technotes

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MARYLAND TRANSPORTATION TECHNOLOGY TRANSFER CENTER

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

www.mdt2center.umd.edu

INSIDE:

Understanding Roadway Reconfiguration

The classic roadway reconfiguration, commonly referred to as a "road diet," involves converting an undivided four lane roadway into three lanes made up of two through lanes and a center two-way left turn lane. The reduction of lanes allows the roadway to be reallocated for other uses such as bike lanes, pedestrian crossing islands, and/or parking. Road diets have multiple safety and operational benefits for vehicles as well as pedestrians, such as:

- Decreasing vehicle travel lanes for pedestrians to cross, therefore reducing the multiple-threat crash (when one vehicle stops for a pedestrian in a travel lane on a multi-lane road, but the motorist in the next lane does not, resulting in a crash) for pedestrians,
- Providing room for a pedestrian crossing island,
- Improving safety for bicyclists when bike lanes are added (such lanes also create a buffer space between pedestrians and vehicles),
- Providing the opportunity for on-street parking (also a buffer between pedestrians and vehicles),
- Reducing rear-end and side-swipe crashes, and
- Improving speed limit compliance and decreasing crash severity when crashes do occur.

Background

Midblock locations tend to experience higher travel speeds, contributing to increased injury and fatality rates. More than 80 percent of pedestrians hit by vehicles traveling at 40 mph or faster will die, while less than 10 percent will die when hit at 20 mph or less. When appropriately applied, road diets have generated benefits to users of all modes of transportation, including bicyclists, pedestrians, and motorists. The resulting benefits include reduced vehicle speeds, improved mobility and access, reduced collisions and injuries, and improved livability and quality of life. When modified from four travel lanes to two travel lanes with a two-way left-turn lane, roadways have experienced a 29 percent reduction in all roadway crashes. The benefits to pedestrians include reduced crossing distance and fewer midblock crossing locations, which account for more than 70 percent of pedestrian fatalities.

Guidance

Road diets can be low cost if planned in conjunction with reconstruction or simple overlay projects, since a road diet mostly consists of restriping. Roadways with Average Daily Traffic (ADT) of 20,000 or less may be good candidates for a road diet and should be evaluated for feasibility. It has been shown that roads with 15,000 ADT or less had very good results in the areas of safety, operations, and livability. Driveway density, transit routes, the number and design of intersections along the corridor, as well as operational characteristics are some considerations to be evaluated before deciding to implement a road diet.

It is a good practice for someone in an agency to know well in advance of when road reconstruction and overlay projects will be initiated so an evaluation can be conducted. It is important to analyze and understand the effects of the proposed change, obtain input from the community stakeholders, and ensure the appropriate elements are included in the project. Improvements to intersection turn lanes, signing, pavement markings, traffic control devices, transit stops, and pedestrian and bicyclist facilities may be needed to support this concept. It should be noted that the classic four-to-three-lane road diet is very compatible with single-lane roundabouts.

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Join in on the Road Diet Discussion!

FHWA along with the MD T2 Center will be hosting a Road Diets Webinar scheduled for April 9, 2015.
Learn more about the Road Diets webinar

Understanding Roadway Reconstruction,

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Key Resources

- Pedsafe: Pedestrian Safety Guide and Countermeasure Selection System, p. 62
- Pedestrian Facility User's Guide: Providing Safety and Mobility, p. 53
- Guide for the Planning, Design, and Operation of Pedestrian Facilities, American Association of State Highway and Transportation Officials, 2004 *(available for purchase from AASHTO)*
- Pedestrian Road Safety Audits and Prompt List
- FHWA Office of Safety Bicycle and Pedestrian Safety
- Road Diet Handbook: Setting Trends for Livable Streets *(available for purchase from ITE)*
- Comparison of empirical Bayes and full Bayes approaches for before-after road safety evaluations
- Crash Reduction Factors for Traffic Engineering and ITS Improvements
- The Safety and Operational Effects of Road Diet Conversion in Minnesota
- AASHTO Highway Safety Manual *(available for purchase)*
- FHWA Traffic Analysis Toolbox, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach"

FHWA Contacts

Office of Safety: Tamara Redmon, 202.366.4077
FHWA Office of Research: Ann Do, 202.493.3319
FHWA Resource Center: Peter Eun, 360.753.9551
FHWA Web site: http://safety.fhwa.dot.gov/ped_bike/

For more information, visit: http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_013.cfm

This article is a reprint from the Federal Highway Administration and the United States Department of Transportation.

