be



sent to you once your enrollment has been processed. The confirmation letter and attached summary are sent to notify you that we did receive your enrollment form and have entered it as shown. When you receive this letter, please check the summary for accuracy of class enrollments and spelling of names. If you need to make any changes, please contact our office.

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 with our policy below.

ENROLLMENT POLICY:

The confirmation letter you receive is *only* to let you know that we did receive your enrollment form. We will continue to enter enrollments in our computer until three weeks prior to a class. We will then determine if we have more enrollments than we have space. If this occurs, Local Agencies and Department personnel will be given priority to attend the class. Other enrollments will be placed in the class on a first come, first served basis. If a class has more Local Agency personnel enrolled than we have space, then placement will be on a first come, first served basis and may be limited to four students per agency, if necessary.

Your *contact person* will receive a letter approximately 2 weeks prior to the class confirming your registration and giving the classroom information. All others will be notified 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 agencies 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 Backhoe Safety, Documentation and Flagger Training.

Consultant registration requests for Documentation of Contract Quantities will only be accepted by the Central Bureau of Construction on their required form. Therefore, consultants registering through T² will not be accepted.

Due to the popularity of our classes, we must limit each Consulting firm to a maximum of four students per class.

CERTIFICATES: A Certificate of Completion will be awarded to those students 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 meets the requirements for Professional Development Hours (PDH's). The number of PDH's given per class can be found with the course description.

Please Note:

Instructors will not admit students into their classes if not enrolled through the Center. Certificates will not be issued to students that have not pre-enrolled.

We want to be fair to those agencies that have enrolled early and have followed our enrollment guidelines - especially those that have been placed on a waiting list for attendance. If you have any questions, contact Kevin Burke at (217) 785-5048.

Technology Transfer Training Program

COURSE DESCRIPTIONS: 2004 - 2005

Backhoe Safety

(for Local Agency Personnel Only)

PURPOSE: To enable the student to safely operate a backhoe.

TOPICS TO BE COVERED: Hands-on use of a backhoe, classroom videos and discussions, machine maintenance and safety “walk around”.

LENGTH OF COURSE: 1 day

PDH's: 6.0

NOTE: Due to space limitations, each agency will be limited to two students per class.



Confined Space Awareness

PURPOSE: To familiarize the student with what a confined space is, how to recognize hazards and prepare for safety.

TOPICS TO BE COVERED: Confined space hazards, Federal and State laws, definitions of what a confined space is, air monitoring and applicable policies.

LENGTH OF COURSE: 2 hours.

PDH's: 2.0

NOTE: This is a 2 hour class that will be offered in the morning and the Trenching and Shoring Safety Class will be offered in the afternoon. Those students who wish may enroll in both classes for the same day.

Construction Material Inspection Documentation

PURPOSE: To increase the course participant's knowledge of IDOT's materials acceptance process.

The course focuses on understanding and using the Project Procedures Guide with an emphasis on the role of IDOT personnel, contractor personnel and consultant personnel in the acceptance process.

TOPICS TO BE COVERED: Some of the available materials, forms and reports, a demonstration on how ICORS can help track materials at the job site, and an overview of the final materials certification review.

LENGTH OF COURSE: 1 day

PDH's: 6.0



Don't forget to type or clearly print your enrollment form and send it in as soon as possible!

Culvert Hydraulics

PURPOSE: To enable the student, with some supervision, to establish design constraints and size culverts using both a manual solution (HDS5) and computer applications.

√ **PREREQUISITES:** Mathematics Refresher Course, Units 1 through 17, or equivalent; familiarity with basic computer usage and hydraulic terminology, ability to read and understand nomographs; the probability of being involved in culvert design.

TOPICS TO BE COVERED: Selecting design parameters, determining the headwater depth and outlet velocity for a pipe or box culvert with inlet or outlet control, use of FHWA culvert nomographs, and use of FHWA's culvert computer program (HY8).

LENGTH OF COURSE: ½ day.

PDH's: 3.0

Documentation

(for Local Agency Personnel Only)

PURPOSE: To provide the student with the ability to document, with some supervision, contract quantities to Federal and State standards.

√ **PREREQUISITES:** Mathematics Refresher Course, Units 1 through 15, or equivalent; **one year construction experience** and familiarity with general highway construction terminology and practice.

TOPICS TO BE COVERED: Project diary entries; quantity book preparation and entries; cross-reference system; extra work reports, and the measurement and calculation of pay items for pay quantities occurring in road and bridge plans.

