See page 21 for Technology Transfer Quarterly.



2010 Professional Training Portfolio

the florida transportation **technology transfer** center *with* the center for transportation training

The Florida T² Center and the Center for Transportation Training (CTT) are your partners and here to serve you by providing your professional training needs. Please review our comprehensive portfolio featuring the vast training opportunities we offer. You and your employees will benefit from the technical and managerial knowledge presented in these courses. In addition, we can tailor or develop training to meet your specific needs.

Both centers, the Florida T² Center and CTT, conduct required and elective training to improve and strengthen the skills of your entire organization. Call us today at 352.273.1685 for a T² Center representative and 352.846.3593 for a CTT representative.

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* – CTT Contact 352.846.3593

+ – formerly called Road Safety

Sponsors/Partnerships and Training Locations

Florida T² Center training opportunities are supported in part through grants and partnerships with various offices of the Florida Department of Transportation and the Federal Highway Administration. Classes are offered as part of the Local Technical Assistance Program (LTAP), Safety Circuit Rider (SCR) Program, and Product Demonstration Showcase (PDS) Program. Many of the Center for Transportation Training (CTT) courses can lead to qualifications through FDOT'S Construction Training Qualification Program (CTQP). The Florida T² Center and CTT classes are conducted at convenient locations around the state. Most Florida T² Center and CTT training can also be arranged exclusively for your organization at your location to save time and money. Our T² Mobile Video Training (MVT) sessions are held at the requesting agency. See Page 20 for (MVT) scheduling details and information. Check our **new** website *t2ctt.ce.ufl.edu* for current training schedules and locations.

ADA

ADA/Accessibility Requirements for Highway Design and **Pedestrians**

Target Audience: Roadway designers, directors, ADA coordinators, safety inspectors, project managers, technicians, and consultants

Learn the Americans with Disabilities Act (ADA) requirements for public agencies to comply with design, construction, operation, and maintenance of pedestrian facilities within public right-of-way. Includes extensive technical and regulatory grounds, ranging from ADA/accessibility requirements and design, standards, good practices, ADA self evaluations and transition plans.

ADA – Facilities Access

Assessments

Target Audience: Facility designers, directors, ADA coordinators, safety inspectors, project managers, technicians, consultants

This is an overview of the Americans with Disabilities Act (ADA), the Florida Accessibility Code and revisions. Discussions include regulation impact on agency personnel and project staff responsibilities, building/roadway accessibility design standards/procedures, and Titles II and III ADAAG requirements.

CEU/PDH 0.7/7.0 Public \$145/Private \$240

ggregates

7 hrs

Aggregate Base Testing Technician – ACI

Target Audience: Government employees who perform acceptance tests to verify aggregate material quality

This American Concrete Institute (ACI) course includes knowledge of and demonstrates how to properly perform, record, and report the results of basic field and laboratory procedures for aggregates and soils used in road base construction.

Course with written and proficiency exams:

Call 352.273.1661 for pricing.

Aggregate Testing Technician Level 1 – ACI

Target Audience: Government employees who perform acceptance tests to verify aggregate material quality

This ACI course includes knowledge of and demonstrates how to properly perform, record, and report the results of basic field and laboratory procedures for aggregates and soils used for the production of hot-mix asphalt and ready-mix concrete.

Course with written and proficiency exams:

Call 352.273.1661 for pricing.

24 hrs

Aggregate Testing Technician Level 2 – ACI

Target Audience: Government employees who perform acceptance tests to verify aggregate material quality who currently hold the ACI Aggregate Testing Technician Level 1 certification

This ACI course includes additional methods and procedures on how to properly perform, record, and report the results of field and laboratory procedures for aggregates and soils used for the production of hot-mix asphalt and ready-mix concrete.

Course with written and proficiency exams:

Call 352.273.1661 for pricing.

24 hrs

16 hrs

8 hrs

Limerock Bearing Ratio (LBR) Technician – CTQP

Target Audience: FDOT and contractor technicians who perform acceptance tests to verify aggregate material quality

Become more knowledgeable and proficient in testing and inspecting materials used for embankment, subgrade, and road base construction.

pdh 8

Course with written and proficiency exams:

\$585

Qualified Aggregate Sampler – CTQP

Target Audience: All employees responsible for sampling aggregates for acceptance testing

This course presents everything technicians need to know to correctly sample aggregates for laboratory testing.

Course with written and proficiency exams:

pdh 6

\$350

Asphalt

Asphalt Combo – Inspection and Maintenance

Target Audience: Design, construction, and maintenance engineers and technicians involved with pavement preservation and rehabilitation techniques

This workshop teaches pavement distress evaluation techniques to determine materials, equipment and procedures needed for effective crack sealing, asphalt patching and utility repair for quality/cost-effective asphalt surface treatments. Ample time is allowed for maintenance issues questions.

ceu/pdh 0.6/6.0

Public \$175/Private \$250

6 hrs

Asphalt Inspection

Target Audience: Inspectors, contractors, technicians, personnel with construction inspection job duties

Discussion includes basic concepts of asphalt materials and inspection techniques and keys to obtaining high quality work on new construction and resurfacing projects. Common problem areas and how to properly correct them are presented. This course does not lead to qualification associated with the Construction Training Qualification Program (CTQP).

ceu/pdh 0.6/6

Public \$125/Private \$210

6 hrs

28 hrs

Asphalt Mix Design – CTQP

Target Audience: Technicians responsible for designing hot-mix asphalt

This course provides engineers, technicians, and inspectors an understanding of how asphalt mixes are developed in accordance with Superpave specifications.

Course with written exam:

PDH 24

\$700

Asphalt Pavement Maintenance

Target Audience: Inspectors, contractors, road crew supervisors, and personnel with construction inspection job duties

This workshop focuses on materials, construction details, and maintenance practices that help extend asphalt pavement service life. Videos and illustrations demonstrate proper maintenance techniques while citing common mistakes arising on the jobsite. Ample time is allowed for maintenance issues questions.

сеџ/ррн 0.6/6 Public \$125/Private \$210 6 hrs

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Asphalt Paving Basics for Florida Cities and Counties

Target Audience: Maintenance field technicians, maintenance supervisors, construction workers, inspectors, designers, and pavement management technicians

This course is patterned after the Asphalt Paving Level I course and can be customized to fit your needs. The class includes random sampling at the plant and roadway; hands-on demonstration of rolling straight edge, cross slope and temperature measurement; core sampling; tack coat spread rate and hot-mix asphalt yield calculations; and nuclear density determination, if required. A simplified, alternate exam is also available upon request.

Call 352.273.1661 for pricing. 8 hrs

Asphalt Paving Level 1 – CTQP

Target Audience: FDOT and contractor Quality Control personnel responsible for verifying roadway characteristics

Learn to use a rolling straight edge, measure cross slope, perform core sampling, calculate yields, layout core locations, and take temperatures.

Course with written and proficiency exams:

pdh 6

\$350

8 hrs

Asphalt Paving Level 2 – CTQP

Target Audience: FDOT and contractor Quality Control personnel, Quality Control managers, roadway technicians, equipment operators, and paving supervisors

Review good construction practices and equipment operation techniques necessary to place and compact a Superpave mixture that meets requirements for smoothness, texture, density, cross slope, and thickness. Additional topics include project administration; surface preparation; specification requirements; hot-mix asphalt (HMA) delivery, placement, and compaction; balancing production rates; and field testing and inspection.

Course with written exam:

CEU/PDH 1.6/16

\$700

24 hrs

24 hrs

Asphalt Plant Level 1 – CTQP

Target Audience: FDOT and contractor Quality Control personnel responsible for verifying asphalt material quality characteristics

Learn to perform the tests required for quality control, verification, resolution, and acceptance of asphalt mix in accordance with standard test methods.

Course with written and proficiency exams:

рdh 16

\$945

Asphalt Plant Level 2 – CTQP

Target Audience: FDOT and contractor Quality Control personnel, Quality Control managers, plant technicians, and plant operators

Covers materials management, specification requirements, plant calibration, and equipment operation necessary to produce a Superpave mixture that meets design criteria and mix production requirements.

Course with written exam:

рdн 16

\$700

24 hrs

Hot-Mix Asphalt Pavement Evaluation, Preservation and Rehabilitation

Target Audience: Design, construction, and maintenance engineers and technicians involved with pavement preservation and rehabilitation techniques

This course presents techniques to identify the causes and patterns of hot-mix asphalt (HMA) pavement distress, as well as evaluation components and preservation and rehabilitation techniques.

CEU/PDH 1.2/12.0 Public \$150/Private \$250

12 hrs

Integrating Pavement Preservation Practices and Pavement Management

Target Audience: Engineers, road agency supervisors, and others involved in pavement management, maintenance, and evaluation

Condensing the National Highway Institute (NHI) version, this course provides information needed for successful use of pavement management activities to support a pavement preservation program.

CEU/PDH 0.7/7 Public \$150/Private \$250

7 hrs

Long-Term Pavement Performance (LTPP) — Pavement Distress Identification

Target Audience: Engineers, road agency supervisors, and those who evaluate pavement for maintenance and/or repair

Distress definitions, as used by LTPP for each pavement type, and best approaches for performing test section measurements are discussed. Classroom and field reviews are incorporated. Two asphalt and two concrete locations are visited. Distresses that are observed in the field at the first location are discussed and rated by participants. The second site is used as a test with no group discussion prior to having the participants perform the ratings.

CEU/PDH 1.75/17.5 Public \$295/Private \$395

17.5 hrs

Superpave for Local Agencies

Target Audience: Engineers, supervisors, managers, road-way personnel and crews

Since July 1, 2003, the Florida Department of Transportation (FDOT) only uses Superpave for all asphalt paving jobs. FDOT no longer verifies, processes, or supports any Marshall mix designs. Orient your workforce on Superpave. This workshop will also cover FDOT Design Standards and is specifically designed for county and municipal roadway professionals.

CEU/PDH 0.6/6

Public \$125/Private \$210

6 hrs

Bicycle and Pedestrian

Community Bicycle and Pedestrian Safety Programs

Target Audience: Local safety officials, school resource officers

This course covers "Earn a bike" community programs, design and implementation of bicycle safety rodeos, strategies for bicycle enforcement, walk audits and bicycle-friendly community assessments. This is a safety council-approved alternative transportation safety class for DUI offenders. The course duration varies with content and audience.

CEU/PDH 0.6-0.8/6.0-8.0/7.0

Public \$125/Private \$210

16 hrs



League Cycling Instructor (LCI) Training (League of American Cyclists)

Target Audience: Community safety officials, law enforcement officers, school resource officers, physical education/ health teachers, bike/ped coordinators, bike/ped advisory board members and community volunteers

Offers national certification for teachers, law enforcement officers, community officials in bicycling skills and education following the national curriculum. This is a rigorous "on bike" course. You must provide your own bicycle (road) and helmet.

Prerequisite: 9 hour "Road 1" course (available on request)

CEU/PDH 1.6/16.0

Call 352.273.1685 for pricing.

