Florida's Pedestrian/Bicycling Safety Resource Center Opens  
see page 2

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The Florida T² Center Welcomes Florida’s Pedestrian/Bicycling Safety Resource Center

Florida’s Pedestrian/Bicycling Safety Resource Center (src) promotes safe pedestrian and bicycling activities by providing information and educational materials to advocate groups in the state. The src will constantly be adding to its collection to offer a wide variety of resources and information about walking and biking for citizens and visitors, young and old, and all levels of expertise.

Information includes safety issues, important laws and policies, how to incorporate walking and biking into your commute to work or school, places to walk and bike, special events, plus trail and tour maps.

In addition, the src has a collection of pedestrian and bicycling-related educational and promotional materials that can be requested by qualifying organizations to help support pedestrian and bicycle safety and educational activities.

The website, pedbikesrc.ce.ufl.edu, also features:

**Upcoming Events:** Participating in events increases knowledge and awareness which can help promote safe practices for pedestrians and bicycles. Sharing experiences provides tools to improve knowledge and skill sets.

**Ped/Bike Safety Links:** A continually expanding number of pedestrian and bicycling safety links that list local, state, national, and international organizations focused on encouraging safe bicycling and walking activities, providing information on raising awareness about safety issues, planning, educational materials, programs, laws, videos, and other web resources.

**In the News:** Pertinent pedestrian and bicycling news articles from around the state, country, and world will be posted as they are received or identified.

We invite you to send us additional resources, links, and upcoming events in your locale. Please visit the src website and submit your suggestions and comments.

The Pedestrian/Bicycling Safety Resource Center is funded by the Florida Department of Transportation Office.

The front cover picture and the picture in this article are courtesy of Dan Burden, Glatting Jackson Kercher Anglin Inc. / Co-Founder, Walkable Communities, Inc.

Celebrate National Bike Month

Participate in and celebrate National Bike Month, Bike-to-Work Week, and Bike-to-Work Day.

May is National Bike Month. The League of American Bicyclists is the sponsor of National Bike Month. Visit www.bikeleague.org/programs/bikemonth/ for more information.
**Free Training**

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

By the year 2020, one in four Florida residents will be over the age of 65, and half of those will be 75 or older. To help meet this challenge, the Florida Department of Transportation developed the Safe Mobility for Life Program to enhance the safety, access, and mobility of Florida’s mature drivers and pedestrians, with the added benefit of improving safety for everyone.

This one-day course, “The Safe Mobility for Life Program: Preparing Our State for the Future,” is designed to raise awareness for engineers, planners, and other professionals of problems associated with mature drivers and our current roadways. The workshop, based on the Federal Highway Administration’s Highway Design Handbook for Older Drivers and Pedestrians, presents options and alternative solutions to the planning, design, and operation of Florida roadways and associated facilities today and in the future.

The remaining course schedule is:

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<td>May 20</td>
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Please visit t2.ce.ufl.edu to register for this free course.

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**Plan to Attend! September 21-23, 2009 in Orlando for the Community Traffic Safety Team Coalition Meeting, the Southeast Road Safety Audit Forum, and Road Safety Audits for Local Governments Workshop**

The Southeast Road Safety Audit (RSA) Forum and Road Safety Audits for Local Governments Workshop are Federal Highway Administration (FHWA)-sponsored events that will be held in conjunction with the Florida’s quarterly Community Traffic Safety Team (CTST) Coalition Meeting which is supported by the Florida Department of Transportation (FDOT). The CTST Coalition now represents 62 teams residing in 56 counties and provides a unique opportunity to enhance Florida’s traffic safety efforts. CTST members are composed of city, county, state and private organization volunteers representing the four Es of safety: Engineering, Education, Enforcement, and Emergency Response. The Coalition is composed of the chairs and other CTST members from each of the CTSTS, in addition to FDOT and FHWA representatives.

The Southeast Road Safety Audit Forum will focus on common emphasis areas among the states, including current progress, RSA success stories from around the country, and ways to advance implementation of RSAs in the southeast region. This Forum will also serve as a peer exchange among the participating states to highlight successful RSA programs and policies and facilitate discussion regarding RSAs. RSA Forum topics include: An Overview of RSAs, Implementation of RSAs in Florida, State and Local RSA Programs, RSA Findings, Pedestrian RSAs, Engaging Law Enforcement in RSAs, and RSA Conversation Circles.

