Delaware T²/LTAP

elaware INFO-CHANGE

Volume XXIV, Issue I

Spring 2013

Inside this issue:

IBS Project	
ITE Students Taking It On The	2

Road

Engineering 2 Internships -Summer 2013

ASHE@UD 2 Closes Another Active Year

Effective
Transportation
Management for
Special Events

Proof: Training 4
Saves Budget

Recent Student 5
Field Trips

Recent Student 7
Field Trips

The Heat's 8
Coming

Upcoming Events 9

Center Request 9

Message from the Director - Earl "Rusty" Lee, Ph.D.

It is hard to believe that it's May already and another construction and maintenance season is getting into full swing. There are many new things on the horizon in the T² world.

April saw the rollout of the FHWA Every Day Counts Phase 2 virtual summits. This set of four summits focused on the key technologies that are part of EDC 2. They included High Friction Surface Treatments, New Intersection and Interchange Geometrics, Traffic Incident Management / First Responder Training, and Geospatial Data Collaboration.

Starting in June, there will be a series of EDC Exchanges that will provide an opportunity to introduce a broader, local audience to the items and how they will be deployed in Delaware. Stay tuned for announcements.

This summer, the T² Center will be overseeing our largest intern program to date, having help fill requests by Delaware City, Wilmington and Cecil County, MD.

It's never too early to get in touch with us regarding interns. Contact me or Matt to meet and discuss how your town can partner with the Center and provide service to your communities, while helping a student gain valuable practical experience.

There are also new initiatives coming with regard to bike and pedestrian safety that Matt or I will be contacting you about.

If there is anything our T²/LTAP Center staff can do to help, or answer any questions you may have, feel free to call or email us.

Delaware Tries Out New Bridge Construction Technique

The Delaware
Department of
Transportation
(DelDOT) has ventured
into an alternative design
and construction
technique for smaller
bridges, and the Federal
Highway Administration
(FHWA) and the
Delaware T²/LTAP
Center joined forces
with them for a
technology showcase on March
27, 2013.

The new technique is the Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS). GRS is an engineered fill of closely spaced, alternating layers of compacted granular fill material and geosynthetic



reinforcement. IBS is a fast, cost -effective method of bridge support that blends the roadway into the superstructure using GRS technology.

DelDOT decided to try the technique for its replacement of Bridge I-366 (Chesapeake City Road over Guthrie Run) and on Day 2 of the construction, 45-50 representatives from FHWA, state DOTs, local governments, and consultants gathered to learn more about the technique and visit the construction site.

GRS-IBS has numerous potential advantages.
Compared to

conventional concrete abutments, as much as 60% cost savings have been seen. Road closures have been reduced from months and years to as little as a few weeks, meaning less inconvenience to the traveling public, less risk for

(Continued on page 8)

Page 2 INFO-CHANGE

ITE Students Taking It On The Road

The student chapter of the Institute of Transportation Engineers (ITE) recently closed out a very active semester.

Under the direction of



chapter president Tucker Smith, the semester began with a trip to the Smithsonian Institute for the "America on the Move" exhibit. The exhibit was a showcase of how transportation

shaped America – our lives, culture and communities. Next was a joint trip with the ASHE chapter on the Amtrak Rail Geometry Car. Finally, it was "Maritime Day" with a visit to the Port of Wilmington and a tour of the USS New Jersey.

The chapter, along with the University Transportation Center, co-hosted speaker Michael Dreznes of the International Road Federation, who gave an excellent presentation called "Forgiving Roads". The semester closed with the annual Mid Colonial District meeting of ITE and the Traffic Bowl. Two chapter members were asked to speak at the conference – Master's student Mindy Laybourne on the Delaware Signal Timing Enhancement Program (DSTEP) and Doctoral candidate Sara Patterson on her work regarding complete streets on their impact on vehicle delay and emissions.

(Continued on page 5)

Engineering Internships - Summer 2013



Delaware local governments, again this summer, have recognized the value of employing an engineering intern to assist with their transportation challenges. Gone are the days of viewing internships as simply cheap labor and make-work. Increasingly, it is recognized that engineering students bring intensity, innovation, and excitement for the work that sometimes translates to more creative solutions.