16 hrs

Pedestrian/Bicycle GIS Crash Mapping

Target Audience: Pedestrian/bicycle coordinators and agency personnel involved in crash mapping

Improved techniques and procedures to map crashes involving pedestrians and bicycles will lead to better analyses, roadway improvements and reduced fatalities and injuries. Learn to use GIS and a Crash Map extension for a better technique to map and track pedestrian/bicycle crash locations.

Call Janet at 352.273.1676 for more information.

Pedestrian/Bicycle Law Enforcement

Target Audience: Law enforcement and pedestrian/bicy-cle coordinators

This course educates law enforcement officers on Florida's pedestrian and bicycle statutes and trains them in the methods to educate motorists by using traffic enforcement operations.

Call Janet at 352.273.1676 for more information.

Bridge Maintenance

Target Audience: All personnel responsible for bridge maintenance and repair— ranging from crews to engineers

This National Highway Institute (NHI) course covers bridge maintenance management and safety, as well as maintenance and repair for the bridge deck, superstructure, and structure.

CEU/PDH 2.8/28

Public \$800/Private \$950

Chainsaw

Chainsaw Safety

Target Audience: Chainsaw operators — all skill levels

How safe are you when you operate a chainsaw? Why does your chainsaw pull to the right when cutting a tree? How do you cut this tree safely? Need answers? This class is for you! Topics include operator safety, chainsaw maintenance, and safe use. The safety training duration varies with skill level.

Public \$75/Private \$150

length varies

Chainsaw Safety/Hands-on

Target Audience: Chainsaw operators — all skill levels

Includes the Chainsaw Safety course listed previously. In addition, learn correct techniques for felling trees, use of protective gear, and safe use of wedges/angles. Participants will fell a tree using proper equipment and techniques. Topics include operator safety, chainsaw maintenance and safe use, and how to fell trees using OSHA-recommended methods. The safety and hands-on training duration varies with skill level.

Public \$195/Private \$295

length varies

Chainsaw Safety in Disaster Recovery

Target Audience: Chainsaw operators — all skill levels

This informative, hands-on safety oriented class is open to all skill levels. A limited number of hands-on slots are available. Learn the correct way to safely remove and clean up fallen trees and proper use of all safety equipment. Bring your chainsaw and have it examined for any potential problems. Workshop emphasizes OSHA procedures and personal protection equipment (PPE). The safety and hands-on training duration varies with skill level.

Public \$195/Private \$295

length varies

Concrete and Cement

Associate Concrete Transportation Construction Inspector – ACI

Target Audience: Government employees who perform ready-mix concrete structural inspections and hold the ACI Concrete Field Testing Technician Grade I certification

This ACI program includes knowledge of concrete construction, including plans reading, formwork installation and removal, reinforcements, embedments, sampling and testing freshly mixed concrete, conveying, placing, consolidation, finishing, jointing curing, and protection.

Course with written exam:

Call 352.273.1661 for pricing.

Cement Base Applications for Pavement

Target Audience: Engineers, public works officials, inspectors, managers, and roadway designers

Learn how Portland cement improves subgrade soils, strengthens pavement bases, serves as an effective material for backfill, and can be used to recycle worn out, flexible pavements to create environmentally friendly pavements. Information is presented on cement-modified soil, cement-treated base, soil-cement base, full-depth reclamation, and rollercompacted concrete pavements, applications, design, materials engineering, construction, testing, and performance of pavements.

Public \$125/Private \$210

7 hrs

Concrete Batch Plant Operator — CTQP

Target Audience: All concrete batch plant operators

Participants learn to prepare concrete design mixes in accordance with standard test methods. The course focuses on performing calculations required for batching concrete for an FDOT-approved ready-mix concrete plant.

Course with written exam:

CEU/PDH 0.8/8

\$325

Concrete Field Testing Technician Grade 1 – ACI

Target Audience: Government employees who perform acceptance tests to verify ready-mix concrete

This ACI course includes knowledge of and demonstrates how to properly perform and record the results of seven basic field tests on freshly mixed concrete.

Course with written and proficiency exams:

Call 352.273.1661 for pricing.

16 hrs

10 hrs

Concrete Laboratory Testing Technician Level 1 – ACI

Target Audience: Government employees who perform, record, and report the results of basic laboratory procedures for aggregates and concrete

ACI Concrete Laboratory Testing Technician - Level 1 certification is automatically awarded to those who successfully complete the following courses:

ACI Concrete Strength Testing Technician and ACI Aggregate Testing Technician - Level 1 certification. Both courses are offered by CTT and are described in this portfolio.

8 hrs

Concrete Laboratory Testing Technician Level 2 – ACI

Target Audience: Government employees having at least one year (2000 hours) of approved work experience or a combination of work experience and education and hold a current ACI Concrete Laboratory Testing Technician - Level 1 certification

This ACI course includes knowledge of and demonstrates how to properly perform, record, and report the results of advanced laboratory procedures for aggregates and concrete.

Course with written and proficiency exams:

Call 352.273.1661 for pricing.

24 hrs

Concrete Strength Testing Technician – ACI

Target Audience: Government employees who perform laboratory acceptance tests to verify concrete strength

This ACI course includes knowledge of and demonstrates how to properly perform, record, and report the results of four basic ASTM laboratory procedures related to the determination of concrete compressive and flexural strength.

Course with written and proficiency exams:

Call 352.273.1661 for pricing.

12 hrs

Concrete Transportation Construction Inspector – ACI

Target Audience: Government employees who perform ready-mix concrete structural inspections and hold the ACI Concrete Field Testing Technician Grade 1 certification

This ACI program includes knowledge of concrete construction, including plans reading, soil-cement, piling installations, formwork installation and removal, reinforcements, embedments, sampling and testing freshly mixed concrete, conveying, placing, consolidation, finishing, jointing curing, and protection.

Course with written exam:

Call 352.273.1661 for pricing.

24 hrs

14 hrs

FDOT Concrete Field Inspector Specification – CTQP

Target Audience: FDOT and contractor Quality Control technicians who perform acceptance tests and inspections on the job site

Improve your understanding of FDDT's Standard Specification Sections 346, 347, 400, 415, and other sections relevant to placement and field testing of ready-mix concrete.

Course with written exam:

CEU/PDH 1.2/12

\$475

FDOT Concrete Laboratory Technician Specification – CTQP

Target Audience: FDOT and contractor Quality Control technicians who perform laboratory tests required for readymix concrete acceptance

Covers FDOT'S SSRBC Sections 346, 347, and other sections relevant to laboratory tests for concrete.

Course with written exam:

ceu/pdh 0.6/6

\$375

Design

Advanced Roadway Signs

Target Audience: Sign maintenance/installation personnel, supervisors, contractors, consultants, other individuals needing in-depth training on roadway sign installation, inspection, and maintenance.

This course offers in-depth training to identify proper sign usage and installation procedures, assessing correct sign types, construction, and application. Learn about sign placement, multi-sign location, and proper sign orientation. Needs assessments, how and when to inspect, and the determination of when to remove or replace signs is addressed. Tips on managing an inspection crew, and creating schedules and accurate records are covered. Participants receive a workbook, relevant Florida Design Standard Indexes, and Part 2 of the Manual on Uniform Traffic Control Devices (MUTCD).

Available late 2010

Basic Roadway Markings

Target Audience: Employees, contractors, consultants, utility personnel, maintenance personnel, and other individuals new to installing, inspecting, or performing maintenance on roadway markings

The classification of markings on streets and highways, installation, inspection and maintenance procedures for each type and impact of climate and traffic conditions are included. Participants receive a workbook, relevant Florida Design Standard Indexes, and Part 3 of the Manual on Uniform Traffic Control Devices (MUTCD).

Available late Spring 2010

Basic Roadway Signs

Target Audience: Contractors, consultants, utility personnel, maintenance personnel, and others new to installing, inspecting, or performing maintenance on signs

This course covers key manuals and terms, sign classification and retroreflectivity, basic sign installation, inspection, maintenance and repair. A session is devoted to recognizing and preventing sign vandalism. Participants receive a course workbook, relevant Florida Design Standard Indexes, and Part 2 of the Manual on Uniform Traffic Control Devices (MUTCD).

Available late summer 2010

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Florida Technology Transfer Quarterly

Basics of a Good Road

Target Audience: Inspectors, contractors, road crews, and supervisors seeking basic road construction information

Materials, design features, compaction, paving mixes, traffic considerations, soils, road geometry, and drainage of a good road are featured. Videos and illustrations demonstrate proper maintenance techniques while citing common mistakes arising on the jobsite. Ample time is allowed for questions on specific maintenance issues.

CEU/PDH 0.6/6 Public \$125/Private \$210

6 hrs

Designing Facilities for Bicyclists and Pedestrians as Part of Multimodal Planning

Target Audience: Transportation planners, engineers, roadway designers, consultant firms, FDOT district/local project managers, bike/ped advisory board members, engineering and planning faculty and graduate students

This training provides current design standards (AASHTO) for bicycle/pedestrian facility planning, innovative safety and design research, FDOT updated multimodal planning level of service tools, and a practical approach to implement/fund bike/ped facilities. Includes best practices case studies from u.s. and Europe. Field experience on local facilities is incorporated as time allows.

CEU/PDH 0.7/7.0 Public \$150/Private \$250

8 hrs

GIS Crash Mapping

Target Audience: Personnel involved in crash mapping

Improved techniques and procedures to map crashes will lead to better analyses, roadway improvements and reduced fatalities and injuries. Learn to use GIS and a crash map extension for a better technique to map and track crash locations.

Call Janet at 352.273.1676 for more information.

Highway Design for Older Drivers and Pedestrians

Target Audience: Highway designers, traffic engineers, and highway safety specialists

The class provides practical information linking older road user characteristics to highway design and operational/traffic engineering recommendations by addressing specific roadway features. Supplements existing standards and guidelines for highway geometry, operations, and traffic control devices.

Ceu/pdh 0.6/6	
Public \$125/Private \$210	6 hrs

Human Factors for Transportation Engineers

Target Audience: Roadway designers, traffic engineers, and safety personnel who plan and design roadways for vehicles and pedestrians

Includes interactive modules on information perception, decision making, driver responses, and human factors principles. The relationship between specific highway standards and human needs is emphasized. Human skills and capabilities are discussed and demonstrated and micro case studies emphasize skills gained.

CEU/PDH 0.7/7

Public \$125/Private \$210

7 hrs

Introduction to the Florida Greenbook

Target Audience: Both technical and non-technical city/ county personnel needing knowledge of basic design requirements and minimum standards for city/county-maintained roadways

The Florida Greenbook (Florida Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways) provides basic design requirements and minimum standards for city and county-maintained roadways in the state. This class is appropriate for both technical and non-technical personnel. Topics also include sidewalks, curbs and curb ramps, crosswalks (where feasible), bicycle facilities, under- and overpasses for vehicular and pedestrian traffic.

CEU/PDH 1.2/12.0

Call 352.273.1685 for pricing.