2nd Annual Build A Better Mousetrap Competition

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 2nd Annual Build a Better Mousetrap Competition.

The MDT2 Center is 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.

If you have something you think would qualify for this competition, submit your entries by Wednesday, April 15, 2015. Entries will be judged by our board of directors; which is composed of representatives from local, state and federal departments and/or agencies on cost savings/benefits to the community, ingenuity, transferability to others, and effectiveness.

The winning entry will be submitted into a national competition to compete for prizes and, of course, bragging rights. Winners of the national competition will be announced at the annual LTAP/TTAP national conference this summer. All entries at the national level will be posted on the LTAP/TTAP program website and compiled into an electronic booklet.

To enter the competition, complete the entry form and return it by Wednesday, April 15, 2015.

If you have questions, please feel free to email them to ckeane@umd.edu or call Carly Keane at 240.304.9627.

State Transportation Innovation Council (STIC) Incentive Program Guidance

The Federal Highway Administration (FHWA) State Transportation Innovation Council (STIC) Incentive program provides resources to help STICs make innovations standard practice in their States. Under the program, technical assistance and limited funds are available to support or offset the costs of standardizing innovative practices in a State transportation agency (STA) or other public sector STIC stakeholder. The funding opportunity is $100,000 per State per year.

Introduction
The STIC is the leadership platform in every State to identify critical needs, find best solutions and to get them into practice quickly. Their role is to help facilitate the deployment of innovations and engage the various stakeholders within the State. The STIC is an organizational unit comprised of people from key areas within the State's borders and its transportation community. In addition to State and Federal transportation executives, the STIC includes technical decision-makers, local agencies, regulatory agencies, Local Technical Assistance and Tribal Technical Assistance Programs, metropolitan planning organizations (MPO), and industry members.

Program Background
The Moving Ahead for Progress in the 21st Century Act (MAP-21) calls for a Technology and Innovation Deployment Program (TIDP) that includes three initiatives: accelerated innovation deployment (AID), future strategic highway research program (SHRP 2), and accelerated implementation and deployment of pavement technologies.

The TIDP relates to all aspects of highway transportation, including planning, financing, operation, structures, materials, pavements, environment, construction, and the time between project planning and delivery. It provides technical assistance and training to researchers, developers, and deployers and develops improved tools and methods to accelerate the adoption of proven innovative practices and technologies as standard practices.

Per Section 52003 of MAP-21and 503(c) of 23 U.S.C., the TIDP goals are the following:

- Significantly accelerate the adoption of innovative technologies by the surface transportation community.
- Provide leadership and incentives to demonstrate and promote state-of-the-art technologies, elevated performance standards, and new business practices in highway construction processes that result in improved safety, faster construction, reduced congestion from construction, and improved quality and user satisfaction.
- Construct longer-lasting highways through the use of innovative technologies and practices that lead to faster construction of efficient and safe highways and bridges.
- Improve highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability.
- Develop and deploy new tools, techniques, and practices to accelerate the adoption of innovation in all aspects of highway transportation.

The AID program provides funding and other resources to offset the risk of trying an innovation. Coupled with Section 1304 of MAP-21, AID offers States incentives such as funding and an increased Federal share for projects using innovations.

The AID program is designed to fulfill the following requirements:

- Establish and carry out demonstration programs.
- Provide technical assistance and training to researchers and developers.
- Develop improved tools and methods to accelerate the adoption of proven innovative practices and technologies as standard practices.

This program guidance focuses on the AID program's STIC Incentive, which is administered through the FHWA Center for Accelerating Innovation (CAI).

Statutory References
Sections 51001(a)(2) and 52003 of MAP-21 and Section 503(c) of title 23 U.S.C.

