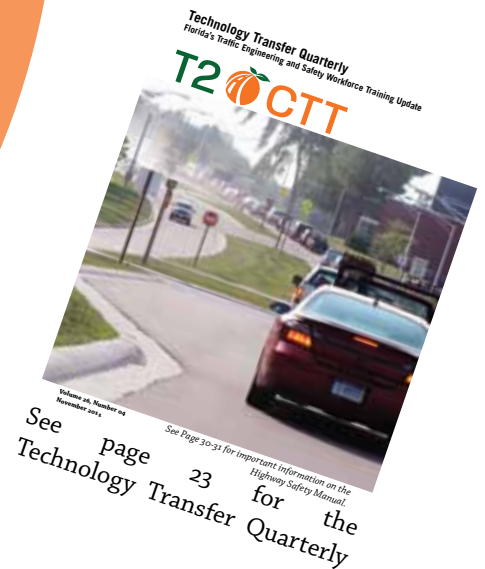


the florida transportation **technology transfer** center



2012 Professional Training Portfolio

The Florida T² Center is your partner in providing your professional training needs. Training delivery methods include instructor-led, recorded, and online options, as well as our exciting new broadcast option. Our comprehensive portfolio outlines the extensive training opportunities we offer. We can tailor or develop training to meet your specific needs. Most courses offer Professional Development Hours (PDHs) and/or Continuing Education Units (CEUs). You and your employees will benefit from the technical and managerial knowledge presented in these courses.

The Florida T² Center conducts required and elective training to improve and strengthen the skills of your entire organization. Courses can be presented to participants live or by broadcast and some are available online. Call us today at 352.273.1685 for a T² Center representative and 352.273.1661 for a CTQP training representative.

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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 (FDOT) and the Federal Highway Administration (FHWA). Classes are offered as part of the Local Technical Assistance Program (LTAP) and Product Demonstration Showcase (PDS) Program. Many courses can lead to qualifications through FDOT's Construction Training Qualification Program (CTQP). The Florida T² Center classes are conducted at convenient locations throughout the state, some are broadcast live to accommodate a wider audience, others are available online or as recordings. Most Florida T² Center training can also be arranged exclusively for your organization at your location to save time and money. Check our website t2ctt.ce.ufl.edu for current training schedules and locations. Our T² Mobile Video Training (MVT) sessions are held at the requesting agency. See Page 22 for MVT scheduling details and information.

Looking for a way to save money on your CTQP Training?

Special Discount Individual Written Exams taken in our Gainesville Business Office are only \$150 per exam!

Call or visit our website today to save money! 352.273.1669 or t2ctt.ce.ufl.edu

Training Notifications

Sign up for email announcements about our course schedule. Contact David Page at dkpage@ufl.edu to have your name added.

Free Training from NHI and TCCC!

Many 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.

Highways for LIFE has partnered with NHI to present NHI Innovations which is a monthly web

conference series that is free to participants. Visit www.nhi.fhwa.dot.gov/about/innovationseries.aspx to view upcoming conference listings or to listen to or download previous presentations. NHI also offers Real Solutions, a free monthly series which features speakers discussing problems or issues they have faced in the field and what steps they took to solve them. Participants can ask questions and receive answers. Go to www.nhi.fhwa.dot.gov/about/realsolutions.aspx to view recorded presentations, titles, and dates of upcoming events, or to sign up for email notifications.

Registration fees included in this portfolio are for live, instructor-led courses and online courses, as noted. The Florida T² Center has recently begun broadcasting selected live, instructor-led courses to provide even greater training options and savings! Check our website for broadcast schedules or call us at 352.273.1661 for a CTQP training representative and 352.273.1685 for a T² Center training representative.

New Courses for 2012

The Florida T² Center is excited to announce the addition of four new safety courses to this year's portfolio! We are also preparing to release online versions of the Intermediate and Advanced Maintenance of Traffic (MOT) Refresher courses and we are putting the finishing touches on a few new design courses. See below for more information.

Building and Facility Maintenance Safety **NEW**

Target Audience: City, county, and special maintenance employees

This course is a must for your maintenance crew. It reviews accident history, relative OSHA standards, work zone safety issues, basic work zone set up, vacant work zone issues, personal protective equipment (PPE), shop and work area housekeeping, power and hand tool safety, welding, fall protection, excavating issues, and property inspection and forms.

Public \$125/Private \$200

7 hrs

Call 352.273.1685 for more information

Chemical Spill Prevention, Control & Countermeasures **NEW**

Target Audience: Public works, streets/roads, parks, building maintenance, wood or metal shop, fleet and water/wastewater utility workers

The training introduces participants to basic chemical (or hazardous material) management. It covers receipt, storage, use, normal disposal, and clean-up of, as well as emergency response for many chemical substances commonly found at cities, counties, and special districts.

Call 352.273.1685 for pricing

2 hrs

Crane Truck Safety: New Operator Orientation and Experienced Operator Hazard Analysis **NEW**

Target Audience: New or experienced operators of your equipment at your facility

This course covers crane operation and safety; OSHA, ANSI/ASME standards, training requirements, machine set up/rigging, work zones, hazardous conditions, inspections/checklists, load assessment, communication, maintenance, and much more.

Public \$125/Private \$175

6 hrs

Call 352.273.1685 for more information

Fleet Maintenance Safety **NEW**

Target Audience: Fleet mechanics, managers, supervisors, foremen, and safety officers

Attendees are introduced to basic and advanced fleet management safety concepts. Learn about serious injury and fatality incidents related to municipal fleet operations. The course emphasizes how you can substantially reduce the likelihood of a serious city or county garage accident through work site safety engineering, the practice of safe procedure, the use of personal protective equipment (PPE), and regular safety education.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

Maintenance of Traffic — Intermediate Refresher Online **NEW**

Target Audience: See Maintenance of Traffic — Intermediate

Prerequisite: Valid Intermediate Maintenance of Traffic qualification

Satisfactory completion of the proctored refresher test must occur on or before the participant's Intermediate MOT qualification expiration date to extend qualification for four years. Participants who do not pass the exam must take the full, 16-hour course to requalify. This Computer Based Training (CBT) refresher consists of approximately three hours of initial course review (self-paced) 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, and 1 hour of proctored testing (scheduled separate from the CBT portion).

Public \$120/Private \$160

4 hrs

Call 352.273.1685 for more information

Maintenance of Traffic — Advanced Refresher Online **NEW**

Target Audience: See Maintenance of Traffic — Advanced

Prerequisite: Valid Advanced Maintenance of Traffic qualification

Satisfactory completion of the proctored refresher test must occur on or before the participant's Advanced MOT qualification expiration date to extend qualification for four years. Participants who do not pass the exam must take the full, 20-hour course to requalify. This Computer Based Training (CBT) refresher consists of approximately three hours of initial course review (self-paced) 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, and 1 hour of proctored testing (scheduled separate from the CBT portion).

Public \$150/Private \$200

4 hrs

Call 352.273.1685 for more information

Advanced Roadway Signs **NEW**

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

This course offers in-depth training on proper sign usage, installation, orientation, and placement, as well as multi-sign location, sign types, construction, and application. It addresses needs assessments, how and when to inspect, and how to determine when to remove or replace signs and offers tips on managing an inspection crew, creating schedules, and keeping accurate records. Participants receive a workbook, relevant Florida Design Standard Indexes, and Part 2 of the Manual on Uniform Traffic Control Devices (MUTCD).

Available Fall 2012 or sooner

Basic Roadway Markings **NEW**

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

This workshop covers the classification of markings on streets/highways, as well as the installation, inspection, and maintenance procedures for each type. It also addresses the impact of climate and traffic conditions. Participants receive a workbook, relevant Florida Design Standard Indexes, and Part 3 of the MUTCD.

Available Fall 2012 or sooner

Basic Roadway Signs **NEW**

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, as well as basic sign installation, inspection, maintenance, and repair. One session covers how to recognize and prevent sign vandalism. Participants receive a course workbook, relevant Florida Design Standard Indexes, and Part 2 of the MUTCD.

Available Fall 2012 or sooner

ADA

ADA/Accessibility Requirements for Highway Design and Pedestrians

Target Audience: Designers, 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, design,

standards, and good practices, to ADA self evaluations and transition plans.

Public \$145/Private \$240

7 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

ADA – Facilities Access

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

This course 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.

Public \$145/Private \$240

7 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

Aggregates

Aggregate Base Testing Technician **ACI**

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

This American Concrete Institute (ACI) course includes information about and demonstrations of 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

24 hrs

Aggregate Testing Technician Level 1 **ACI**

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

This ACI course includes information about and demonstrations of 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: FDOT employees who perform acceptance tests to verify aggregate material quality and 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

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.

Course with written and proficiency exams:

Call 352.273.1661 for more information

16 hrs

\$450

PDH 8

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:

\$350

8 hrs

Call 352.273.1661 for more information

PDH 6

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 questions about maintenance issues.

Public \$175/Private \$250

6 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6/6

Asphalt Inspection

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

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

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6/6

Asphalt Mix Design CTQP

Target Audience: Technicians responsible for designing hot-mix asphalt

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

Course with written exam:

\$600

28 hrs

Call 352.273.1661 for more information

PDH 24

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 which arise on the jobsite. Ample time is allowed for questions about maintenance issues.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6/6



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 1 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 how to use a rolling straight edge, measure cross slope, perform core sampling, calculate yields, lay out core locations, and take temperatures.

Course with written and proficiency exams:

\$350 8 hrs

Call 352.273.1661 for more information PDH 6

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. Topics also include project administration; surface preparation; specification requirements; hot-mix asphalt delivery, placement, and compaction; balancing production rates; and field testing and inspection.

Course with written exam:

\$525 24 hrs

Call 352.273.1661 for more information CEU/PDH 1.7/17

Asphalt Plant Level 1 CTQP

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

Learn how 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:

\$645 24 hrs

Call 352.273.1661 for more information PDH 16

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:

\$600 24 hrs

Call 352.273.1661 for more information CEU/PDH 1.7/17

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 pavement distress, as well as evaluation components and preservation and rehabilitation techniques.

Public \$150/Private \$250 12 hrs

Call 352.273.1685 for more information CEU/PDH 1.2/12

Integrating Pavement Preservation Practices and Pavement Management

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

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

Public \$150/Private \$250 7 hrs

Call 352.273.1685 for more information CEU/PDH 0.7/7

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

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

This course covers distress definitions, as used by LTPP for each pavement type, and best approaches for performing test section measurements. It incorporates classroom and field reviews, including visits to two asphalt and two concrete locations. Distresses that are observed in the field at the first location are discussed and rated by participants. The second site is used as an exam with no group discussion prior to having the participants perform the ratings.

Public \$295/Private \$395 17.5 hrs

Call 352.273.1685 for more information CEU/PDH 1.75/17.5

Superpave for Local Agencies

Target Audience: Engineers, supervisors, managers, and roadway personnel and crews

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.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6/6

Bicycle and Pedestrian

Community Bicycle and Pedestrian Safety Programs

Target Audience: Local safety officials and 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. It is approved by the Safety Council as an alternative transportation safety class for DUI offenders. The course duration varies with content and audience.

Public \$125/Private \$210

16 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6-0.8/6-8

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

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

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

16 hrs

Call 352.273.1685 for pricing

CEU/PDH 1.6/16

Bridges

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.