Traffic Engineering Fundamentals

Target Audience: Non-traffic engineers or technicians, engineering and planning professionals who regularly interface with traffic engineering or are new to the discipline

Covers signal systems and operations, analysis of roadway capacity and level of service, intelligent transportation systems, traffic control devices, roundabouts and traffic incident management. Three length options: full three days, day one and two, or only day three; visit t2ctt.ce.ufl.edu for more information.

All three days:	
CEU/PDH 2.1/21	
Public \$545/Private \$625	21 hrs
Days one and two:	
CEU/PDH 1.4/14	
Public \$425/Private \$550	14 hrs
Day three:	
CEU/PDH 0.7/7	
Public \$250/Private \$350	7 hrs

12 hrs

2

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Fraining Portfoli

Transportation Site Impact and Trip Generation

Target Audience: City, county and state engineers and planners, consultants and others involved in the design and approval of new land developments and modification of existing facilities

This workshop presents the methodology, techniques, and procedures used in traffic analyses for proposed land developments, the determination of off-site and on-site transportation requirements, and an approach to the preparation of reports and findings. Institute of Transportation Engineers (ITE) methodologies and recommended practices will be used as a basis for the workshop. A discussion of trip generation anomalies and cautions and case studies will be presented. Participants work in teams to analyze illustrative problems. Participants receive ITE's publication, Transportation Impact Analyses for Site Development – an ITE Proposed Recommended Practice, and presentation materials.

CEU/PDH 1.4/14.0

Public \$275/Private \$375

14 hrs

Wildflowers and Noxious Weeds in Florida

Target Audience: Maintenance workers, supervisors, engineers, and employees in charge of vegetation design and care

Learn wildflower landscape design and maintenance for roadways, intersections, and bridges. The importance of maintaining designed areas using local wildflower species is emphasized along with noxious weed control methods.

CEU/PDH 0.6/6

Public \$125/Private \$210

6 hrs

Earthwork

Earthwork Construction Inspection Level 1 – CTQP

Target Audience: FDOT and contractor Quality Control technicians who perform field testing of soils used for roadway construction

Trainees will learn to safely and effectively sample soil materials from the roadway, take earthwork density readings, and record those findings in a density log book. Topics include nuclear gauge use and maintenance, determination of moisture levels in the soil, and utilization of the FDOT Earthwork Records System. Nuclear Safety Certification is required for qualification.

Course with written and proficiency exams:

CEU/PDH 0.8/8

\$475

14 hrs

Earthwork Construction Inspection Level 2 – CTQP

Target Audience: FDOT and contractor Quality Control technicians who verify that earthwork test results meet acceptance criteria and comply with standards, specifications and

contract documents

Improve your skills in applying standards and specifications associated with earthwork sampling, testing, recording, and inspecting earthwork construction on FDOT projects.

Course with written exam:

ceu/pdh 0.8/8

\$475

10 hrs

Geotech

Drilled Shaft Inspection – CTQP

Target Audience: FDOT and contractor Quality Control technicians responsible for inspecting drilled shaft foundations

Recognize and become familiar with the drilled shaft construction process, equipment, nomenclature, and FDOT Standard Specification for Road and Bridge Construction (SSRBC) Section 455.

Course with written exam:

CEU/PDH 1.6/16

\$700

24 hrs

Geotechnical Engineering for Non-Geotechnical Engineers — The Basics

Target Audience: Non-soils engineers, technicians and inspectors, project engineers and managers, architects, landscape architects, geologists, earth scientists, civil and other engineers, construction personnel, industry tech/sales representatives, public works professionals, and engineers-in-training. No formal geotechnical education is needed.

Develop your understanding of the basics with this straightforward, practical, entry-level course which describes and analyzes each important element of soil engineering: soil classifications and behavior, field investigations and soils reports, water effects on soils and dewatering, earth pressures and stresses, soil strength and settlement, compaction of sands and clays, construction procedures and stability of cuts and fills, and geosynthetics and earthwork.

Public \$125/Private \$210

6 hrs

Pile Driving Inspection - CTQP

Target Audience: FDOT and contractor Quality Control technicians responsible for inspecting driven pile foundations and retaining wall installations

Recognize and become more familiar with recording and documenting activities related to pile driving projects. Learn more about pile driving equipment, processes, terminology, and FDOT'S Standard Specification for Road and Bridge Construction (SSRBC) Section 455. This course also teaches you how to accurately and efficiently handle the FDOT pile driving software. Learn how to setup a structure file, understand bent/pier models, enter pile driving data, and print reports.

Course with written and proficiency exams:

сеu/ррн 1.6/16 \$975

24 hrs

10

Heavy Equipment

Backhoe – Safety/Hands-on

Target Audience: Backhoe operators — all skill levels

Provides equipment operators with classroom and handson experience. Acquaints operators with proper road profiles, drainage issues, maintenance methods, and new techniques and technologies. Covers safety, backhoe types, maintenance, speed, aggregate types, road profiles, ditching, draining, dust control, wetlands issues, etc. Hands-on: instructor provides field assistance on backhoe techniques and solving problems on your agency's local roadways. The safety and hands-on training duration varies with skill level.

Public \$250/Private \$350

length varies

Bucket Truck - Safety/Hands-on

Target Audience: Operators, managers, administrators, and supervisors — all skill levels

This workshop is held at your location using your equipment. Topics include personal safety, personal protection equipment, pre-use inspection, functional operation, and inspection of all components. Importance of routine inspection reports and unit maintenance, as mandated/required by OSHA, are covered. Information on mechanics, hydraulics, fluids, and the dielectric testing integrity of the mast and boom/bucket is presented. Participants perform hands-on pre-use inspection, correct set up of a unit on available surface for maximum stability, and load capacities of the bucket on a 5 degree slope. A certificate of competency is awarded for passing the test. The safety and hands-on training duration varies with skill level.

Public \$250/Private \$350

length varies

Forklift–Powered Industrial Truck – Safety/Hands–on

Target Audience: Warehouse, shop, and maintenance drivers — all skill levels

This safety workshop complies with all OSHA regulations and is held at your location using your equipment. Learn how a forklift works, safe operating rules/techniques/procedures, load handling, and inspection. Passing the performance and written exams earns a certificate of competency. The safety and hands-on training duration varies with skill level.

Public \$195/Private \$295

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length varies
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Front-end Loader — Safety/ Hands-on

Target Audience: Front-end loader operators — all skill levels.

This safety workshop complies with all OSHA regulations and is held at your location using your equipment. Topics include how a front-end loader works, safe operating rules/ techniques, load handling, inspection, and hands-on operating procedures. A certificate of competency will be issued after passing the written test. The safety and hands-on training duration varies with skill level.

Public \$325/Private \$425

Motor Grader Operator — Safety/ Hands-on

Target Audience: Motor grader operators, managers, operator supervisors — all skill levels

This course and manual acquaint operators with proper road profiles, drainage issues, maintenance methods, and new techniques and technologies. Topics include safety, grader types, grader maintenance, blade pitch, articulation, grader speed, aggregate types, road profiles, ditching, draining, washboarding, dust control, wetlands issues, and more. The instructor travels to your municipality and provides field assistance on grader techniques and solving problems on your local roads. The safety and hands-on training duration varies with skill level.

Public \$350/Private \$475

length varies

8 hrs

Tractor Mower Operator Safety

Target Audience: Tractor mower operators — all skill levels

An AEMF/FEMA-based best safety practices Industrial Mower Operator Safety Training Program. All makes and models of tractors and mowers will be covered. This course has both classroom and hands-on training. Lunch is provided.

Public \$145/Private \$250

Maintenance of Traffic

Maintenance of Traffic – Basic

Target Audience: Individuals working in traffic control zones on state roadways with responsibility for flagging traffic

Basic MOT training is required for every employee flagging traffic in traffic control zones. Includes review of Part 6E of the MUTCD, Florida Design Standard Index 600, and general information for traffic control through work zones. This training may be performed in-house by a qualified Intermediate MOT or Advanced MOT employee. Requalification is required every four years.

Public \$90/Private \$120

6 hrs

Maintenance of Traffic – Intermediate

Target Audience: Persons with direct control of placement, maintenance and inspection of traffic control devices, training and placing flaggers, and drafting or generating electronic work zone control plans

Successful course completion provides Intermediate MOT qualification. Material includes in-depth analysis of Florida Design Standard Index 600 and the MUTCD Part 6. Requalification is required every four years.

CEU/PDH 1.5/15 Public \$170/Private \$210

Maintenance of Traffic – Intermediate Refresher

Target Audience: Refer to Maintenance of Traffic -Intermediate

Prerequisite: Valid Intermediate Maintenance of Traffic qualification

Satisfactory completion of Intermediate Refresher training must occur on or before the participant's Intermediate MOT qualification expiration date to extend qualification for four years. This refresher course is an overview of the initial course with concentration on changes that have occurred to the Florida Design Standard Index 600 and Part 6 of the MUTCD in the past four years. Participants failing the exam must retake the full, 16-hour course to requalify.

CEU/PDH 0.7/7

Public \$120/Private \$160

8 hrs

Maintenance of Traffic – Advanced

Target Audience: All personnel with responsibility for, or authority to decide on specific maintenance of traffic requirements to be implemented on state roadways, including the engineer responsible for the work zone traffic control plan development and the work zone traffic control supervisor

Prerequisite: One year experience in work zone traffic control and responsibility for work zone traffic control plan development

Advanced MOT qualification is awarded to individuals who successfully complete this course. Successful participants will be able to analyze, design, implement and operate traffic control plans in a clear and concise manner. Regualification is required every four years.

CEU/PDH 1.675/16.75

Public \$295/Private \$395

Maintenance of Traffic – **Advanced Refresher**

Target Audience: Refer to Maintenance of Traffic -Advanced

Prerequisite: Valid Advanced Maintenance of Traffic qualification

Overview of initial course with concentration on changes to the Florida Design Standards, Part 6 of the MUTCD, PPM, CPAM, and Florida's Standard Specifications for Road and Bridge Construction. Satisfactory completion of the Advanced Refresher training must occur on or before the participant's Advanced MOT qualification expiration date to extend qualification for four years. Participants failing the exam must retake the full, 20-hour course to re-qualify.

CEU/PDH 0.7/7 Public \$150/Private \$200 7 hrs

Making Work Zones Work Better

Target Audience: Traffic engineers, construction engineers, project engineers, contractors, utility personnel, law enforcement, planners, public officials, and others involved in project development and work zone operations and safety

Traffic mobility and safety in and around work zones continues to be a problem in Florida. Over the past 20 years, severe congestion has doubled and extreme congestion has tripled. More than 24% of all non-recurring congestion is due to work zones, and is projected to increase by 50% over the next 10 years. Course topics will include congestion through reduced-capacity work zones, noise requirements for nighttime construction, adequate public relations campaigns, and knowledge of mitigation techniques and strategies.