This summer, the Delaware T²/LTAP Center will assist with at least four internships. The City of Wilmington will hire at least one intern to update elements of its growing asset management system. Delaware City will hire an intern to begin a comprehensive mapping and inventory of transportation assets in support of their long term plans to enhance their pavement, sidewalks, and curbing throughout

the city. Cecil County (Maryland) Department of Public Works will hire one intern to inventory signs and measure retroreflectivity while another intern attempts to inventory and inspect small (<20' span) structures along its 600+ mile rural road network.

The T²/LTAP Center will play coordinative roles and provide some technical oversight for each of these posts.

ASHE@UD Closes Another Active Year





The American Society of Highway Engineers student chapter at University of Delaware has finished another busy year of construction site visits, invited speakers, and interaction with practitioners from the First State Section.

They began in late September with a barbeque at White Clay Creek Park that once again substituted for the First State Section dinner meeting that month. In October,

the students were hosted by the DelDOT bridge inspection team to look under the Route 9 bridge over the Leipsic River in the Under Bridge Inspection Vehicle (UBIV). In November, they visited Rinker Materials for a better understanding of the design and manufacturing of precast concrete pipe. And, of course, the Punkin' Chunkin' in Bridgeville.

In February, they toured DelDOT's Traffic Management Center. In March they were hosted on Amtrak's Track Geometry Car on its voyage to NYC and back and invited Don Steele, P.E. from the Pennsylvania Turnpike Commission to speak. Then, in April, the students visited the first GRS-IBS bridge construction in Delaware and were again hosted by the DelDOT team for an allday, in-depth look at nine bridges throughout New Castle County.

And they can't wait for the fall—stay tuned.

Effective Transportation Management for Special Events

By Michael Rivera, Special Events Manager, Delaware Department of Transportation

Planned special events are occurring on Delaware's roadways with ever increasing regularity. Last year alone, the Delaware Department of Transportation (DelDOT) processed nearly five hundred special event permit applications. Large scale events such as Punkin Chunkin, the Delaware State Fair, the Firefly music festival and NASCAR races, as well as smaller events such as motorcycle rallies, concerts, organized bicycle rides and races, running events such as 5Ks and marathons, festivals and block parties have varied impacts to our roadways throughout the year.

Special events pose a unique challenge to motorists and to transportation infrastructure itself. Unlike congestion which is generally time and location specific, special events can have far reaching impacts to peripheral roads and often catch motorists off guard. To accommodate some events, roadway and lane closures must be orchestrated safely. Some events draw very large crowds for which alternate or temporary traffic control is necessary. Effective travel disruption mitigation and increased event participant safety begins with the DelDOT Special Event Permit Application.

Three years ago, DelDOT promulgated the Special Events Policy to establish guidelines and safety parameters for planned special events taking place on Delaware's roadways. As part of this policy, DelDOT requires the organizer of a special event, which will either

directly or indirectly impact the transportation system, to submit a Special Event Permit Application. DelDOT has taken steps to streamline the application process and offers the option to submit the application online. More information regarding the Special Events Policy and the Special Event Permit Application can be accessed through the "Community Programs and Services" tab on DelDOT's website

(www.deldot.gov).

In addition to events sponsored by private event organizers and planners, schools, etc., events sponsored by, and located within, municipalities require the submission of a permit application. All cities, towns and municipalities should coordinate with DelDOT to ensure public safety and to minimize travel disruptions. Municipal or

(Continued on page 6)



Delaware Department of Transportation | Community Programs and Services

SHARE

Special Event Permi

Special Event Policy DE MUTCD

→ Traveler's Information

Public Relations

Michael Rivera

302.659.4080

800,652,5600 (DE only)

Special Events Manage

Gerald Nagyiski Chief Safety Officer 302.659.4072

About DelDOT

Secretary Message Press Releases Employment Public Workshops Related Links DMV DMV DART EZPass Contact Information Office Locations Agency Site Map

SERVICES Online Services

INFORMATION

Live Traffic Interactive Maps Biking in Delaware Community Programs and Services Doing Business FOIA Requests Legislation Projects Publications Archaeology Red Light Enforcement

Community Programs And Services

Special Events Impacting Delaware's Roadways

Planned special events include sporting events, concerts, festivals and conventions occurring at permanent multi-use venues. They also include less frequent public events such as parades, fireworks displays, bicycle races, sporting games, motorcycle rallies, seasonal festivals and block parties which may occur at temporary venues. These types of events can have direct and indirect impacts on the transportation system. Events that have direct impacts to the transportation system are those that require full roadway or lane closures to accommodate the needs of the event. Events having indirect impacts to the transportation system or those types of events that attract large crowds which could affect normal traffic flow on Delaware's roadways.