Public \$800/Private \$950

28 hrs

Call 352.273.1685 for more information

CEU/PDH 2.8/28

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 should 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

Call 352.273.1685 for more information

Chainsaw Safety/Hands-on

Target Audience: Chainsaw operators — all skill levels

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

Public \$195/Private \$295

length varies

Call 352.273.1685 for more information

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

Call 352.273.1685 for more information

Concrete and Cement

Associate Concrete Transportation Construction Inspector ACI

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

This ACI program includes information about concrete construction, including plans reading; formwork installation and removal; reinforcements; embedments; sampling and testing freshly mixed concrete; and conveying, placing, consolidating, finishing, jointing, curing, and protecting concrete.

Course with written exam:

Call 352.273.1661 for pricing 20 hrs

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. The course presents information on cement-modified soil, cement-treated base, soil-cement base, full-depth reclamation, and roller-compacted concrete pavements, as well as the applications, design, materials engineering, construction, testing, and performance of pavements.

Public \$125/Private \$210 7 hrs

Call 352.273.1685 for more information

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:

\$325 10 hrs

Call 352.273.1661 for more information CEU/PDH 0.8/8

Concrete Field Testing Technician Grade 1 ACI

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

This ACI course includes information about and demonstrations of 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

Concrete Laboratory Testing Technician Level 1 ACI

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

This certification is automatically awarded to trainees who successfully complete the following courses, both of which are offered by the Florida T² Center and are described in this portfolio:

- ACI Concrete Strength Testing Technician
- ACI Aggregate Testing Technician Level 1

Course with written and proficiency exams:

Call 352.273.1661 for pricing. 16 hrs

Concrete Laboratory Testing Technician Level 2 ACI

Target Audience: FDOT 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 information about and demonstrations of 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: FDOT employees who perform laboratory acceptance tests to verify concrete strength

This ACI course includes information about and demonstrations of 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: FDOT employees who perform ready-mix concrete structural inspections and hold the ACI Concrete Field Testing Technician Grade I certification

This ACI program includes information about concrete construction, including plans reading, soil-cement, piling installations, formwork installation and removal, reinforcements, embedments, sampling and testing freshly mixed concrete, conveying, placing, consolidating, finishing, jointing, curing, and protecting concrete.

Course with written exam:

Call 352.273.1661 for pricing 24 hrs

FDOT Concrete Field Inspector Specification **CTQP**

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

This updated 2 ½ day course, based on the July 2011 Supplemental Specifications, will improve your understanding of FDOT's Standard Specification Sections 346, 347, 400, 415, and other sections relevant to the placement and field testing of ready-mix concrete.

Course with written exam:

\$500

18 hrs

Call 352.273.1661 for more information

CEU/PDH 1.8/18

Design

Advanced Roadway Signs **NEW**

See Page 4 for more information.

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.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6/6

Basic Roadway Markings **NEW**

See Page 4 for more information.

Basic Roadway Signs **NEW**

See Page 4 for more information.

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 covers the 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 implementing and funding bike/ped facilities. It includes best practices case studies from the U.S. and Europe, and incorporates field experience at local facilities as time allows.

Public \$150/Private \$250

8 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

Highway Design for Older Drivers and Pedestrians

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

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

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6/6

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. It emphasizes the relationship between specific highway standards and human needs, and includes discussions and demonstrations on human skills, capabilities, and micro case studies to allow participants to apply the knowledge they have gained.

Public \$125/Private \$210

7 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

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, curb ramps, crosswalks (where feasible), bicycle facilities, and under/overpasses for vehicular and pedestrian traffic.

12 hrs

Call 352.273.1685 for pricing

CEU/PDH 1.2/12

Traffic Engineering Fundamentals

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

This class covers signal systems and operations, analysis of roadway capacity and level of service, intelligent transportation systems, traffic control devices, roundabouts, and traffic incident management. Choose from all three days, days one and two, or day three.

All three days:	21 hrs
Public \$545/Private \$625	CEU/PDH 2.1 / 21
Days one and two:	14 hrs
Public \$425/Private \$550	CEU/PDH 1.4 / 14
Day three:	7 hrs
Public \$250/Private \$350	CEU/PDH 0.7 / 7
Call 352.273.1685 for more information	

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. The workshop is based on the Institute of Transportation Engineers (ITE) methodologies and recommended practices and presents a discussion of trip generation anomalies, cautions, and case studies. Participants work in teams to analyze illustrative problems and will receive ITE's publication, *Transportation Impact Analyses for Site Development: an ITE Proposed Recommended Practice*, along with presentation materials.

Public \$275/Private \$375	14 hrs
Call 352.273.1685 for more information	
	CEU/PDH 1.4/14

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.

Public \$125/Private \$210	6 hrs
Call 352.273.1685 for more information	
	CEU/PDH 0.6/6

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 how 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:

\$475	14 hrs
Call 352.273.1661 for more information	
	CEU/PDH 0.8/8

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:

\$400	10 hrs
Call 352.273.1661 for more information	
	CEU/PDH 0.8/8

Nuclear Density Gauge Safety and HazMat

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

This course covers the safe transport requirements of portable nuclear density gauges and includes safety regulations for storing, transporting, and handling gauges. Technicians transporting and handling nuclear density gauges who have attended the eight-hour Nuclear Density Gauge Safety course are required to successfully complete this training every three years. Passing the exam fulfills this requirement. The class is required for Earthwork Construction Inspector Level 1 qualification and is highly recommended for Asphalt Paving Level 1 technicians as they use or work near nuclear density gauges.

Course with written exam:

\$150	8 hrs
Call 352.273.1661 for more information	
	CEU/PDH 0.6/6

2012 Geotech

Florida T² Center Training Portfolio

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 Specifications for Road and Bridge Construction (SSRBC) Section 455.

Course with written exam:

\$600

24 hrs

Call 352.273.1661 for more information CEU/PDH 1.6/16

Geotechnical Engineering for Non-Geotechnical Engineers — The Basics

Target Audience: Non-soils engineers, technicians, inspectors, project engineers/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, soils reports, water effects on soils, dewatering, earth pressures and stresses, soil strength and settlement, compaction of sands and clays, construction procedures, stability of cuts and fills, geosynthetics, and earthwork.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

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 how to record and document activities related to pile driving projects. Learn more about pile driving equipment, processes, terminology, and FDOT's Standard Specifications for Road and Bridge Construction (SSRBC) Section 455.

Course with written and proficiency exams:

\$725

24 hrs

Call 352.273.1661 for more information CEU/PDH 1.6/16

Heavy Equipment

Backhoe — Safety/Hands-on

Target Audience: Backhoe operators — all skill levels

This training provides equipment operators with classroom and hands-on experience while acquainting operators with proper road profiles, drainage issues, maintenance methods, and new techniques and technologies. It also covers safety, backhoe types, maintenance, speed, aggregate types, road profiles, ditching, draining, dust control, wetlands issues, and more. The 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

Call 352.273.1685 for more information

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. It also covers the importance of routine inspection reports and unit maintenance, as mandated/required by OSHA, as well as information on mechanics, hydraulics, fluids, and the dielectric testing integrity of the mast and boom/bucket. 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. Participants earn a certificate of competency for successfully completing the course and written exam. The safety and hands-on training duration varies with skill level.

Public \$250/Private \$350

length varies

Call 352.273.1685 for more information

Crane Truck Safety **NEW**

See Page 4 for more information.

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. Topics include how a forklift works, safe operating rules/techniques/procedures, load handling, and inspection. Participants earn a certificate of competency for successfully completing the written and proficiency exams. The safety and hands-on training duration varies with skill level.

Public \$195/Private \$295

length varies

Call 352.273.1685 for more information

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/procedures, load handling, and inspection. Participants earn a certificate of competency for successfully completing the course and written exam. The safety and hands-on training duration varies with skill level.

Public \$325/Private \$425

length varies

Call 352.273.1685 for more information

Motor Grader Operator — Safety/ Hands-on

Target Audience: Motor grader operators, managers, and 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 speed/types/maintenance, blade pitch, articulation, 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

Call 352.273.1685 for more information

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. This course covers all makes and models of tractors and mowers, and includes both classroom and hands-on training.

Public \$145/Private \$250

8 hrs

Call 352.273.1685 for more information

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. This course includes a 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

Call 352.273.1685 for more information

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. Materials include in-depth analysis of Florida Design Standard Index 600 and Part 6 of the MUTCD. Requalification is required every four years.

Public \$170/Private \$210

16 hrs

Call 352.273.1685 for more information

CEU/PDH 1.5/15

Maintenance of Traffic — Intermediate Refresher

Target Audience: See 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. Participants who do not pass the exam must take the full, 16-hour course to requalify. 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. A 4-hour version of this course will be available Spring 2012.

Public \$120/Private \$160

8 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

Maintenance of Traffic — Intermediate Refresher Online **NEW**

Target Audience: See Maintenance of Traffic — Intermediate

Prerequisite: Valid Intermediate Maintenance of Traffic qualification

Satisfactory completion of the proctored refresher test must occur on or before the participant's Intermediate MOT qualification expiration date to extend qualification for four years. Participants who do not pass the exam must take the full, 16-hour course to requalify. This Computer Based Training (CBT) refresher consists of approximately three hours of initial course review (self-paced) 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, and 1 hour of proctored testing (scheduled separate from the CBT portion).

Public \$120/Private \$160

4 hrs

Call 352.273.1685 for more information

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

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

Successful course completion provides Advanced MOT qualification. Successful participants will be able to analyze, design, implement, and operate traffic control plans in a clear and concise manner. Requalification is required every four years.

Public \$295/Private \$395

20 hrs

Call 352.273.1685 for more information CEU/PDH 1.675/16.75

Maintenance of Traffic — Advanced Refresher

Target Audience: See Maintenance of Traffic — Advanced

Prerequisite: Valid Advanced Maintenance of Traffic qualification

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 requalify. This refresher course is an overview of the 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. A 4-hour version of this course will be available Spring 2012.

Public \$150/Private \$200

7 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

Maintenance of Traffic — Advanced Refresher Online **NEW**

Target Audience: See Maintenance of Traffic — Advanced

Prerequisite: Valid Advanced Maintenance of Traffic qualification

Satisfactory completion of the proctored refresher test must occur on or before the participant's Advanced MOT qualification expiration date to extend qualification for four years. Participants who do not pass the exam must take the full, 20-hour course to requalify. This Computer Based Training (CBT) refresher consists of approximately three hours of initial course review (self-paced) 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, and 1 hour of proctored testing (scheduled separate from the CBT portion).

Public \$150/Private \$200

4 hrs

Call 352.273.1685 for more information

Making Work Zones Work Better

Target Audience: Traffic engineers/construction/project engineers, contractors, utility personnel, law enforcement officers, planners, public officials, and others involved in project development, 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 that amount is projected to increase by 50% over the next 10 years. Course topics include congestion through reduced-capacity work zones, noise requirements for night-time construction, adequate public relations campaigns, and mitigation techniques and strategies.

Public \$150/Private \$250 8 hrs

Call 352.273.1685 for more information
CEU/PDH 0.8/8



Mobile Equipment and Internal Work Zone Safety

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

This workshop covers mobile equipment hazards, crashes, work zone perimeters/barriers, inclines, surface conditions, proximity to excavations/general stability, falling object/rollover protective structures, vehicle restraint devices, rider-passenger rules, pedestrian worker safety rules, suspended loads/rigging, trailering, equipment inspection, pre-job checklists, unattended equipment, and nighttime security.

Public \$75/Private \$100

4 hrs

Call 352.273.1685 for more information

Work Zone Training for Law Enforcement

Target Audience: Law enforcement officers

This course covers safe and effective practices, roles, and procedures for law enforcement officers working in work zones, as well as the basic components, standards, and guidelines related to temporary traffic control in work zones.

Public \$100/Private \$150

4 hrs

Call 352.273.1685 for more information

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 the 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 fulfills one-third 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 an 8-hour Pilot/Escort Flagging training. A four year certificate is mailed to trainees who successfully complete the exam.

