



**MARYLAND  
TRANSPORTATION  
TECHNOLOGY  
TRANSFER CENTER**

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

[mdt2center.umd.edu](http://mdt2center.umd.edu)

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# technotes

Spring 2020 | Volume 36, No. 1

## Roadway Management Conference

The Mid-Atlantic LTAP Region hosted the 2019 Roadway Management Conference (RMC) in Ellicott City, Maryland on October 21-23. The program included a mix of classroom presentations, outdoor demonstrations, and opportunities to interact one-on-one with vendors, peers, and presenters.

In addition to the outdoor product and equipment demonstrations, the conference program included twenty different breakout sessions and four general sessions. Conference topics included work zone safety, gravel roads, accommodating road users, stress management, geogrid in pavements, strategies for finding and writing grants, and many more. The outdoor demonstrations included wood chipper and chainsaw safety, concrete mix design, crack sealing, a hands-on accessibility exercise, and proper work zone set-up and flagger safety.

Photos and many of the presentations from the 2019 conference are available on the RMC website. This website is also a great resource for up-to-date information on the 2020 conference, which is scheduled for October 26-28 in Charlottesville, VA at the DoubleTree Hotel. Attendees sharing their successes, challenges, and making new connections is at the heart of this event, and we'd love to see you in Charlottesville!

[roadwaymanagementc.wixsite.com/home](http://roadwaymanagementc.wixsite.com/home)



This breakout session started with a fun team challenge.



General sessions are an important part of the RMC.



The FHWA Concrete Lab personnel demonstrated proper concrete mix design.



A crack sealing product demonstration enabled participants to see this method up-close.

**Save-the-date for the 2020 RMC**

October 26-28, Charlottesville, VA.

[roadwaymanagementc.wixsite.com/home](http://roadwaymanagementc.wixsite.com/home)

**Attendee Registration**

\$175 until September 18, 2020

\$200 after September 18, 2020

# Professional Development Hours

Are you a Professional Engineer? Need help obtaining professional development hours (PDHs)? All of our courses offer PDHs. Check out our currently scheduled courses in the following pages. Below is the continuing education requirements for professional engineers, this information and more can be found at:

<http://www.dllr.state.md.us/license/pe/peeduc.shtml>

## Requirements

- A. A licensee shall complete at least 24 PDH units during each reporting period with a:
  - (1) 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
  - (2) Maximum of 6 PDH units in Category B programs.
- B. A maximum of 12 PDH units earned in excess of 24 PDH units that are required for a license renewal during the licensing term can be carried forward to apply as credit toward the next individual licensing term.

Category A topics focus on technical, research, analytical or design aspects of engineering; laws and regulations related to the practice of engineering in Maryland; engineering-related computer hardware or software; standards of practice or care; professional engineering ethics; project management, risk assessment and management, or emergency and disaster management or similar topics intended to maintain and enhance the knowledge and skills related to the practice of engineering.

Category B topics relate to business or government administration or the development of traits, skills or behavioral patterns geared towards improved communications skills, oral and written skills, personal management skills or other similar programs which contain a clear purpose of improving a licensee's methods of practice or operations or advancing professionally related skills and practices as applicable to the practice of engineering.

Licensees renewing for the first time after receiving their initial license are exempt.

## Our Currently Scheduled Courses

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 301.405.6535 or register online at [www.mdt2center.umd.edu](http://www.mdt2center.umd.edu).

### **PREVENTIVE PAVEMENT MAINTENANCE** (Learn about seal coats, slurry seals, and microsurfacing)

**Location:** MD T2 Center at College Park, Maryland

**Date:** March 3, 2020

**Time:** 8:30am - 3:30pm

This course is the first step in making your asphalt pavements last longer at lower costs. The course instructed by Ed Stellfox covers preventive maintenance treatments such as chip seals, slurry seals, and micro-surfacing and discusses when and where each technique could be effective. It presents application methods, including preparation, materials, equipment, operations and safety, along with practical tips on how to avoid trouble. This course is open to municipal officials, road commissioners, supervisors, and superintendents; public works and maintenance personnel; equipment operators; and city or town managers.

**Professional Development Hours:** 6.0.

**Registration Fees:** \$110 for all participants.

### **ASPHALT RESURFACING**

**Location:** MD T2 Center at College Park, Maryland

**Date:** March 31, 2020

**Time:** 8:30am - 12:30pm

This course instructed by Ed Stellfox reviews the various asphalt mixes, their components and their uses. Asphalt resurfacing procedures are covered, including preparation, material, equipment, operation and safety. Special emphasis is placed on proper rolling and compaction of the asphalt overlay. Superpave mix design is discussed as well. Municipal officials, road commissioners, supervisors, and superintendents; public works and maintenance personnel; equipment operators; and city or town managers are encouraged to attend.