Funding
Up to $5.3 million per fiscal year is available for the STIC Incentive element. Incentives will be for the Federal share of 80 percent, limited to $100,000 per State each year. The non-Federal match may come from project sponsors or other allowable fund sources.

Entities Eligible for Funding
The STA will be the primary recipient of the funds because the money will be obligated via the Fiscal Management Information System (FMIS). Â MPOs, local governments, and tribal governments may be recipients through States as sub-recipients. Sub-recipients should also demonstrate how they will meet the requirements of Title 49 of the Code of Federal Regulations (CFR) Part 18, including financial management standards and audits.

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Eligibility Requirements

- The project will have a statewide impact on making the innovation a standard practice.
- An innovation deployment team (i.e., STIC) is formally established with a charter, including a membership roster and meeting frequency.
- The STIC should include STA and FHWA division office members.
- The activities for which incentives are requested should be included in the STIC's implementation plan and align with TIDP goals.
- The activities funded through the TIDP should be eligible for Federal-aid assistance and adhere to CFR requirements.
- The activities in the proposal should be started as soon as practical after notification of selection (preferably within 6 months, but no later than 1 year), and TIDP work must be completed within 2 years.

Activities Eligible for Funding

STIC Incentive may be used to conduct internal assessments; build capacity; develop guidance, standards, and specifications; implement system process changes; organize peer exchanges; offset implementation costs; or conduct other activities the STIC identifies to make an innovation that meets TIDP goals a standard practice in the STA or other public sector STIC stakeholder.

Examples of allowable costs include, but are not limited to, the following:

- Develop standards and specifications.
- Develop and deliver training on and an evaluation plan for the innovation.
- Refine current specifications based on lessons learned from implementing the innovation.
- Develop memoranda of agreement.
- Prepare standard operating procedures or technical guidance for the innovation.
- Prepare a report summarizing the lessons learned and economic analysis of the innovation.
- Develop a decision matrix for the innovation.
- Prepare an integration plan, including performance measures.

Examples of non-allowable costs include the following:

- Food
- Promotional items
- Conference attendance
- Conference booth space rental

The Process

- CAI sends out memo announcing the availability of funds
- Division Office or STA creates a formal innovation deployment team if one has not already been established
- Division Office shares memo with STIC
- STIC develops proposal(s)
- Division Office approves the proposal(s) and send request to CAI for funding
- CAI allocates funds to STA
- STA requests obligation of funds for STIC project via FMIS
- Division obligates funds to project(s)
- STIC provides semi-annual progress/final report to DO, DO to forward reports to CAI
- Product delivered within 2 years

STIC Responsibilities

- Coordinate with the STA, local governments, and MPOs in the State, as necessary, to develop applications.
- Ensure that the work proposal(s) comply with the submission requirements outlined above.
- Submit the work proposal(s) to the local FHWA division office.
- Comply with eligibility use of the funds.
- Obtain 20 percent matching requirement
- Report progress at STIC meetings.
- Provide a brief written progress report to the FHWA division office semi-annually.
- Provide a brief final report (maximum 5 pages) to the FHWA division office that includes project or product description, how the work specifically meets the program criteria, result of the project, challenges, lessons learned and budget.

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

ASPHALT ROADS COMMON MAINTENANCE PROBLEMS

Ed Stellfox
April 7, 2015, 8:30am – 12:30pm
College Park, Maryland
$59 for all participants
PDHs: 4.0

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 instructed by Ed Stellfox 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.

ASPHALT RESURFACING

Ed Stellfox
April 9, 2015, 8:30am – 12:30pm
College Park, Maryland
$59 for all participants
PDHs: 4.0

This course 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.