LENGTH OF COURSE: 3 days.

PDH's: 18.0

NOTE: The Technology Transfer Documentation classes will be offered to local agency personnel only. Consultant registration for Documentation of Contract Quantities is on a first-come, first-served basis so requests in writing are required. A Bureau of Construction Registration Form (available on the web site at <http://www.dot.il.gov/contractquantities/registration.html>) is required for each individual wishing to attend class. Requests will be accepted via fax at 217/524-4922, Attn: Documentation Registration, or by e-mail at cbctraining@dot.il.gov. Consultant registration requests will only be accepted by the Central Bureau of Construction. Requests by phone and requests prior to the posted registration dates will not be accepted.

Erosion Control

PURPOSE: To familiarize the student with different types of erosion control methods that are available, and to discuss when, where, and how to install each type.

√ **PREREQUISITES:** Mathematics Refresher Course, Units 1 through 5 or equivalent.

TOPICS TO BE COVERED: Temporary and permanent erosion control measures, planned management design, NPDES permits, seeding, mulching, erosion control blankets, and IDOT erosion control design standards.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Flagger Training

(for Local Agency Personnel Only)

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



Hazardous Materials First Responder

PURPOSE: This training is intended to meet the requirements of the Occupational Safety and Health Administration and United States Environmental Protection Agency (OSHA/USEPA) Hazardous Waste Operations and Emergency Response Final Rule (29 CFR 1910.120, effective March 6, 1990) and is for personnel who may be the first-on-the scene at a hazardous materials incident.

TOPICS TO BE COVERED: Basic hazard recognition, identification, reporting, and self-protection for individuals who may do preliminary observation of an event. *It does not provide the necessary hazard recognition and protective skills to equip you to deal effectively and safely with activities beyond the awareness level.*

LENGTH OF COURSE: 1 day.

PDH's: 6.0

HEC-RAS

PURPOSE: To introduce the student to the concept of Standard Step Method for Water Surface Profile computations.

√ **PREREQUISITES:** Knowledge of the Windows environment and the fundamentals of open channel flow, including basic understanding of HEC-2 or WSPRO.

TOPICS TO BE COVERED: Bridge hydraulics, including the method presented in WSPRO, culvert hydraulics, flood encroachments, design of open channel flow, analyzing split flow options and sub and supercritical flow computations.

LENGTH OF COURSE: 3½ days

PDH's: 21.0

NOTE: This is a computer course offered through the National Highway Institute (NHI). There is a course registration fee of \$460.00 per student.



Highway Engineering Principles

PURPOSE: For engineering and technical employees to familiarize or review their knowledge of highway terminology and procedures used in conjunction with a construction or maintenance project from its initial stage to final completion.

√ **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; Standard Specifications; reading plans, specifications, material proposals, maintenance procedures and final papers.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Highway Jurisdiction/Transfers

PURPOSE: To provide students with laws that govern highway authorities, highway jurisdiction and the basic elements of how jurisdictional transfers are accomplished and their legal ramifications.

TOPICS TO BE COVERED: The Bureau's booklet, "Jurisdictional Transfer Guidelines for Highway and Street Systems," and applicable portions of the Illinois State Highway and Municipal Codes will be discussed. Includes the definition of terms, discussion of various forms of ownership and legal responsibilities.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Highway Signing

PURPOSE: Placement of traffic signing to help ensure highway safety by providing for the orderly and predictable movement of all traffic, motorized and non-motorized, throughout the highway system, and to provide such guidance and warnings as are needed to ensure the safe and informed operation of individual elements of the traffic stream.

√ **PREREQUISITES:** The probability of assignment to sign erection responsibilities.

TOPICS TO BE COVERED: Traffic control sign placement, uniformity and maintenance.

LENGTH OF COURSE: 1 day.

PDH's: 6.0



MFT Accounting and Auditing

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 auditing principles of MFT funds as established by the Illinois Department of Transportation.

LENGTH OF COURSE: 1 day.

PDH's: N/A

OSHA 10-Hour

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

TOPICS TO BE COVERED: Cranes, electrical, hazard communication, ladders & stairs, fire protection, personal protection equipment, material handling, tools, walking working surfaces, and welding safety.

LENGTH OF COURSE: 1½ days.

