

#### MARYLAND TRANSPORTATION TECHNOLOGY TRANSFER CENTER

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

mdt2center.umd.edu

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# technotes

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# Cecil County places in National Build a Better Mousetrap Competition

Employees from the MD T2 Center recently took a road trip up to Elkton located in Cecil County to present the Cecil County Department of Public Works employee Rob Padgett, Sign Shop Supervisor with his Build a Better Mousetrap Competition award.

In our summer issue of Technotes we announced Mr. Padgett as our Mousetrap Competition winner, as the winner of our local competition, we entered the innovative idea in the National Build a Better Mousetrap Competition. During the National Local Technical Assistance Association (NLTAPA) Annual Meeting it was announced that our entry had placed third in the National competition!



The entry; a sign stabilizer was an inexpensive and effective idea. Cecil



Rob Padgett (center) recieving his Mousetrap Awara from Janette Prince (left) and Carly Keane (right).

County noticed that dual street name signs were folding and working free from the mounting hardware when exposed to high winds. Fixing the two signs together with PVC pipe, the signs are more stable. In fact, since implementing this simple

fix, the County has not lost a single sign.

The second place winner was also from the Mid-Atlantic region; Pennsylvania submitted a High-Pressure Sprayer. The Swatara Township in Dauphin County was experiencing ongoing issues with salt and salt residue on the underside of trucks and equipment, leading to corroded metal, brake lines, fittings, and truck parts. To combat this problem, they fabricated a high-pressure sprayer with four 45-degree sprayer nozzles to blast off the salt and residue.





The first place winner was from Idaho, the entry was titled, The Bottom Feeder. The Ada County Highway District noticed large amounts of debris remaining in storm drain pipes after cleaning, so some employees devised a system to keep the cleaning head on the bottom of the pipe. The new method increased efficiency, conserves water, and reduces labor.

Congratulations to Rob and the Cecil County Department of Public Works on your innovative award-winning idea!

For more information about the Build a Better Mousetrap Competition, visit: LTAP.org

## **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 <a href="https://www.mdt2center.umd.edu">www.mdt2center.umd.edu</a>.

#### ROAD DIETS WORKSHOP

Dane Ismart

October 19, 2016, 8:30am-3:30pm

College Park, Maryland \$110 for all participants

PDHs: 6.0

The course covers the design, safety, and operations of road diets. Road diets, although they come in many different designs, reduce the number of through lanes and allocate excess roadway width to parking, bicycle lanes, freight movements, and transit operations. The classical design reduces a 4-lane undivided highway to three lanes consisting operations. The classical design reduces a 4-lane undivided highway to three lanes consisting of one through lane in each direction and a continuous two lane left turn in the middle. A road diet may also reduce the widths of lanes as well when appropriate. The advantages, disadvantages, various road diet configurations, guidance, and criteria for determining the feasibility of implementing a road diet are discussed. Safety and operational considerations as well as examples of actual case studies are part of the course. The after results of example corridors that are renovated and redesigned as road diets are presented. The course is concluded with the class broken up to teams that work on a corridor problem and present their solution and road diet design. This Workshop will be of interest to Engineers, Transportation Planners, Pedestrian and Bicycle Coordinators, Safe Routes to School Coordinators, Local Public Agency Coordinators, and Transportation Alternatives Program Managers.

# STORMWATER MANAGEMENT - EROSION AND SEDIMENT CONTROL (New Course!)

October 26, 2016, 8:30am - 12:00pm

College Park, Maryland \$59 for all participants

PDHs: 4.0

Design of construction stormwater pollution plans focusing on the stormwater polution prevention plan (SWPPP) design elements for most construction sites disturbing more than one acre of land. The course covers National Pollutant Discharge Elimination System (NPDES) construction permit requirements, design procedures and other regulatory requirements. The course emphasizes selection and design of appropriate temporary and permanent best management practices (BMPs) and proper location of BMPs. Examples and exercises in the class include road, linear, residental, and commercial construction operations. This course is designed for engineers, planners, inspectors, contractors, municipal, county and/or state employees who are invovled in the design specifications, construction, maintenance and regulatory issues related to stormwater management and watershed protection.

#### SAFETY THROUGH ACCESS MANAGEMENT

Dane Ismart

November 15-16, 2016, 8:30am-3:30pm College Park, Maryland \$199 for Maryland local government participants only \$225 for all other participants PDHs: 12.0

Traffic engineers have long recognized that eliminating unexpected events and separating decision points simplifies the driving task. Since access control reduces the number, complexity, and spacing of events to which the driver must respond, it results in improved traffic operation and reduces accidents. Other benefits include reduced delay, improved traffic flow, increased capacity, and improved fuel economy. This course covers not only why, but also how to manage access, from a policy, legal, and design perspective. This two-day short course covers the following topics: access management policies; access design principles, trip generation; access management techniques; retrofit programs; access and median design guidelines; site plans and access for major activity centers; evaluation of improvements; and workshops.