CEU/PDH 0.8/8

Public \$150/Private \$250

8 hrs

Mobile Equipment and Internal Work Zone Safety

Target Audience: Public works employees: water/waste water utility, parks, irrigation, those who operate/work near mobile equipment and in/outdoor municipal work zones

Topics covered include mobile equipment hazards, crashes, work zone perimeters/barriers; inclines, surface conditions, proximity to excavations/general stability; falling object protective structures (FOPS), rollover protective structures (ROPS), vehicle restraint devices and rider-passenger rules; pedestrian worker safety rules; suspended loads/rigging, "trailering," equipment inspection/pre-job checklists, and unattended equipment and nighttime security.

Public \$75/Private \$100 4 hrs

QuickZone

Target Audience: Engineers, planners, designers, contractors, inspectors

OuickZone traffic impact software estimates work zone delays, performs tradeoff analyses between costs of construction and delays costs, compares night and day work, and diverts traffic to different roads at various stages of construction. These effects can be estimated for periods as short as one hour or for the entire project.

CEU/PDH 0.7/7 Public \$125/Private \$210

7 hrs

Work Zone Training for Law Enforcement

Target Audience: Law enforcement officers

This course provides safe and effective practices, roles and procedures related to the use of law enforcement officers in work zones and the basic components, standards and guidelines related to temporary traffic control in work zones.

Public \$100/Private \$150

4 hrs

Pilot/Escort Flagging

Pilot/Escort Flagging

Target Audience: Personnel responsible for assisting oversize load drivers and warning the motoring public of oversize loads

This course reviews official rules for Florida escorts found in the Florida Administrative Code chapter 14-26.012, as well as basic maneuvering with oversize loads, and flagging procedures from the MUTCD Part 6E. This course represents onethird of Florida's escort qualification requirements: (1) must be at least 18 years of age with a valid driver's license; (2) successfully complete a minimum 8-hour National Safety Council Defensive Driving course **or** possess a valid CDL (Class A, B, or C); and (3) successfully complete Florida Pilot/Escort Flagging training.

Requalification is required every 4 years.

Public \$120/Private \$120

8 hrs

Pilot/Escort Flagging Refresher

Target Audience: Refer to Pilot/Escort Flagging

Prerequisite: Valid Florida Pilot/Escort Flagging course certificate (8-hour or 4-hour course)

This course reviews changes to the Florida Administrative Code. A four-year certificate is presented to those who successfully complete the exam. The course is also available online through the Florida T² Center website (see Pilot/Escort Flagging Refresher Online).

Public \$60/Private \$60

4 hrs

Pilot/Escort Flagging Refresher Online

Target Audience: Refer to Pilot/Escort Flagging

Prerequisite: Valid Florida Pilot/Escort Flagging course certificate (8-hour or 4-hour course)

This 4-hour Computer Based Training (CBT) refresher reviews changes to the Florida Administrative Code. A fouryear qualification is presented to those who successfully complete the exam. To enroll and take the online course, go to $t2ctt.ce.ufl.edu/assnfe/ev.asp?MODE= \Leftrightarrow SNID=1152695523$ $\Leftrightarrow ID=136$ or for assistance, contact Florida T² Center Pilot/ Escort online registration by phone: 352.273.1670.

Public \$60/Private \$60

4 hrs

Project Management Construction Estimating

Target Audience: Employees responsible for making construction quantities estimates

The workshop provides agency personnel practice and experience making computations for estimating and measuring roadway maintenance quantities and amounts. Participants must supply their own calculator (T136x calculator or equivalent) and have the skill to add, subtract, multiply and divide on it.

Public \$120/Private \$210

4 hrs

Economic Evaluation of Public Projects

Target Audience: Engineers, managers, and technicians who assist with/analyze the financial feasibility of construction projects using public monies

This workshop provides a good, basic foundation in engineering economics principles and how to apply them to make realistic, economic decisions between competing alternative solutions. The analytical framework for decision making from an economic viewpoint includes theory, knowledge, and tools used to analyze commonly encountered engineering problems.

Ceu/pdh 0.7/7.0

Public \$200/Private \$300

8 hrs

Final Estimates Level 1 – CTQP

Target Audience: FDOT, contractor, and construction inspection personnel responsible for providing proper measurements, computations, documentation, and submission of final estimates

The CTT review course covers general responsibilities and procedures for final estimates, types and methods of proper documentation, and methods for measuring and computing pay-item quantities.

Course and written exam:

CEU/PDH 0.6/6

\$325

8 hrs

Final Estimates Level 2 - CTQP

Target Audience: All employees responsible for producing, reviewing, and approving monthly, progress, and final payments and/or compiling final estimates packages

Covers contract language, asphalt records, final plans, certifications, earthwork requirements, and fuel and bituminous adjustments. Standard policies, procedures, and common practices necessary to produce optimal, accurate, and timely payments are also presented.

Course with written exam:

CEU/PDH 1.4/14

\$575

Florida Department of Transportation (FDOT) Specifications

Target Audience: Roadway designers, specification writers, engineers, contractors

FDOT uses Contractor Quality Control (CQC) specifications on all projects for asphalt, concrete and earthwork, fundamentally changing acceptance and testing on FDOT projects which may affect your city or county. Learn a simplified process and easily customized tools that follow FDOT's Standard Specifications for Road and Bridge Construction. Become familiar with the workbook and process of selecting files to include in project packages. Learn the macro to pull it all together.

CEU/PDH 0.6/6

Public \$125/Private \$210

6 hrs

Inspecting Municipal Properties

Target Audience: Employees responsible for safety inspection of public properties

This course covers the inspection of indoor and outdoor work areas, public properties and access areas and emphasizes basic OSHA regulatory compliance, standard work place safety issues, desirable/undesirable working conditions, personal protective equipment (PPE) requirements, signage and markings. Agency inspection checklist forms are shared. Proactive maintenance is recommended with limited resources.

Public \$100/Private \$150

4 hrs

Introduction to Highway Construction Inspection

Target Audience: Inspectors, contractors, technicians, and construction personnel

This course provides participants with a better understanding of construction processes and a useful reference for highway construction inspection. Topics include chain of command, the preconstruction conference, working shop drawings, construction records, control of materials, utility relocation, schedule and contract time, progress estimates, safety, contract modifications, contractor claims, acceptance of work, and final estimates.

сеи/рдн 0.7/7 Public \$125/Private \$210

7 hrs

Project Manager/Inspector Fundamentals

Target Audience: Roadway managers and inspectors

This introduction and review course gives managers and inspectors basic tools required for job planning. Reviewing and performing hands-on training will occur for plans reading and review, soil borings and geometrics, field layout and survey, utilities, bridges, drainage, soils and geotechnical, work zone safety, construction safety, form teams, conduct plans review, and onsite/field review.

Public \$295/Private \$395

Quality Control Manager - CTQP

Target Audience: FDOT, contractor, and construction inspection personnel involved in acceptance decision-making

Learn how to develop quality control plans and how to monitor adherence to those plans during the construction process.

Course with written exam:

CEU/PDH 1.2/12

\$500

Safety

Common Sense Solutions for Intersection Safety Problems

Target Audience: Elected officials, law enforcement officers, municipal workers, safety advocacy groups, roadway designers, public works employees, directors, and engineers

This class provides basics of intersection safety problems, issues and liability, and the officials' role in making local intersections safer while protecting their governments from litigation. It also provides practical information that does not require engineering expertise for common safety problems, as well as background information on problems that do require engineering expertise.

CEU/PDH 0.7/7

Public \$125/Private \$210

7 hrs

Community Approach to Safe Routes to School Programs, A

Target Audience: Community safety officials, CTST members, bike/ped coordinators, Safe Kids Coalition members, county health staff, school administrators, interested PTA members

This is a national Safe Routes to School (SRTS) overview covering the 5 "ES" (Engineering, Education, Encouragement, Enforcement, and Evaluation) and practical ways to create a community-based SRTS program. Addresses state funding applications and applying for infrastructure/non-infrastructure funds. Includes field exercise "walk audit" of a school site. Shares local success stories with "walking school buses" examples, enforcement strategies, education programs and encouragement ideas.

Ceu/pdh 0.6/6.0

Call 352.273.1685 for pricing. 7 hrs

Confined Space Entry Certification

Target Audience: Municipal water, waste water and storm water utility employees

Identifies/addresses common municipal permit-required, confined space situations rarely covered by other programs. Provides a comprehensive Confined Space Entry policy and implementation methods. Introduces other hazards specific to water/waste water/storm water facilities. Presents new safety products, accident prevention, site analysis measures, protocol development for each permit-required confined space location, and the most advanced Confined Space Entry Permit form. Includes field exercise.

Public \$125/Private \$210

8 hrs

Defensive Driving Skills and Crash Prevention For Heavy Vehicle Operation

Target Audience: Operators of heavy equipment — all skill levels

This class helps develop knowledge and driving skills for dual and single axle dump trucks, ³/₄ ton pickups, emergency vehicles, and more. Increase your confidence level in operating vehicles with a GVWR over 26,000 LBS and towing trailers/vehicles rated at 10,000 LBS GVWR or less by taking this course. The safety and hands-on training duration varies with skill level.

Public \$175/Private \$295

length varies

Lockout/Tagout: Isolation and Control of Hazardous Energy at **Municipal Work Places**

Target Audience: Public works/utility employees, water/ waste water distribution/plant operators, anyone exposed to hazardous energy

This course combines a total program approach to lockout/tagout principles with worksite safety engineering, safe work practices, protective devices/products, special clothing and proper use of personal protective equipment. Hazardous energy sources, lockout/tagout concepts applicable to public work spaces, recent public sector lockout/tagout hazards and accidents, and available isolation and/or lockout devices are presented.

Public \$75/Private \$100

4 hrs

Low-Cost Safety Improvements for Rural Roads

Target Audience: Elected officials, law enforcement officers, municipal workers, safety advocacy groups, roadway designers, street superintendents, public works employees, directors, and engineers

This class is a basic review of low-cost safety solutions for roadways, emphasizing rural roads. Information for common safety problems is provided in a practical format that does not require engineering expertise.

Public \$125/Private \$210

Nuclear Density Gauge Safety – CTT

Target Audience: Technicians who use or work near nuclear density gauges

This course covers the proper use and safe transportation requirements of portable nuclear density gauges. Topics include radioactivity, radiological health and safety, regulations, monitoring and transport. Passing the exam fulfills requirements for technicians using nuclear density gauges, required for Earthwork Construction Inspection Level 1 CTQP qualification. The class is highly recommended for Asphalt Paving Level 1 technicians as they use or work near nuclear density gauges.

Course with written exam:

CEU/PDH 0.6/6.0

Call 352.273.1661 for pricing.

OSHA Competent Person

Target Audience: Engineers, contractors, supervisors, inspectors, construction and road crews

Covers the OSHA Trenching and Excavation Competent Person requirements. Learn new terms and how to apply the standards. Other topics include soil classifications, tests, and hazard recognition.