Public \$120/Private \$120

8 hrs

Call 352.273.1670 for more information

Pilot/Escort Flagging Refresher

Target Audience: Refer to Pilot/Escort Flagging

Prerequisite: Valid Florida Pilot/Escort Flagging course certificate

This refresher course is an overview of the initial course with concentration on February and October 2010 changes to the Florida Administrative Code. A four year certificate is mailed to trainees 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

Call 352.273.1670 for more information

Pilot/Escort Flagging Refresher Online

Target Audience: Refer to Pilot/Escort Flagging

Prerequisite: Valid Florida Pilot/Escort Flagging course certificate

This Computer Based Training (CBT) refresher consists of approximately four hours of initial course review (self-paced) with concentration on February and October 2010 changes to the Florida Administrative Code. A four year certificate is mailed to trainees who successfully complete the exam. To enroll, go to t2ctt.ce.ufl.edu/pero or for assistance, contact the Florida T² Center by phone: 352.273.1670.

Public \$60/Private \$60

4 hrs

Project Management

Construction Estimating

Target Audience: Employees responsible for making construction quantities estimates

This workshop provides agency personnel with practice and experience in making computations for estimating and measuring roadway maintenance quantities and amounts. Participants must supply their own calculator (TI36X or equivalent) and be able to use it to add, subtract, multiply, and divide.

Public \$120/Private \$210

4 hrs

Call 352.273.1685 for more information

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

Public \$200/Private \$300

8 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7



Final Estimates Level 1 CTQP

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

This 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:

\$350

8 hrs

Call 352.273.1661 for more information CEU/PDH 0.6/6

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

This course covers contract language, asphalt records, final plans, certifications, earthwork requirements, and fuel and bituminous adjustments. It also presents standard policies, procedures, and common practices necessary to produce optimal, accurate, and timely payments.

Course with written exam:

\$575

16 hrs

Call 352.273.1661 for more information CEU/PDH 1.4/14

FDOT Specifications

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

FDOT uses Contractor Quality Control (CQC) specifications on all projects for asphalt, concrete, and earthwork, which fundamentally changes acceptance and testing on FDOT projects and 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, and learn the macro to pull it all together.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information CEU/PDH 0.6/6

Inspecting Municipal Properties

Target Audience: Employees responsible for safety inspection of public properties

This course covers the inspection of indoor/outdoor work areas, public properties, and access areas; emphasizes basic OSHA regulatory compliance, standard work place safety issues, desirable/undesirable working conditions, personal protective equipment (PPE) requirements, signage and markings; and presents agency inspection checklist forms and recommendations for proactive maintenance with limited resources.

Public \$100/Private \$150

4 hrs

Call 352.273.1685 for more information

Introduction to Highway Construction Inspection

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

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

Public \$125/Private \$210

7 hrs

Call 352.273.1685 for more information CEU/PDH 0.7/7

Project Manager/Inspector Fundamentals

Target Audience: Roadway managers and inspectors

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

Public \$295/Private \$395

14 hrs

Call 352.273.1685 for more information

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:

\$400

14 hrs

Call 352.273.1661 for more information CEU/PDH 1.2/12

Safety

Building and Facility Maintenance Safety NEW

See Page 4 for more information.

Chemical Spill Prevention, Control & Countermeasures NEW

See Page 4 for more information.

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 the basics of intersection safety problems, issues, and liability, as well as 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.

Public \$125/Private \$210

7 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

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, and interested PTA members

This course 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. It addresses state funding applications and applying for infrastructure/non-infrastructure funds. It also includes a field exercise walk audit of a school site and shares enforcement strategies, education programs, encouragement ideas, and success stories about local walking school buses.

7 hrs

Call 352.273.1685 for pricing

CEU/PDH 0.6/6

Confined Space Entry Certification

Target Audience: Municipal water, wastewater and stormwater utility employees

This course identifies and addresses common municipal permit-required, confined space situations rarely covered by other programs. It offers a comprehensive review of Confined Space Entry policy and the most advanced permit form. It also covers implementation methods; introduces hazards specific to water, wastewater, and stormwater facilities; presents new safety products, accident prevention, and site analysis measures; and includes a field exercise.

Public \$125/Private \$210

8 hrs

Call 352.273.1685 for more information

Defensive Driving Skills and Crash Prevention for Heavy Vehicle Operation

Target Audience: Operators of heavy equipment — all skill levels

This class develops knowledge of and driving skills for dual and single axle dump trucks, ¾ 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. The safety and hands-on training duration varies with skill level.

Public \$175/Private \$295

length varies

Call 352.273.1685 for more information

Fleet Maintenance Safety **NEW**

See Page 4 for more information.

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

Target Audience: Public works/utility employees, water/wastewater distribution/plant operators, and 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. It also presents 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.

Public \$75/Private \$100

4 hrs

Call 352.273.1685 for more information

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. It provides information on common safety problems in a practical format that does not require engineering expertise.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

OSHA Competent Person

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

This course covers the OSHA Trenching and Excavation Competent Person requirements. Learn about soil classifications, tests, hazard recognition, and how to apply the standards.

Public \$125/Private \$210

5 hrs

Call 352.273.1685 for more information

Power Line Safety for the Municipal Worker

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

This program educates workers on above- and below-ground power line configurations, activities that place them at risk of contact with high voltage lines, accident prevention methods, and safe work practices when operating new power lines. It also covers power line accident scenarios, issue/incident prevention, and ground penetrating radar. It includes a field exercise and demonstration.

Public \$75/Private \$100

4 hrs

Call 352.273.1685 for more information

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. This workshop provides CTST members with a step-by-step 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.

8 hrs

Call 352.273.1697 for pricing

CEU/PDH 0.4/4

Road Safety Audits for Local Governments

Target Audience: Traffic engineers and other local government decision makers

This class introduces Road Safety Audits (RSAs) as an effective tool to reduce injuries and fatalities on your road network through low-cost safety improvements. Learn basic RSA concepts, risk, safety, and common issues. Gain experience in conducting a RSA. An onsite RSA is conducted on day 2 at a predetermined, local site.

16 hrs

Call 352.273.1697 for pricing

CEU/PDH 1.2/12

Roadside Maintenance Safety

Target Audience: Mower tractor operators, and vegetation control workers

This course teaches OSHA standards, the fundamentals of safe mower use, 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

Call 352.273.1685 for more information

Safe Mobility for Life Program: Planning and Designing for an Aging Population

Target Audience: Engineers, planners, and associated professionals

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

7 hrs

Call 352.273.1685 for pricing

CEU/PDH 0.7/7

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 the Florida best management practices. To become a Certified Stormwater Management Inspector, participants must successfully complete the state-approved course and exam.

Public \$195/Private \$295

13 hrs

Call 352.273.1685 for more information

CEU/PDH 1.3/13

Surveying

Surveying Methods for Local Agencies

Target Audience: Individuals with limited to no surveying experience including engineers, supervisors, managers, state/local officials, road agency personnel, and others interested in learning simple surveying methods

This course covers basic surveying techniques using the hand level, rule (tape), and level rod. Participants learn how to record field measurement notes and use the notes to make simple calculations.

Public \$125/Private \$210

7 hrs

Call 352.273.1685 for more information

CEU/PDH 0.7/7

Workforce Development and Management

Between You and Me: Managing Conflict at Work

Target Audience: Your entire team

In today's workforce, some people 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.

Call 352.273.1685 for more information

Public \$125/Private \$210 3 hrs

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

Call 352.273.1685 for more information

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 that are essential in many day-to-day situations.

Public \$125/Private \$210 3 hrs

Call 352.273.1685 for more information

Communication Confidence

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

Most of us think we are good communicators. Listening and talking are activities we engage in all the time, so we assume we do them 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

Call 352.273.1685 for more information

Creating Possibilities

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

Featuring the work of Ben Zander, world-famous conductor of the Boston Philharmonic Orchestra, this course offers a fresh approach for improving your leadership 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

Call 352.273.1685 for more information

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 3 hrs

Call 352.273.1685 for more information

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

Call 352.273.1685 for more information

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 the reasons why employees work and the 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

Call 352.273.1685 for more information

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

3 hrs

Call 352.273.1685 for more information

Making Meetings Work

Target Audience: Supervisors, staff, and engineers

How many meetings have you attended or conducted that seemed like wastes of time? Well, no more! Learn why meetings usually don't work, how to overcome typical meeting blunders, and how to conduct effective meetings.

Public \$125/Private \$210

3 hrs

Call 352.273.1685 for more information

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

3 hrs

Call 352.273.1685 for more information

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

Call 352.273.1685 for more information

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

Call 352.273.1685 for more information

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

3 hrs

Call 352.273.1685 for more information

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

Call 352.273.1685 for more information

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.

Public \$125/Private \$210

6 hrs

Call 352.273.1685 for more information

CEU/PDH 0.6/6

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!" In this workshop, supervisors will 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

Call 352.273.1685 for more information

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

Call 352.273.1685 for more information

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 do 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

Call 352.273.1685 for more information

3 hrs



The Benefits of Training

Training employees can be a big drain on your resources and time; however, training can positively affect your agency's employees. Investing in your employees does several things. It increases their satisfaction with their job, improves their productivity, and reduces the amount of supervision they need. In addition, it can reduce turnover. Employees see training as a reward and compliment because you are taking the time to invest in them which can lead to increasing their willingness to accept more job responsibilities. Be sure your organization's employees get the proper training. It may be one of the best business investments you can make.

2012 Mobile Video Training

Target Audience: Field employees, entry level employees, and supervisors

This efficient video-based and instructor-led training delivers job-related skills information directly to your office, maintenance yard, or training facility. Schedule as much training in one day as possible (7 hours) and have the instructor travel to and from without an overnight stay. Including other agencies can save money and train the most employees at once. Average cost per training hour decreases as the total number of training hours increases. Custom tailored training is available.

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. Your agency provides the meeting space and breaks.

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 352.273.1670.

Mobile Video Training Program Modules

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)
- 1I. Pedestrians (2 hrs)
- 1J. Surveyors/Locators (2 hrs)
- 1K. Utility Work (2½ hrs)
- 1L. Nighttime Operations (2½ hrs)

Note – Modules 1D–1L are designed to be stand alone training modules. When taught in combination with modules 1A, 1B, or 1C, modules 1D–1L will be treated as supplemental material, adding 30 to 45 minutes to training time.

