technotes
Winter 2011 | Volume 28, No. 4

MARYLAND TRANSPORTATION TECHNOLOGY TRANSFER CENTER

Local Technical Assistance Program (LTAP)
University of Maryland at College Park

www.mdt2center.umd.edu

INSIDE:

Professional Development Hours

Are you a Professional Engineer? Starting in October 2012 a minimum of 12 Professional Development Hours (or PDHs) will be required to fulfill license renewal requirements.

Many of our courses offer PDHs. For a more detailed listing of all our courses, visit our course catalog online at: http://www.mdt2center.umd.edu/courses/course-catalog.html

Here is more information from DLLR's Division of Occupational and Professional Licensing: The requirements will be phased in at a rate of 50% beginning October 1, 2012. Licensees who renew between October 1, 2012 and September 30, 2013 must fulfill 12 PDH units - with a minimum of 9 PDH units in Category A programs, and a maximum of 3 PDH units in Category B programs.

Licensees who renew on or after October 1, 2013, must fulfill 24 PDH units - with a minimum of 18 PDH units in Category A programs, including a minimum of 1 PDH unit in content areas related to the standards of practice or care, laws and regulations applicable to the practice of engineering in Maryland, or professional engineering ethics; and a maximum of 6 PDH units in Category B programs. For category classifications, see the Assessment Form below.

The licensee is required to maintain records and documentation of the PDH units earned. To assist the licensee, two forms have been created. The Reporting Form (links to a Word document) should be used to list all the pertinent information about the 24 PDH units earned over the renewal period. The Assessment Form (links to a Word document) should be used when (1) a course provider does not supply a PDH form or a record of an outcome measure, or (2) an activity is offered by a provider described in .08 B(2) of the Regulations. The records must be maintained for at least 4 years from the date of the completion of the qualifying program.

Licensees will be subject to a random audit of continuing professional competency courses. If you are audited, you will be required to submit proof of the hours claimed as more fully described in Section .09 of the regulations.

For more information about the new regulations, visit:
http://dllr.maryland.gov/license/pe/peeduc.shtml

Connecting the National Transportation Innovation Network

What is EDC-EXCHANGE? EDC-Exchange will be a regularly scheduled series of "dynamic webinars". The in-person learning sessions will describe effective project development and delivery practices, tools and "market ready" technologies that local and tribal transportation agencies can readily implement into their programs. FHWA national subject matter experts, in conjunction with FHWA and State DOT field office experts, will provide information and materials, and facilitate discussions designed specifically for the local/tribal transportation managers.

How will attendees participate in EDC-EXCHANGE? Attendees in seminar rooms across the country will interact with webinar presenters by text chat, polls, surveys, or voice calling in questions to the subject matter experts who will then respond during the program. The audience will also have the additional benefit of local, state and FHWA experts in the room with them to facilitate the discussion and answer questions geared to the local level.

What will be discussed at the EDC-EXCHANGE? FHWA subject matter experts will deliver training modules developed and targeted specifically for local transportation agencies to seminar rooms across the country. LTAP, FHWA and State DOT experts will also be available at the individual seminar room locations to facilitate on-site discussions. The first five broadcast topics to be presented and discussed include:

- Construction Manager/General Contractor
- Geosynthetic Reinforced Soil (GRS) Integrated Bridge System (IBS) technology
- Flexibilities in Right-of-Way
- In Lieu Fees/ Mitigation Banking
- Adaptive Signal Control

Where will EDC-EXCHANGE occur? Each EDC-EXCHANGE will be delivered to easily accessible sites in each state by broadband internet technology. Each location (FHWA Division offices, State DOT HQ or district offices industry sites, etc.) should provide a "classroom" setting where 25-40 Local Public Agency, Tribal and State DOT professionals can come together to participate in an EDC discussions. The MD T2 Center will offer two locations for our participants to attend, free of charge.

The first location is the Capital Wireless Information Net (CapWIN) offices
Located at 6305 Ivy Lane, Suite 300, Greenbelt, Maryland 20770.