The Road Safety Audits for Local Governments Workshop is optional and follows the Coalition and Forum. The workshop introduces local road agency professionals to RSAs as an effective tool to reduce injuries and fatalities. The training presents basic road safety audit concepts, risk and safety, and common issues and also demonstrates how low cost safety improvements can be implemented quickly on their road network. Participants will gain experience in conducting a Road Safety Audit.

**Schedule:**

- **Monday September 21**
  - 9:00 AM–1:00 PM Community Traffic Safety Team Coalition Meeting **(free)**
  - 1:00 PM–5:00 PM Road Safety Audit Forum **(registration fee)**

- **Tuesday September 22**
  - 8:00 AM–12:30 PM Road Safety Audit Forum, continued
  - 2:00 PM–5:00 PM Road Safety Audit Workshop **(free, registration required)**

- **Wednesday September 23**
  - 8:00 AM–4:00 PM Road Safety Audit Workshop, continued

The CTST Coalition Meeting will be open and free of charge to all interested parties. The RSA Workshop is also free, but has limited seating so prospective attendees must register separately for the workshop. There is a small registration fee for the Southeast Road Safety Audit Forum. Visit t2.ce.ufl.edu for more information and to register.

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**Share Your Agency’s Success Stories and Best Practices**

Do you have a success story or best practice you would like to share? Please email t2@ce.ufl.edu or fax 352.392.3224 your successes to us. Information received will be posted on our website or included in a future Florida T² Center newsletter.

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**Top 5 Survey**

What are your agency’s top five technical challenges or research needs? Please visit our website at t2.ce.ufl.edu for the “Top 5 Survey” to submit your agency’s response today!
Hard Hat Safety

Hard hats are one of the most important pieces of safety equipment and are worn daily by millions because of the protections they provide. However, it is rarely part of an inspection, maintenance, or replacement program but should be. Many workers may be wearing a hard hat well past its useful life without even knowing it.

The durable exterior of the rugged-looking hard hat can disguise the need for replacement. Hard hats must be replaced when they can no longer provide the protection intended, and sometimes this can be difficult to detect. Organizations requiring workers to wear head protection on the job should have a regular hard hat replacement program.

Hard hat life span may vary significantly based upon the conditions at each work site. Ultimately, an employer is responsible for defining a responsive and appropriate solution for hard hat service life issues.

Useful Life of a Hard Hat

As a general guideline, most manufacturers recommend replacing hard hats every five years, regardless of outward appearance. If work conditions include exposure to higher temperature extremes, sunlight, or chemicals, hard hats should be replaced after two years of use. Some manufacturers recommend replacing the hard hat every 12 months, regardless of appearance. Careful review of each work site is critical to ensure that degradation of Personal Protection Equipment (PPE) is not being accelerated due to extreme work conditions.

Inspection and Maintenance

There are two hard hat impact types: the ANSI Type I hard hat, intended to reduce the force of impacts resulting from a blow only to the top of the head, and the ANSI Type II, which reduces blows received on the top, back and sides of the head, as well as off center. These hats consist of two components, shell and suspension, which work together as a system. Inspect both the shell and suspension on a regular basis.

Shell Inspection

Throughout history, many materials have been used to manufacture hard hat shells. Today, thermoplastics (polyethylene, polycarbonate, and others) and thermoset materials (fiberglass-reinforced polyesters and phenolic-impregnated textiles) are commonly used to mold shells of industrial hard hats. These materials have proven to be durable, reliable, and lightweight while providing effective protection. Given proper care, these materials will provide a reasonable service life under normal workplace conditions. However, these hard hats do not have an indefinite useful life, nor are they resistant to all physical and chemical exposures.

Regardless of the material, shells should be inspected routinely for dents, cracks, gouges, and any damage due to impact, penetration, abrasions, rough treatments, or wear that might reduce the degree of protection originally provided. Degradation of thermoplastic material may be apparent when the shell becomes stiff, brittle, faded, dull in color, or exhibits a chalky appearance. A hard hat should be replaced at first sign of any of these conditions.

Exposure to direct sunlight will affect the life of the shell.

Although most manufacturers add an ultraviolet inhibitor to the shell material to protect against degradation caused by sunlight, all hard hats are susceptible to ultraviolet light damage. Workers should never store their hard hats in the rear window or dash of a vehicle or in direct sunlight. This is the quickest way to degrade the shell material and reduce the product’s life.