**Professional Development Hours:** 4.0.

**Registration Fees:** \$75 for all participants.

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### **ROAD SURFACE MANAGEMENT**

**Location:** MD T2 Center at College Park, Maryland

**Date:** April 9, 2020

**Time:** 8:30am - 4:00pm

This course instructed by Ed Stellfox provides participants with the basic concepts of road surface management including inventory, distress identification, condition survey, strategies, programs, budgets, and field surveys. A Road Surface Management Systems software demonstration will also be conducted during this course.

**Professional Development Hours:** 6.0.

**Registration Fees:** \$110 for all participants.

### **INTRODUCTION TO TEMPORARY TRAFFIC CONTROL**

**Location:** MD T2 Center at College Park, Maryland

**Date:** April 15, 2020

**Time:** 8:30am - 3:30pm

An introductory course to temporary traffic control (TTC) in highway work zones. This one-day course instructed by Juan M. Morales, P.E. is designed to give participants a complete overview of TTC in work zones, including applicable standards, guidelines, traffic control devices, component parts and their requirements, installation/removal considerations, and pedestrian accessibility. This course will prepare participants to take the Maryland SHA Traffic Manager's course. The instructor will briefly cover the use of temporary portable rumble strips in work zone areas. The course is intended for anyone whose actions affect safety on temporary traffic control work zones, including traffic managers, traffic technicians, inspectors and designers.

**Professional Development Hours:** 6.0

**Registration Fees:** \$110 for MD local government agencies, \$125 all others

### **FLAGGER CERTIFICATION**

**Location:** MD T2 Center at College Park, Maryland

**Date:** April 16, 2020

**Time:** 8:30am - 12:30pm

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 instructed by Juan M. Morales, P.E. 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).

**Professional Development Hours:** 4.0.

**Registration Fees:** \$100 for all participants.

### **TRAFFIC SIGNS**

**Location:** MD T2 Center at College Park, Maryland

**Date:** April 23, 2020

**Time:** 8:30pm - 12:30pm

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.

**Professional Development Hours:** 4.0.

**Registration Fees:** \$75 for all participants.

### **BLUEPRINT READING FOR HIGHWAY WORKERS**

**Location:** MD T2 Center at College Park, Maryland

**Date:** April 29, 2020

**Time:** 8:30am-3:30pm

Today's highway workers use a variety of blueprints and drawings to guide them in accurately performing the construction and maintenance of roadways and related components. Upon successful completion of this course instructed by Glynn Stoffel, the student will be able to read and interpret the drawings included in a set of highway plans.

**Professional Development Hours:** 6.0

**Registration Fees:** \$110 MD local government agencies, \$125 for all other participants.

### **CONSTRUCTION MATHEMATICS**

**Location:** MD T2 Center at College Park, Maryland

**Date:** May 7, 2020

**Time:** 8:30am - 3:00pm

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 lead by Ed Stellfox is a good refresher, and excellent preparation for the construction inspection class. The course was designed for road workers, foremen, superintendents, construction inspectors and supervisors in need of a refresher, especially in preparation for the Construction Inspections class.

**Professional Development Hours:** 6.0.

**Registration Fees:** \$110 for all participants.



## Our Currently Scheduled Courses

(continued from page 3)

### TRAFFIC ENGINEERING FUNDAMENTALS

**Location:** MD T2 Center at College Park, Maryland

**Date:** May 11-14, 2020

**Time:** 8:30am - 4:15pm

This course instructed by Dane Ismart and Juan M. Morales, P.E. condenses what was the five-day Traffic Engineering Short Course into a new four-day course.

#### **Agenda Day One:**

Introduction

Traffic Engineering Terms and Design Year Traffic

Site Impact Analysis

Safety Principles and Crash Principles

Principles of Access Management

#### **Agenda Day Two:**

Intersection Analysis and Geometrics

Signal Timing

Arterial and Freeway Analysis

MUTCD

#### **Agenda Day Three:**

Roundabout Basics

ITS Overview

Traffic Calming

Pedestrian Safety

ADA Accessibility

#### **Agenda Day Four:**

Temporary Traffic Control Standards and Guidelines

Component Part of a TTC Zone

Traffic Control Devices

Traffic Control Devices, continued

Work Zone Impact Analysis

**Audience:** This course is geared towards anyone with an engineering background and/or traffic engineering responsibilities in a related field. Also junior level traffic engineers, transportation planners, highway designers and city/county engineers.