WORK ZONE DESIGN

Juan M. Morales, P.E.
April 14-15, 2015, 8:15am – 4pm
College Park, Maryland
$199 for Maryland local government participants
$225 for all other participants
PDHs: 12.0

The course will give participants knowledge of the entire temporary traffic control (TTC) process: planning, design, review, installation, maintenance, and inspection of temporary traffic control for highway work zones. Issues regarding planning, design, review, and operation of temporary traffic control are covered, including pedestrian accessibility, worker safety, human factors, and legal aspects. The material is based on Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD) and are modified to address Maryland State Highway Administration (SHA) TTC standards and guidelines. Topics covered include: introduction to TTTC, TTC standards and guidelines (MUTCD and MD SHA), fundamental principles of traffic control, human factors, component part of the TTC zones, traffic control devices, the typical project, planning, design, installation, inspection, enhancements and modifications, constructability reviews, removal, traffic control plan strategies, MD SHA standards, guidelines and practices, legal aspects of TTC, and workshops. The course is aimed at individuals who are responsible for the design, review, or modification of temporary traffic control for work zones adjacent to and within roads and highways. The course will also be of interest to those responsible for installation, operation, and inspection.

PREVENTIVE PAVEMENT MAINTENANCE

Ed Stellfox
April 21, 2015, 8:30am – 3pm
College Park, Maryland
$89 for all participants
PDHs: 6.0

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.

ROAD SURFACE MANAGEMENT

Ed Stellfox
April 23, 2015, 8:30am – 3pm
College Park, Maryland
$89 for all participants
PDHs: 6.0

This 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.

FLAGGER CERTIFICATION

Juan M. Morales, P.E.
April 30, 2015, 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.

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SAFETY THROUGH ACCESS MANAGEMENT

Dane Ismart
May 13-14, 2015, 8:30am-4pm
College Park, Maryland
$199 for Maryland local government participants
$215 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 course coveres 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.

INTRODUCTION TO TEMPORARY TRAFFIC CONTROL

Juan M. Morales, P.E.
May 19, 2015, 8:30am - 3:30pm
College Park, Maryland
$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, fundamental principles of TTC, component parts of the TTC zone, temporary traffic control devices, tapers and other transitions, installation and removal considerations, and 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.

BLUEPRINT READING FOR HIGHWAY WORKERS

Glynn Stoffel
June 15, 2015, 8am-4pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other participants
PDHs: 6.0

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, the student will be able to read and interpret many of these blueprints as well as demonstrate the ability to produce accurate and legible field sketches. At the conclusion of the course, the student will be able to:

- Recognize and define the various lines and symbols used in plain construction.
- Describe and discuss the characteristics of plans, plats, profiles, views, details and other drawings found in a set of working plans.
- Demonstrate the ability to use engineer's and architect's scales.
- Demonstrate the ability to read and interpret the different blueprints and plans used in highway construction and maintenance.
- Describe how to effectively use plans in the field.
- Draw legible field sketches and as-built drawings.
- Obtain a score of at least 70% on the review test.

INTERSECTION SIGNAL & DESIGN ANALYSIS

Dane Ismart
July 8-9, 2015, 8:30am – 4pm
College Park, Maryland
$199 for Maryland local government participants
$215 for all other participants
PDHs: 12.0

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.

TRAFFIC CALMING

Dane Ismart
August 25, 2015, 8:30am – 4pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other participants
PDHs: 6.0

This Traffic Calming seminar is designed to present a broad-based understanding of traffic calming philosophy and measures while recognizing and preserving the function of roadways. This course is adapted toward state and local government officials and employees who are charged with enhancing roadway safety. The seminar will focus on the appropriateness and effectiveness of various traffic calming measures as well as the specifics of designing such measures to achieve their desired effect. Audio-visual presentation materials will be used, and attendees will also participate in interactive workshops where case studies are evaluated and appropriate traffic calming solutions are developed. Upon completion of the workshop sessions, the participants will present their solutions to the class. The goal of the course is that participants will leave with a basic understanding of what traffic calming is, and what issues are typically encountered when using traffic calming techniques. Students will receive a course notebook.

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TO SIGNALIZE OR NOT TO SIGNALIZE

Dane Ismart
August 26, 2015, 8:30am-4pm
$110 for Maryland local government participants
$125 for all other participants
PDHs: 6.0

The course will also cover warrants for four-way stops as well as alternatives to traffic control signals. A detailed discussion of the advantages and disadvantages both in the terms of capacity and safety of various types of traffic controls will be presented. The basis for both the installation and the removal of traffic control devices will be covered. As part of the course, workshop problems will be given to the class participants. The class will be provided intersection field data and will determine if signals are warranted for the sample intersections. After completing the workshops, MUTCD signal warrant analysis software will be demonstrated and the workshop problems will be evaluated based on microcomputer analysis. This course is designed for traffic engineers and transportation planners involved in the design and planning of corridors and intersections.