PDH's: 10.0

Pavement Construction Inspection

PURPOSE: To enable the student to inspect the construction of bituminous surface treatments, asphalt concrete and PCC pavements to ensure compliance with plans and specifications.

√ **PREREQUISITES:** Mathematics Refresher Course, Units 1 through 15, or equivalent; and the probability of inspection of pavement construction within 18 months.

TOPICS TO BE COVERED: Bases: granular and stabilized; Surface Treatment: preparation and prime, design, and construction control; Bituminous Concrete: road mix and low and high quality plant mixes; Portland Cement Concrete: concrete placement, reinforcement, joints, finishing and curing, intersection joint design and field layout.

LENGTH OF COURSE: 3 days.

PDH's: 18.0

Pavement Maintenance

PURPOSE: To enable student to recognize the causes of pavement failure and to make and/or recommend corrective measures including alleviating the cause, selecting the proper materials and methods, and documenting the work accomplished. Discusses various types of road surfaces with the emphasis on flexible bases and developing a pavement management system.

√ **PREREQUISITES:** Knowledge of equipment and materials (particularly asphaltic materials); and probability of involvement in scheduling pavement maintenance activities.

TOPICS TO BE COVERED: Drainage and subsurface maintenance; patching and resurfacing material; street patching methods; portland cement concrete, and utility cuts; seal coats and crack sealing; and developing a systematic approach to pavement maintenance.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

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

Rehabilitation of Streets and Highways

PURPOSE: To familiarize student with advantages, disadvantages, capabilities, and elements of construction for various methods of rehabilitating urban streets. This will be an information sharing/discussion session for local agencies on what is and is not working for them on their urban streets.

TOPICS TO BE COVERED: PCC and bituminous rehabilitation techniques, seal coats and slurry seals, rehabilitation materials, maintenance planning and programming.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Response Handbook for Incidents Disasters and Emergencies (R.H.I.D.E.)



PURPOSE: To enable personnel to react to incidents, disasters and emergencies as it occurs. Your personal safety is of primary concern when evaluating and taking action.

TOPICS TO BE COVERED: personnel's awareness of biological, nuclear, incendiary, chemical, explosive, bridge failures, natural and manmade disasters.

LENGTH OF COURSE: 1/2 day

PDH's: 3.0

Seal Coats (Oil & Chipping)

PURPOSE: To enable student to select the best type of bituminous material and aggregate for prime, seal, and cover coats for their applications. To understand proper construction methods in preparation of the surface, placement of the bituminous materials & aggregates, and to recognize typical problems.

TOPICS TO BE COVERED: Types of bituminous materials & aggregates, proper preparation of the existing surface, proper construction of seal coats, and typical problems which may be encountered.

LENGTH OF COURSE: 1/2 day

PDH's: 3.0



Small Drainage Structure Construction Inspection

PURPOSE: This course will enable students to inspect the construction of pipe culverts, storm sewers and related structures to ensure compliance with plans and specifications.

✓ **PREREQUISITES:** Mathematics Refresher Course, Units 1 through 15, or equivalent; familiarity with bridge and culvert terminology; and probability of assignment to drainage structure inspection within 18 months.

TOPICS TO BE COVERED: Culvert - Sewer differences, trenching, bedding, pipe installation, backfill, and documentation. Precast concrete box culverts, pipe liners, and other new methods will also be reviewed.

LENGTH OF COURSE: 2 days.

PDH's: 12.0

Snow Removal and Ice Control for New Drivers

PURPOSE: Introduction to snow removal and ice control operations; including major components, equipment adjustment and calibration, and proper snow and ice control methods.

✓ **PREREQUISITES:** Probability of assignment to snow removal responsibilities within 12 months.

TOPICS TO BE COVERED: Equipment preparation; snow removal procedures and methods; special situations; after-storm procedures; spreader calibration; public relations; and safety.

LENGTH OF COURSE: 1/2 day. All snow removal and ice control classes start at 8:30 a.m., if this class becomes full a second class will be held at 1:00 p.m.

PDH's: N/A

NOTE: Copies of the video used in this class are available for Local Agencies who would want a copy for their own training purposes. Copies may be obtained through the Video/Publication Library Catalog.



Street Sweeping Techniques - Basic Air/Vacuum Street Sweeping

PURPOSE: To introduce the student to the basics of air/vacuum street sweeping including safe and efficient operation, maintenance, component functions, and other routine operating techniques.