The other location is Meyersville Municipal Center
Located at 301 Main Street, Myersville, MD 21773

What is the schedule for the EDC-EXCHANGE? The "Season Premiere" of EDC-EXCHANGE is scheduled for Thursday, December 15 2011, with subsequent events scheduled bimonthly on the 3rd Thursday of the month thru August 2012 as shown below. Each session will typically be presented from 1:00 pm to 4:00 pm Eastern Standard Time. The schedule is as follows:

Exchange #1	Topic: CMGC	December 15, 2011
Exchange #2	Topic: GRS	February 16, 2012
Exchange #3	Topic: Flexibility in ROW	April 19, 2012
Exchange #4	Topic: In Lieu Fees / Mitigation Banking	June 21, 2012
Exchange #5	Topic: ASCT	August 16, 2012

How to register
Simply visit our web site and fill out our course registration form; be sure to select each of the free webinars at your preferred location. Once you receive your confirmation, you're all set! Register Now (links to MD T2 Course Registration page).

New LTPP Tech Briefs Examine Pavement Rehabilitation and Maintenance Strategies

Three new Tech Briefs available from the Federal Highway Administration's (FHWA) Long Term Pavement Performance (LTPP) program present highlights from a recently released LTPP report on Impact of Design Features on Pavement Response and Performance in Rehabilitated Flexible and Rigid Pavements (Pub. No. FHWA-HRT-10-066).

Performance Comparison of Pavement Rehabilitation Strategies (Pub. No. FHWA-HRT-11-050) looks at rehabilitation strategies for both flexible and rigid pavements. The impact of overlay thickness, preparation prior to constructing an overlay, and mix type on performance are evaluated using data from the LTPP Specific Pavement Study (SPS)-5 and SPS-6 experiments. The 32 experiment sites included 18 rehabilitation projects that used asphalt concrete, 8 projects that featured asphalt concrete overlays over jointed plain concrete pavements, and 6 projects that used jointed reinforced concrete pavements. Sites were monitored for periods ranging from 8 to 17 years.

LTPP pavement rehabilitation experiments included jointed concrete pavements.

The performance evaluation included looking at outcomes for pavement smoothness and fatigue cracking and then developing a practical ranking of rehabilitation strategies from best to worst. Results, for example, indicated that thick overlays best improved the performance of rehabilitated asphalt concrete pavements with regard to smoothness and fatigue cracking. Results also showed that using virgin hot-mix asphalt (HMA) versus reclaimed asphalt pavement (RAP) did not have a significant effect on performance.

Statistical Analysis of Performance of Recycled Hot Mix Asphalt Overlays in Flexible Pavement Rehabilitation (Pub. No. FHWA-HRT-11-051) compares the performance of RAP to virgin mixes in asphalt overlays constructed as part of the SPS-5 experiment. Performance was evaluated by examining load-associated distress, including roughness, rutting, and fatigue cracking. As the Tech Brief notes, "the performance data from LTPP SPS-5 shows that RAP

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CITE Blended Courses for 2012

The Consortium for ITS Training and Education (CITE) announces its Blended Course schedule for 2012. A "blended" course combines the best features of both instructor-led and web-based instruction. Features include: live discussions through the use of conference calls, convenient, flexible web-based learning, a specific time schedule in which to complete the course, and student interaction through the use of a discussion board.

Scheduled courses include:

- Introduction to Telecommunication, February - March 2012
- Advanced Telecommunications, March - April 2012
- Configuration Management for Traffic Management Systems, April - May 2012
- Fundamentals of Database Management Systems, June - July 2012
- Improving Highway Safety with ITS, June - July 2012
- Introduction to Systems Engineering, September - October 2012
- Traffic Signal Timing, September - October 2012
- Road Weather Information Systems (RWIS) Equipment and Operations, October - December 2012

For more information about or to register for CITE's Blended Courses visit: www.citeconsortium.org

and virgin HMA mixes used in overlays of flexible pavements showed approximately the same performance across a range of climates, traffic, and existing pavement conditions over a period of up to 17 years."