Suspension Inspection

The hard hat suspension is just as important to worker safety as the shell. The suspension actually helps to absorb the shock of a blow, so it must be in good condition at all times. Like the shell, the suspension must be inspected regularly and replaced from time to time. Suspensions should be inspected closely for cracks, frayed or cut crown straps, torn headband or size adjustment slots, loss of pliability, missing components, or other signs of wear. These conditions can be caused by perspiration, hair oils, or normal wear.

Maintenance

Hard hats will get dirty. The hat and suspension should be cleaned with mild soap and lukewarm water. Strong detergents, solvent chemicals, gasoline, and other like substances could affect the resistance and other properties of the hat over time. Contact the manufacturer if you have concerns.

General Guidelines

All new employees should be provided with a new, unused, and unexposed hard hat. Avoid reissuing cleaned hard hats. The cost of a hard hat is negligible when the potential for injury, lost time, health care costs, and liability are considered.

Hard hats are designed to protect you only once. If the hard hat has been struck by a forcible blow of any magnitude, both the hard hat shell and the suspension should be replaced immediately, even if no damage is visible. Hard hats also should be replaced if dropped accidentally by the worker from the height of a two story building or higher. Damage to the hat and suspension from the drop could seriously degrade the effectiveness of the product.

Assuming the hard hat has been stored in proper packaging — free from exposure to sunlight, chemicals, and extreme temperatures — the product service life would begin at the time the hard hat is put into service, not from the date of manufacture. Be sure to check with the manufacturer about product warranty

ANSI/ISEA Z89.1, the national standard for industrial head protection, was updated in January 2009 to include optional testing and marking features for head protection devices that reflect end-user preferences. Most notable among these are specific testing parameters and marking for products that have high-visibility properties. In addition, the revised standard includes criteria for products that can be worn in the reverse position, which is preferred when performing some applications such as welding. Visit the National Work Zone Safety Information Clearinghouse website for more information: www.workzonesafety.org/research/record/9329
because it may not allow for storage time. All hard hats have a molded-in date code (date of manufacture) per ANSI Z89.1 industrial head protection requirements. These date codes are usually located on the underside of the shell. Check and log this date prior to sending the hard hat into service to help track the age of the product.

Supplying and enforcing the use of hard hats is only half the job. Safety officials must implement and maintain a hard hat replacement program to ensure that hard hats are providing the level of protection intended. This is not only necessary, but well worth the effort when considering the implications of providing a hard hat that has outlived its usefulness. Check with the hard hat manufacturer for additional tips, guidelines, and warnings.

### Nine Proven Roadway Safety Tools and Techniques: How many does your agency use?

The Federal Highway Administration (FHWA) Safety Program urges local and state roadway officials to consider implementing these nine safety countermeasures to reduce highway fatalities and injuries.

**Road Safety Audits:** A Road Safety Audit (RSA) is a formal safety performance examination of an existing or future road or intersection. Audit (or Assessment) teams are independent and multidisciplinary. The team reports on potential road safety issues and identifies opportunities to improve safety for all road users. (See page 3 for information on the upcoming Southeast RSA Forum and RSA Training.)

**Roundabouts:** A roundabout is a circular intersection where entering traffic yields to vehicles on the circulatory roadway. Roundabouts are designed to channel traffic at the entrance and provide collision deflection around a center island. Modern roundabouts are geometrically designed to reduce speeds and deflect collision forces, which substantially improves safety, while providing excellent operational performance at the intersection. (See page 10 for information on the upcoming Roundabouts Workshop.)

**Safety Edge:** The Safety Edge asphalt paving technique minimizes vertical drop-off safety hazards. A Safety Edge shape is created by fitting resurfacing equipment with a device that extrudes and compacts the shape of the pavement edge at a specific angle as the paver passes. This mitigates shoulder pavement edge drop-offs immediately during the construction process and over the pavement life. Because the technique involves only a slight modification of paving equipment, it has a minimal impact on project cost. Improved compaction of the pavement near the edge is an additional benefit of the Safety Edge. More information on the Safety Edge can be found in the May 2006 T2 quarterly newsletter: [12.ce.ufl.edu/nt/2006-05.pdf](http://12.ce.ufl.edu/nt/2006-05.pdf)

**Rumble Strips and Rumble Stripes:** Raised or grooved rumble strip patterns provide both an audible warning (rumbling sound) and a physical vibration to alert drivers that they are leaving the driving lane. Rumble strips may be installed on the roadway shoulder or on the centerline of undivided highways. Rumble “stripes” are rumble strips that are placed at the centerline or edge-line. More information can be found in the May 2007 T2 quarterly newsletter: [12.ce.ufl.edu/nt/2007-05.pdf](http://12.ce.ufl.edu/nt/2007-05.pdf)

**Median Barriers:** Median barriers are longitudinal barriers used to separate opposing traffic on a divided highway and are designed to redirect vehicles striking either side of the barrier. Median barriers can significantly reduce the number of cross-median crashes and the overall severity of median-related crashes.