✓ **PREREQUISITES:** New air/vacuum street sweeper operators or anyone who might be assigned air/vacuum street sweeping responsibilities in the near future.

TOPICS TO BE COVERED: Street sweeping purpose, air/vacuum sweeper types, basic vehicle operation, component and system function, operator maintenance checks, and operating techniques and tips.

LENGTH OF COURSE: 1 day.

PDH's: N/A

Street Sweeping Techniques - Basic Mechanical Street Sweeping

PURPOSE: To introduce the student to the basics of mechanical street sweeping including safe and efficient operation, maintenance, component functions, and other routine operating techniques.

✓ **PREREQUISITES:** New mechanical street sweeper operators or anyone who might be assigned mechanical street sweeping responsibilities in the near future.

TOPICS TO BE COVERED: Street sweeping purpose, mechanical sweeper types, basic vehicle operation, component and system function, operator maintenance checks, and operating techniques and tips.

PDH's: N/A

LENGTH OF COURSE: 1 day.

(Course descriptions continued on page 12)

2004 - 2005 T2 Classes	North Locations				Central Location		South Location
	Glen Ellyn	Schaumburg	Glenview	Other Cities	Springfield	Other Cities	Other Cities
Backhoe Safety				Woodstock: Apr. 28 Lake Zurich: May 24	May 19	Galesburg: Apr. 20	Marion: May 5
Confined Space Awareness		Jan. 20	Dec. 2				
Construction Material Inspection Documentation		Mar. 16				Peoria: Mar. 29	
Culvert Hydraulics					Feb. 18		
Documentation			Jan. 4-6				Edwardsville: Feb. 15-17
Erosion Control	TO BE ANNOUNCED AT A LATER DATE						
Flagger Training			Mar. 31	Manteno: Feb. 3 Dixon: Feb. 10 Woodstock: Feb. 17		Paris: Mar. 10	Carbondale: Apr. 12
Hazardous Materials First Responder	Mar. 23		Dec. 16	Manteno: Jan. 20	Apr. 13		
HEC-RAS					Mar. 29 - Apr. 1		
Highway Engineering Principles				Marteno: Mar. 9	Feb. 1		
Highway Jurisdiction/Transfers		Mar. 22			Jan. 19		
Highway Signing	Jan. 13					Peoria: Dec. 2	
MFT Accounting and Auditing	Apr. 14			Oglesby: Mar. 9	Mar. 30		
OSHA 10-Hour		Feb. 2-3					Edwardsville: Jan. 26-27
Pavement Construction Inspection			Jan. 11-13				
Pavement Maintenance			Dec. 7				Edwardsville: Nov. 16

Piling		Dec. 7				Feb. 8		
Rehabilitation of Streets and Highways			Apr. 13					
Response Handbook for Incidents, Disasters and Emergencies (R.H.I.D.E.)			Mar. 2			Mar. 22		Edwardsville: Apr. 5
Seal Coats	Mar. 1	Jan. 12		Mantero: Dec. 14		Mar. 15		Carbondale: Mar. 22
Small Drainage Structure Construction Inspection		Feb. 9-10				Dec. 9-10		
Snow and Ice Control		Oct. 12					Paris: Oct. 21	Carbondale: Oct. 5
Street Sweeping - Air				Elgin: Dec. 2				
Street Sweeping - Mechanical				Elgin: Dec. 1				
Structure Information & Management Systems (SIMS)				Dixon: Feb. 24 Ottawa: Mar. 24		Jan. 11		Carbondale: Apr. 14
Survey I - Beginning		Feb. 22-24						
Survey II - Intermediate		Mar. 29 - Apr. 1						
Survey III - Const. Staking		Apr. 26-28						
Superpave		Oct. 27 Oct. 28		Ottawa: Nov. 17			Peoria: Oct. 7 Urbana: Nov. 3	Carbondale: Dec. 16
Team Building	Jan. 4	Dec. 14						
Trenching and Shoring Safety		Jan. 20	Dec. 2					
Understanding Specifications		Nov. 5		Dixon: Nov. 30				Edwardsville: Nov. 9
Urban Tree Preservation		Nov. 18					Peoria: Nov. 4	Edwardsville: Oct. 14
Work Zone Safety	Dec. 9		Oct. 6	Dixon: Nov. 9				Carbondale: Mar. 17

Structure Information & Management Systems (SIMS)

PURPOSE: To introduce students to SIMS concepts, including its relationship to the Structure Information and Procedure (SIP) Manual and the Illinois Structure Information System (ISIS).