FLAGGER CERTIFICATION

Juan M. Morales, P.E.
September 3, 2015, 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.

DESIGNING SAFER ROADS FOR VULNERABLE ROAD USERS

Juan M. Morales, P.E.
September 9-10, 2015, 8:30am-3:30pm
$199 for Maryland local government participants
$225 for all other participants
PDHs: 12.0

Vulnerable road users (VRU) are susceptible to traffic injuries and fatalities, perhaps more so than drivers. Yet we design highways for the mobility of cars sometimes neglecting the needs of the most vulnerable, such as pedestrians, bicyclists, motorcyclists, transit users and others. This course will teach participants how to diagnose pedestrian (and other VRU) safety deficiencies and select the appropriate countermeasures to make conditions safer for all users including an overview of the American with Disabilities Act (ADA) accessibility requirements. Engineering countermeasures will be emphasized but education and enforcement countermeasures will also be covered. Upon Completion of the Course, Participants Should be Able to: Define vulnerable road users, Describe VRU needs, Diagnose crash causes and select proper countermeasures, Identify safety-related geometric design elements, and Discuss VRU safety issues and how to address them.

BRIDGE MAINTENANCE INSPECTION

John Hopkins
September 14, 2015, 8:30am – 3:30pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other participants
PDHs: 6.0

This one day course will cover inspection of bridge maintenance. A brief summary of the topics to be covered are as follows: approach, deck maintenance, deck joints, deck drains, bearing maintenance, concrete beams, steel beams, timber beams, bridge seats and caps, piles and bents, truss maintenance, painting, and winter maintenance. The class is for the actual field maintenance worker who has to do the repairs. It is mostly concerned with what to look for from a maintenance standpoint not a structural rating perspective.

CONSTRUCTION INSPECTION FOR LOCAL AGENCY EMPLOYEES

John Hopkins
September 15, 2015, 8:30am – 3:30pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other participants
PDHs: 6.0

This one day session will cover some of the major duties and responsibilities of an individual responsible for the quality of a project. It will address the importance of understanding the plans, the contract, the order of operations, the materials to be used and the various quality control tests used in project inspection. This course is presented in a straight forward manner and deals with the reality of everyday factors involving contractors and agencies. Qualified field inspection personnel with one to three years of field experience are encouraged to attend; participants must possess basic math skills in geometry and algebra. *Participants should bring a calculator, scale and straight edge; notebooks will be provided.

CONSTRUCTION INSPECTION INTERMEDIATE LEVEL

John Hopkins
September 16-17, 2015, 8:30am – 3:30pm
College Park, Maryland
$200 for Maryland local government participants
$225 for all other participants
PDHs: 12.0

An intermediate class focuses on the construction, inspection, measurement and testing of materials associated with road way construction. Includes real-life scenarios and problems faced on the job, and covers general practices and MD standards. Qualified field inspection personnel with one to three years of field experience are encouraged to attend; participants must possess basic math skills in geometry and algebra. A test will be administered to acquire class credit. Participants should bring a calculator, scale and straight edge; notebooks will be provided.

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THE NEW MD MUTCD

Dane Ismart
October 1, 2015, 8:30am-4pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other registrants
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. Who should attend: State and Local Transportation Engineers, Traffic Engineers, Planners, Elected Officials, and Traffic Engineering Consultants responsible for the placement and maintenance of uniform traffic control devices in Maryland. Sponsors: This workshop is presented by the Maryland T2 Center and is sponsored by The Maryland State Highway administration (SHA) and the Federal Highway Administration (FHWA).

CONSTRUCTION MATH

Ed Stellfox
October 8, 2015, 8:30am-3:00pm
College Park, Maryland
$89 for all participants
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. *Participants should bring a calculator, scale and straight edge; notebooks will be provided.