**Professional Development Hours:** 24.0.

**Registration Fees:** \$399 MD local government and \$420 all other registrants

### DESIGNING PEDESTRIAN FACILITIES FOR ADA ACCESSIBILITY

**Location:** MD T2 Center at College Park, Maryland

**Date:** June 2-3, 2020

**Time:** day 1: 8:30am - 3:30pm, day 2: 8:30am - 12:30pm

Upon completion of this course instructed by Juan M. Morales, P.E., the participant will be able to identify applicable laws, regulations, guidelines, and standards pertaining to accessibility for persons with disabilities. Know the requirements for ensuring accessibility in existing facilities vs. work in new construction and alterations. Identify some of the challenges in the Public Right-of-Way (PROW) faced by persons with disabilities. Review design elements necessary for achieving accessibility in the PROW, including work zones. Identify best practices. There will be (weather permitting) a field visit to a nearby intersection to assess its design and accessibility.

**Professional Development Hours:** 12.0.

**Registration Fees:** \$150 for Maryland local government participants, and \$175 for all other participants.

### FLAGGER CERTIFICATION

**Location:** MD T2 Center at College Park, Maryland

**Date:** June 4, 2020

**Time:** 8:30am - 12:30pm

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 instructed by Juan M. Morales, P.E. 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).

**Professional Development Hours:** 4.0.

**Registration Fees:** \$100 for all participants.

### ASPHALT RECYCLING

**Location:** MD T2 Center at College Park, Maryland

**Date:** June 9, 2020

**Time:** 8:30pm - 12:30pm

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 instructed by Ed Stellfox 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.

**Professional Development Hours:** 4.0.

**Registration Fees:** \$75 for all participants.

### GRAVEL ROAD MAINTENANCE

**Location:** MD T2 Center at College Park, Maryland

**Date:** August 13, 2020

**Time:** 8:30pm - 3:00pm

This course instructed by Ed Stellfox addresses basic maintenance techniques for unpaved and gravel roads. Topics include road materials, blading or dragging, reshaping or regrading for proper crown, regravelling, stabilization or full-depth reclamation, and dust control, with an introduction to road management techniques.

**Professional Development Hours:** 6.0

**Registration Fees:** \$110 for all participants.

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### INTRODUCTION TO GEOSYNTHETICS

**Location:** MD T2 Center at College Park, Maryland

**Date:** August 27, 2020

**Time:** 8:30am - 3:00pm

This course is an introduction to geosynthetics, beginning with a discussion of geosynthetics, what they are, how they are made and how they can be used in a road maintenance program. The course then looks at other geosynthetics and their road system uses, including geogrids, geocells and geowebbs, presenting new materials with new applications. This course instructed by Ed Stellfox, will cover the following topics: history; materials (geotextile fabrics, geogrids, geocells and geowebbs); uses and applications of drainage, erosion control, reinforcement, separation, and reflective crack control.

**Professional Development Hours:** 6.0

**Registration Fees:** \$110 for all participants.

### DESIGNING SAFER ROADS FOR PEDESTRIANS AND BICYCLISTS

**Location:** MD T2 Center at College Park, Maryland

**Date:** September 15-16, 2020

**Time:** 8:30am - 3:30pm

Pedestrians and bicyclists are susceptible to traffic injuries and fatalities, perhaps more so than drivers. Yet we design highways for the mobility of motorized traffic perhaps neglecting the needs of the most vulnerable, such as pedestrians and bicyclists. This course, instructed by Juan M. Morales, P.E., will teach participants how to diagnose pedestrian and bicyclist safety deficiencies and select the appropriate countermeasures to make conditions safer for all users. The course includes an overview of the American with Disabilities Act (ADA) accessibility requirements and a field trip where students will be exposed to various design elements. Engineering countermeasures will be emphasized but education and enforcement countermeasures will also be covered. Upon Completion of the course, participants will be able to: understand pedestrian and bicyclist traffic; describe their needs; diagnose crash causes; select proper countermeasures; identify safety-related geometric design elements (including roundabouts and bicycle lanes), and describe disable pedestrian considerations as per the American with Disabilities Act (ADA).

**Audience:** Engineer, Safety and Roadway Designers as well as individuals with Traffic/Transportation interests.

**Professional Development Hours:** 12.0

**Registration Fees:** \$175 MD local government agencies, \$199 all others.

### FLAGGER CERTIFICATION

**Location:** MD T2 Center at College Park, Maryland

**Date:** September 17, 2020

**Time:** 8:30am - 12:30pm

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 instructed by Juan M. Morales, P.E. 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).

**Professional Development Hours:** 4.0.

**Registration Fees:** \$100 for all participants.

### TECHNIQUES FOR REDUCING CONSTRUCTION AND MAINTENANCE COSTS

**Location:** MD T2 Center at College Park, Maryland

**Date:** September 24, 2020

**Time:** 8:30pm - 3:00pm

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 instructed by Ed Stellfox, will conclude with groups of participants developing a cost control plan for a project.