2 – Asphalt Pavement

- 2A. Asphalt Pavement Repair (2 hrs)
- 2B. Asphalt Paving (1½ hrs)
- 2C. Asphalt Paving Inspection (1-2 hrs)
- 2D. Asphalt Surface Treatments (2 hrs)

3 – Equipment/Tool Operation and Safety

- 3A. Asphalt Paving Compaction Equipment 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 (1 hr)
- 3H. Forklift Operation and Safety (1 hr)
- 3I. Front End Loader (2 hrs)
- 3J. Motor Grader (2 hrs)
- 3K. Skid Steer Loader (Bobcat) (2 hrs)

4 – Portland Cement Concrete

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

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)

6 – Drainage Construction/ Erosion Control

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

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)

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)

9 – Highway Safety: Design, Construction and Maintenance

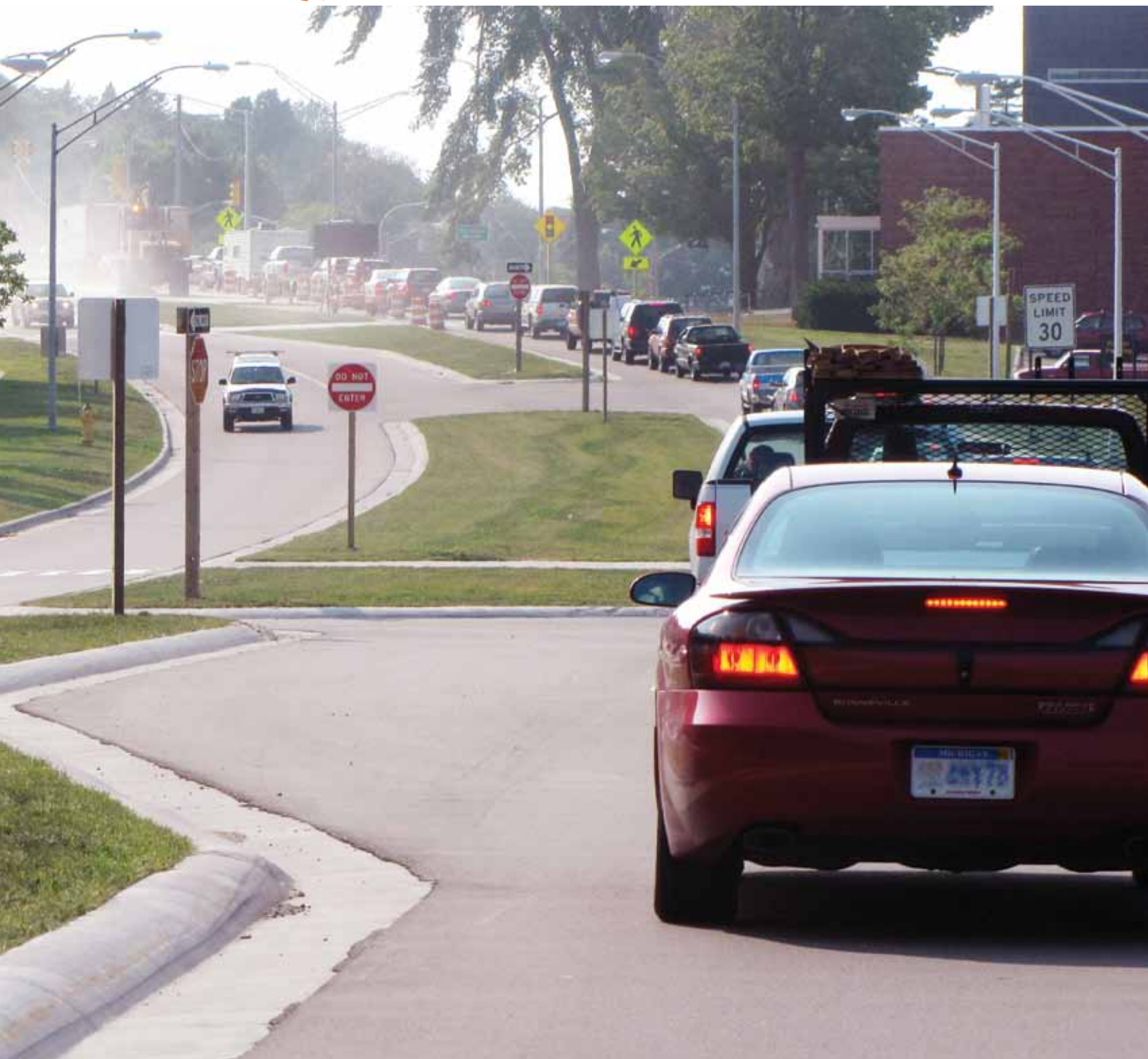
- 9A. Highway Safety Features (4 hrs)

10 – Traffic Operations

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

Technology Transfer Quarterly

Florida's Traffic Engineering and Safety Workforce Training Update



Volume 26, Number 04
November 2011

*See Page 30-31 for important information on the
Highway Safety Manual.*



Florida Transportation Technology Transfer Center

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Every Day Counts
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Sharing Success Stories

24-27 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 and other success story submissions. Although winners were announced in our August newsletter, other outstanding nominations deserve to be shared. As newsletter space permits, we will include a brief synopsis of the FACERS Team Project and Local/State Agency Collaboration award entries. Please contact the contributing agency for more information or visit www.FACERS.org for information on all the award categories and to make nominations to recognize outstanding projects and the efforts of your agency. 34
35 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 their successes.

Team Projects

Dixie Park Subdivision Martin County

Dixie Park residents wanted neighborhood potholes to be filled and drains to be cleaned. The Field Operations/Stormwater Manager met with residents to address these concerns, and, upon further investigation, noted more extensive problems, such as roads that had not been resurfaced in decades and were beyond the patch stage. A plan was implemented and Road Crews were sent to clean swales, clear storm drains, trim right-of-ways, and install new street signs. They also crack sealed, resurfaced, and restriped local roads, all for a total cost under \$65,000. The work inspired residents to organize their own weekend neighborhood roadside and common area cleanup. A local non-profit volunteer organization, 

Florida Technology Transfer Quarterly Established 1984

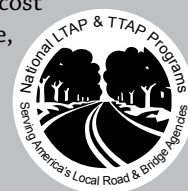
Voice	352.392.2371
Workshop Registration	EXT. 31670 or 31669
Workshop Development	EXT. 31685
Maintenance of Traffic Courses	EXT. 31685
Pilot/Escort Program	EXT. 31670
CTT and CTQP Courses	EXT. 31669 or 31670
Customer Service	EXT. 31669 or 31670
Media Center	EXT. 31694
Product Demo. Showcases	EXT. 31687
Safety Resource Center	EXT. 31680
Mailing list	EXT. 31670
Fax	352.392.3224
Email	t2@ce.ufl.edu
Web	t2ctt.ce.ufl.edu

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), the Product Demonstration Showcase Program (PDS), the Pedestrian/Bicycling Safety Resource Center, and the Center for Transportation Training (CTT) which offers Construction Training Qualification Program (CTQP) courses.

Interested parties may receive this publication at no cost by providing name, agency, address, city, state, zip code, phone and email address to t2assist@ce.ufl.edu. Newsletter content and accuracy is the exclusive responsibility of the Florida T² Center.

Circulation: 15,854



Sharing Success Stories *continued*

Keep Martin Beautiful, donated water and trash bags. Martin County collected and removed hazardous materials. Residents celebrated their newly refurbished neighborhood with a block party, food, a band, and much more. Dixie Park was transformed, not only in appearance, but also in spirit. Neighbors gathered for a picture and all residents signed a poster which was presented, with thanks, to county officials. The project's success was the result of real, front line county leadership. With today's budget constraints, it is often difficult to see beyond immediate necessity. It would have been easy for local officials to simply comply with the residents' very minimal requests; however, by investing a little more, they accomplished a great deal more than the bare minimum. Addressing the problems also prevented the need for major future reconstruction. Ultimately, the Dixie Park restoration was the result of neighborhood activists, aided by local government, and supported by a non-profit volunteer organization.

Hoagland Blvd. Segment 2 New Alignment Design Osceola County

The 1.9 mile Hoagland Blvd. Segment 2 was a four-lane, divided, urban new alignment project involving wetlands, floodplains, pedestrian facilities, a skewed bridge over a railroad, airport coordination, utilities, drainage ponds (with new storm-water rules), lighting, interconnect, right-of-way acquisition, and bald eagle nests. Roadway elevation was needed for airport constraints, FAA pole height, and new clearance National Electric Codes. Through close coordination, alignment was established as a constraint early in the design. The county implemented 24 hour electronic reviews, which shortened the timeline and provided needed direction. Funding required that work be completed within 12 months.

To accomplish this goal, the team met biweekly, accompanied by the attorney's office and right-of-way specialists who helped facilitate decisions, as well as city officials who were equal partners extremely active in the design process. Utility teams met monthly to discuss transmission line relocation. The public works team and director, as well as the county engineer, provided superior project leadership and constant availability for questions or guidance. The project manager was instrumental in routing work products and submittals for comments and responses. The county project manager went to extraordinary lengths to obtain agenda agreements for board approvals. The commission supported the project with board actions.

Funding was a collaborative effort between the county, city, and state. This new roadway provides needed congestion relief along the U.S. 17-92 corridor in Kissimmee, a more direct airport access route, a north-south hurricane evacuation route, and pedestrian facilities connecting schools and amenities to existing trails, making future trail expansion possible. The new alignment allows an extended main runway for larger planes, improving operations and potential economic growth. Two 90 degree turns were eliminated, improving traffic safety and flow. The project was completed within budget and on time.

Juniper Blvd Intersections and Bridge Improvements City of Palm Bay

This project converted a two-lane, open drainage roadway into a four-lane, divided urban road.

The City of Palm Bay conducted a preliminary intersections analysis to evaluate the best option for free traffic flow between the north-south routes. Land purchase was too costly, so the city pursued widening Jupiter Boulevard with bonding through future sales tax revenue.

Work also included replacing and widening the existing Jupiter Boulevard bridge, converting an open drainage system to a closed system, adding sidewalks on both sides, upgrading traffic signals from span to mast arms, improving traffic flow patterns, and landscaping. The bridge's unique characteristics included a concrete pedestrian railing with window pane openings and pedestal lights on the railing. Bridge and landscape lighting utilized LED technology.

The project also included adding center medians and closing roads at two major intersections to prevent vehicles stacking when entering left turn lanes. Intersection closures required resident notifications, public meetings, and City Council approval. A driveway egress for a church required that city officials meet with residents and parishioners and then gain approval from the local Planning and Zoning Board.

Utilities coordination included relocating transmission poles, telephone lines, and cables (underground and aerial), as well as standardizing street lighting design, relocating the force main transmission, deflecting water distribution lines around storm structures, and preserving the water main under the canal straddling the new bridge piles.

Construction was completed two months beyond the 13 month schedule. The multifaceted project required extensive coordination and teamwork between multiple city departments and the contractor/consultant staff.

Old Bethel Road Stormwater Project Okaloosa County

Okaloosa County used its Public Works Bridge Construction and Maintenance Section crew to construct a localized stormwater outfall project. Part of busy Old Bethel Road began failing and became threatened after an outside group attempted rehabilitation. Large washes were so severe that the system head's large concrete inlet box was exposed and metal drainage box pipes were mangled. Soil loss exceeded 2,750 cubic yards, stretching over 300 feet and infiltrating the freshwater creek.

Project goals included: protect the road, stop/minimize erosion, eliminate fresh water sedimentation, minimize traffic interruption, and manage multiple utility conflicts. Leadership ensured all risks were minimal or avoided and were readily available to answer all questions.

Workers built a steel sheet piling retaining wall to protect the road, aide erosion control and sediment run-off, and reduce fresh water contamination, which required an innovative construction approach, including the installation of additional devices and a cable system to increase safety. ▮

Three new concrete inlet boxes enabled large elevation changes for the culvert system while maintaining adequate flow. The tiered, three-step project surface allowed water to percolate and/or flow into the open grated inlet box. The unusual topography had an excessive amount of ground water flow which needed constant run-off and discharge control measures. Skilled special equipment operators provided the delicate excavation for the first inlet box, located dangerously close to a 12 inch force water

main. Inlet box installation required removing dirt to place one box, then back-filling to proceed with the next. This project increased the stormwater drainage from 730 to 775 outfall acres.

The County did not establish a project budget, but contributed Okaloosa County Transportation Trust Funds and General Funds. Instead of costing over one million dollars, Okaloosa County personnel collaborated to build the system for less than \$335,000 in just four months.