#### THE NEW MD MUTCD ONE DAY SEMINAR

Dane Ismart

November 29, 2016, 8:30am-3:30pm

College Park, Maryland \$100 for all participants

PDHs: 6.0

This one-day training is to enable participants to become familiar with the new MD MUTCD regarding the application of its principles to their traffic control devices in Maryland. As of February 3rd, 2012, the new Maryland Manual on Uniform Traffic Control Devices (MDMUTCD) has been officially adopted by the State of Maryland. The workshop, is open to representatives of all traffic engineering and planning organizations and elected officials. Part of the workshop is also geared towards Local Administrators and Elected Officials. A series of five workshops will be provided in various regions of the State. Agenda will include compliance days for new and existing traffic control devices, new sections within various chapters of the manual, other changes in standards and guidance, procedure for experimentation and interpretation, etc.



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### **Our Currently Scheduled Courses**

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# PROJECT DEVELOPMENT OF FEDERAL-AID PROJECTS (New Course!)

November 30-December 1, 2016, 8:00am - 4:00pm

College Park, Maryland

\$199 for Local Agency Employees Only

\$225 for all other participants

PDHs: 12.0

State DOTs and local agencies when developing projects involving federal-aid must follow a prescribed set of rules, regulations, and procedures. This course will cover the various steps necessary to meet the federal requirements. The course will be initiated with a discussion of categorical funds and what activities they are eligible for. A detailed presentation will be made on how the federal highway financial system works and the process that determines the amount of federal funds that will be available to the States and MPOs. Presentations will then be made on federal rules to meet planning and environmental requirements, right-of- way rules and requirements (the Uniform Act), design standards, the bridge inspection program requirements. Federal contract requirements will also be presented that discuss a broad of issues such as use of proprietary materials, contract bidding rules, contract provisions, etc. Class exercises will be used to demonstrate typical real life issues involving the development of federal-aid projects. Who Should Attend: State DOT and local staff and officials involved in the development of transportation projects using federal-aid funds.

Agenda:

Day 1:

8:00 Registration

8:30 Course Introduction

9:00 Background of State-Federal- aid Program

10:00 Financial System Using the Federal-aid Program

A. Trust Fund

B. Authorization/Appropriation

C. Federal-aid Financing Procedures

D. Matching Ratio/Lapse/Transferabiliy

E. Innovative Financing

12:00 Lunch

1:00 Financing Demonstration

2:00 Planning

A. Planning Process

B. Statewide Planning

C. Metropolitan Planning

D. STIP – TIP – Financial Constraint

3:30 Planning Exercise

4:00 Adjourn

Day 2:

8:00 Environment Background/ National Environmental Policy Act/ Project Developments/ Documentation

A. Transportation Decision

B. Purpose and Need

C. Alternatives

D. Impacts & Mitigation

E. Public Involvement

F. Interagency Coordinaton

A. Integrated Decision Making

B. CEs/EAs/EISs

C. Processing Environmental Findings

D. Section 4(f)

9:30 Right-of- Way

A. Project Development

B. Right-of- Way Availability – Certification

C. Uniformity Act

D. Property Management

E. Utility Accomodation

10:30 Environment/Right-of- Way Exercise

11:00 Design

A. Design Process Including Consultant Selection

B. Project Scope

C. Environmental Considerations & Commitments

D. Context Sensitive Solutions

E. Highway Capacity Manual

F. Design Standards

12:00 Lunch

1:00 Bridge

A. Bridge Standards & Bridge Formula

B. National Bridge Inspection Standards

C. Highway Bridge Replacement & Rehabilitation Program

1:45 Construction

A. Contract Administration

B. Contract Provisions

C. Oversight Agreements

D. Pre & Post Award Procedure

E. Environmental Commitments

3:00 Project Development Exercise

3:20 Class Test

4:15 Adjourn



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

Tom Jacobs
Director
301.405.7328
tjacobs@umd.edu

janette@umd.edu

Janette Prince Program Manager of Training 301.405.6535 Carly Keane
Program Manager of Outreach
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 <a href="www.mdt2center.umd.edu">www.mdt2center.umd.edu</a> and fill out our request training form or call Janette Prince at 301.405.6535 and she'll be glad to assist you.

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

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