Permit Requirements

The Delaware Department of Transportation (DelDOT) requires the organizer of a special event that impacts the transportation system to get approval from the Department to hold such events and to review any temporary traffic control that is necessary for the event to occur. Event organizers are required to fill out DelDOT's Special Event Permit Application and submit the completed application to the Special Events Manager in the Traffic Safety Section. This form can be simply emailed by clicking the appropriate button at the top of the application. The Department's Special Events Manager will review the application and the location of the event and determine if additional traffic control measures of other requirements are needed to safely conduct the event and to minimize the impacts to the transportation system. If additional information is needed, the Special Events Manager will coordinate that information with the event organizer. Once all requirements are satisfied, an approved copy of the Special Event Permit Application will be provided to the event organizer. An approved copy of the Special Event Permit Application will be provided to the event organizer. An approved copy will be held by the Traffic Safety Section.

DeIDOT reserves the right to revoke this permit at any time if the special event creates major traffic problems or the safety of the event participants and/or the traveling public is compromised. If this permit is revoked by DeIDOT during the event, the event activities shall cease immediately.

Traffic Control Requirements

Any roadway or lane closures that are required as part of the events Traffic Control Plan shall be conducted in accordance with the DelDOT Manual on Uniform Traffic Control Devices, Part 6, Temporary Traffic Control. Traffic Control Plans shall be reviewed and approved by DelDOT prior to receiving an approved Special Event Permit Application. If traffic control is required for an event, the event organize should provide a completed application and traffic control plan no later than six (6) weeks prior to the start of the event. If the event organizer needs assistance with the development of a traffic control plan, the Department should be contacted no later than three (3) months prior to the start of the event.

Only qualified people specializing in temporary traffic control shall place traffic control devices on Only qualined people specializing in temporary traffic control is an aliquet traffic control devices on Delaware's roadways. The event organizer is responsible for all costs of temporary traffic control in accordance with the approved traffic control plan, including any required portable changeable message signs. If the event organizer requests DeIDOT assistance with traffic control, including labor and equipment, all costs will be borne by the event organizer. An estimate will be prepared and a concurrence letter will be provided prior to the beginning of the event. The concurrence letter provides a binding contract between the event organizer and DeIDOT for the costs associated with DeIDOT provided traffic extent. Plains for the first extent and the contract of the event of the post of the provided traffic. provided traffic control. Billing for traffic control costs will occur after the completion of the event. The event organizer is encouraged to seek estimates from private companies that specialize in temporary traffic control or to seek donations of traffic control equipment for the purposes of the event.

If portable changeable message signs (PCMS) are used for the event, either provided by DelDOT (at the cost of the event organizer) or by other means, the event organizer shall complete the Portable Changeable Message Sign Approval Form and submit the form to the Department for approval no later than 14 days prior to the start of the event.

Last Updated: Friday, 27-Jan-2012 10:39:55 Eastern Standard Tir

Page 4 INFO-CHANGE

Proof: Training Saves Budget

By Don Bruey, Public Works Director (retired), City of South Jordan, Utah, Member, APWA Small Cities/Rural Communities Committee.

[This article was originally printed in in the APWA Reporter, March 2013 issue; reprinted with permission.]

As public works managers we are always seeking ways to save money and improve our levels of service. This is the story of how one city, in the face of budget restrictions, funded training that successfully achieved both goals. Yes, the City of South Jordan, Utah, found a way to keep training going with a reduced overall budget, saved money and increased its service levels. How did they do it?