**Left- and Right-Turn Lane at Stop-Controlled Intersections:** Left-turn lanes are auxiliary lanes for storage or speed change of left-turning vehicles. Left-turn lanes reduce the likelihood of intersection crashes while making a turn easier for drivers and improving the intersection’s operational efficiency. Right-turn lanes provide a separation at intersection approaches between right-turning traffic and adjacent through-traffic to reduce conflicts and improve intersection safety.

**Yellow Change Intervals:** Yellow signal lights that are timed appropriately are a safety enhancement. Yellow change intervals that are consistent with normal operating speeds prevent the creation of a “dilemma zone” in which drivers can neither stop safely, nor reach the intersection before the signal turns red.

**Medians and Pedestrian Refuge Areas in Urban and Suburban Areas:** Medians reduce traffic conflicts and increase safety by providing a buffer area between opposing lanes of traffic. Medians can be open (pavement markings only), or channelized (raised medians or islands) to separate various road users. Pedestrian Refuge Areas—also known as crossing islands, center islands, refuge islands, pedestrian islands, or median slow points—are raised islands placed in the street to separate crossing pedestrians from vehicles.

**Walkways:** Appropriately designed walkways increase safety for all road users. Walkway types include:

- **Pedestrian Walkway** — a continuous way designated for pedestrians and separated from motor vehicle traffic by a space or barrier.
- **Shared Use Path** — a bikeway or pedestrian walkway physically separated from motor vehicle traffic by an open space or barrier, either within a highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Shared use paths also are referred to as “trails” or “multiple-use trails.”
- **Sidewalks** — walkways that are paved and separated from the street, generally by curb and gutter.
- **Roadway Shoulder** — in rural or suburban areas where sidewalks and pathways are not feasible, gravel or paved highway shoulders provide a safer area for pedestrians to walk next to the roadway.

Visit safety.fhwa.dot.gov for more information on these countermeasures.

Adapted from the Federal Highway Administration
## New Publications

- **Human Factors Guidelines for Road Systems**  
  NCHRP NCHRPP600B.01
- **Traffic Safety Evaluation of Nighttime and Daytime Work Zones**  
  NCHRP NCHRPP627.01
- **Traffic Safety Facts Bicyclists and Other Cyclist 2007 Data**  
  NHTSA NHTSA0502.01
- **Traffic Safety Facts Pedestrians 2007 Data**  
  NHTSA NHTSA0503.01
- **Traffic Safety Facts Children 2007 Data**  
  NHTSA NHTSA0504.01
- **Traffic Safety Facts School Transportation-RelatedCrashes 2007 Data**  
  NHTSA NHTSA0505.01
- **Survey of Traffic Noise Reduction Products Materials and Technologies**  
  AZDOT P0790.01
- **Evaluation of Longitudinal Construction Joints on Traffic Operations and Safety**  
  KDOT P0808.01
- **Reducing Work Zone Crashes by Using Vehicle Warning Flashers as a Warning Sign**  
  KDOT P0809.01
- **A Study of the Effect of ADA Accessibility on Kansas Roundabouts**  
  KDOT P0810.01
- **Benefits of Using Intelligent Transportation Systems in Work Zones**  
  FHWA P0815.01
- **Bridge Evaluation and Quality Assurance in Europe**  
  FHWA P0817.01
- **Comparing State DOT Construction Project Cost and Schedule Performances: 28 Best Practices from Nine States**  
  AASHTO P0818.01
- **Managing Travel for Planned Special Events Handbook: Executive Summary**  
  FHWA P0840.01
- **Planned Special Events--Economic Role and Congestion Effects**  
  FHWA P0814.01
- **Long Term Pavement Performance Computed Parameter: Moisture Content**  
  FHWA P0847.01
- **Improving Safety and Mobility for Older Road Users in Australia and Japan**  
  FHWA P0848.01
- **Using Highways for No-Notice Evacuations**  
  FHWA P0849.01
- **Older Road Users**  
  FHWA P0850.01
- **Integration of Weather Information in Transportation Management Center Operations: Self-Evaluation and Planning Guide**  
  FHWA P0851.01
- **The Impact of Bicycling Facilities in Commute Mode Share**  
  MDOT P0852.01
- **Congestion Pricing**  
  FHWA P0866.01
- **Disaster Recovery**  
  GAO P0871.01
- **Disaster Response Roadway Safety Awareness Trainee Booklet**  
  ARTBA NAPA P0876.01
- **Report and Recommendations from the Florida Public Task Force on Workplace Safety**  
  FPTF P0878.01
- **Feasibility of Forecasting Highway Safety in Support of Safety Incentive and Safety Target Programs**  
  AZDOT P0882.01
- **Restrain Use (Seat Belt and Child Passenger) Survey**  
  AZDOT P0883.01
- **Crashes in the Vicinity of Major Crossroads**  
  UDOT P0904.01
- **Two-Dimensional Depth-Averaged Flow and Sediment Transport Model**  
  FHWA P7940.02