An overview of the LTPP program's SPS-3 experiment is found in Results of Long-Term Pavement Performance SPS-3 Analysis: Preventive Maintenance of Flexible Pavements (Pub. No. FHWA-HRT-11-049). The SPS-3 experiment evaluated four preventive maintenance alternatives: thin HMA overlays, slurry seals, crack seals, and chip seals. These treatments focus on improving the pavement's functional performance and prolonging pavement life, rather than improving structural capacity. Each SPS-3 site was also categorized according to five design factors:

- Moisture (wet or dry climate).
- Temperature (freeze or no-freeze zone).
- Subgrade type (fine grained or coarse grained).
- Traffic loading (low or high).
- Existing pavement condition (good, fair, or poor).

Thirty-three States and Canadian Provinces participated in the experiment, which included 81 sites. Performance was evaluated according to the deterioration measured by fatigue cracking, rutting, and roughness (using the International Roughness Index). Overall results indicated that chip seals and thin overlays had the highest levels of performance. All treatments were effective to some degree relative to the performance of the experiment's control section.

To download copies of the Tech Briefs or the full report, visit www.fhwa.dot.gov/research/publications/technical/infrastructure/pavements/ltpp. For more information on the LTPP SPS experiments, contact Larry Wiser at FHWA, 202.493.3079 or by email at larry.wiser@dot.gov. To learn more about the LTPP program, visit www.fhwa.dot.gov/pavement/ltpp.

The LTPP program's SPS-5 and SPS-6 experiments examined rehabilitation strategies for both flexible and rigid pavements.

Reprinted from the November 2011 issue of FOCUS, a publication of the United States Department of Transportation and the Federal Highway Administration

A State-of-the-Art Load Rating Method: Resources for Implementing LRFR

New resources are available from the Federal Highway Administration (FHWA) to assist State transportation departments in implementing the Load and Resistance Factor Rating (LRFR) method for evaluating bridge condition and determining a load rating. Since October 1, 2010, all new bridges and bridges that are being completely replaced must be load rated using the LRFR method. The new method is improving the safety of bridges by incorporating state-of-the-art rating methodology for bridge loads. Load and resistance factors are calibrated using statistical data on loads and materials. States have realized many advantages from using LRFR, including the system's ability to accommodate State-specific legal and permit loads, as well as local live load statistics. "The LRFR method offers greater consistency and uniformity in reliability. Using this method, we can be more confident about the level of safety," said Lubin Gao of FHWA.

To support use of LRFR, FHWA established an LRFR Implementation Working Group in April 2011. The group includes representatives from FHWA's Office of Bridge Technology, Resource Center, and Division offices. A National LRFR Implementation Status Survey conducted by the group found that 92 percent of States are using LRFR to rate bridges designed with the Load and Resistance Factor Design (LRFD) method, while 40 percent are using it to rate bridges designed with the American Association of State Highway and Transportation Officials' (AASHTO) Standard Specifications. Thirty-two percent of States have finalized State-specific policies and procedures to implement LRFR and 20 percent have developed draft policies and procedures.

A free LRFR Implementation Webinar Series launched by FHWA in October 2011 is focusing on priority topics for which States have requested more information. Held on October 5, 2011, the first Webinar highlighted Federal regulations and FHWA's expectations on load rating, the fundamentals of the LRFR method, and the Virginia Department of Transportation's experiences in implementing the LRFR method. More than 100 people participated in the Webinar, with 42 percent indicating that they had not used the LRFR method before.

A second Webinar held on November 17, 2011, concentrated on load rating for culverts. The Ohio Department of Transportation's experiences were featured, along with presentations from the concrete pipe, corrugated steel pipe, and plastic pipe industries. The series will continue in January 2012 with a Webinar discussing the load rating of segmental bridges.

We offer a Bridge Maintenance Inspection course - simply request it (links to our request form) **and we can bring it to you!**

FHWA's new resources can assist States in implementing the LRFR method for evaluating bridge condition and determining a load rating.

Reprinted from the November 2011 issue of FOCUS, a publication of the United States Department of Transportation and the Federal Highway Administration

The following courses are currently scheduled and we are still adding to the list! For more information or to schedule a class, contact Janette Prince at 301.403.4623 or register online by visiting us at www.mdt2center.umd.edu.