Local Agency/State Agency Collaboration Projects

City of Gainesville/Alachua County and the Florida Department of Transportation

SMARTTRAFFIC Advanced Traffic Management System

The Gainesville/Alachua County SMARTTRAFFIC Advanced Traffic Management System (TMS) is all about advancements in technology, communication, sustainability, and improved partnerships. With traffic congestion increasing in and around Gainesville, the City recognized that a solution was needed. Officials decided that it was not sustainable to address the problem by further expanding multi-lane arterial highways through the city; but instead chose to focus attention on maximizing the capacity of the existing lane miles. An integral component of this objective would be ensuring the traffic signal system was coordinated. The existing DOS-based signal system would not allow the addition of Intelligent Transportation System technology that would provide the signal coordination needed, nor would it allow the implementation of other smart transportations technologies such as real time travel time information, citizen interface, and incident management. A traffic signal master plan called for a nearly \$18M investment to upgrade the technology platform.

Gainesville began exploring grant funding opportunities through the Florida Department of Transportation's TRIP program and successfully promoted the concept that the TMS was regionally significant and furthered the Florida Transportation Plan's goals. The TRIP required a local 50% funding match which was accomplished through a multi-agency funding partnership between the City of Gainesville, Alachua County, and the University of Florida (through the Campus Master Plan Agreement). Additionally, the city collected Transportation Concurrence Exception Area funding from private developments.

The TMS now has 164 of the 229 signals on-line and over 18 miles of fiber installed, a fully operational Traffic Management Center (TMC) with 84 cameras in use, and real time signal system monitoring allowing real time traffic congestion management. TMC staff work in cooperation with law enforcement to provide incident management which allows officers to perform law enforcement duties rather than provide traffic control.

City of Jacksonville and Florida Department of Transportation

I-10/I-95 Interchange

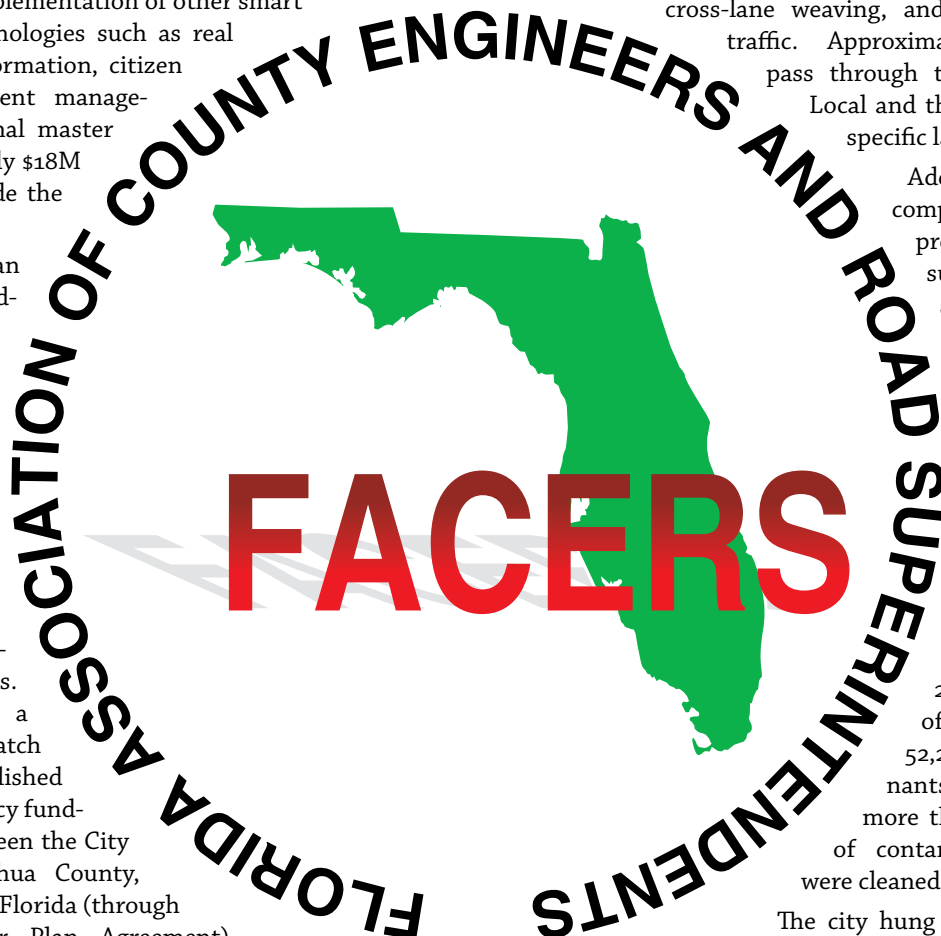
The I-10/I-95 Interchange in downtown Jacksonville was one of the largest transportation construction projects in the area. The \$157M plus project had ten complex major phases, including fully reconstructing two intersecting Interstates, constructing 17 bridges, and adding four flyover ramps and 25 lane miles. The project increased capacity and eliminated conflict points, cross-lane weaving, and hours of congested traffic. Approximately 155,000 vehicles pass through the interchange daily.

Local and through traffic now use specific lanes.

Adding to the project's complexity was its proximity to an EPA superfund site. Construction within the contaminated (ash) zone required training and cooperation between multiple agencies: EPA, FDEP, FDOT, the City of Jacksonville and a strong partnership between the contractors and consultants.

Approximately 260,000 cubic yards of ash were excavated, 52,214.4 tons of contaminants were removed, and more than 33 million gallons of contaminated groundwater were cleaned.

The city hung banners from project structures promoting safety, quality, and productivity. Up to 150 workers were onsite day and night with every kind of equipment. Work performed on



"Center Stage" was visible to residents and visitors, so the Construction Team made the Public Information Program a priority. The Team worked together to develop an innovative re-phasing plan to ensure success. At weekly progress meetings, the whole Team understood that the best solution could only be developed through teamwork, so they solved issues collectively, without respect to who owned the problem. The Team knew that, with planning, cooperation, and communication, they provided the public with a positive image of this difficult and challenging project. Through their hard work, and despite the complications, the project was completed six months ahead of schedule and improved traffic patterns that triggered redevelopment and boosted the city's economy.

Palm Beach County and the Florida Department of Transportation

Widening of Okeechobee Boulevard

This project widened Okeechobee Boulevard (SR 704) in West Palm Beach from six to eight lanes between west of State Road 7 and the Florida Turnpike. The project included the

innovative approach of converting pedestrian caged areas on the Okeechobee Boulevard Bridge over the Turnpike to travel lanes, while constructing separate, detached pedestrian bridges north and south of Okeechobee Boulevard.

The corridor is one of the main east-west corridors of Palm Beach County and with the construction of several large residential communities west of the Turnpike, area traffic demands were exceeding the road's existing capacity. This project was one of the largest ever for Palm Beach County Engineering with a construction cost of approximately \$30M. The project was a joint effort with the FDOT as the road is located on the State Highway System. The FDOT funded half of the construction under the County Incentive Grant Program (CIGP) 6.

Multiple amendments to the CIGP were necessary and coordination between the County and the FDOT was extensive and critical to keep the project moving forward. The western communities now enjoy easy access, less travel time, and fewer delays to the Turnpike and I-95 as well as downtown West Palm Beach via Okeechobee Boulevard. ■■■

Florida Technology Transfer (T²) Center Now Broadcasting Selected Training

Does your organization need training but lack the funds to cover travel? Then the Florida T² Center may have your answer! We recently began broadcasting some of our live, instructor-led training and have received excellent reviews from trainees.

During the broadcast, trainees see and hear live video and audio as our instructor delivers the course to the participants in the classroom. In addition, remote participants follow along with the PowerPoint slides which are advanced in real time with the instructor's presentation and audio.

You can register yourself or personnel from your agency to participate remotely—but don't worry; you won't be cut out of the action. The broadcast option comes fully equipped with the ability to ask questions via a microphone if you have one, or by using the comprehensive chat feature included with the program. Trainees can view the course from the convenience of their own computer right from their desk or even from home. Another option is to group trainees together to view the broadcast from a projector in a conference room at your location.

All you have to do is register online for the broadcast option and we do the rest. You will receive an email from our expert IT staff a few days before the course with instructions on how to log in and view the broadcast.

If there is an exam attached to your course, you can schedule to take it during one of our already scheduled exam sessions, or, if you have five or more people, we can send a proctor to you!

As another exciting option, we are working on making recorded sessions available to you soon, which will allow you to have access to the material anytime, anywhere. Recorded

sessions will also have options such as the ability to ask the instructor questions via email and the capability of viewing only the modules pertinent to your interest or profession. This option will really open up the opportunity to learn on your schedule, bringing new meaning to our motto: Training on *your* terms.

Want to take a look and see what you can expect? Just send an email to itassist@ce.ufl.edu and ask for a link to one of our own broadcast demos to see for yourself!

Don't see a broadcast option for the course you need? Call or email today about the possibility of getting it set up for you: 352.273.1661 or sitison@ufl.edu. Stretch your organization's training dollar by trying this new training delivery option brought to you by the friendly and innovative staff at the Florida T² Center. ■■■



Go Green with Technology Transfer Quarterly **Receive your Technology Transfer Quarterly by email.**

Send us an email at t2assist@ce.ufl.edu with your name, organization, and email address. As soon as the newsletter is available, you will receive an email at the address you provided with a link to our E-Newsletter. You can also request to receive our monthly training updates. Thanks in advance for being green! To view Florida's Technology Transfer Quarterly newsletter, past and present, visit: www.t2ctt.ce.ufl.edu/nl_archive ■■■

Announcing the Every Day Counts Exchanges

US DOT Secretary Ray LaHood to kick off the December Exchange

The Federal Highway Administration's Every Day Counts (EDC) Initiative is taking information sharing to the next level. In partnership with the Florida Transportation Technology Transfer Center and the Florida Department of Transportation (FDOT), the Federal Highway Administration (FHWA) will begin hosting a series of dynamic peer exchanges called the "EDC Exchange". The nationally broadcasted learning sessions will allow participants to hear from national subject matter experts about market-ready EDC technologies. Participants will also exchange information locally about effective project development and delivery practices for immediate use in their programs.

U.S. DOT Secretary Ray LaHood is expected to open the December 15th Exchange and also be available for questions.

Florida is one of the many states hosting locations for the interactive sessions. The three Florida locations are:

- FHWA Florida Division Office – Tallahassee
- FDOT Turnpike, Turkey Lake Office – Ocoee
- FDOT MRO Office – Davie

The topics scheduled are:

- | | |
|--|---------------|
| 1. Construction Manager General Contractor | Dec. 15, 2011 |
| 2. Geosynthetic Reinforced Soil | Feb. 16, 2012 |
| 3. Flexibility in ROW | Apr. 19, 2012 |
| 4. In Lieu Fees / Mitigating Banking | June 21, 2012 |
| 5. Adaptive Signal Control Technologies | Aug. 16, 2012 |

There will be a national Question and Answer session scheduled with each of the subject matter experts during the "EDC Exchange". Representatives from local public agencies, tribal members, contractors and consultants, and state DOT professionals are invited to participate. Space is limited! To register for this **free** event, visit: t2ctt.ce.ufl.edu/EDCExchange.

For more information on the "EDC Exchange", please contact Karen Brunelle, FHWA Florida Division's EDC Coordinator, at 850-553-2218 or Karen.Brunelle@dot.gov.

An online "Community of Practice" forum is available to anyone interested in either sharing information or just learning more about EDC initiatives in other cities and states. Just visit the EDC website at www.fhwa.dot.gov/everydaycounts/ and click on the online forum. ■■■



Safety Edge Device is Available at No Cost for Paving Public Roads

Pavement edge drop-offs are a serious problem on Florida's rural highways – especially on two-lane roads with unpaved shoulders. The Safety Edge has proven to be an effective, low cost measure that reduces serious crashes. It is formed during the paving operation by extruding a wedge of paving material (hot mix asphalt or concrete) at the pavement edge. This edge provides a ramp to allow vehicles to reenter the pavement without loss of control. For asphalt pavements, this wedge is created by a Safety Shoe, a simple device that attaches to the paver.