## New CDs

- **Pedsafe: Pedestrian Safety Guide and Countermeasure Selection System September 2004**  
  FHWA C046.01
- **Dealing with Venomous Snakes in Florida School Yards**  
  UF WILDLIFE ECOLOGY C0249.01
- **Check It Out, Make It Happen**  
  MACK-BLACKWELL D0037.01
- **Woodrow Wilson Bridge Project: Lessons Learned**  
  D0040.01
- **APWA Florida Chapter Public Works... So that community works better**  
  VISUAL IMPACT COMMUNICATIONS D0046.01

## New DVDs

- **Disaster Response Roadway Safety Awareness Trainee Booklet**  
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## Giveaways

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

- **Local Agency Program (LAP) 2009 Quick Reference Guide 10 CDs**
- **How to Develop a Pedestrian Safety Action Plan 17 copies**
- **Gravel Roads Maintenance and Design 12 booklets**
- **NACE: Action Guide Volume III-5: Storm Water Management and Drainage 4 booklets**
- **Basic Traffic Control for Utility Operations: Guide to Temporary Traffic Control for the Utility Operations 20 booklets**
- **Strategies for Success: Combating Juvenile DUI 3 books**
- **Helmet Fit and Wear Bookmarks 50 copies**
FDOT Summary of Final Reports—New Topics Available

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

Environmental Management
- BD548-14 – Simulation Visualization of Highway Noise Near Barriers

Geotechnical
- BD545-59 – Distribution of End-Bearing, Tip Shear and Rotation on Drilled Shafts with Combined Loading in Florida Limestone

Materials
- BD544-36 – Investigation of Automated and Interactive Crack Measurement Systems

Public Transportation
- BD549-24 – Testing the Impact of Personalized Feedback on Household Travel Behavior (TRAC-IT Phase 2)
- BD549-35 – Smart Phone Application to Influence Travel Behavior (TRAC-IT Phase 3)
- BD549-28 – Creative Ways to Manage Paratransit Costs

Roadway Design
- BD545-55 – Seasonal Variability of Near Surface Soil Water and Groundwater Tables in Florida – Phase 11
- BD545-82 – Field Data Collection and Analysis for Freeway Work Zone Capacity Estimation
- BDH10 – M-E PDG Program Implementation in Florida

Structures
- BDB14 – Post-Tensioned Bridge Girder Anchorage Zone Enhancement with Fiber Reinforced Concrete (FRC)
- BD545-29 – Development of Improved Bridge Design Provisions for Barge Impact Loading

Traffic Engineering and Operations
- BD548-26 – Traffic and Rural Intersection Monitoring with a Solar-based Infrared Wireless System Phase 11

Addicted to Email? Helpful Hints to Maintain Productivity

Do you quickly skim emails to identify and respond to critical messages? What about the unanswered ones that accumulate, sometimes reaching a preset limit that can either affect the functioning of your computer or even trigger messages to be returned as “undeliverable”? Cleaning out space is only a temporary fix. More emails will fill their places, probably even faster than before. Even if you have been efficient in sorting messages into folders, the volume can be overwhelming.

This easy way to stay in touch can also rob us of concentration and consumes time. You know the feeling when you receive new email! You are pulled from your work and drawn to your monitor to see who sent the mail. It can ruin our productivity.

Productivity experts have some tips that will help you tame and conquer the email beast.