First, it began with the introduction of an awardwinning Safety Program. Why safety first? There were three good reasons. The program saved money by reducing costly equipment damage and loss. This resulted in the savings of over ten thousand dollars alone in the first year. Next, it reduced the number of lost workdays due to personal injuries. In fact, in the first year of the program they saved the equivalent in lost man-hours of two full-time positions.

Another major benefit derived from this program was an increase in employee morale (see Maslow's Hierarchy of Needs). The program was coached in a way that said, "This organization cares about you and your well-being." That created an instant understanding and bonding between employees and leadership. By including employees in the process as part of a Safety

Counsel, it bought buy-in and cooperation.

This program required internal training and time with minimal costs but was well worth the efforts. As an unexpected bonus, the City received the lowest increase in annual insurance rates in the entire State of Utah, saving tens of thousands of dollars! The Safety Program won the APWA Safety Program Award two years running.

Public Works then developed a Career Path Program that required the attainment of advanced certifications, training, and skills for each step from basic maintenance worker through the leadership staff. The program was presented to the City Manager with the projection that the training would produce additional savings and increased levels of service. The program was funded from part of the savings generated from the Safety Program and insurance cost savings. The program was approved and implemented in the next budget year. An Annual Training Plan that included managerial and leadership programs as well as technical training was created and implemented with near immediate positive results.

First, the employee responsible for the Streets Sign Program attended a class on a computerized sign-making machine. He did his homework and brought a plan forward to purchase the computer program and bring sign-making capabilities in-house. By implementing his plan, South Jordan saved nearly 25 percent of the annual sign budget including the startup costs that first year and is now replacing signs in a matter of hours rather than weeks.

Next, they sent a Streets Lead-Worker to the annual APWA Snow Conference. He came back with multiple ideas. First, the division calibrated their salt spreaders. That reduced the cost of salting during snow events from \$3.48 cents per lane mile to \$2.53 cents. He also learned about mixing red and white salts to work more effectively based on weather conditions. That also improved service level by improving efficiency and effectiveness of road salting.

Second, the employee learned about the advantages of pre-wetting roads with salt brine. He and his coworkers presented a proposal to build and utilize a brine system. When the numbers were crunched, they were given the go-ahead to design and build the system and dispensers. This program further reduced the cost of salting from \$2.53 cents per lane mile to \$1.15 cents. The mixing, storage and pumping plant was constructed inhouse as were the dispensing systems for mounting on multiuse hook trucks that replaced limited-use 10-wheelers and bobtails (a plan developed by the Fleet Division to reduce fleet costs and improve usability of fleet assets). For the cost of less than \$40,000, the City will save more than that annu-

Another idea came from the concrete crew. Rather than tearing out and replacing damaged sidewalks, they proposed to purchase a pumper that raised sunken sidewalks. The cost was \$15,000 to start up and allowed a two-man crew to repair more sidewalk in a week than a full crew of six could replace in a month for a fraction of the cost. This idea

(Continued on page 5)



Training is one of the core focus areas of the Delaware T²/LTAP Center. If you have an example of how training has saved your agency money or reduced injuries, tell us. If you have specific transportation training needs, let us know and we'll attempt to arrange



Proof: Training Saves Budget

(Continued from page 4) came forward after attending a local training session on concrete care and replacement.

Their latest program came in the form of building a dispenser for GSB-88. In the never-ending struggle to keep roads in good repair, the City has a treatment program designed to extend the service life of its roads. Part of the program calls for treating roads with regenerating agents. A bid was let for GSB-88 that came in at 11 cents per square foot.

When the Streets Division manager and his staff came up with the plan to build their own dispenser and put the numbers to it they determined that they could do the treatment for 4.3 cents per square foot and build the dispenser for \$6,000 to be used on the same hook truck as the brine dispenser. They saved more than the cost of the system on their first job.

I give great credit to the right-headed thinking of the South Jordan leadership to continue to invest in training that

has proven to pay continuing dividends in cost-effective and service level improvements in the face of tough budget decisions. I also give great credit and thanks to the young men and women that have taken that training and put it to great use. The benefits will be realized by the residents of South Jordan for years to come. It pays to train!