**Professional Development Hours:** 6.0.

**Registration Fees:** \$110 for all participants.

### ADVANCED BLUEPRINT READING FOR HIGHWAY WORKERS

**Location:** MD T2 Center at College Park, Maryland

**Date:** October 20, 2020

**Time:** 8:30am - 3:30pm

*This course is designed as a follow-up to T2's Blueprint Reading for Highway Workers.* This class discusses how the highway supervisor, superintendent, maintenance worker and inspector can use a set of highway plans to ensure any new work, or roadway/structure repair work is performed according to design standards.

**Professional Development Hours:** 6.0

**Registration Fees:** \$110 MD local government agency participants and \$125 all other participants.

### WINTER MAINTENANCE

**Location:** MD T2 Center at College Park, Maryland

**Date:** October 20, 2020

**Time:** 8:30am - 3:30pm

This course covers all aspects of winter operations-planning and organizing, methods of snow and ice control, salt usage, and winter equipment maintenance. Instructed by Ed Stellfox this lesson will include usage of snow maps, formal snow plans, snow plow and salt spreader operation. This course is intended for municipal officials, road commissioners, supervisors, superintendents, public works and maintenance personnel, equipment operators, and city or town managers.

**Professional Development Hours:** 6.0.

**Registration Fees:** \$110 for all participants.

**2020 BUILD A BETTER MOUSETRAP COMPETITION:  
RECOGNIZING INNOVATIVE INVENTIONS AND IMPROVEMENTS  
MDTZ CENTER/ MD LOCAL TECHNICAL ASSISTANCE PROGRAM  
APPLICATIONS DUE: FRIDAY, JUNE 5, 2020**

Have you or one of your coworkers recently built an innovative gadget or developed an improved way to do a job? If so, now is the time to show off a project your municipality is proud of in the Build a Better Mousetrap Competition.

We are looking for projects that you, your employees, or crew designed and built. It can be anything from the development of tools, equipment modifications, and/or processes that increase safety, reduce cost, improve efficiency, and improve the quality of transportation.

New this year, the contest will have four categories for submitting entries, with a potential winner in each. From among these winning entries, an overall Maryland winner of the contest will be chosen.

If you have something you think would qualify for this competition, submit your entries by Friday, June 5, 2020. Entries will be judged by a committee on cost savings/benefits to the community, ingenuity, transferability to others, and effectiveness.

The four winning category entries will be submitted to the national competition to compete for recognition and, of course, bragging rights. Winners of the national competition will be announced at the annual LTAP national conference. All entries at the national level will be posted on the LTAP program website and compiled into an electronic booklet.

To enter the competition, complete the [entry form](#) and return it by Friday, June 5, 2020. If you have questions, please feel free to email them to [mdt2@umd.edu](mailto:mdt2@umd.edu), or call Carly Keane at 240.304.9627.

### Judging Criteria

The competition is judged on the criteria listed below within the framework of a 10-point rating scale. Provided is a list of the judging criteria and the rating scale. The winner is the entry with the highest number of overall points.

### Judging Criteria

- Cost Savings/Benefits to the Community
- Ingenuity
- Ease of Transferability to Others
- Effectiveness

### Five-Point Rating Scale

- 5 = Excellent
- 4 = Very Good
- 3 = Good
- 2 = Fair
- 1 = Poor





## MD T<sup>2</sup> Center Staff

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## MD T<sup>2</sup> Advisory Board Committee

**Greg Africa** Anne Arundel County,  
Department of Public Works

**Brenda Alexander** College Park  
Department of Public Works

**Erv Beckert** Prince George's County  
Department of Public Works  
& Transportation

**MT Chaudhry** Federal Highway  
Administration

**Dean Dashiell** Ocean City Department  
of Public Works

**Carol Diserio** Maryland State Highway  
Administration, Office of  
Maintenance

**Allison Hardt** Maryland State Highway  
Administration

**Paul Kahl** Allegany County,  
Department of Public Works

**Stephen Kline** Town of Bel Air,  
Department of Public Works

**Alex Moyseenko** City of Hagerstown,  
Department of Public Works

**Dan Sanayi** Montgomery County, Traffic  
Engineering & Operations  
Section

**Tim Smith** Maryland State Highway  
Administrator

**Cedric Ward** Maryland State Highway  
Administration, Office of  
Traffic & Safety

**Lisa Wright** Baltimore County,  
Department of Public Works

**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](http://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](http://www.mdt2center.umd.edu) and fill out our request training form or call Janette Prince at 301.405.6535 and she'll be glad to assist you.