Cost to construct the Safety Edge is minimal when included in regular asphalt paving projects, and contractors report that it has a minimal effect on the production of the paving operation. Even projects that involve thin asphalt overlays can accommodate the Safety Edge by adding a few inches of asphalt at the edge of the existing pavement.

The Florida T² Center now has a Safety Shoe that is available on a loaner basis for agencies interested in evaluating this tool for improving safety on their roads. In Florida, at least two counties have already incorporated the Safety Edge into paving projects, and several others plan to specify it during the next year.

To schedule the use of the Safety Shoe, contact David Page at

the Florida T² Center at dkpage@ufl.edu or 352.273.1685. For more information about the design or construction of the Safety Edge, contact John Goodknight at jgoodknight@ce.ufl.edu or 352.284.5717. The Safety Edge is a simple, inexpensive solution and a focus of the FHWA's Every Day Counts program. The FHWA's web site: safety.fhwa.dot.gov/roadway_dept/pavement/safedge/ contains additional information, including the Safety Edge Toolkit, sample specifications, research reports, evaluations, and other resources. ■■■

Submitted by John Goodknight, PE, PhD

FACERS working with FDOT to streamline LAP process

The Florida Association of County Engineers and Road Superintendents (FACERS) and Florida Department of Transportation (FDOT) are working together to streamline and improve the process for administering Local Agency Program (LAP) projects. The focus of these efforts is on reducing or eliminating unnecessary paperwork, streamlining reviews, clarifying policies, improving consistency with which policies are applied, and updating relevant specifications.

Changes to FDOT Procedures will be incorporated into an upcoming revision to the LAP Manual. Policy clarifications and refinements are being posted on the FDOT website: www.dot.state.fl.us/specificationsoffice/LAP in the form of "Asked and Answered" documents.

FACERS and FDOT are drafting revisions to the LAP specifications for asphalt, concrete, earthwork, and landscaping which will soon be available for public review and comment. The agencies are also planning additional training for participants in LAP projects.

Agencies that are involved in LAP projects can monitor the FACERS website at www.facers.org/?page_id=1035 to stay up-to-date on the status of these efforts. This site also includes links to other resources which are useful for agencies involved in administering LAP projects. ■■■

Submitted by John Goodknight, PE, PhD

Florida's Occupant Protection Resource Center *Coming Soon!*

The Florida T² Center will be housing the new Florida Occupant Protection Resource Center (OPRC), funded by a grant from the Florida Department of Transportation.

Over the next few years, the Resource Center is expected to become Florida's one-stop shop for occupant protection information and materials on such subjects as child passenger safety, safety belts, air bags, and even distracted driving. Look for more information as well as the OPRC web address in the February 2012 issue of this publication. ■■■

The Debut of FDOT Maintenance of Traffic Refresher Classes *Online!*

Finally, for all you who hold a Florida Department of Transportation Maintenance of Traffic (MOT) qualification that is expiring, you now have a convenient option. The Intermediate MOT Refresher class and Advanced MOT Refresher class will be available online through the Florida T² Center – which means you can eliminate traveling to a course and you get to choose your testing date (prior to the expiration date of your current qualification, of course)! Check our website at t2ctt.ce.ufl.edu within the next month to see the debut of these long-awaited and much needed online qualification courses. ■■■

FDOT Summary of Final Research Reports—New Topics Available

Access the FDOT website 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.

Construction

BDK84 977-06 Reinforced Concrete Pipe Cracks -- Acceptance Criteria

Geotechnical

BDK81 977-01 Design Phase Identification of High Pile Rebound Soils

Maintenance

BDK83 977-01 Enhancement of the FDOT's Project Level and Network Level Bridge Management Analysis Tools

Materials

BD545-76 Modification of LRFD Resistance Based on Site Variability

BD546-08 Characterization of New and Old Concrete Structures Using Surface Resistivity Measurements

Planning

BDK84 977-18 Roadway Data Representation and Application Development Phase III

Public Transportation

BDK85 977-04 Guidebook for Using Automatic Passenger Counter Data for National Transit Database (NTD) Reporting

BDK85 977-11 Assessing Air Quality Impacts of Managed Lanes

BDK85 977-13 Assessment Instrument for the Certified Transit Technician Program

BDK85 977-19 Florida Bus Maintenance Staffing Practices

Roadway Design

BDK75 977-06 Continuation of Superpave Projects Monitoring

PR4575974 Development of Methods for Improving Levels I and II MET/Ocean Parameter Predictions

Structures

BDK83 977-03 Investigation of Impact Factors for FDOT Bridges

Traffic Engineering and Operations

BDK80 977-02 Decision Support Tools to Support the Operations of Traffic Management Centers (TMC)

The Science of Highway Safety

Highway Safety Manual is a valuable tool for local agencies Major Effort Undertaken

As a civil engineer or one who works closely with civil engineers, you know when designing an intersection and a question about sight distance arises, you can look for an answer in the American Association of State Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets, also known as the AASHTO Green Book, or in Florida's Green Book (Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways). Similarly, when you have a question about signs, pavement markings, and signals for the same intersection, the answers will be in the Manual on Uniform Traffic Control Devices, or MUTCD.

But where do you look for answers to traffic safety questions? For example, what is the safest method for handling left turn movements at a four-way signalized intersection? Sifting through multiple sources of information (probably including the Green Book, the MUTCD, and published research reports) does not guarantee a definitive answer. The question about left turn movements exposes a dilemma that safety professionals have grappled with for years: What constitutes safety on a road? Must a road simply adhere to established design standards to be considered safe, or does it require something more?

Standards Are Not Enough

Dr. Ezra Hauer, Professor Emeritus, Department of Civil Engineering, University of Toronto and internationally-recognized highway safety expert, introduced the adjectives "nominal" and "substantive" to help describe roadway safety. Hauer's term "nominal" safety depends on "compliance with standards, warrants, policies" and sanctioned procedures whereas one measures "substantive" safety "by expected crash frequency and severity." Defining safety as a function of compliance with standards, Hauer asserts, creates the problem that "Limit standards do not tell the designer what the safest design is. Rather, they specify the limit of what is permissible." Today, the Highway Safety Manual (HSM) is the definitive source of substantive answers to roadway safety questions.

Volunteers from eight different Transportation Research Board subcommittees worked over ten years to create the HSM as a single source for safety information and tools in a form that facilitates data-based decision making. The National Cooperative Highway Research Program (NCHRP) and the Federal Highway Administration (FHWA) provided supplementary funding.

In 2006, the HSM was published as an AASHTO document. A Joint Task Force formed with AASHTO Design, Traffic Engineering, and Safety Management subcommittee members to ensure the HSM met State Departments of Transportation and local agency needs and to promote the HSM. In 2009, after intensive development and refinement, the AASHTO board of directors approved the HSM for distribution.

Valuable Resource, but Not a Standard

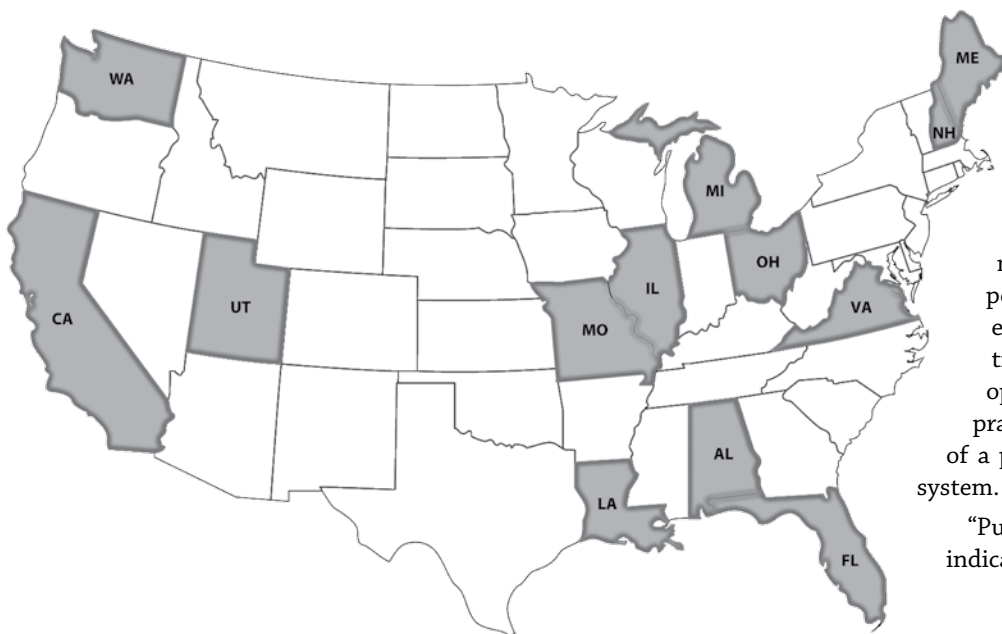
Priscilla Tobias, Bureau Chief of Safety Engineering, Illinois Department of Transportation (IDOT), and Joint Task Force Chair, oversees the HSM maintenance and ongoing development. "This manual represents the best safety-related science of our day," she declares. "And it has been thoroughly vetted by safety experts and representatives from all groups involved with roadway safety to make sure it is accurate and relevant for all stakeholders."

The HSM is not a standard, like the MUTCD. "The manual is intended as a guide; nothing about it constitutes a legal standard, nor does it mandate responsibilities," Tobias warns. "It's simply a great tool for making informed decisions about how to allocate resources to address safety issues most effectively."

New Direction in Highway Safety

The manual contains a thorough, scientific approach to identifying, analyzing, and solving safety problems. In accounting for the statistical phenomenon of regression to the mean, many HSM site selection methods help road agencies choose the most relevant sites by eliminating locations that have randomly high or low crash fluctuations. After a site is identified, the HSM provides a means for analyzing the safety impact of decisions at all project development process stages, enabling practitioners to quantify safety improvement effectiveness and other transportation performance measures. The HSM includes an extensive catalog of proven crash modification factors (CMFs) for many geometric and operational treatment types. Using CMFs, practitioners can predict the safety impact of a potential treatment or design on their road system.

"Publication of the Highway Safety Manual indicates wide recognition of the need for



approaching safety in some evidence-based manner. With procedures that examine safety quantitatively rather than subjectively, the document is an important first step in the right direction," stated Hauer.

Early Adopters Lead the Way

At three volumes (nearly one thousand pages), the HSM contains a formidable amount of information, especially for those who are not experienced in analyzing and improving roadway safety. To help disseminate new HSM information and encourage use by road-owning agencies, the NCHRP is sponsoring the Lead States Initiative for Implementing the Highway Safety Manual, an effort to showcase experiences of state and local transportation officials.

Charles Niessner, NCHRP senior program officer and Lead States Initiative project manager, worked with Tobias' AASHTO HSM Joint Task Force to solicit State Departments of Transportation (DOTs) participants and got 30 responses. Thirteen states were selected as a Lead State, including Florida.

Florida is a Lead State

Our February newsletter will include information on what the Florida Department of Transportation (FDOT) is doing as a Lead State with implementation efforts.

Not Just for State DOTs

Tony Giancola, former Executive Director of the National Association of County Engineers (NACE), is also excited about the availability and relevance of the HSM for agencies across the country. "This is a very useful tool... a big help for road agencies at state and local levels as they evaluate, design, plan for and implement safety improvements in their respective communities."

