



MARYLAND TRANSPORTATION TECHNOLOGY TRANSFER CENTER

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

www.mdt2center.umd.edu

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EDC GRS-IBS Allegany County Showcase

On July 17, 2014 the Maryland Transportation Technology Transfer (MD T2) Center along with the Federal Highway Administration and Allegany County hosted an Every Day Counts Allegany County Potomac Hollow Road GRS-IBS Showcase.

This successful event held at the Barton Fire Department Bingo Hall was to spotlight the very first Geosynthetic Reinforced Soil (GRS) Integrated Bridge System (IBS) in Maryland.

GRS-IBS technology uses alternating layers of compacted granular fill material and fabric sheets of geotextile reinforcement to provide support for the bridge. Some advantages to using GRS-IBS include: reduced construction time and cost, easy construction and maintenance with common equipment and materials, and a flexible design that is easily modified in the field if needed.

The event included presentations related to the GRS-IBS technology and project implementation and also included a field trip to a GRS-IBS bridge site in Allegany County.



Presentations were made by:

Daniel Alzamora - Geosynthetic Reinforced Soil Integrated Bridge System

WBCM Bridge Engineers: Mike Izzo, P.E. and Dipali Patel, P.E.- Replacement of Bridge No. A-008 Potomac Hollow Road over Moores Run



DelDOT: Scott Walls, Project Engineer, Bridge Design
FHWA, Mike Adams - Construction Of GRS-IBS



Thank you to the many people who had a hand in planning this event and thank you to those who attended and made it the success it was.

More photos on page 6

Did you know that if your county, city or town receives any federal money, you are required to comply with federal requirements aimed at preventing discrimination and providing access to programs, services and activities for people with disabilities? Did you know that failure to do so ultimately could result in stiff federal penalties?

Several weeks ago, with the active support of the T2 Center, the Maryland State Highway Administration (SHA), in conjunction with the Federal Highway Administration (FHWA), delivered its second training session on ADA compliance by state and local public entities (Title II). This course is designed to assist Transportation/Public Works departments of Maryland Counties, as sub-recipients of federal funds, in complying with the certain requirements of the ADA and the Rehabilitation Act of 1973, Sec. 504.

Entitled “A Real-Life Approach to Americans With Disabilities Act Compliance: Self-Evaluations and Transition Plans for Transportation Sub-Recipients,” the course was developed with the help of the T2 Center in direct response to requests by Maryland counties for very detailed training on the toughest elements of compliance.

- The training covers:
- who must do what and when;
 - how to determine whether and where your public rights-of-way network meets federal requirements (self-evaluation) and,
 - if not, how to go about developing a long-term strategic plan to address deficiencies (a transition plan) including establishing priorities.

While a session in April focused mainly on counties, the most recent session expanded its audience to include town and other municipalities, who are also required to comply with the evolving ADA requirements. This training is meant for policy-level staff and ADA Title II Coordinators responsible for programmatic development and implementation. (It does not go into technical specifications and construction/design issues.)

For more information about scheduling an ADA course
contact Janette Prince at 301.405.6535 or email her at janette@umd.edu

Have you taken all the courses to qualify for Road Scholar status?
We want to award all your hard work with one of our new Road Scholar jackets
and a certificate (might help with that raise you’ve been aiming for!)

Calling All Road Scholars!

Contact [Janette](#) to see if you qualify or if you only need a few courses to qualify!

What is a Road Scholar?

Road scholar participants improve their road and bridge maintenance as well as their safety skills with the latest innovations and tried and true methods and procedures. Road superintendents, road crews, public works personnel, managers and public officials are shown how proper techniques and new technologies apply to their maintenance and safety needs. Road Scholar courses can help stretch those budgets, providing information that squeezes the most out of dollars invested.

Participants pursuing a Roads Scholar Certificate will take the following four core courses: Asphalt Roads Common Maintenance Problems, Basic Drainage, Preventive Maintenance, and Winter Maintenance. Four more courses can be chosen by the participant to complete the certificate program. You must complete eight courses to achieve Road Scholar status. All courses will be offered at least once a year and will be hosted at the T2 Center’s classroom located in College Park, Maryland.

The MD T2 Center will bring any course listed below to your municipal site. The center provides all the necessary equipment to present the course. You provide a room that can be darkened, an electrical outlet, tables and chairs for participants and a pot of coffee for the presenter will be greatly appreciated. Prices and a minimum class size can be discussed with the instructor.

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Road Scholar I

Asphalt Resurfacing (Half-Day Course)

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. PDHs: 4.0

Asphalt Roads Common Maintenance Problems (Half-Day Course)

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Basic Drainage (One-Day Course)

This course instructed by Ed Stellfox 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 and sub drains inlets and end structures, their uses, materials, installation and maintenance. 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, geosynthetics in drainage. PDHs: 6.0

Construction Mathematics (One-Day Course)

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 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. PDHs: 6.0

Introduction to Geosynthetics (One-Day Course)

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. Designed for municipal officials, road commissioners, supervisors, and superintendents; public works and maintenance personnel; equipment operators; and city or town managers. This course instructed by Ed Stellfox will cover the following topics: history, materials, geotextile fabrics, geogrids, geocells and geowebbs, uses & applications, drainage, inflation, erosion control, reinforcement, separation, and reflective crack control. PDHs: 6.0

Preventive Pavement Maintenance (One-Day Course)

This 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. PDHs: 6.0

Gravel Road Maintenance (One-Day Course)

This course instructed by Ed Stellfox addresses basic maintenance techniques for unpaved and gravel roads. Topics include road maintenance, 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. PDHs: 6.0

Winter Maintenance (One-Day Course)

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 and formal snow plans. This course is intended for municipal officials, road commissioners, supervisors, superintendents, public works and maintenance personnel, equipment operators, and city or town managers. PDHs: 6.0

Road Scholar II

Asphalt Recycling (Half-Day Course)

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, 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, surface recycling, hot-mix recycling, cold-mix recycling, full depth reclamation, materials, equipment, operations, and examples of projects. PDHs: 4.0

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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 by visiting us at www.mdt2center.umd.edu.