Public \$125/Private \$210

5 hrs

Power Line Safety for the **Municipal Worker**

Target Audience: Public works/utility crews, anyone working around power utilities, safety officers, safety loss control officers

This program educates workers on above- and belowground power line configurations. Activities that place them at risk of contact with high voltage lines are described, as well as accident prevention methods and safe work practices when operating near power utilities. Power line accident scenarios, issues and incident prevention, and ground penetrating radar are discussed. Includes a field exercise and demonstration.

Public \$75/Private \$100

4 hrs

Road Safety Audits for Community Traffic Safety Teams (CTSTs)

Target Audience: CTST members

Road Safety Audits (RSAS) for CTSTS, an abbreviated version of the full course, is available only to CTST members. The RSA is an effective tool to help reduce injuries and fatalities on your road network. CTST members are provided with a step-bystep procedure for performing RSAS to recognize basic RSA concepts, evaluate risk and safety, and become familiar with common issues, which gives the team the ability to conduct audits. Simple, low-cost safety improvements can be implemented to reduce fatalities and severe crashes. An optional, onsite RSA will be conducted at a predetermined, local site.

CEU/PDH 0.4/4 Call 352.273.1697 for pricing.

8 hrs

15

Road Safety Audits for Local Governments

Target Audience: Traffic engineers and other local government decision makers

Road Safety Audits (RSAS) for Local Governments introduces RSAS as an effective tool to reduce injuries and fatalities on your road network. Learn basic RSA concepts, risk and safety, and common issues. Gain experience in conducting a RSA. Low-cost safety improvements can be implemented quickly to reduce fatalities and severe crashes. An onsite RSA is conducted on day 2 at a predetermined, local site.

CEU/PDH 1.2/12

Call 352.273.1697 for pricing.

16 hrs

Roadside Maintenance Safety

Target Audience: Mower tractor operators, vegetation control workers

This course teaches workers OSHA standards, the fundamentals of safely using mowers, traffic control procedures, PPE, sprayers, accident reviews and prevention, and vegetation control. This is not a hands-on equipment course.

Public \$120/Private \$210 5 hrs

Safe Mobility for Life Program: Preparing Our State for the Future

Target Audience: Engineers, planners, and associated professionals

By 2020, one in four Florida residents will be over 65, and half of those will be 75 or older. Developed by FDOT, this Florida-specific training, based on FHWA's Highway Design Handbook for Older Drivers and Pedestrians, raises awareness of roadway needs related to mature drivers. It presents alternative solutions to planning, design, and operation of roadways and associated facilities.

CEU/PDH 0.7/7.0

Free

Stormwater

Stormwater, Erosion, and Sedimentation Certification **Program (NPDES)**

Target Audience: Persons responsible for planning and/or inspecting stormwater runoff and containment sites

This course satisfies the EPA regulations for qualified/ certified inspectors for the Florida Stormwater, Erosion and Sedimentation Control Program and covers best management practices as set forth by the state of Florida. To become a Certified Stormwater Management Inspector, participants must successfully pass a state-approved test upon completion of the course.

CEU/PDH 1.3/13 Public \$195/Private \$295

13 hrs



Surveying Methods for Local Agencies

Target Audience: Experienced individuals are welcome; however, the focus is for those with limited/no surveying experience including engineers, supervisors, managers, state and local officials, road agency personnel, and others interested in learning simple surveying methods.

Basic surveying techniques using the hand level, rule (tape), and level rod are taught. Participants learn to record field measurement notes and use the notes to make simple calculations.

CEU/PDH 0.7/7

Public \$125/Private \$210

7 hrs

Workforce Development and Management

7 Habits for Associates

Target Audience: Supervisors, managers, upward bound employees, office personnel, and engineers

Based on the best-selling book by Dr. Steven R. Covey, this class focuses on principle-centered concepts proven to improve effectiveness at work and home.

Public \$350/Private \$425

Between You and Me: Managing Conflict at Work

Target Audience: Your entire team

In today's workforce, some are reluctant to get involved in a conflict situation. Who doesn't feel uncomfortable at the thought of an unpleasant and possibly emotional confrontation? Unfortunately, conflicts are rarely self-healing conditions. Learn how to take responsibility for resolving individual conflicts by following simple, effective steps.

Public \$125/Private \$210

Coaching for Success

Target Audience: Supervisors and other leaders

Learn basic leadership skills to encourage/guide employees toward accomplishing goals in the work environment. Coaching is a dynamic, face-to-face leadership style. This intensive session provides practical tips on how to be a coach and therefore become a better manager. Lectures, group discussion, and case study reviews cover techniques that can help you become a more effective leader.

Public \$125/Private \$210

3 hrs

Communicate Assertively

Target Audience: Supervisors, managers, office personnel, and engineers

Assertiveness is an acquired skill, not a personality trait that some people have and others do not. When we communicate assertively, we express our feelings, thoughts, and wishes, standing up for our legitimate rights without violating the rights of others. Learn communication skills essential in many day-to-day situations.

Public \$125/Private \$210

3 hrs

Communication Confidence

Target Audience: Supervisors, managers, office personnel, and engineers

Most of us think we're good communicators. Listening and talking are activities we engage in all the time, so we assume we do it well. Unfortunately, that is often not the case. Learn skills and tools to improve the way your team communicates.

Public \$125/Private \$210

3 hrs

Creating Possibilities

Target Audience: Supervisors, managers, office personnel, and engineers

Features the work of Ben Zander, world-famous conductor of the Boston Philharmonic Orchestra. A fresh approach for improving your leadership is offered by encouraging you to become a possibility — a vision. The program expresses the importance of relating to people on your team as co-visionaries and co-leaders in the part they have to play.

Public \$125/Private \$210

3 hrs

Discover the Leader in You

Target Audience: Supervisors, managers, office personnel, and engineers

Packed with practical exercises, tools, checklists, and action plans, this course will help you identify specific leadership roles that are natural for you, most critical to your organization, and most difficult for you. Learn practical tools for developing your skills. Good managing and effective leadership are not about memorizing techniques; they are about the kind of capability that begins to feel like a natural part of your being.

Public \$125/Private \$210

Empowerment: Unleash Potential

Target Audience: Supervisors, managers, office personnel, and engineers

Want to maximize human potential? Create a culture that fosters independent initiative, creativity, and resourcefulness through proactive leadership. Identify proactive versus reactive behavior, increase your awareness of untapped potential, and develop an action plan to maximize potential in your work group.

Public \$125/Private \$210 3 hrs

From Manager to Motivator

Target Audience: Supervisors, managers, office personnel, and engineers

Inspiring employee motivation requires much more than the old-fashioned carrot-and-stick approach. Today's managers must understand reasons why employees work and rewards they hope to receive. Learn the many factors affecting employee motivation. If you lead others, this workshop is for you.

Public \$125/Private \$210 3 hrs

Leading the Challenge of Change

Target Audience: Supervisors, managers, office personnel, and engineers

In this world of high velocity change, we face the challenge of leading others through change every day. Why is this a challenge? When people perceive an established belief, value, or behavior is threatened, they experience fear — which then motivates them to protect themselves and resist the change! Explore the dynamics of change, the role of values and behavior in the change process, how to overcome resistance to change, and how to make change irresistible.

Public \$125/Private \$210

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3 hrs
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3 hrs

Making Meetings Work

Target Audience: Supervisors, staff, and engineers

How many meetings have you attended or conducted that seemed like wasting time? Well, no more! Attend this workshop and learn how to conduct more effective meetings. You'll even learn why meetings don't work and what you can do to overcome typical meeting blunders.

Public \$125/Private \$210 3 hrs

Now Hear This

Target Audience: Supervisors, managers, office personnel, and engineers

Forty percent of your average workday is spent listening to others. That's close to half a day! Are you an effective listener? Assess your listening skills. Could you improve?

Public \$125/Private \$210

Power of Feedback, The

Target Audience: Your entire workforce

Whenever we respond to another person, we are giving feedback. Effective feedback clearly communicates what's expected. It avoids attacks, judgments, and name-calling, and uses reinforcement to point out positive behavior that can be repeated or redirected when an employee is not contributing toward the organization's goals.

Public \$125/Private \$210

3 hrs

Powerful Public Speaking

Target Audience: Upward bound employees, engineers, supervisors, and managers

Have you ever been in an interview, a meeting, or presentation and wished you were better prepared? Has stage fright impacted your effectiveness? Learn how to reduce stage fright and deliver your message in a professional manner. You will apply public speaking basics by focusing on situation, purpose, audience, and methods.

Public \$125/Private \$210

3 hrs

3 hrs

Quality Customer Service

Target Audience: Your entire workforce

We all have customers. How effective are you when dealing with them? When was the last time you really assessed your customer interaction? Could you improve? Would it help to review and get re-energized? This is not your ordinary customer service workshop.

Public \$125/Private \$210

Relationship Strategies

Target Audience: Upward bound staff, supervisors, and engineers

This demanding workshop offers guidelines for understanding and adjusting to differences in people through observation of their behavior. Tools presented enable you to see yourself and your world through someone else's eyes which increases communication effectiveness.

Public \$125/Private \$210

3 hrs

Successful Supervision in Public Works

Target Audience: Public works directors, engineers, supervisors, and superintendents

Improve the quality of supervision in your public works department. This class covers tasks related to human resources management, a responsibility for all public works supervisors; how the certification interview can be used to select supervisors with competencies in human resource management; evaluation of supervisory performance related to the management of human resources; and a training program to improve supervisory performance related to personnel management.

CEU/PDH 0.6/6 Public \$125/Private \$210

Surviving the Challenge of the **Problem Employee**

Target Audience: Supervisors, managers, engineers, and office personnel

"Bill's work is not up to speed, but I'm afraid he's going to get angry if I tell him." "Mary does good work . . . when she actually comes to work." "The problem with Joe is his attitude. I just want to fire him!" Supervisors learn how to analyze and control problem employees and how to get the workplace back on track to productivity.

Public \$125/Private \$210

3 hrs

Teamwork: Together Everyone Wins

Target Audience: Team members, upward bound employees, engineers, supervisors, managers, and office personnel

Many organizations today use teams to identify and solve problems. Groups can transform themselves by learning the essential elements of team development.

Public \$125/Private \$210

3 hrs

What to Do First When **Everything is Important**

Target Audience: Supervisors, managers, office personnel, and engineers

"It takes too much time to plan, besides, I've been successful so far without planning." "Everything I have to do is important." In today's work environment, supervisors often are bombarded with simply too much to do. While it is true that we don't have enough time to do it all, it is equally true that we have enough time. The key is knowing what to do first. Learn how to control work environments and how to manage workloads.

Public \$125/Private \$210

More Free Training from NHI and TCCC!

Over 40 free, web-based courses are available from the National Highway Institute (NHI) in partnership with the Transportation Curriculum Coordination Council (TCCC). Please visit www.nhi.fhwa.dot.gov/Home.aspx to view the entire list.