FLAGGER CERTIFICATION

Juan Morales
January 19, 2012, 8:30am - 12:30pm
College Park, Maryland
$100 for all participants
PDHs: 4.0

The safety of workers, motorists and pedestrians is dependent upon the flaggers' performance. Since the flagger position involves safety, proper training is vital; flaggers are expected to pass a test to prove their proficiency and competence level. A MD SHA-approved ATSSA (American Traffic Safety Services Association) flagger card will be issued upon satisfactory completion of this course. This will be valid for 4 years and is acceptable in several states, including MD, VA and DC. The class is presented in PowerPoint© and will include a 25-question multiple choice exam and a flagger demonstration (dexterity test). Students will receive their ATSSA Flagger Certification card the day of the course (upon passing the exam). The course is intended for anyone whose actions affect safety of contemporary traffic control work zones, including traffic managers, traffic technicians, inspectors and designers..

ASPHALT RECYCLING

Ed Stellfox
January 31, 2012, 8:30am - 3:30pm
College Park, Maryland
$59 for all participants
PDHs: 6.0

This course discusses the advantages of asphalt recycling as part of your road maintenance program. It covers techniques for recycling asphalt pavement, including surface recycling, hot mix recycling (both in plant and on-site), and cold mix recycling. The course emphasizes cold mix recycling, full depth reclamation, reviewing materials, equipment and operations. It also presents recent examples of asphalt recycling projects in several states. The following topics will be discussed: advantages; review of techniques -materials, equipment, and operations for surface recycling, hot-mix recycling, cold-mix recycling, and full depth reclamation.

ASPHALT ROADS - COMMON MAINTENANCE PROBLEMS

Ed Stellfox
February 8, 2012, 8:30am - 3:30pm
College Park, Maryland
$59 for all participants
PDHs: 6.0

Municipal employees with road maintenance responsibilities should understand the causes of common maintenance problems on asphalt roads and be familiar with proper repair materials and methods. This course discusses causes and repair procedures for common problems such as cracking, potholes, rutting, corrugations, etc. The procedures cover materials, equipment, and techniques for lasting repairs. Also included, a brief discussion of surface treatment.

TECHNIQUES FOR REDUCING CONSTRUCTION AND MAINTENANCE COSTS

Ed Stellfox
March 6-7, 2012, 8:30am - 3:00pm, day 2 8:30am - 12:30pm
College Park, Maryland
$100 for all participants
PDHs: 10.0

Counties and municipalities bear a considerable financial burden with respect to the construction and maintenance of roadways. Inflation, increasing cost of labor, materials and fuel have risen steeply in the past few years. At the same time, municipal budgets have not kept pace. It is essential to conserve resources, find energy efficient and low maintenance materials and to use more efficient techniques. This workshop will conclude with groups of participants developing a cost control plan for a project.

CONSTRUCTION MATHEMATICS

Ed Stellfox
March 13, 2012, 8:30am – 3:30pm
College Park, Maryland
$89 for all participants
CEU's: 0.6
PDHs: 6.0

Construction inspectors may need to brush up on math skills specifically related to construction inspection, especially basic geometry, fractions, area, volume and conversions. The class is a good refresher, and excellent preparation for the construction inspection class. The course was designed for road workers, foremen, superintendants, construction inspectors and supervisors in need of a refresher, especially in preparation for the Construction Inspections class. Depending on the interest of the participants, the course may cover: whole number and fractions, decimals (for measurement and payment), mixed operation fractions and decimals, formula evaluation, techniques of algebra, ration and proportion, percentage, hints for problem solving, useful formulas, square and square roots, conversion, and transportation construction examples.
Please note: Participants should bring a calculator, a scale, and a straight edge.

ADA COMPLIANCE AND TECHNICAL TRAINING

Juan Morales
March 14, 2012, 8:30am – 3:30pm
College Park, Maryland
$99 Maryland local government participants
$110 for all other participants
PDHs: 6.0

This course instructed by Juan Morales will highlight the necessary elements required to ensure that transportation agencies are in compliance with the American with Disabilities Act, and provide technical guidance as developed by the State Highway Administration in conjunction with the Americans with Disabilities Act Accessibility Guidelines (ADAAG). Elements to be covered include, developing a transition plan, performing self-evaluation, creating asset management tools to track compliance, programmatic compliance, and design & construction technical requirements. This course is aimed at local transportation agencies (design division heads, design engineers, construction division heads, and construction engineers).