TRAFFIC ENGINEERING FUNDAMENTALS

Dane Ismart and Juan M. Morales, P.E.

October 7-9, 2014, 8:30am – 4:15pm

College Park, MD

\$330 for Maryland local participants

\$375 for all other participants

PDHs: 18.0

This course condenses what was the five-day Traffic Engineering Short Course into a new three-day course.

Agenda Day One:

- 8:30AM Introduction
- 9:00AM Traffic Engineering Terms and Design Year Traffic
- 9:45AM Break
- 10:00AM Site Impact Analysis
- 12:00PM Lunch
- 1:15PM Safety Principles and Crash Principles
- 2:30PM Break
- 2:45PM Principles of Access Management
- 4:15PM Adjourn

Agenda Day Two:

- 8:30AM Intersection Analysis and Geometrics
- 10:00AM Break
- 10:15AM Signal Timing
- 12:00PM Lunch
- 1:15PM Arterial and Freeway Analysis
- 2:45PM Break
- 3:00PM MUTCD
- 4:15PM Adjourn

Agenda Day Three:

- 8:30AM Roundabout Basics
- 9:30AM Break
- 9:45AM ITS Overview
- 10:45AM Break
- 11:00AM Traffic Calming
- 12:15PM Lunch
- 1:30PM Work Zones
- 2:45PM Break
- 3:00PM ADA Accessibility
- 4:15PM Adjourn

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.

BASIC DRAINAGE

Ed Stellfox

October 14, 2014, 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.

WINTER MAINTENANCE

Ed Stellfox

October 21, 2014, 8:30am – 3:00pm

College Park, MD

\$89 for all participants

PDHs: 6.0

This course covers all aspects of winter operations- planning and organizing, methods of snow and ice control, salt usage, and winter equipment maintenance. 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.

HIGHWAY CAPACITY UNINTERRUPTED FLOW

Dane Ismart

October 22, 2014, 8:30am - 4:00pm

College Park, Maryland

\$105 for Maryland local government participants

\$120 for all other registrants

PDHs: 6.0

CEUs: 0.6

This one-day course will cover the theory and methodology of the 2010 Highway Capacity Manual for uninterrupted flow. The Chapters that will be covered include: basic freeway sections, weaving, ramps, multilane highways, and two lane rural roads. Changes in each of the uninterrupted Chapters of the 2010 Highway Capacity Manual will be highlighted during the lectures. The Highway Capacity Software will be demonstrated to the class using sample problems.

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DESIGNING PEDESTRIAN FACILITIES FOR ACCESSIBILITY

Juan M. Morales, P.E.

October 30-31, 2014,

Day 1 8:30am – 3:00pm, Day 2 8:30am – 12:30pm

College Park, MD

\$150 for Maryland local government participants

\$185 for all other participants

PDHs: 10.0

Upon completion of this course 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.

Introduction to Temporary Traffic Control

Juan M. Morales, P.E.

November 18, 2014, 8:30am - 3:00pm

College Park, MD

\$100 for Maryland local government participants

\$125 for all other participants

PDHs: 6.0

An introductory course to temporary traffic control (TTC) in highway work zones. This one-day course 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.

Topics Covered/Agenda:

- Introduction to temporary traffic control (TTC)
- Quantification of the work zone safety problem
- Standards and guidelines applicable in the State of Maryland (MD SHA)
- Fundamental principles of TTC
- Component parts of the TTC zone
- Temporary traffic control devices
- Tapers and other transitions
- Installation and removal considerations
- Pedestrian accessibility

The course is intended for anyone whose actions affect safety on temporary traffic control work zones, including traffic managers, traffic technicians, inspectors and designers.

Calling All Road Scholars!
(concluded from page 3)

Road Surface Management (One-Day Course)

The course 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. PDHs: 6.0

Traffic Signs (Half-Day Course)

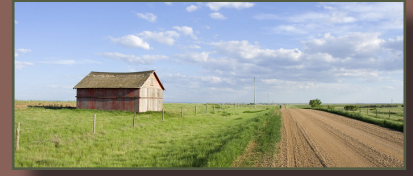
This half-day course will cover the regulations and guidelines for traffic signs including; regulatory signs, warning signs, and guide signs. A review of the Manual on Uniform Traffic Control Devices (MUTCD) will also be covered. An in depth discussion of sign examples, installation and maintenance, as well as sign management will be covered. PDHs: 4.0

Work Zone Traffic Control (WZTC) (Half-Day Course)

This half-day course will discuss the importance of work zone traffic control (WZTC) covering topics such as safety and liability. Regulations and guidelines will also be discussed with topics ranging from traffic control plans, traffic control devices, installation, and flagging procedures. Plan exercise and inspection of work zones will also be covered. PDHs: 4.0

Interested in starting your Road Scholar certificate? Sign up for one of our Road Scholar courses today!





MD T² Center Staff

Tom Jacobs, Director

301.405.7328

tjacobs@umd.edu

Ed Stellfox, Co-Director

301.405.6369

stellfox@umd.edu

Janette Prince

Program Manager

301.405.6535

janette@umd.edu

Marc Trainum

Administrative Assistant

301.405.5312

mtrainum@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 301.405.6535 and she'll be glad to assist you.

MD T² Advisory Board Committee

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