Also, Highways for LIFE has partnered with NHI to bring YOU NHI Innovations which is a monthly web conference series that is also free to participants. Go to www.nhi.fhwa.dot.gov/ about/innovationseries.aspx to see upcoming conference listings or to listen to or download previous presentations.



Mobile Video Training

Target Audience: Work crews, field and entry level employees, and supervisors

This efficient training delivers video-based instruction and job-related skills information directly to your office, maintenance yard, or training facility. All training materials reflect Florida's regulations and guidelines. Sessions are scheduled on a first-come, first-served basis with a small registration fee that covers all employees. Meeting space and breaks are provided by your agency.

Schedule as much training in one day as possible (7 hours) and have the instructor travel to and from without an overnight stay. Sharing costs with another agency can save money and train the most employees at once. Average cost per training hour decreases as the total training hours offered increases. Custom tailored training is available.

Visit *t2ctt.ce.ufl.edu* and complete the request form, then submit as directed. Limited scholarships are available. For special training or questions, contact *mvt*@*ce.ufl.edu* or 352.273.1697.

Mobile Video Training Program Modules

Equipment

Module 1: Work Zone Safety

- 1A. Rural Road Operations (4 hrs)
- 1B. Urban Streets (4 hrs)
- 1C. Combination of Rural Roads and Urban Streets (4 hrs)
- 1D. Detours (2 hrs)
- 1E. Flagging (2½ hrs)
- 1F. Intersection Work (2 hrs)
- 1G. Low Speed Streets (3 hrs)
- 1H. Moving/Mobile Operations (2 hrs)
- 11. Pedestrians (2 hrs)
- 1J. Surveyors/Locators (2 hrs)
- 1K. Utility Work (2½ hrs)
- 1L. Nighttime Operations (21/2 hrs)

Module 2: Asphalt Pavement

- 2A. Asphalt Pavement Repair (2 hrs)
- 2B. Asphalt Paving (1¹/₂ hrs)
- 2C. Asphalt Paving Inspection (1-2 hrs)
- 2D. Asphalt Surface Treatments (2 hrs)

Module 3: Equipment / Tool Operation and Safety

- 3A. Asphalt Paving Compaction Operation (2 hrs)
- 3B. Backhoe/Loader Operation (1½ hrs)
- 3C. Chainsaw Safety (1^hr)
- 3D. Commercial Driver's License (4 hrs)
- 3E. Crane Safety (1 hr)
- 3F. Crawler Excavator (Crawler Backhoe) Safety (1 hr)
- 3G. Dump Truck Operation and Preventive Maintenance (Γ hr)
- 3H. Forklift Operation and Safety (1 hr)
- 3I. Front End Loader (2 hrs)
- 3J. Motor Grader (1½-2 hrs)
- 3K. Skid Steer Loader (Bobcat) (2 hrs)

Module 4: Portland Cement Concrete

- 4A. Reinforced Portland Cement Concrete Inspection (4 hrs)
- 4B. Portland Cement Concrete Flatwork (2½ hrs)

Module 5: Roadside Maintenance Operations

- 5A. Mowing Safety (1 hr)
- 5B. Roadside Vegetation Control (4 hrs)
- 5C. Shoulder and Roadside Ditch Maintenance (2 hrs)
- 5D. Guardrail Installation (2½ hrs)

Module 6: Drainage Construction/ Erosion Control

- 6A. Pipe Placement Grader (1½ hrs)
- 6B. Underground Safety (2 hrs)

Module 7: Soils

- 7A. Soil Cement Construction in Florida (1½ hrs)
- 7B. Soil Stabilization in Clay Soils (1½ hrs)
- 7C. Geotextiles and Geogrids (2 hrs)
- 7D. Graded Road Maintenance (1-2 hrs)
- 7E. Erosion Control (2 hrs)

Module 8: Legal Concerns

- 8A. Legal Testimony Trial and Deposition (2 hrs)
- 8B. Tort Liability Field Responsibility (1 hr)
- 8C. Tort Liability Management Responsibility (1-2 hrs)

Module 9: Highway Safety: Design, Construction and Maintenance

9A. Highway Safety Features (4 hrs)

Module 10: Traffic Operations

10A. Highway Signing and Pavement Marking Maintenance (4 hrs)

Technology Transfer Quarterly Florida's Traffic Engineering and Safety Workforce Training Update



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- 25 Has Your Agency Developed a Better Mousetrap?
- 27 Sign Grant Funding Still Available



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Florida Technology Transfer Quarterly, published by the Florida Transportation Technology Transfer (T²) Center at the University of Florida, Department of Civil and Coastal Engineering, facilitates information exchange relating to roads, bridges, general surface transportation, and safety.

Our programs are sponsored through partnerships between the Florida Department of Transportation and the Federal Highway Administration and include the Local Technical Assistance Program (LTAP), Safety Circuit Rider Program (SCR), the Product Demonstration Showcase Program (PDS), and the Pedestrian/Bicycling Safety Resource Center.

Interested parties may receive this publication at no cost by completing and returning the FaxBack form on the inside back cover. Newsletter content and accuracy is the exclusive responsibility of the Florida T^2 Center.

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Too Busy To Train? Think Again

By Linda Hanson

How many times have you wished your managers and field crews were as good as you? Maybe some of them are struggling to do things the way you want them done and are failing. Others may take longer to master new tasks and therefore you find it takes them too long to complete a job.

There is no doubt that workers in many industries today are pushed to produce more in less time and that may be why research shows that today's workers are less satisfied with their jobs versus a decade ago. In addition, as large numbers of baby boomers prepare to leave the work force, they will be increasingly replaced by younger workers, who tend to be more dissatisfied with their jobs than older workers. They also have different attitudes and expectations about the role of work in their lives. This transition presents a new challenge for many employers and may be impacting your ability to get managers and field crews to reach their full potential.

The answer to the problem for many agencies and companies is to provide more training and coaching of their employees. If your field personnel get below eight hours of training per year it won't lead to any changes in their production. Many organizations offer more training for their management and while that is good, construction companies make or lose most of their money out on the jobsite, not in the office. Quality, service and productivity happens, to a great extent, out in the field.

Most public agencies don't have formal training programs and making time to train employees is challenging because as a manager there are time constraints on you. But leaving people to learn by doing or by the trial and error method is costly. Set a goal to conduct training that will help your employees excel. Your training goal should be to provide 40 hours of training per year, per employee. The total cost probably won't be more than two percent of your payroll cost but your return will be much higher improvement in bottom-line productivity.

To get started, call a meeting with your managers or team to select and prioritize training topics. In future years make it a habit to cover the same topics plus add new ones—there are always new people and refresher classes reinforce correct performance. Allocate training time each week such as 30 minutes every Tuesday morning. Remember, training can be held in the office or on the jobsite but it should be interactive. Use the old method of telling them what you are going to tell them, tell them, show them, let them do it and tell them again. Follow up by coaching participants until they get it right then recognize those who do a good job. Share training duties among your crew, based on experience and skill, so everyone gets a chance to teach.

There are times when you should use outside people to instruct on new or technical tasks. Bringing in a specialist to train or sending employees offsite to interactive seminars and workshops can be worth the investment providing you coach them after they get back on the job so they are implementing their new skills.

People want to make a meaningful contribution on the job and they want to be recognized for their efforts. Training does this and it also fosters team spirit and more enthusiasm for their work. Use training and coaching to build productivity, quality of work, motivation, and company loyalty.

Linda Hanson, CMC, is a certified management consultant and author of 10 Steps to Marketing Success. She writes, speaks and consults on marketing, management and customer service issues and can be contacted at www.llhenterprises.com. Sign up for her free newsletter, The Superior Performance Report.

Reprinted with permission from the Winter 2008 issue of Tech Transfer, the newsletter of the California LTAP Center. ||||

Changes, Changes, Changes — all to serve you better! New logo, new website and new registration system!

Our new logo was previewed in the August issue of the Florida *Technology Transfer Quarterly*, and will be used throughout our center makeover. As we strive to find more efficient ways to deliver T^2 services, we realized a new look was needed to help us make the exciting transition. The new logo will be used to refresh our website and a new registration system. Check things out at *t2ctt.ce.ufl.edu* and give us your feedback.

One of Our Local Problems

Want to see where fatal crashes occurred in your community? And the nation?

The Center for Excellence in Rural Safety (CERS) recently updated their national website which has located every national highway death for the past five years and provides details on each fatality. The information helps local officials identify the most dangerous portions of their roadways so they can focus on where to implement safety improvements. Drivers also benefit by being able to locate problematic travel way locations, helping them be more aware and alert while planning and driving on the routes.

Florida is included in the ten states with the most rural hot zones.

Rural roads carry less than half of the traffic in the United States; however, rural roads account for half of our nation's vehicular deaths. U.S. Census figures reveal that, even though only 21 percent of the U.S. population lives in rural areas, the Federal Highway Administration found that 57 percent of highway deaths occur on rural roads.

Visit *www.SafeRoadMaps.org* for searchable maps. Enter a ZIP code, municipality name or street address to view the road fatalities for that location. Details include driver age, whether the driver was wearing a seat belt, drinking and/or speeding. Hot zones or

Improve Your Rural Road Safety!

Rural roads account for approximately 40 percent of the vehicle miles traveled in the U.S., but almost 57 percent of fatalities. The Federal Highway Administration's (FHWA) Local and Rural Roads Safety Program website, *safety.fhwa.dot.gov/local_rural/* has a wealth of helpful information and materials, policies, statistics and guides to assist your agency in developing and implementing safety programs. Categories include:

- Crash Facts
- Funding, Policy and Guidance
- Training, Tools, Guidance and Countermeasures for Locals
- Safety Programs
- Partners and Resources III

"heat maps" visually highlight top rural and urban locations with the highest fatalities. Viewers can zoom from heat maps showing all the zones to images of individual road segments.

A mapping feature tutorial video is available at the site under "Tutorials." Click the "View Street Maps" button to enter the ZIP code and data filter choices. Detailed images are displayed for the exact location you choose.

Florida is included in the ten states with the most rural hot zones. Check out the website to find the hot zones in your locale.



Sharing More Success Stories

The Florida T² Center is continuing our commitment to feature success stories identified through the Florida Association of County Engineers and Road Superintendents (FACERS) annual awards. Although winners were announced in our August newsletter, other outstanding nominations deserve to be shared. A brief synopsis of FACERS Team Project award entries will be featured as newsletter space permits.

Please visit *www.facers.org* for information on all the award categories and to make nominations to recognize outstanding projects and efforts of your agency. FACERS and the Florida T² Center hope sharing these stories will provide a small thank you for a job well done and also inspire others to share theirs.

Team Project: Completion of a Highlands County Traffic Signal Improvement Project at Sebring Parkway and Scenic Highway

Highlands County Traffic Operations Department

After receiving an unacceptable bid to install a traffic signal system, including mast arm foundations, the Highlands County Traffic Operations Team was asked to handle the installation of the poles and mast arms, resulting in savings of more than \$79,000 over the original bid!