TRAFFIC SIGNS

Ed Stellfox
March 22, 2012, 8:30am – 12:30pm
College Park, Maryland
$59 for all participants
PDHs: 4.0

This half-day course instructed by Ed Stellfox will cover the regulations and guidelines for traffic signs including; regulatory signs, warning signs, and guide signs. A review of the Manual on Uniform Traffic Control Devices (MUTCD) will also be covered. An in depth discussion of sign examples, installation and maintenance, as well as sign management will be covered.

BASIC DRAINAGE

Ed Stellfox
April 4, 2012, 8:30am - 3:30pm
College Park, Maryland
$89 for all participants
PDHs: 6.0

This course emphasizes the importance of good drainage with discussions of water and its effects on roads, problems caused by improper drainage, and ways to handle these problems. It covers types of drainage facilities, ranging from ditches, culverts, subdrains, inlets and end structures. Their uses, materials, installation and maintenance as well as erosion control are addressed. It also introduces geosynthetic drainage applications. The following topics will be covered: importance of drainage, characteristics of water, system maintenance, drainage principles, surface and subsurface drainage, ditches, driveways, drainage culverts – materials and placement, headwalls, endwalls and inlets, erosion control, and geosynthetics in drainage.

ASPHALT RESURFACING

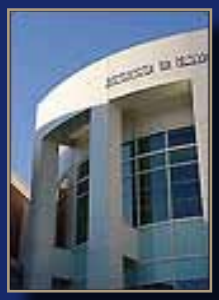
Ed Stellfox
April 12, 2012, 8:30am – 12:30pm
College Park, Maryland
$59 for all participants
PDHs: 4.0

This course emphasizes the importance of good drainage with discussions of water and its effects on roads, problems caused by improper drainage, and ways to handle these problems. It covers types of drainage facilities, ranging from ditches, culverts, subdrains, inlets and end structures. Their uses, materials, installation and maintenance as well as erosion control are addressed. It also introduces geosynthetic drainage applications. The following topics will be covered: importance of drainage, characteristics of water, system maintenance, drainage principles, surface and subsurface drainage, ditches, driveways, drainage culverts – materials and placement, headwalls, endwalls and inlets, erosion control, and geosynthetics in drainage.

INTERSECTION AND ARTERIAL SAFETY DESIGN ANALYSIS

Dane Ismart
May 7-8, 2012, 8:30am – 4:00pm
College Park, Maryland
$199 Maryland local government participants
$215 for all other participants
CEU's: 1.2
PDHs: 10.2

This course will have broad general coverage of at-grade intersection analysis and design features. The analysis will include signalized, unsignalized and roundabout intersections. Specific coverage will include capacity, analysis, signal warrants, queue analysis and safety selected design features. Software packages such as HCS and SIDRA will be demonstrated. This course is targeted for municipal engineers; public works directors; state, federal, and private engineers; planners, designers, and traffic engineers that may be involved in the selection and design of intersections.


MD T² Center Staff

Tom Jacobs, Director
301.403.4534
tjacobs@umd.edu

Ed Stellfox, Co-Director
301.403.4696
stellfox@umd.edu

Janette Prince
Program Manager
301.403.4623
janette@umd.edu

Ellen Neal
Administrative Assistant
301.403.4239
ellenn@umd.edu

Carly Keane
Newsletter Editor
240.304.9627
ckeane@umd.edu

Need Training but budget cuts won't allow travel?
Request a class and we'll bring it to you!

We understand your training needs and the tremendous budget cuts everyone is dealing with in this economy. By logging on to www.mdt2center.umd.edu and requesting a course that 10 or more of your employees need, we'll bring our course to you. We'll need a room where your employees can learn and either a white board or bare wall for our projector and a pot of coffee for our instructor.

Requesting a course is simple, visit www.mdt2center.umd.edu and fill out our request training form or call Janette Prince at 301.403.4623 and she'll be glad to assist you.

MD T² Advisory Board Committee