√ **PREREQUISITES:** Knowledge of Microsoft Access is helpful but not required.

TOPICS TO BE COVERED: Students will learn how to use all the reports and forms already available in SIMS, and will also learn how to use SIMSLink, which allows the user to create simple queries and reports. Computers will be provided for “hands-on” training and handouts will also be provided.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Survey I - Beginning

PURPOSE: To enable potential survey personnel, with some supervision, to know the use and care of basic surveying instruments and equipment.

√ **PREREQUISITES:** Mathematics Refresher Course, Units 1 through 17, or equivalent. Ability to perform math equations on a calculator.

TOPICS TO BE COVERED: Surveying mathematics; use, care and maintenance of the transit, level and chain; horizontal angle measurements with transit; leveling and the leveling rod; chaining; field note-keeping and safety.

LENGTH OF COURSE: 3 days.

PDH's: 18.0

Survey II - Intermediate

(Highway Construction Surveying)

PURPOSE: To enable the student, with some supervision, to establish the alignment of the route and to obtain data necessary for the preparation of highway construction plans.

√ **PREREQUISITES:** Mathematics Refresher Course, Units 1 through 17, or equivalent; knowledge of basic surveying operations and familiarity with surveying instruments and equipment; familiarity with surveying and construction terms, or completion of Beginning Surveying Class. Ability to perform math equations on a calculator.

TOPICS TO BE COVERED: Horizontal alignment; vertical alignment; horizontal and vertical curves; super-elevations, topography; cross sectioning; and traversing.

LENGTH OF COURSE: 4 days.

PDH's: 24.0

***Survey Enrollees Please Note:** Mathematics and field work are important parts of surveying instruction. The surveying courses have been updated to provide more of these elements. The first day of the Survey I class provides essential survey math instruction. This means that less math instruction will be offered in the Survey II and III classes so that field exercises can be added (weather permitting). **We strongly suggest that students enroll in Survey I prior to enrolling in Survey II & III or be proficient in math and able to perform trigonometric calculations on a calculator.**

Survey III - Construction Staking

PURPOSE: To enable the student, with some supervision, to stake common construction jobs.

√ **PREREQUISITES:** Attendance in both the Beginning and Intermediate Surveying classes or equivalent experience.

TOPICS TO BE COVERED: Staking theory, special staking, slope staking, bridge staking, culvert staking and pavement staking.

LENGTH OF COURSE: 3 days.

PDH's: 18.0

Superpave

PURPOSE: To familiarize the student with the concepts of Superpave mix design.

TOPICS TO BE COVERED: Material selection, design compactive effort and the mix design process.

LENGTH OF COURSE: 1 day.

PDH's: 6.0



Team Building for Supervisors and Crew Leaders

PURPOSE: Stresses the importance of team building. Provides management and conflict resolution techniques to perform more effectively and efficiently.

TOPICS TO BE COVERED: The importance of team building, management and conflict resolution techniques.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Trenching and Shoring Safety

PURPOSE: To provide students with safety procedures to follow when involved in trenching and shoring operations.

TOPICS TO BE COVERED: Utility notification, soil mechanics, slope requirements, manual and visual testing, shoring techniques and equipment.

LENGTH OF COURSE: 2 hours.

PDH's: 2.0

NOTE: This is a 2 hour class that will be offered in the afternoon after the Confined Space Awareness Class. Those students who wish may enroll in both classes for the same day.

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

Urban Tree Preservation-Caring for Community Trees

PURPOSE: To familiarize the student with how to preserve and protect valuable tree resources during construction and development.

TOPICS TO BE COVERED: Proper tree management on public lands, legal issues surrounding tree management decisions, utilities and tree conflicts, pruning and general care.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Work Zone Safety for Projects (Crews)

PURPOSE: To provide the student with the basic elements required for work zone traffic control and protection.

TOPICS TO BE COVERED: Need for traffic control, laws and legal considerations, applicable portions of the Manual on Uniform Traffic Control Devices, developing traffic control plans, work zone traffic control and the Work Area Protection Guide for street and utility repairs.

LENGTH OF COURSE: 1 day.

PDH's: 6.0

Superpave for Local Agencies

To enroll in the Superpave for Local Agencies course, please contact Lake Land College at the address, phone or website listed below. Class locations and dates are located on page 11 of this **newsletter**.