The project was re-bid, minus the work that the Team took on. The revised contract was split between two vendors. The Traffic Operations Team completed the work in two weeks, expediting the project and thus eliminating potential work zone hazards and delays to the traveling public. In addition, the Team completed installation of two other signals at intersections along the corridor.

The Team's initiative and dedication to excellence showed that jobs can be performed quickly, safely and economically, much to the delight of the taxpayers.

Team Project: Clay Street and Goddard Avenue Drainwell Replacements

Orange County Public Works Department, Roads and Drainage Division

Drainwells alleviate street flooding, control water levels of land locked lakes, and recharge aquifers. Over 400 drainwells have been drilled in Orange County, Florida since the early 1900s; many are single-cased with no grout. Increasing concerns included how current drainwells are acting as runoff outfalls, and could cause street flooding, geysering, road depressions and sinkholes if they fail. When drainwells become inoperative they need to be replaced to conform to state and federal regulations.

The emergency replacement of Clay Street drainwell was due to the failure in grouting which caused the well to collapse, causing street flooding and a sinkhole to develop.

Replacement of Goddard Avenue drainwell was due to a failed casing. During construction of the replacement well, a cavity was found that caused in-filling of sand into the new drainwell. Grout was injected down the well in order to seal off the cavity, but unstable formations kept filling the borehole with sand and a small sinkhole developed near the well. Additional grouting was injected unsuccessfully and the replacement well had to be abandoned. A new well was relocated about 200 feet away from the previous well. After finishing the construction of the new drainwell, mucky soil was found in an adjacent ditch which had to be removed in order to properly set the drainage structures and cable concrete was installed on both sides of the ditch for slope stabilization.

Both of the drainwells are equipped with a Continuous Deflective Separation (CDS) Stormwater Treatment Unit that helps capture pollutants before they reach the drainwell, a locking vault and wellhead debris screen that provide better drainage structure to protect the aquifer. Double casing was constructed with a grout seal in order to prevent cross-aquifer contamination along the casing interface.

A total design and construction cost for the Goddard Avenue drainwell was \$455,353.11, while the cost of the Clay Street drainwell was \$600,297.40 due to the emergency nature of the project.

The Orange County Teams continue to perform in a superior manner for their citizens.

Other Success Stories:

Bus Shelters Make a Difference in City of Lauderdale Lakes, Florida

In a past newsletter, we asked agencies to submit success stories to share. As space permits, we will feature the submissions. Help other agencies by submitting your successes, either as FACERS award nominations or directly to us for publication consideration.

Due to the demand for transportation alternatives and protection from Florida's summer weather, the City of Lauderdale Lakes and the Community Redevelopment Agency designed and built 12 bus shelters. Partial funding was also provided by the Broward County Metropolitan Planning Organization and Transportation Office. The project won a Florida Redevelopment Association 2008 Roy F. Kenzie Award in the Transportation/Transit Enhancement category. The safe, appealing, convenient, and attractively landscaped shelters also enhance the streetscape and complement local efforts to provide a sustainable and walkable environment. High youth and elderly populations increase demand for public transportation. Thus, locations are hubs for transit users, like schools and housing density/development and park facilities. Increased demand in Lauderdale Lakes is also due to its central location in Broward County and the Tri-County area of Palm Beach, Miami Dade and Broward counties.

Ten more shelters will be added in the future.

Read more about the bus shelter project at: *t2ctt.ce.ufl.edu*

Build a Better Mousetrap Competition

Now seeking entries from Florida

The Federal Highway Administration's LTAP/TTAP centers (T2/ LTAP centers) are now sponsoring a national competition to showcase innovative inventions, gadgets, tools, equipment modifications, and/or processes that increase safety, reduce cost, improve efficiency, and improve the quality of transportation or methods to improve ways to do a job.

The national Build a Better Mousetrap Competition will be collecting and disseminating real world examples of best practices, tips from the field, and just great, home-grown ideas that work. The competition is a fantastic way for innovative and local ideas to be exchanged with others. It is technology transfer in its best form. In doing so, ideas result in even greater improvements and spur the development of different concepts and perspectives. It is also a great opportunity for local transportation workers and all of our audience to obtain some well-earned recognition for their hard work and innovations.

- State prizes include:
- an award certificate
- a free T² workshop voucher
- a gift certificate
- recognition in our T² Center quarterly newsletter and website

How can you enter? Go to *t2ctt.ce.ufl.edu* for details. Florida's entry deadline is March 31, 2010.

Plus, all entries submitted to our Florida T² Center and forwarded to the national level competition will be included in an annual electronic booklet. Go to *www. ltapt2.org/resources/downloads/ NationalEntryBooklet.pdf* to view the 2009 national entry booklet which features the following entries that your agency can possibly benefit from:

- Culvert Inlet Improvement to Existing Rural Culverts by Adding Low Cost Drop Inlets
- Magnet System for Road Debris
- Asphalt Equipment Clean-Out System
- Self-Loading Water Tanker with Spray System
- Rock Crusher Camera Monitoring System
- One Man Culvert Loader

Help is Available to Reduce Roadway Departures

more. 📗

The Roadway Departure Safety website, *safety.fhwa.dot.gov/ roadway_dept/* will help agencies identify and correct roadway features that contribute to run-off-the-road crashes and the resulting injuries and fatalities.

Over half of the people killed annually on our highways die when their vehicle leaves their lane and crashes. Sometimes vehicles cross the centerline and are involved in head-on crashes or are sideswiped. Vehicles driving onto the shoulder or beyond can roll over, be struck, or hit objects such as trees, utility poles, bridge railings, guardrails, or parked vehicles.

The Roadway Departure Safety website provides highway

engineers, decision makers, and practitioners with information and guidance to help keep drivers on the road. Retroreflective pavement markings and signage help keep drivers in their lanes and rumble strips are used to alert drivers as they start to drift out of their lane. Other countermeasures that help keep vehicles traveling in the correct direction and also reduce crossovers are guardrails and median barriers. Wider shoulders and flat, traversable roadsides help drivers recover from drift so they can return safely to the road. Clear zones and properly designed breakaway sign and utility pole supports, roadside barriers, and bridge railings also reduce severity of crashes and assist drivers. Visit the site to learn

- Phillips County Landfill
- Routt County Road Roller
- Cattle Guards
- Trailer Walkways
- Safety Incentive Program
- Pinchie the Basin Cleaner
- Local Work Zone Safety Posters
- Pipe Site Truck
- Suck'em Dry Molokai
- Scarifying BladesTemporary Sign Post
- Sign Truck

Remember, **all** entries will be forwarded to the national competition, not just the winner. Time is short so enter your great innovations today. Help us show the rest of the nation that Florida's public works and transportation workforce is on the leading edge of efficiency!

CTOP Course Revision Information

Several of the Construction Training Qualification Program (CTQP) courses and exams have recently been updated. The information below provides an overview of the revisions. For more details please check our website: *t2ctt.ce.ufl.edu* and the CTQP website: *www.ctqpflorida.com*

Asphalt Paving Level 1 and Level 2 and Asphalt Plant Level 1 and Level 2: course materials and exams were revised to reflect the January 2009 Workbook (to the Florida Department of Transportation publication, 2007 Standard Specifications for Road and Bridge Construction, SSRBC). The Workbook can be accessed at *www.dot.state.fl.us/specificationsoffice/Implemented/ WorkBooks/Default.shtm* which provides a link to SSRBC.

Asphalt Paving Level 1 and Asphalt Plant Level 1: changes became effective on September 14, 2009.

Asphalt Paving Level 2 and Asphalt Plant Level 2: changes became effective on June 11, 2009.

Earthwork Construction Inspection Level 1: course

materials and exam revisions became effective on August 23, 2009.

Earthwork Construction Inspection Level 2 is in the revision process. Please check the website: *t2ctt.ce.ufl.edu* or visit *www.ctqpflorida.com* for current information.

Final Estimates Level 1: course materials and exam revisions are currently underway with a target implementation date of January 2010.

Drilled Shaft Inspection: new course materials and revised exam became effective on May 30, 2009. Passing a proficiency exam on slurry testing is now required to gain the qualification. CTQP has extended the exam time from 2 hours to 2.5 hours to accommodate the proficiency exam.

Pile Driving Inspection: course materials and exam changes became effective on May 20, 2009.

Other courses slated for revisions in 2010 are Asphalt Mix Design and Concrete Field Inspection Specification.

Warm-mix Asphalt Educational Module Available

The National Asphalt Pavement Association has developed a free, interactive web-based educational module that provides an overview of warm-mix asphalt technologies. The module includes

the types of technologies, benefits, and potential challenges and takes about 15 minutes to complete. Visit *store.hotmix.org/index. php?productID=694* to participate.

photo: Dan Dobson



Florida's Pedestrian and Bicycling **Resource Center Materials-check ou** website f ems and

Listed below are the newest and replenished pedestrian and bicycling-related educational and promotional items added to our Safety Resource Center (SRC) collection. These, and all the other great materials we have, can be provided to qualifying organizations to help support pedestrian and bicycle safety and educational activities. Please visit *pedbikesrc.ce.ufl.edu* to view the complete list of items, descriptions and ordering information. The website has also received some new features, making it even easier for you to use, including new filters to assist you in your searches.

Be sure to check back regularly to see new items. Please contact us if you have items you would like considered to be available through the SRC and/or improvements to our website or services.

Books

- I'm Safe! Walk with Me Activity Sticker Book
- I'm Safe! On my Bike Activity Sticker Book
- Florida Bicycle/Pedestrian Law Enforcement Guide

CDs

- Safer Journey
- Bicycle Safer Journey •
- Walk Smart & Bike Smart

Videos (DVDs)

- Elementary School Helmet Safety Program
- Step to Safety with ASIMO

Publications

- Easy Steps to Properly Fit a Bicycle Helmet
- Safety Fun Activity Book
- Safe Ways to School Toolkit
- Kids Physical Activity
- Bicycle Safety: What Every Parent Should Know
- Neighborhood Safety
- Sprocket Man Comic Book
- Top Ten Rules of Bicycle Safety Bookmark
- Tips for Parents and Other Adults for Teaching Pedestrian Safety to Children
- Tips for Walking Safely to School



Funding Still Available for Sign Grant Awards

work required made

very simple to apply."

In our November 2008 issue we reported that the National Association of County Engineers (NACE) members could apply for a grant to help offset traffic sign costs. Three counties: Indian

River, Highlands, and Marion counties applied for and received sign materials that also met the new, federal retroreflectivity standards. In total these three agencies received over \$32,000. Congratulations to these agencies for using their NACE membership and initiative to apply. What a great way to help your organization out in these lean budget times.

Eddie Cardona, Traffic Oper-

ations Supervisor for Highlands County BOCC said "...this is a wonderful program for any municipality. The ease of the paper work required made it very simple to apply."