Reduce the volume of email (Mike Gunderloy, Web Worker Daily)
- Unsubscribe from publications/services that were once useful, but no longer meet your needs.
- Use spam filters.
- Ask friends and co-workers to exclude you from “fluff” or chain mail.
- “Batch Process” - set a schedule for reading email, i.e. three or four times a day.

Take one of the following actions for each piece of mail you read to reach the “Inbox Zero” goal (Merlin Mann, www.43folders.com)
- Delete.
- Archive.
- Defer (Flag) or place in a separate folder.
- Generate action and place in a special folder.
- Respond immediately, when message is extremely urgent or response will take two minutes or less.

Major do’s (Susan Kousek, Professional Organizer, Balanced Spaces, Reston, VA)
- Deal with emails when you open them.
- Move emails from inbox into folders.
- Delete unnecessary emails.
- Clean up the mess and create space
- Empty your “Sent” folder periodically
- Save important messages to your hard drive, cd, or flash drive and delete them from your mail folders.
- Sort messages by size, deleting the largest first, after saving any attachments you wish to keep.
- Other helpful tips to increase productivity.
- Brief responses are preferred. Consider saving time with a phone call.
- If emails contain several different points, bullet each response or send separate emails addressing each point.
- Decide if the email requires a response. Emails addressed to several people may not need a reply. If a response is required, reply “all” or only to “sender” as appropriate.
- Limit email volleys of “Thank you” and “You are welcome.”
- Subject lines should relate to the body of the email. Using “question” or “hello” subject lines do not identify the topic and make emails difficult to file.
- Email programs have several organizational tools to help you file and prioritize mail such as folders, filters, and follow-up reminders.
- If your emails have accumulated for a while, organizing may be overwhelming and time consuming. Time spent sorting, filing, and deleting will be recovered in increased productivity during your work week.

Adapted from: C4IT Tech Transfer Group Volume 10, Issue 10 October 2008
New Research Cards Are Available

The FDOT Research Center has completed the following information cards:

- Resource Guide for Transit Incident Investigators  BD549-22  Toolbox for Transit Event Investigation
- Innovative Traffic Control Devices Reduce Fatalities  BD500  Evaluation of Innovative Safety Treatments
- Computer Program Aids Transit Agency Workforce Management  BD549-25  Transit Extraboard Management – Optimum Sizing and Strategies
- Virtual Weigh Stations May Improve Vehicle Inspection Efficiency  BD441  Commercial Vehicle Inspection Stations
- Non-Invasive Corrosion Detection Methods for Post-Tensioned Tendons  BD544-08  Early Warning Corrosion Detection in Post-tensioned Tendons
- Better Estimates of Water Table Levels Can Help Prevent Road Failure  BD545-55  Seasonal Variability of Near Surface Soil Water and Groundwater Tables in Florida – Phase II
- Virtual Check Ride System Provides Effective Commercial Driver Training  BD548-10  Simulation as a Tool for Enhancing Commercial Driver Skills and Recertification: Follow-On to the Virtual Check Ride System
- Computer Simulation Program Aids Noise Abatement Barrier Planning  BD548-14  Simulation Visualization of Highway Noise Near Barriers
- New Bridge Design Model Predicts Vessel Impact Effects  BD545-29  Development of Improved Bridge Design Provisions for Barge Impact Loading
- Study Evaluates Impacts of Reduced Auto Ownership on Transit  BD549-43  Exploration of a Shift in Household Transportation Spending from Vehicles to Public Transportation
- Alkali Content and Its Effect on Concrete Durability in Florida  BD544-22  Role of Alkalis and Sulfates of Portland Cement on Durability of Florida Structures
- New Decision Tool Aids Bus Purchase and Deployment Planning  BD549-39  Development of a Large Bus/Small Bus Decision Support Tool (Phase II)
- Florida Work Zone Crash Database Will Aid Work Zone Safety Planning  BD544-26  Integrated Work Zone Safety Management System and Analysis Tools
- New Model Provides More Accurate Work Zone Traffic Flow Estimates  BD545-82  Field Data Collection and Analysis for Freeway Work Zone Capacity Estimation

Evaluation of Innovative Safety Treatments  BD500

Background  FDOT field tested six innovative traffic control techniques that are intended to reduce crashes and fatalities. Follow-up was needed to determine if these techniques have raised driver safety awareness and lowered accident rates.