Everyone familiar with the HSM agrees it will be a great tool for improving roadway safety, but some are expecting more—especially those who have experience with local-level safety improvement implementation. The HSM can help agencies define quantifiable solutions to safety problems that can lead to secured funds.

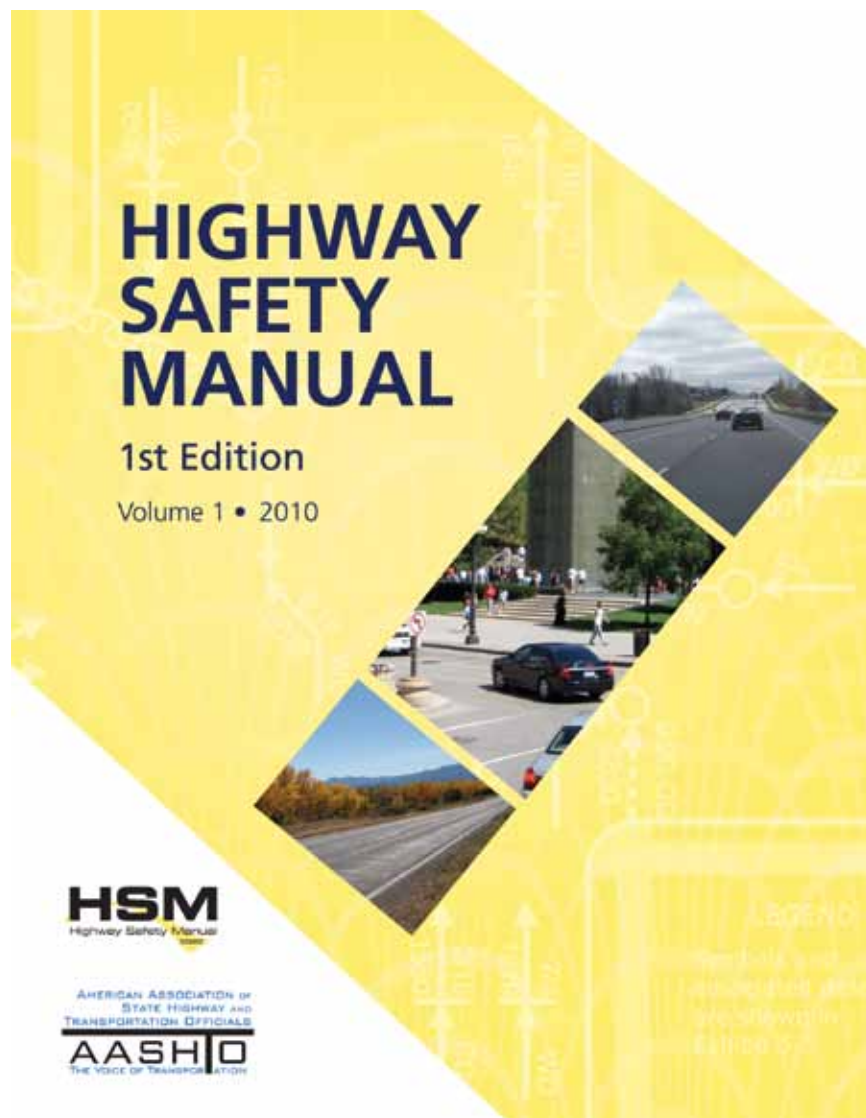
Please visit www.highwaysafetymanual.org for more information about the Highway Safety Manual, including how to order it.

Article and cover photo adapted with permission from John Rynnanen, Editor, Center for Technology & Training, Michigan Tech Transportation Institute

FHWA Resource Center HSM Webinar Series

Ten webinars can be accessed at www.highwaysafetymanual.org/Pages/FHWAResourceCenterHSMWebinarSeries.aspx

- HSM Introduction and Overview
- Applications to Two-Lane Rural Roads
- Applications to Urban/Suburban Intersections
- Project Identification
- Applications to Rural Two-Lane Intersections
- Applications to Rural Multilane Highways
- Applications to Urban/Suburban Roads
- Applications to Rural Multilane Intersections
- HSM and Pedestrians
- Applications to Horizontal Curves
- HSM Relationship to Roadway Departure Crashes
- Applications to HSIP ■■■



Upcoming Workshops

For a list of all courses or to register, visit our website at t2ctt.ce.ufl.edu or for T² workshops, email t2workshops@ce.ufl.edu or call 352.273.1670 and for CTQP courses, email ctt@ce.ufl.edu or call 352.273.1669. We look forward to serving you.

Advanced Maintenance of Traffic

November 16–18, 2011	Gainesville
November 16–18, 2011	Orlando
November 30 – December 2, 2011	Crestview
December 7–9, 2011	Pompano Beach
December 14–16, 2011	Tampa
December 20–21, 2011	North Miami Beach
January 4–6, 2012	Tallahassee
January 25–27, 2012	Temple Terrace
February 1–3, 2012	Gainesville
February 8–10, 2012	Crestview
February 15–17, 2012	Orlando
February 29 – March 2, 2012	Punta Gorda
March 28–29, 2012	North Miami Beach
March 28–30, 2012	Temple Terrace
April 11–13, 2012	Gainesville
April 18–20, 2012	Crestview
May 9–11, 2012	Orlando
May 15–17, 2012	Tallahassee
May 16–18, 2012	Punta Gorda
June 6–8, 2012	Temple Terrace
June 13–15, 2012	Gainesville
June 27–29, 2012	Cape Coral
June 27–29, 2012	Tallahassee
July 18–20, 2012	Orlando
July 26–27, 2012	North Miami Beach
August 8–10, 2012	Temple Terrace
August 29–31, 2012	Cape Coral
September 12–14, 2012	Gainesville
September 18–20, 2012	Tallahassee
October 17–19, 2012	Punta Gorda
October 24–26, 2012	Temple Terrace
November 1–2, 2012	North Miami Beach
November 7–9, 2012	Gainesville
November 14–16, 2012	Orlando
December 12–14, 2012	Temple Terrace

Advanced Maintenance of Traffic - Refresher

November 15, 2011	Gainesville
November 15, 2011	Orlando
November 29, 2011	Crestview
December 6, 2011	Pompano Beach
December 13, 2011	Tampa
December 14, 2011	North Miami Beach
January 3, 2012	Tallahassee
January 24, 2012	Temple Terrace
January 31, 2012	Gainesville

February 7, 2012
February 14, 2012
February 28, 2012
March 14, 2012
March 27, 2012
April 10, 2012
April 17, 2012
May 8, 2012
May 14, 2012
May 15, 2012
June 5, 2012
June 12, 2012
June 26, 2012
June 26, 2012
July 17, 2012
July 18, 2012
August 7, 2012
August 28, 2012
September 11, 2012
September 17, 2012
October 16, 2012
October 23, 2012
November 6, 2012
November 13, 2012
November 14, 2012
December 11, 2012

Asphalt Paving Level 1

January 23, 2012	Pompano Beach
February 6, 2012	Jacksonville
February 20, 2012	Chipley

Asphalt Paving Level 2

January 24–26, 2012	Pompano Beach
February 7–9, 2012	Jacksonville
February 21–23, 2012	Chipley

Asphalt Plant Level 1

January 4–6, 2012	Gainesville
February 22–24, 2012	Gainesville
April 4–6, 2012	Gainesville

CTQP Written Exam Only (No books provided)

December 2, 2011	Orlando
December 7, 2011	Chipley
December 7, 2011	Jacksonville
December 7, 2011	Pompano Beach
December 7, 2011	Tallahassee
December 7, 2011	Tampa

Crestview	January 4, 2012	Chipley
Orlando	January 4, 2012	Jacksonville
Punta Gorda	January 4, 2012	Pompano Beach
North Miami Beach	January 4, 2012	Tampa
Temple Terrace	February 1, 2012	Chipley
Gainesville	February 1, 2012	Jacksonville
Crestview	February 1, 2012	Pompano Beach
Orlando	February 1, 2012	Tampa
Tallahassee	March 7, 2012	Chipley
Punta Gorda	March 7, 2012	Jacksonville
Temple Terrace	March 7, 2012	Pompano Beach
Gainesville	March 7, 2012	Tampa
Cape Coral	April 4, 2012	Chipley
Tallahassee	April 4, 2012	Jacksonville
Orlando	April 4, 2012	Pompano Beach
North Miami Beach	April 4, 2012	Tampa

Drilled Shaft Inspection

March 19–21, 2012	Orlando
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Earthwork Construction Inspection

Level 1

December 6–7, 2011	Gainesville
January 9–10, 2012	Pompano Beach
March 6–7, 2012	Jacksonville
March 27–28, 2012	Pompano Beach
April 10–11, 2012	Orlando

Earthwork Construction Inspection

Level 2

December 8–9, 2011	Gainesville
January 11–12, 2012	Pompano Beach
March 8–9, 2012	Jacksonville
March 29–30, 2012	Pompano Beach
April 12–13, 2012	Orlando

EDC Exchanges for Market-Ready Technologies - FREE

December 15, 2011	Tallahassee, Ocoee, Davie
February 16, 2012	Tallahassee, Ocoee, Davie
April 19, 2012	Tallahassee, Ocoee, Davie
June 21, 2012	Tallahassee, Ocoee, Davie
August 16, 2012	Tallahassee, Ocoee, Davie

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Upcoming Workshops *continued*

FDOT Concrete Field Inspector Specification

November 15–17, 2011 Gainesville
January 18–20, 2012 Tampa
February 6–8, 2012 Chipley

Final Estimates Level 1

November 14, 2011 Gainesville
March 7, 2012 West Palm Beach
March 12, 2012 Lakeland
April 11, 2012 Gainesville

Final Estimates Level 2

November 15–16, 2011 Gainesville
March 8–9, 2012 West Palm Beach

Intermediate Maintenance of Traffic

November 15–16, 2011 Naples
November 16–17, 2011 Cape Coral
December 7–8, 2011 Orlando
December 14–15, 2011 Crestview
January 11–12, 2012 Crestview
January 18–19, 2012 Orlando
January 25–26, 2012 Gainesville
January 25–26, 2012 Punta Gorda
February 7–8, 2012 North Miami Beach
February 15–16, 2012 Temple Terrace
March 7–8, 2012 Crestview
March 7–8, 2012 Punta Gorda
March 7–8, 2012 Tallahassee
March 21–22, 2012 Gainesville
March 21–22, 2012 Orlando
April 25–26, 2012 North Miami Beach
May 2–3, 2012 Punta Gorda
May 2–3, 2012 Temple Terrace
May 16–17, 2012 Crestview
May 23–24, 2012 Gainesville
May 23–24, 2012 Orlando
June 12–13, 2012 North Miami Beach
June 13–14, 2012 Cape Coral
July 18–19, 2012 Temple Terrace
July 25–26, 2012 Gainesville
July 25–26, 2012 Punta Gorda
August 15–16, 2012 Cape Coral
August 15–16, 2012 Orlando
August 29–30, 2012 North Miami Beach
September 12–13, 2012 Punta Gorda
September 26–27, 2012 Temple Terrace
October 10–11, 2012 Tallahassee
October 17–18, 2012 Cape Coral
October 17–18, 2012 North Miami Beach
October 24–25, 2012 Gainesville
October 24–25, 2012 Orlando
November 7–8, 2012 Punta Gorda
November 7–8, 2012 Temple Terrace
December 5–6, 2012 Orlando
December 12–13, 2012 Cape Coral