Registration Process

Contact Marlene Browning and reserve the number of seats you need in each class at:

Lake Land College
5001 Lake Land Blvd.
Mattoon, IL 61938-9366
Phone: 217.234.5285

Homepage: www.lakelandcollege/idotqcqa

All registration forms *and* payment must be returned **three weeks prior** to the **beginning day** of class.

Method of Payment: Check, Money Order, Visa or MasterCard only.

Any reserved seats **not registered and paid for three weeks prior** to the start of class can be held by a **Late Registration Agreement** signed by the company or they can be **reassigned** to other students. The Refund Policy does not apply to a signed **Late Registration Agreement**.

Mathematics Refresher Course

PURPOSE: This course is designed as a math refresher for individuals planning on enrolling in the Technology Transfer Training Program. The course description specifies what level of skill must be reached in the Math Refresher course to meet the required prerequisites for that class.

FORMAT: This self study course consists of the 18 modules listed below, which can be studied either at home or on the job. Each module has a step-by-step explanation of the subject it covers and it has job-related problems at the end of each unit. A Preliminary Screening Test can be used to determine which areas the student needs to review. This pretest is available upon request. The Preliminary Screening Test and the Math Refresher Course are both available at no cost to local agencies.

- | | | |
|-------------------------------------|---|---------------------------------------|
| 1. Addition and Subtraction | 8. Liquid and Weight Units | 14. Volume: Prisms, Average End Areas |
| 2. Multiplication and Division | 9. Averages and Percentages | 15. Volume: Cones and Combinations |
| 3. Rounding and Degrees of Accuracy | 10. Proportion | 16. Trigonometry of Right Triangles |
| 4. Fractions | 11. Square Root, Pythagorean Theorem | 17. Trigonometry of Oblique Triangles |
| 5. Formulas | 12. Area: Triangles, Rectangles, Trapezoids | 18. Metric Module |
| 6. Solving Equations | 13. Area: Circles | |
| 7. Length and Weight Units | | |

MATH REFRESHER COURSE ORDER FORM

Name _____ **Title** _____

Agency _____ **Phone** () _____

Address _____

City _____ **State** _____ **Zip Code** _____

Please send me the following items I have marked.

PRELIMINARY SCREENING TEST

MATH REFRESHER COURSE MODULES

- | | | | | | | | | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 001 | 002 | 003 | 004 | 005 | 006 | 007 | 008 | 009 |
| 010 | 011 | 012 | 013 | 014 | 015 | 016 | 017 | 018 |

Mail Requests To:
 Illinois Department of Transportation
 Bureau of Local Roads and Streets
 Technology Transfer Center - Room 205
 2300 South Dirksen Parkway
 Springfield, Illinois 62764
 Fax Number (217) 785-7296

FOR OFFICE USE ONLY:

Order # _____

Date Rcvd. _____

Mailed _____

Technology Transfer Training Program: 2004 - 2005

ENROLLMENT FORM

Return to:
 Illinois Department of Transportation
 Technology Transfer Center
 2300 S. Dirksen Parkway, Room 205
 Springfield, IL 62764

FAX #: 217/785-7296

Please Print students' names as they should appear on their Certificate and check the boxes for each course desired.

Location Code:	Class Number:				
	1	GV	Dec. 2	Confined Space Awareness	
	2	SC	Jan. 20	Construction Material Inspection Documentation	
	3	SC	Mar. 16	Culvert Hydraulics	
	4	PE	Mar. 29	Erosion Control	
	5	SP	Feb. 18		
	6		TBA		
	7		TBA	Hazardous Materials First Responder	
	8		TBA		
	9	GV	Dec. 16		
	10	MA	Jan. 20	HEC-RAS	
	11	GE	Mar. 23		
	12	SP	Apr. 13	Highway Engineering Principles	
	13	SP	Mar. 29-Apr. 1		
	14	SP	Feb. 1	Highway Jurisdiction/Transfers	
	15	MA	Mar. 9		
	16	SP	Jan. 19	Highway Signing	
	17	SC	Mar. 22		
	18	PE	Dec. 2	MFT Accounting & Auditing	
	19	GE	Jan. 13		
	20	OG	Mar. 9	OSHA 10-Hour	
	21	SP	Mar. 30		
	22	GE	Apr. 14	Pavement Construction Inspection	
	23	ED	Jan. 26-27		
	24	SC	Feb. 2-3	Pavement Maintenance	
	25	GV	Jan. 11-13		
	26	ED	Nov. 16	Piling	
	27	GV	Dec. 7		
	28	SC	Dec. 7	Rehabilitation of Streets & Highways	
	29	SP	Feb. 8		
	30	GV	April 13	Response Handbook for Incidents, Disasters and Emergencies (R.H.I.D.E.)	
	31	GV	Mar. 2		
	32	SP	Mar. 22		
	33	ED	Apr. 5		