Findings  The study showed that all of the following techniques resulted in reduced speeds and improved public compliance:
1. Temporary rumble strips on roadways ahead of construction work zones
2. White enforcement lights at signalized intersections
3. Motorist construction zone warning systems
4. Tyregrrip® high friction surface coatings on ramp pavement
5. Pedestrian signals that count down the time remaining to cross safely
6. Flashing lights embedded in turn lane pavement

These techniques could be useful additions to roadway design, construction, and maintenance standards.

To request cards, contact the Media Center at 352-392-9537 EXT. 1544 or mediacenter@ce.ufl.edu or use the FaxBack form on the inside back cover.
Free FACERS Membership for New Members

The Florida Association of County Engineers and Road Superintendents (FACERS) Board of Directors and Officers are waiving the 2009 membership fees for new members who join for 2009. Also, FACERS bylaws have been amended to include members representing cities and municipalities in Florida.

As a FACERS member you will benefit from being part of a network of public works professionals and those associated with public works operations throughout all of Florida. FACERS are kept abreast of state and national legislation affecting transportation and public works; contribute to the development or revision of statewide standard specifications and guideline documents; are part of a forum for the exchange of ideas, technical information and best practices; and assure every community has the best possible engineering available by providing opinion on related local, state, and national legislation. Visit www.facers.org to join and find a wealth of information such as the FACERS scholarship program and schedules of upcoming events. FACERS is an affiliate of the National Association of County Engineers (NACE). For questions contact Hector Bertran at Hector.Bertran@ocfl.net.

Florida Association of County Engineers and Road Superintendents (FACERS)
June 24 – 25, 2009
Marriott, Marco Island, Florida

Wednesday, June 24, 2009

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<td>FAC Continental Breakfast***</td>
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<td>8:00 AM – 12:00 PM</td>
<td>Exhibit Hall/Networking Opportunities***</td>
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<td>12:00 PM – 1:30 PM</td>
<td>FAC Awards Luncheon***</td>
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<td>1:30 PM – 5:00 PM</td>
<td>Stormwater Treatment, Water Quality Park Presentation and Field Trip</td>
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<tr>
<td>6:00 PM – 7:30 PM</td>
<td>FAC Welcome Reception***</td>
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Note: FACERS does not charge a registration fee for its activities, however attendance at any events/functions marked by *** are provided by the Florida Association of Counties (FAC) and require you to be a registered participant. Please visit www.fl-counties.com/fcf/facconferences/annualconference09.shtml for more information.

FAC annual meeting dates are June 23-26, 2009.

Thursday, June 25, 2009

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<tr>
<td>8:30 AM – 10:00 AM</td>
<td>Road Safety Audits</td>
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<tr>
<td>10:00 AM – 10:30 AM</td>
<td>Networking Break</td>
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<tr>
<td>10:30 AM – 12:00 PM</td>
<td>Red Light Running</td>
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<tr>
<td>12:00 PM – 1:30 PM</td>
<td>FAC Installation Luncheon***</td>
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<tr>
<td>1:30 PM – 2:00 PM</td>
<td>FACERS Award Presentations</td>
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<tr>
<td>2:00 PM – 4:00 PM</td>
<td>FACERS Business Meeting</td>
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<tr>
<td>5:30 PM – 7:30 PM</td>
<td>FAC President’s Reception***</td>
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<tr>
<td>6:30 PM – 10:00 PM</td>
<td>FACERS Social Gathering</td>
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Tips for CTQP and CTT Training

Registering with Your Center for Transportation Training (CTT)

Managing registration as a trainee or training coordinator can help you receive the exact training to fit your needs.

- Ask for customized training. Do you need to train a whole group? What about a special version of a course? Many times it is easier and more cost effective to tailor an exclusive, full training session just for your organization, at your own facility. This exclusive registration saves travel and time away from work. Call CTT anytime to see how your training needs can be met more efficiently. Talk to Scott Tison 352.273.1661 or email sitison@ufl.edu with your information and training requirements.

- Search the CTT schedule directly for topics important to you. CTT registration pages have a wide variety of search options that let you find information based on your criteria based on your needs by date, location, instructor, or course type. Plus, CTT’s schedule shows the most up-to-date listings and real-time availability (classes will not be marked as “Closed” if they are not actually closed). Go to www.youctt.com/reg to view the CTT schedule/registration pages.

- Take an exam any day of the week in a Gainesville Exam-Only Session. Almost any written exam can be offered any weekday, and special weekend options can also be arranged. Just call us 352.846.3593 ext. 31669.