Intermediate Maintenance of Traffic - Refresher

November 14, 2011 Naples
November 15, 2011 Cape Coral
November 17, 2011 New Port Richey
November 30, 2011 Fort Myers
December 6, 2011 Orlando
December 13, 2011 Crestview
January 10, 2012 Crestview
January 17, 2012 Orlando
January 24, 2012 Gainesville
January 24, 2012 Punta Gorda
February 1, 2012 North Miami Beach
February 14, 2012 Temple Terrace
March 6, 2012 Crestview
March 6, 2012 Punta Gorda
March 6, 2012 Tallahassee
March 20, 2012 Gainesville
March 20, 2012 Orlando
April 11, 2012 North Miami Beach
May 1, 2012 Punta Gorda
May 1, 2012 Temple Terrace
May 15, 2012 Crestview
May 22, 2012 Gainesville
May 22, 2012 Orlando
June 12, 2012 Cape Coral
June 20, 2012 North Miami Beach
July 17, 2012 Temple Terrace
July 24, 2012 Gainesville
July 24, 2012 Punta Gorda
August 14, 2012 Cape Coral
August 14, 2012 Orlando
August 15, 2012 North Miami Beach
September 11, 2012 Punta Gorda
September 25, 2012 Temple Terrace
October 9, 2012 Tallahassee
October 10, 2012 North Miami Beach
October 16, 2012 Cape Coral
October 23, 2012 Gainesville
October 23, 2012 Orlando
November 6, 2012 Punta Gorda
November 6, 2012 Temple Terrace
December 4, 2012 Orlando
December 11, 2012 Cape Coral

Mobile Equipment and Internal Work Zone Safety

November 30, 2011 Port Charlotte

Nuclear Density Gauge Safety and HazMat

December 5, 2011 Gainesville
March 5, 2012 Jacksonville
April 9, 2012 Orlando

Pile Driving Inspection

November 30 – December 2, 2011 Orlando
April 2–4, 2012 Orlando

Pilot/Escort Flagging

November 15, 2011 Fort Myers
December 6, 2011 Orlando
January 5, 2012 Gainesville
January 17, 2012 Fort Myers
February 2, 2012 Gainesville
March 1, 2012 Gainesville
April 5, 2012 Gainesville
April 17, 2012 Fort Myers
May 3, 2012 Gainesville
June 7, 2012 Gainesville
July 12, 2012 Gainesville
July 12, 2012 Fort Myers
August 2, 2012 Gainesville
September 6, 2012 Gainesville
October 4, 2012 Gainesville
October 11, 2012 Fort Myers
November 1, 2012 Gainesville
December 6, 2012 Gainesville

Pilot/Escort Flagging Refresher

December 13, 2011 Gainesville
January 12, 2012 Gainesville
February 9, 2012 Gainesville
March 8, 2012 Gainesville
April 12, 2012 Gainesville
May 3, 2012 Gainesville
June 7, 2012 Gainesville

Pilot/Escort Flagging Refresher Online

January 1 – June 30, 2012 Gainesville

Qualified Aggregate Sampler

February 13, 2012 Gainesville

Quality Control Manager

February 9–10, 2012 Chipley

New at the T² Media Center

Below is a sample of new items added to our Media Center collection since our last newsletter. To better serve our clients, visit our website, t2ctt.ce.ufl.edu, to view all new listings. You will also find links to publications, when available, that allows for quicker access to the publication. As always, any non-copyrighted publication can be printed and checked out to you upon request.

Criteria for Restoration of Longitudinal Barriers NCHRP656.01	Speed Reduction Techniques for Rural High-to-Low Speed Transitions N-SYN412.01	Work Zone Operations Best Practices Guidebook P8571.01
Accelerating Transportation Project and Program Delivery: Conception to Completion NCHRP662.01	Techniques for Effective Highway Construction Projects in Congested Urban Areas N-SYN413.01	Distracted Driving: So What's The Big Picture P8572.01
Design of Roadside Barrier Systems Placed on MSE Retaining Walls NCHRP663.01	Geometric Design Practices for Resurfacing, Restoration, and Rehabilitation N-SYN417.01	Evaluation of the Effectiveness of a Variable Advisory Speed System on Queue Mitigation in Work Zones P8573.01
Model Curriculum for Highway Safety Core Competencies NCHRP667.01	Transportation Improvement Program Revision Process N-SYN419.01	Proper Seat Placement of Children Aged 12 or Younger Within Vehicles: A Rural/Urban Comparison P8574.01
Roundabouts: An Informational Guide (Second Edition) NCHRP672.01	Improving Transportation Construction Project Performance: Development of a Model to Support the Decision-Making Process for Incentive/Disincentive Construction Projects P8555.01	Decade of Action for Road Safety 2011 - 2020: Toolkit for Organizers of Launch Events P8575.01
A Manual for Design of Hot Mix Asphalt with Commentary NCHRP673.01	The Role of FHWA Programs in Livability: State of the Practice Summary P8556.01	Practical Methods for Analyzing Pedestrian and Bicycle Use of a Transportation Facility P8576.01
Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities NCHRP674.01	Complete Streets Policy Analysis 2010: A Story of Growing Strength P8557.01	Improving Traffic Signal Management and Operations: A Basic Service Model P8577.01
Intelligent Soil Compaction Systems NCHRP676.01	Connecting Rural and Urban America P8559.01	Run-Off-Road Crashes: An On-Scene Perspective P8581.01
Manual for Emulsion-Based Chip Seals for Pavement Preservation NCHRP680.01	Smart Mobility for a 21st Century America: Strategies for Maximizing Technology to Minimize Congestion, Reduce Emissions and Increase Efficiency P8561.01	Reducing Pedestrian Delay at Traffic Signals P8584.01
Strategies to Attract and Retain a Capable Transportation Workforce NCHRP685.01	Enhancing Motorcycle Conspicuity Awareness in Iowa P8562.01	Distracted Driving: What Research Shows and What States Can Do P8589.01
Determining Highway Maintenance Costs NCHRP688.01	Improving Mature Driver Safety Task 6: Final Report with Recommendations P8564.01	Aging in Place, Stuck without Options P8621.01
Mix Design Practices for Warm Mix Asphalt NCHRP691.01	Public Policies for Pedestrian and Bicyclist Safety and Mobility P8566.01	Low Volume Roads 2011 Vol 1 TRB2203.01
Decision Making for Outsourcing and Privatization of Vehicle and Equipment Fleet Maintenance NCHRP692.01	Highway Incident Traffic Safety Guidelines for Emergency Responders P8568.01	Low Volume Roads 2011 Vol 2 TRB2204.01
Guidelines for the Use of Pavement Warranties on Highway Construction Projects NCHRP699.01	International Scan Summary Report on Pedestrian and Bicyclist Safety and Mobility P8569.01	Low Volume Roads 2011 Vol 3 TRB2205.01
Utility Location and Highway Design N-SYN405.01		Asphalt Materials and Mixtures 2011 TRB2209.01
Traffic Signal Retiming Practices in the United States N-SYN409.01		Highway Safety Management; Safety Workforce Development; School Transportation TRB2213.01
Microsurfacing N-SYN411.01		

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FDOT Final Research Reports are Available Online

For a complete list, visit www.dot.state.fl.us/research-center/completed_research_main.shtm

Florida's Pedestrian and Bicycling Safety Resource Center supplying materials to make your safety event successful

Make your ped/bike events and educational activities more successful by providing items that reinforce safe walking and bicycling practices. Items listed below are available at no charge to qualifying organizations.

Visit www.pedbikesrc.ce.ufl.edu for descriptions, illustrations, and ordering information. Our current inventory includes:

Books

- A Resident's Guide for Creating Safe and Walkable Communities
- Florida Bicycle/Pedestrian Law Enforcement Guide
- Florida Bicycling Street Smarts
- How to Develop a Pedestrian Safety Action Plan
- Pedestrian Safety Guide for Transit Agencies
- Pedestrian Safety Workshop: A Focus on Older Adults
- Pedestrian Safety Workshop: A Focus on Older Adults Instructor Guide
- PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System
- Practice Bike Safety
- Statewide Bicycle Facilities Study
- The Guide to Bicycle Rodeos
- Traffic Safety

Publications

- A Kid's Guide to Safe Walking
- Bicycle Safety
- Bicycle Safety: What Every Parent Should Know **E+S**
- Bicyclist Make Safe Choices/Rules of the Road
- Bike Riding Dangers
- Crosswalk countdown!
- Crosswalk Safety **E+S**
- Easy Steps to Properly Fit a Bicycle Helmet
- El Equipo Adecuado
- Florida Specifier
- How To Fit & Wear Your Bicycle Helmet **E+S**
- I'm A Safe Walker
- I'm Safe - On My Bike
- I'm Safe! Paint Sheet - Bike **E+S**
- I'm Safe! Paint Sheet - Pedestrian **E+S**

- I'm Smart About People
- Kids Physical Activity **E+S**
- Know the Rules - Going To & From School **E+S**
- Let's Walk to School Coloring Book
- Neighborhood Safety **E+S**
- Parent's Guide - Child Safety on Your Street
- Paul's A-Maze-ing Trip
- Peaton, Ponga Atencion...
- Prevent Pedestrian Crashes
- Road Riders Are Drivers
- Safety Fun Activity Book **E+S**
- Sara and Her Bike
- Secret Code
- Sprocket Man Comic Book
- Stepping Out
- Teacher's Guide - Walk With Me
- The Top Ten Rules of Bicycle Safety
- Tips for Parents and Other Adults for Teaching Pedestrian Safety to Children **E+S**
- Tips for Walking Safely to School **E+S**
- Walk 'n Roll Activity Book
- Walk 'n Roll Bookmark
- Walk 'n Roll Punch Cards
- Wear Your Helmet

- What's wrong with this Picture?
- You Can Teach Your Child to Walk Safely **E+S**
- You Can't Stop a Train

Reflective

- Be Safe Be Seen Reflective Wristlet
- SRTS Reflective Wrist Band
- Reflective Zipper Pull

Stickers

- Use Your Head (Dog)
- Use Your Head (Moose)
- Walk Safely!
- Walking School Bus

Posters

- Are You A Safe Walker?
- Hispanic Bicyclist Poster II
- Hispanic Bicyclist Poster
- Hispanic Pedestrian Poster: Intoxicated
- Hispanic Pedestrian Poster: Sidewalks
- I'm Safe On My Bike.

Crayons

- 4-pack Crayola Crayons

E+S – Available in English and Spanish





University of Florida
Civil and Coastal Engineering
2110 NE Waldo Road
Gainesville, FL 32609
352.392.2371

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Upcoming Workshops

For the dates and locations of these upcoming workshops, see page 32-33.

Advanced Maintenance of Traffic 35 classes	Earthwork Construction Inspection Level 2 5 classes	Mobile Equipment and Internal Work Zone Safety 1 class
Advanced Maintenance of Traffic - Refresher 35 classes	EDC Exchanges for Market-Ready Technologies - FREE 5 classes	Nuclear Density Gauge Safety and HazMat 3 classes
Asphalt Paving Level 1 3 classes	FDOT Concrete Field Inspector Specification 3 classes	Pile Driving Inspection 2 classes
Asphalt Paving Level 2 3 classes	Final Estimates Level 1 4 classes	Pilot/Escort Flagging 18 classes
Asphalt Plant Level 1 3 classes	Final Estimates Level 2 2 classes	Pilot/Escort Flagging Refresher 8 classes
CTQP Written Exam Only (No books provided) 22 classes	Intermediate Maintenance of Traffic 40 classes	Pilot/Escort Flagging Refresher Online 1 class
Drilled Shaft Inspection 1 class	Intermediate Maintenance of Traffic - Refresher 42 classes	Qualified Aggregate Sampler 1 class
Earthwork Construction Inspection Level 1 5 classes		Quality Control Manager 1 class