LOW COST SAFETY IMPROVEMENTS

Mark Hood
October 15, 2015, 8:30am-3:30pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other registrants
PDHs: 6.0

This course provides participants with methods for implementing effective, low cost safety improvements targeted at high crash areas. It emphasizes the basic and enhanced application of traffic control devices, low cost safety improvements, and their specific safety benefit (crash reduction factors). Traffic crash data collection, identification of hazardous locations, and engineering study procedures are also discussed. Emphasis is placed on low cost solutions that may be made at the local level.

DESIGNING PEDESTRIAN FACILITIES FOR ACCESSIBILITY

Juan M. Morales, P.E.
October 20-21, 2015, 8:30am-4pm
College Park, Maryland
$135 for Maryland local government participants
$150 for all other participants
PDHs: 10.0

Upon completion of this course the participant will be able to:
- Identify applicable laws, regualtions, 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 neccessary for achieving accessibility in the PROW, including work zones.
- Identify best practices.

WINTER MAINTENANCE

Ed Stellfox
October 22, 2015, 8:30am – 3pm
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 in intended for municipal officials, road commissioners, supervisors, superintendents, publics works and maintenance personnel, equipment operators, and city or town managers.

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TRAFFIC ENGINEERING FUNDAMENTALS

Dane Ismart and Juan M. Morales, P.E.
October 26-29, 2015, 8:30am – 4:15pm
College Park, MD
$399 for Maryland local participants
$420 for all other participants
PDHs: 24.0

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

FLAGGER CERTIFICATION

Juan M. Morales, P.E.
November 12, 2015, 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.

HIGHWAY CAPACITY INTERRUPTED FLOW

Dane Ismart
November 17, 2015, 8:30am - 4pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other registrants
PDHs: 6.0

This one-day course will cover the theory and methodology of the 2010 Highway Capacity Manual for interrupted flow. The Chapters that will be covered include:
- Signalized Intersections
- Unsignalized Intersections:
  - (A) Two-Way Stops (B) Four Way Stops
- Urban Arterial

Changes in each of the interrupted 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. The new roundabout capacity procedure is covered under a separate course.

HIGHWAY CAPACITY UNINTERRUPTED FLOW

Dane Ismart
November 18, 2015, 8:30am - 4pm
College Park, Maryland
$110 for Maryland local government participants
$125 for all other registrants
PDHs: 6.0

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.

STIC Incentive Program Guidance
(concluded from page 4)

Don't miss out, there is a National STIC Meeting scheduled for April 30th
For more information, visit:
http://www.fhwa.dot.gov/stic/

STA Responsibilities

- Ensure that the work proposal(s) comply with the submission requirements outlined above.
- Request obligation of funds for STIC project via FMIS
- Administer the project(s) to ensure the funds are spent appropriately

FHWA Division Office Responsibilities

- Provide the solicitation memorandum and this program information to the STIC.
- Set a schedule for when proposal(s) are due to the division office.
- Determine eligibility of proposal(s) for STIC Incentive
- Approves proposal(s)
- Request funding from CAI (Include a description of the proposed activity, end product, amount requesting, and a statement that all of the STIC Incentive eligibility requirements are met.)
- Review and approve project authorization request from STA and FMIS
- Ensure that the AID funds are spent according to the program guidance.
- Monitor the progress of the project and offer technical assistance if needed.
- Provide semi-annual reports on the progress of the project and forward the final report to CAI.

FHWA CAI Responsibilities

- Develop program guidance.
- Allocate funds to division office.
- Track available funds, spending levels and deliverables of the program.
- Share accomplishments and lessons learned nationally.

FHWA CAI Contact

Mary Huie, FHWA Center for Accelerating Innovation
1200 New Jersey Ave. SE (E84-430)
Washington, DC 20590
Phone: 202.366.3039
E-mail: mary.huie@dot.gov

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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

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Maryland Transportation Technology Transfer (T²) Center | University of Maryland, College Park
Technology Ventures Building, Suite 2219 | College Park, Maryland 20742-6602