Name of Agency

Department

Contact Person (Please Print)

Fax #

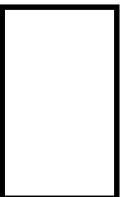
Business Address

Telephone

Signature

Title

City - State - Zip



Location Codes: CA = Carbondale DI = Dixon ED = Edwardsville EL = Elgin GE = Glen Ellyn GV = Glenview MA = Manteno OG = Oglesby PA = Paris PE = Peoria SC = Schaumburg SP = Springfield WO = Woodstock

Technology Transfer Training Program: 2004 - 2005

ENROLLMENT FORM

Return to:
 Illinois Department of Transportation
 Technology Transfer Center
 2300 S. Dirksen Parkway, Room 205
 Springfield, IL 62764

FAX #: 217/785-7296

Please **Print** students' names as they should appear on their Certificate and check the boxes for each course desired.

Class Number:	Location Code:	Date															
			Seal Coats	Small Drainage Structure Inspection	Snow and Ice Control	Street Sweeping-Air	Street Sweeping-Mech.	Structure Information & Management Systems (SIMS)	Survey I - Beginning	Survey II - Intermediate	Survey III - Construction Staking	Team Building	Trenching and Shoring Safety	Understanding Specifications	Urban Tree Preservation	Work Zone Safety	
34	MA	Dec. 14															
35	SC	Jan. 12															
36	GE	Mar. 1															
37	SP	Mar. 15															
38	CA	Mar. 22															
39	SP	Dec. 9-10															
40	SC	Feb. 9-10															
41	CA	Oct. 5															
42	SC	Oct. 12															
43	PA	Oct. 21															
44	EL	Dec. 2															
45	EL	Dec. 1															
46	SP	Jan. 11															
47	DI	Feb. 24															
48	OT	Mar. 24															
49	CA	April 14															
50	SC	Feb. 22-24															
51	SC	Mar. 29 - Apr. 1															
52	SC	Apr. 26-28															
53	SC	Dec. 14															
54	GE	Jan. 4															
55	GV	Dec. 2															
56	SC	Jan. 20															
57	SC	Nov. 5															
58	ED	Nov. 9															
59	DI	Nov. 30															
60	ED	Oct. 14															
61	PE	Nov. 4															
62	SC	Nov. 18															
63	GV	Oct. 6															
64	DI	Nov. 9															
65	GE	Dec. 9															
66	CA	Mar. 17															

Name of Agency

Department

Contact Person (Please Print)

Fax #

Business Address

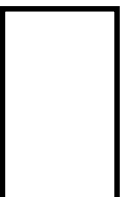
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Flagger Training for Local Agencies

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 of 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. We have two dedicated instructors that will come to your location and train your employees in proper procedures. A minimum of 25 people is required to offer this training. If you do not have this many employees, work with other local agencies in you area to organize a joint class.

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 schedule 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

Agency _____

Contact Person _____ Number of Students _____

Agency Address _____

City _____ State _____ Zip Code _____

Phone _____ Requested Training Date _____

Have your employees taken our course before? Yes No

Training Room on Site? Yes No Could other agencies attend? Yes No

TV/VCR/SCREEN? Yes No

Flagger Training is for Local Agency personnel only.

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.

The Illinois Interchange is published quarterly by the Illinois Technology Transfer Center at the Illinois Department of Transportation. Any opinions, findings, conclusions, or recommendations presented in this newsletter are those of the authors and do not necessarily reflect views of the Illinois Department of Transportation, or the Federal Highway Administration. Any product mentioned in the Illinois Interchange is for informational purposes only and should not be considered a product endorsement.

Illinois Technology Transfer Center

Illinois Department of Transportation

2300 South Dirksen Parkway - Room 205, Springfield, IL 62764

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E-mail us at T2LRSDOT@dot.il.gov

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Visit our website at www.dot.il.gov/blr/t2center.html



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(708) 499-7816

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2300 South Dirksen Parkway



Illinois Department of Transportation

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