Don Bruey can be reached at DbrueyA4@gmail.com





ITE Students Taking It On The Road

(Continued from page 2)

The Traffic Bowl team of Elisa Kropat, Mindy Laybourne and Anna Duryea, competed for the fourth consecutive year against teams from Villanova, Penn State and Morgan State in a single elimination, leopardy style tournament. The UD team defeated Morgan State in the first round but lost to Penn State in the finals. They were outstanding representatives of the program and were strongly supported by the large number of UD alumni in the audience.





Recent Student Field Trips

UD Engineering Students toured the USS New Jersey in Camden, New Jersey, as well as the Smithsonian Museum in Washington, D.C.





Page 6 **INFO-CHANGE**

Effective Transportation Management for Special Events

(Continued from page 3) community events like parades and fireworks displays often cause significant impacts to the traveling public. DelDOT will

on Uniform Traffic Control Devices (DE-MUTCD). Part 6 deals exclusively with temporary traffic control and the standards set forth in Part 6 of the DE-MUTCD apply to all roads open for public use. Refware's temporary traffic control standards can be found on DelDOT's website in the "Manuals" section under the

The State of Delaware is unique among all states in that 89% of Delaware's roads are maintained by the State, far more than in other states. Submitting a DelDOT Special Event Permit Application is the best way to ensure a safe and trouble-free planned special event. Knowing about an event beforehand allows DelDOT to provide travelers with advanced notice about delays and expectations when appropriate.

> Informed and prepared motorists pose less of a safety risk to planned events on the roadways. Coordinated effort and proactive traffic management for special events ensures the public safety of residents and visitors alike on Delaware's roadways.

Delaware Department of Transportation EMAIL COMPLETED FORM erence material regarding Dela-Special Event Permit Application Event Start Date Event End Date "Publications" tab. End Time Contact Person (Individual in Charge on Day of Event) Event Contact Email (If different than applicant) Address Will this event require the partial for full closure of any roadways or intersections? State Delaware ▼ ZIp Code Event Location Will this event occur on or adjacent to Yes Notate maintained roadways? Type of Event Please note, traffic control for all roadway closures shall conform to Part 6 of the Delaware Manual on Uniform Traffic Control Devices (DEMUTCD).
The DEMUTCD can be found at www.mutcd.deldot.gov Traffic control plans shall be submitted to DelDOT for review and approval no less than 6 weeks prior to the Proposed Routing (for bike races, marathons, beginning of the event Please attach map of route to application Organization Name (if applicable) Applicant's Address Permit Conditions and Notes Will police officers or fire police be as ZIp Code Organization's Address (If different from applica

police agency. Provide name, phone number and number of officers that will be provided freach agency. DelDOT will veri

If yes, please describe

Will provisions for medical treatment h

Advance coordination and planning between DelDOT and sponsors/ promoters of special events improves safety and avoids unwelcome last minute surprises; projects large and small should complete this simple form to start the process.

State Delaware

Cell Num

coordinate efforts and partner with the municipality to approve the event.

ZIp Code

Email

One benefit of the DelDOT Special Event Permit Application process is access to information about impending road projects that may adversely affect a planned special event. DelDOT is also available to assist with developing a traffic control plan and, at the organizer's expense, can provide assets and resources to help bring temporary traffic control into compliance with Part 6 of the Delaware Manual

- 1. All traffic control shall conform to the standards specified in the Delaware Manual on Uniform Traffic Contro
- The Delaware Department of Transportation reserves the right to revoke this permit at any time if the
 special event creates major traffic problems or the safety of the event participants and/or the traveling
 public is compromised. If this permit is revoked by the Department during the event, the event activities
 shall cease immediately.
- 3. Traffic control devices required to provide proper traffic control for the event can be requested from DelDOT. The costs associated with traffic control provided by DelDOT, including but not limited to, traffic control devices and other equipment and labor, shall be borne by the event organizer. The event organizer may
- also rent traffic control devices from a company specializing in temporary traffic control 4. The Contact Person or an individual in charge on the day(s) of the event shall be reachable at all times during
- Except in unusual cases, funerals do not require a Special Event Permit and are subject to the provisions of Title 21, Chapter 71 of the Delaware Code.