Although the special NACE/3M offer has ended, 3M is continuing their Sign Grant Program, making it available to help city, county and state agencies. Use your grant to purchase 3M pris-

matic reflective sign sheeting to ...this is a wonderful proreplace signs made with engineer grade or super engineer grade gram for any municipalsheeting or for upgrading signs from high intensity sheeting. ity. The ease of the paper Grants can be used to purchase both fabricated signs and/or roll goods, either direct from 3M and/ it or through participating independent sign fabricators. How can lose? Go you to www.3MSignGrants.com and be a

hero for your agency! Don't miss out, apply today and let us know if you receive a grant so we can tell others of your success. Grant applications may be submitted through November 30, 2009.

New at the T² Media Center

Our Media Center offers more than **7,000** publications, **1,000** videos, and **175** CDs for loan. To request any of the items on these pages, please mark the items you want to borrow and fax with the FaxBack form on the inside back cover to **352.392.3224**. Descriptions of the materials can be found on our website: t2ctt.ce.ufl.edu where you can also request a full catalog on CD, or browse the electronic catalog. Call **352.392.9537 EXT. 1544** for assistance.

New Publications

- □ Impact of Shoulder Width and Median Width on Safety NCHRP633.01 TRB
- □ Tools to Aid State DOTS in Responding to Workforce Challenges NCHRP636.01 TRB
- Quantifying the Benefits of Context Sensitive Solutions NCHRP642.01 TRB
- □ Reducing Litter on Roadsides N-SYN394.01 TRB
- Summary Report: Evaluation of Sign and Marking Alternatives for Displaced Left-Turn Lane Intersections P8062.01 FHWA
- Utilizing Community Advisory Committees for NEPA Studies P8083.01 AASHTO
- Countermeasures That Work: A Highway Safety Countermeasure Guide For State Highway Safety Offices P8084.01 NHTSA
- □ Tracking Compliance with Environmental Commitments/Use of Environmental Monitors P8086.01 AASHTO
- □ Using the Transportation Planning Process to Support the NEPA Process P8087.01 AASHTO
- □ Traffic Signal Operations and Maintenance Staffing Guidelines P8088.01 FHWA
- ☐ Maintaining a Project File and Preparing an Administrative Record for a NEPA Study P8090.01 AASHTO
- Responding to Comments on an Environmental Impact Statement P8091.01

 AASHTO

- Design and Evaluation of
 Effective Crosswalk Illumination
 P8102.01 NJ DOT, FHWA
- Design Highwater Clearances for Highway Pavements P8104.01 FDOT
- Speed Limit-Related Issues on Gravel Roads P8107.01 KDOT
- Safety Circuit Rider Programs
 Best Practices Guide
 P8113.01 FHWA
- Communication Matters: Communicating the Value of Transportation Research Guidebook P8114.01 TRB
- Child Pedestrians: Factors Associated with Ability to Cross Roads Safely and Development of a Training Package P8120.01 NRMA-ACT ROAD SAFETY TRUST, MUARC
- Aggressive Driving: Research
 Update, April 2009
 P8121.01
 AAA FOUNDATION FOR
 TBAFFIC SAFETY
- Driver Licensing Policies and Practices: Gearing Up for an Aging Population P8129.01 AAA FOUNDATION FOR TRAFFIC SAFETY
- TechBrief: Safety Evaluation of Lane and Shoulder Width Combinations on Rural, Two-Lane, Undivided Roads P8131.01 FHWA
- ➡ TechBrief: Safety Evaluation of Advance Street Name Signs P8132.01 FHWA
- TechBrief: Safety Evaluation of Offset Improvements for Left-Turn Lanes P8133.01 FHWA

- A Collection of sops for Municipal Public Works P8142.01 UNH T² CENTER
- Communication Matters: Communicating the Value of Transportation Research Guidebook Overview P8145.01 TRB
- Low-Cost Safety Enhancements for Stop-Controlled and Signalized Intersections P8146.01 FHWA
- High Value Research Roundtable: 2009 AASHTO RAC Meeting July 21, 2009 P8148.01 AASHTO
- LTPP Beyond FY 2009: What Needs To Be Done? P8149.01 FHWA
- Routes to Effective Evacuation Planning Primer Series: Using Highways During Evacuation Operations for Events with Advance Notice P8151.01 FHWA
- Traffic Safety Roundabouts, Trucks, Older Drivers, and Traffic Law Enforcement 2009 TRB2096.01 TRB

New CDs

- Capacity of Laterally Loaded Shafts Constructed Behind the Face of a Mechanically Stabilized Earth Wall C251.01 KS DOT
 - 51.01 KS DOT
- **RSA Toolkit vol 1, Feb. 2009** C252.01 FHWA

New DVDs

- Understanding Car Crashes: It's Basic Physics D0049.01 IIHS
- Professional Drivers: Stay Alive When You Drive D0050.01 OPERATION LIFESAVER

The Florida Department of Transportation's Glossary of Terms and Acronyms has been updated.

Go to www.dot.state.fl.us/planning/glossary/glossary.pdf to access the glossary.

Giveaways

Make your choice(s) and use the FaxBack form to request these free items.

- Basic Traffic Control For Utility Operations: Guide to Temporary Traffic Control for Utility Operations 40 COPIES
- □ Roadway Safety Awareness Program Disaster Response 100 COPIES
- Roadway Safety Awareness Program Temporary Traffic Control Devices 100 COPIES
- Gravel Roads Maintenance and Design Manual 10 COPIES
- Dublic Roads January/February 2003 Special Issue: Highway Safety 75 COPIES
- ☐ 3м Safe Routes to School Program CD 10 COPIES
- Slow Down and Move Over 150 COPIES
- Implementing Local Agency Safety Management 25 COPIES
- Final Rule on Work Zone Safety and Mobility 8 COPIES
- Read Your Road Every Highway User's Guide to Driving Safely 100 COPIES
- LifeGuide Series: Safe On The Road 12 COPIES
- □ Retroreflective Sheeting Identification Guide 60 COPIES
- Decket Guide to Florida Transportation Trends & Conditions 12 COPIES
- Slow Down, Pay Up, Or Crash: Teen Safe Driving in Work Zones 30 COPIES
- Group Riding A Cycling Public Awareness Program 10 COPIES
- Transforming America's Roads & Bridges Toolkit 6 COPIES

Benefits of Using Intelligent Transportation Systems in Work Zones 8 COPIES

FDOT Summary of Final Reports

New Topics Available

Access the updated FDOT web site *www.dot.state.fl.us/research-center/* for these summaries. Go to the Research Center Topics drop down menu in the lower left corner of the page and click on Completed Research. Summaries are listed by category.

Public Transportation

BD549-47 Development of Comprehensive Guidance on Obtaining Service-Consumed Data for the National Transit Database

Construction

□ BD550-13 Cost and Quality Effectiveness of Material and Non-Material Models in Contractor Quality Control System

The 2010 APWA Florida Chapter Annual Meeting and Trade Show

May 3–7 in Orlando, Florida

Congratulations APWA Florida Chapter!

The Florida Chapter has received the 2009 Presidential Award for Chapter Excellence (PACE) in recognition of the Chapter's impact on APWA's membership and the public works community.



Upcoming Workshops

through February 2010

For a list of all courses or to register, visit our **new** website at *t2ctt.ce.ufl.edu* or for T² workshops, email *t2workshops@ce.ufl.edu* or call 352.273.1675 and for CTT and CTQP courses, email *ctt@ce.ufl.edu* or call 352.846.3593 EXT. 31669. We look forward to serving you.

Advanced Maintenance of Traffic

Dec 9 – 11, 2009	Orlando
Dec 9 - 11, 2009	Gainesville
Jan 13 - 15, 2010	Tampa
Jan 27 - 29, 2010	Tallahassee
Feb 16 - 18, 2010	Gainesville
Feb 17 - 19, 2010	Orlando
Feb 24 - 29, 2010	Naples

Advanced Maintenance of Traffic – Refresher

france frenconer	
Dec 18, 2009	Orlando
Dec 18, 2009	Gainesville
Jan 12, 2010	Tampa
Jan 26, 2010	Tallahassee
Feb 15, 2010	Gainesville

Asphalt Paving Level 1

Dec 7, 2009	Tampa
Dec 18, 2009	Gainesville

Asphalt Paving Level 2 Dec 10, 2009

CTQP Exam Only Sessions (No

books provided)	
Dec 10, 2009	
Dec 17, 2009	

Earthwork Construction Inspection Level 1 Dec 14 - 15, 2009 Sarasota Earthwork Construction Inspection Level 2

Dec 14 - 15, 2009 Sarasota FDOT Concrete Field Inspector Specification Gainesville

Dec 1 - 2, 2009

Intermediate Maintenance of Traffic

Dec 10 - 11, 2009 Dec 16 - 17, 2009 Jan 20 - 21, 2010 Jan 20 - 21, 2010 Feb 3 - 4, 2010 Feb 10 - 11, 2010 Feb 23 - 24, 2010

Intermediate Maintenance of

Traffic – Refresher

Dec 15, 2009 Jan 19, 2010 Jan 19, 2010 Feb 2, 2010 Feb 9, 2010 Feb 22, 2010

Tampa

Tampa

Sarasota

Panama City Gainesville Orlando Cape Coral Panama City Port Charlotte

Port Charlotte

Panama City

Gainesville

Cape Coral

Panama City

Port Charlotte

Orlando

Pilot Escort Flagging

Dec 2, 2009	Fort Myers
Dec 17, 2009	Orlando
Jan 18, 2010	Milton
Jan 23, 2010	Tampa
Feb 10, 2010	Gainesville
Feb 24, 2010	Fort Myers

Plans Reading Fundamentals

Dec 18, 2009

Dec 10, 2009

Project Manager/Inspector **Fundamentals**

Naples

Naples

Quality Control Manager Dec 3, 2009

Gainesville

Retaining Wall Fundamentals/ Inspection

inspection	
Dec 1, 2009	Orlando
Dec 2, 2009	Orlando

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Upcoming Workshops

For the dates and locations of these upcoming workshops see page 30.

Advanced Maintenance of Traffic 7 Classes	Inspection Level 1	Intermediate Maintenance of Traffic – Refresher
Advanced Maintenance of Traffic – Refresher	1 Class Earthwork Construction	6 Classes Pilot Escort Flagging
5 Classes	Inspection Level 2	6 Classes
Asphalt Paving Level 1	1 Class	Plans Reading Fundamentals
2 Classes	FDOT Concrete Field Inspector	1 Class
Asphalt Paving Level 2 1 Class	Specification 1 Class	Project Manager/Inspector Fundamentals
CTQP Exam Only Sessions (No	Intermediate Maintenance of	1 Class
books provided) 2 Classes	Traffic 7 Classes	Quality Control Manager 1 Class
		Retaining Wall Fundamentals/ Inspection

2 Classes

For a list of all courses or to register, visit our **new** website at *t2ctt.ce.ufl.edu* or for T² workshops, email *t2workshops@ce.ufl.edu* or call 352.273.1675 and for CTT and CTQP courses, email *ctt@ce.ufl.edu* or call 352.846.3593 EXT. 31669. We look forward to serving you.