- Pay by credit card. This ensures your seat is reserved regardless of the total number of session registrations. You receive an email receipt within one business day, and enrollment processing is faster. Register, pay, and relax; it is taken care of.

- Use of confirmations as invoices: Many companies do not necessarily need an official invoice number to pay an amount due. The registration confirmation (not to be confused with the “Request Received” notice) has all the pertinent information needed to make payment, including the course date and location, student details, fees selected, amounts due, and payment mailing address. Print the invoice, prepare a check, and mail it.

Thanks for the opportunity to serve you by making the CTT registration experience smooth and easy.
Upcoming Workshops

For a list of all courses and to register, visit t2.ce.ufl.edu or email t2workshops@ce.ufl.edu or call 352.273.1675.
To register for CTQP and CTT courses, visit ctt.ce.ufl.edu or email ctt@ce.ufl.edu or call 352.846.3593 EXT. 31669.

Roundabouts Workshop to be held in Orlando

The University of Florida’s Transportation Research Center is sponsoring a workshop on August 18, 2009 designed for transportation professionals interested in roundabout design and operations. Topics and speakers include:

- An Overview of Modern Roundabouts and What They Might Soon Mean for You (Ken Sides, City of Clearwater, Florida)
- Design of Roundabouts (Michael Wallwork, Alternate Street Design, p.a.)
- Roundabouts and Their Implementation in the US (Mark Doctor, Federal Highway Administration)
- Luncheon Speaker (Dan Burden, Glatting Jackson Kercher Anglin, Inc. / Co-Founder, Walkable Communities, Inc.)

- Modeling of Roundabouts Using SIDRA INTERSECTION (Rahmi Akcelik, Akcelik and Associates Pty Ltd)
- Modeling Roundabouts Using CORSIM (Aaron Elias, University of Florida)
- Designing Roundabouts with TORUS (Milton Carrasco, Transoft Solutions)

For registration and hotel information, please visit http://trc.ce.ufl.edu/Roundabouts_Workshop_2009.html

Sponsorships are available and PDHs will be offered.
Today's Date __________________________

Name ___________________________ Agency __________________________

Address __________________________________________________________

City ___________________________ State ___________________________ Zip __________________________

Please check your affiliation below:

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☐ County
☐ State
☐ Federal
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☐ Correct my information as indicated
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**Publications, Videos, and CDs** from the T² Center. Just check the item(s) you wish to borrow on page 6, fill out the information above, and fax all pages to us. It’s that easy!

**Items** mentioned in this issue:

Please mark the boxes below like this ☒ Thank you!

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**HELP US!** Please help update our database so we can serve you better! If you are receiving duplicate copies or receiving mail for folks who are no longer with your agency, please let us know. Simply make a copy of the back page of the newsletter – showing us the person's name and information – write delete or correct the current information, and fax it to us at 352.392.3224. If you have several deletions or corrections, please contact t2mailings@ce.ufl.edu at 352.273.1675.
Upcoming Workshops

For the dates and locations of these upcoming workshops see page 10.

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<thead>
<tr>
<th>Workshop</th>
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<td>ADA/Accessibility Requirements for Hwy Design and Pedestrians</td>
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<tr>
<td>ADA - Facilities Access</td>
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<tr>
<td>Advanced Maintenance of Traffic</td>
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<tr>
<td>Advanced Maintenance of Traffic (MOT) Refresher</td>
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<tr>
<td>Asphalt Combo - Inspection and Maintenance</td>
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<tr>
<td>Asphalt Paving Level 1</td>
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<tr>
<td>Asphalt Paving Level 2</td>
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<tr>
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<td>Earthwork Construction Inspection Level 2</td>
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<td>FDOT Concrete Field Inspector Specification</td>
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<td>Geotechnical Engineering for Non-Geotechnical Engineers - The Basics</td>
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<td>Interim Maintenance of Traffic</td>
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<td>Interim Maintenance of Traffic Refresher</td>
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<td>Pilot/Escort Flagging Training</td>
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<td>Safe Mobility for Life Program: Preparing Our State for the Future</td>
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<td>Surveying Methods For Local Highway Departments</td>
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<tr>
<td>Traffic Engineering Fundamentals</td>
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To register or see all workshop listings visit ctt.ce.ufl.edu for CTQP or CTT workshop details or visit t2.ce.ufl.edu for all other workshop details.