Legal ruumonsy: Titled 17, Chapter 1, Subchapter III, Section 141 gives the Department of Transportation jurisdiction and control of all state highways outside of the limits of incorporated cities and towns for the purpose of regularing traffic and for the use and operation of all vehicles thereover, and gives the Department the authority to adopt any and all rules and regulations respecting the use of such highways and the operation of all vehicles upon the

For state maintained roadways within the corporate limits of municipalities, the local government is responsible for approving the special event after consultation with the Department of Transportation. All temporaty traffic control for special events inside the limits of municipalities shall comply with the requirements of the Delaware Manual on Uniform Traffic Control Devices (DE MUTCD). For those events occurring on state maintained roadways within the corporate limits of municipalities, the temporary traffic control shall be reviewed and approved by DelDOT.

Traffic Control Notes (to be filled out by DelDOT)		
Approved	Date	
Special Events Manager	butc	
		,

Recent Student Field Trips



UD Engineering
Students rode with
Amtrak's engineers
on the Track
Geometry Car to
New York and
back, with an
inside look at the
equipment that
diagnoses the
health of the rails.









UD Engineering Students were hosted by DelDOT for a tour of nine Delaware bridges.
Students saw the inside of steel "tub" beams, the control room and motor rooms of a lift bridge, and the substructure of several others, including two covered bridges.







The T²/LTAP Center organizes and supports many student field trips each semester to operational centers, construction sites, labs, and maintenance facilities. While these are sometimes associated with specific academic classes, most trips are centered around student groups from professional associations like ITE, ASHE, ASCE, etc. These excursions are very instructive to students as they decide how to focus in engineering and they are an important part of our workforce development charge.

Page 8 INFO-CHANGE

The Heat's Coming - Be Prepared





The summer heat is coming - don't be a casualty.

Drink cool water frequently and dress for ventilation (don't drag that heat around with you).

Don't work alone in high heat - the buddy system can help you spot someone before the worst heat illnesses hit.

But if heat stroke strikes, call 911 for direction and start rapidly cooling the patient. Remember last July?
That was some serious heat, even for those of us that love it. Well, it doesn't take a heat like that to get you in trouble, so prepare yourself and your crews for this summer's heat now.

There are a host of heat illnesses you can develop, including relatively minor conditions like heat cramps, heat syncope (fainting), and heat exhaustion (heavy sweating, rapid breathing, fast, weak pulse). Generally speaking, these are your body's way of telling you to take some remedial action.

And that's the key with summer heat and humidity.

Be smart from the outset

with lots of water and loosefitting, light colored clothes. Frequently drinking smaller amounts of cool water is better than downing a whole quart when you "can't believe how thirsty you are." Get out ahead of it. And, dress in clothes that don't hold heat in - light colors are key and styles that promote air circulation around key parts of the body.

A much more serious condition is heat stroke, where the body temperature exceeds 104 °F and results usually from heavy exercise or work in hot environments with inadequate fluid intake. Symptoms include dizziness, confusion, and a rapid, strong

pulse.

When these symptoms develop, quick action is important. Call 911 while you get the patient indoors or in the shade. Rapid cooling with cold water, ice, or wet towels to the torso, head, neck, and groin is important, but also keep ventilation going by fanning the patient to draw away the heat. Ironically, draping them in wet towels can actually insulate and trap the heat.

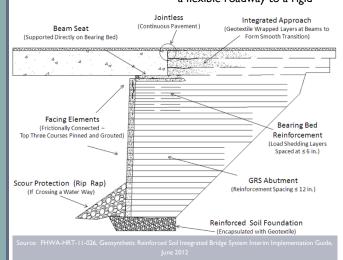
But again, prevention is the key. Don't go crazy on the hottest days. Drag the work to the shade if you can. Make sure there's plenty of water on the job and that everyone is making use of it.

Be safe this summer.

Delaware Tries Out New Bridge Construction Technique



(Continued from page 1)
emergency response, and fewer
environmental impacts. The
technique affords greater
flexibility for the construction
schedule and site conditions.
Off the shelf materials, light
equipment, and no deep
foundations translates to ease
of construction. Because
there's no abrupt change from
a flexible roadway to a rigid





structure, the jarring bump can go away.

In time, DelDOT hopes to bring those advantages to local roads here. But like any tool, it has its role to play, so don't look for these at every stream.

For more information, see

FHWA's Every Day Counts site: http://www.fhwa.dot.gov/everydaycounts/technology/grs ibs/index.cfm.



Upcoming Events

The T²/LTAP Center is currently planning the following upcoming events. Others will follow. We will announce exact dates, locations, and other information as we finalize details. Monitor our website for up to the minute details and registration.

• Highway Capacity Manual Training, June 4, 5 & 6, University of Delaware Newark Campus

T²/LTAP Center Request Form

Your feedback and interests help us increase the $T^2/LTAP$ Center's effectiveness, so please complete and return this form or email us—all compliments, criticisms, and ideas are welcome!

 Please add my name to the $T^2/LTAP$ INFO-CHANGE subscription list—subscriptions are free I have an idea for a future $T^2/LTAP$ newsletter article Topic:
 I volunteer to author this article—please contact me Please consider these topics for future training sessions Topic:
Topic:
 I would like to learn more about the T²/LTAP Center and how its free services can assist my municipality or agency—please contact me Name:
Agency:
Address:
email:



Care to contribute an article? Just let us know by filling out this form or emailing us.

Please return this form to:

Delaware T²/LTAP Center, Delaware Center for Transportation 360 DuPont Hall, University of Delaware, Newark, DE 19716

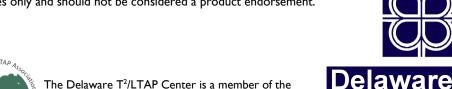
Helping to Bridge your Transportation Gaps

DELAWARE T²/LTAP CENTER

Delaware Center for Transportation 360 DuPont Hall University of Delaware Newark, Delaware 19716

Phone: 302-831-6241 Fax: 302-831-0674 E-mail: matheu@udel.edu The Local Technical Assistance Program (LTAP) is a nationwide effort financed jointly by the Federal Highway Administration and individual state departments of transportation. Its purpose is to conduct training and technology transfer in the form of workshops, seminars, and conferences. The Delaware T²/LTAP Center Info-change is published semi-annually. T²/LTAP Center articles also appear semi-annually in the TransSearch - the newsletter of the Delaware Center for Transportation. Any opinions, findings conclusions or recommendations presented in this newsletter are those of the authors and do not necessarily reflect views of the University of Delaware Department of Transportation, or the Federal Highway

Delaware, Delaware Department of Transportation, or the Federal Highway Administration. Any product mentioned in the newsletter is for information purposes only and should not be considered a product endorsement.





The Delaware T²/LTAP Center is a member of the National Local Technical Assistance Program (LTAP)



http://www.ce.udel.edu/ dct/T2.html

T²/LTAP Center Organization Contacts

T²/LTAP Center Staff

Dr. Ardeshir Faghri, Director, Delaware

Center for Transportation

Dr. Earl "Rusty" Lee, T² Program Coordinator

Matheu J. Carter, P.E., Municipal Engineering Circuit Rider

Ellen M. Pletz, Business Administrator

Sandi Wolfe, Event Coordinator

Contact us by phone, fax, email, or snail mail

Phone: (302) 831-6241 Fax: (302) 831-0674

355 DuPont Hall, University of Delaware

Newark, Delaware 19716

matheu@udel.edu

DelDOT Liaison

Ralph Reeb, Division of Planning

Federal Highway Administration Liaison

Patrick A. Kennedy, P.E., Safety/Mobility Program

Leader, DelMar Division (Dover)

AN EOUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

The University of Delaware is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, creed, color, gender, genetic information, age, religion, national origin, veteran or disability status, or sexual orientation in its educational programs, activities, admissions or employment practices as required by Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and other applicable statutes. Inquiries concerning Section 504 compliance and information regarding campus accessibility should be

referred to the Office of Disability Support Services (DSS), (302) 831-4643, located at 119 Alison Hall. Inquiries concerning Title VII and Title IX should be referred to the Office of the Assistant Vice President for Affirmative Action, (302) 831-8735, located at 124 Hullihen Hall.



