How Can We Help You?
from Nicholas R. Jones, P.E., Director

The FHWA Local Technical Assistance Program (LTAP) was first organized in Utah in 1988 as the Utah Technology Transfer (T²) Center under the direction of Dr. William Grenney, then head of the Civil Engineering Department at USU. The Center was established by FHWA in cooperation with the Utah Department of Transportation. The program has since expanded to all 50 states. The companion Tribal Technical Assistance Program (TTAP) established 7 TTAP Centers nation-wide to support Native American tribal entities in their technical and transportation needs.

The first Utah Center director was Steven Jenkins (currently the director of the Montana LTAP Center). When Steve left to take the reigns in Montana, Doyt Bolling stepped in as director. He served from 1994 until his retirement in 2009, greatly expanding the services provided by the Center.

Nick Jones, formerly with Provo City, has directed the program since 2009, with Dr. Kevin Heaslip as the USU principal investigator. Nick is assisted by three full-time staff members, as well as a variety of part-time staff. Full-time staff include: Pam Pyle, office and business manager; Dee Hadfield, training manager; and Ben Fore, IT manager.

Our primary mission is to train local government personnel throughout Utah in the most effective ways to plan, design, construct, maintain, and operate their respective transportation systems. We are funded by FHWA, UDOT, and Utah State University. High quality, effective and meaningful service is our goal.

In support of our mission, we provide a free lending library that includes 4386 publications and online resources (videos, etc.) for use by local agency personnel. We also offer a quarterly on-line newsletter with updates on happenings in the field, and periodic electronic notification on training opportunities.

Our primary method of service, however is through the conduct of workshops around the State. We conduct workshops on over 30 different topics related to your transportation systems throughout the year.

This training is organized through our Road Scholar and Road Master Certification program. Each certification requires completion of 8 classes (5 required and three elective).
Several agencies are using this program to assist in promotions and step increases. Many of your agency personnel were hired without much formal training in maintaining and operating your roads. Learning through trial and error is often costly. And with tight budgets and finite limits to resources, our goal is to help increase training in the most cost effective methods of servicing our roadways and transportation systems including the latest strategies in construction and maintenance.

Workshop topics include:

- OSHA 10 hour Safety
- Roadway Drainage
- Confined Space Dangers
- Communication Skills for Supervisors
- Chip Seal Best Practices
- Basics of a Good Road
- Traffic Sign Retroreflectivity
- Asphalt Maintenance 1 & 2
- Roadway Materials
- MUTCD requirements
- Tree Trimming
- Speed Limits & School Zones
- Survey & Grade Checking
- Fork Lift Operation
- ADA Curb Ramp Construction
- Street Sweeper & Vactor Operation
- Heavy Equipment Operator Training
- Vegetation & Roadside Management
- Pedestrian & Bicycle Safety
- Winter Maintenance
- Commercial Driver’s License (CDL) Training
- Aerial Man Lift Operation
- Flagger Certification
- Traffic Control Technician
- Traffic Control Supervisor
- Road Safety Audits
- Trench Excavation Best Practices
- Welding
- Street Lighting, and
- Construction Inspection.

We also add and/or tailor workshops based on your requests.

To make workshop participation easier for our customers, we try to focus our training in five regional centers around the state. These centers include the Wasatch Front area, Vernal, Price, Brigham City, and St. George. This not only makes workshops accessible to agencies throughout the State, but it helps reduce travel costs for all entities involved. We also teach workshops at
Road School and the Annual APWA Conference, and assist at the Asphalt Conference and the Concrete Paving Conference.

With only 3.5 full-time staff, we are on the go constantly in our efforts to providing training. To help provide timely training when demand is high, we also have a limited number of on-call instructors who are available to share their training and expertise.

Another way we serve the local agencies of Utah is through Pavement Management Studies. These studies help local agencies to cost effectively manage their municipal and county road systems. We have anywhere from 3-7 undergraduate and graduate engineers that work to assist in evaluating local agency pavements and provide cost effective programs for individual agencies along with free management software to help manage road system. To-date we have assisted 60 cities, towns, and counties in Utah with their pavement management. With limited budgets, it is vital that each agency know how to keep their roadways in good condition and keep costs as low as possible. We also provide traffic sign inventory studies and retroreflectivity measurements for agencies.

Let us know what training resources that you need and how we can be of assistance to you. We are pleased to be able to lend a hand in the important work tasked to local agencies in keeping our communities and economies running smoothly and within budget.

**LTAP Survey Shows Growing Trend in Local Government Use of Road Scholar Program in Employee Advancement**

In our recent LTAP survey, more than half of the supervisors that responded indicated that they use Road Scholar achievement when considering employee advancement. That's good news for all of our Road Scholars!

We especially want to congratulate the newest Road Scholars who achieved this status in March 2014. Congratulations to Allen Bowles (Sandy City), Jason Fike (Sandy City), Craig Smith (Sandy City), Szeth Simmons (Naples City), and John Procarione (Price City).

Front-line employees aren't the only ones taking advantage of the Road Scholar program. Their supervisors are also tapping into this resource and finding success. Here are a few comments from supervisors who took part in the survey:

"I have just earned it because I need to be an example to my guys to never stop educating yourself."

"Great value for the cost. They reach the level of the workers rather than talking over our heads. Times change, information changes, techniques are always changing and improving. I feel it is an excellent way to keep up and to improve my knowledge and capabilities."

In the survey, a number of supervisors indicated that while they thought the program was helpful, they weren't taking part because they would be retiring in the near future. We've seen this day coming, and it's finally here. A large number of experienced supervisors and even front-line employees are reaching the age of retirement and leaving the full-time workforce. Who will take their place? Cities, towns and counties will be looking to hire employees who have experience and training and that is where the Road Scholar program can help.

We received additional feedback through the survey. One item of note is a request for more on-line and short-term (1-2 hour) training sessions to allow local agencies to have more of their employees take part without needing to leave the day-to-day press of the work at hand.

We appreciate the feedback and those who took the time to respond to our survey. This feedback is vital in helping us tailor our services to the needs of local agencies around the State. With the feedback in hand, the next step for us is to work on addressing the requests and suggestions made. We will keep you posted as we put those requests into action.

*On the Move*  
Page 3  
April 2014
Backplates are added to a traffic signal indication in order to improve the visibility of the illuminated face of the signal by introducing a controlled-contrast background. The improved visibility of a signal head with a backplate is then made more conspicuous by framing the backplate with a retroreflective border. Taken together, a signal head equipped with a backplate with retroreflective border is made more visible and conspicuous in both daytime and nighttime conditions, which is intended to reduce unintentional red-light running crashes.

### Background

A project initiated in 1998 by the Insurance Corporation of British Columbia and the Canadian National Committee on Uniform Traffic Control investigated the effectiveness of applying retroreflective tape around the borders of traffic signal backplates. A small number of signalized intersections were treated and followed up with a simple before/after study, which concluded that the enhancement was effective at reducing crashes. A larger number of sites were subsequently treated and a more robust statistical study was performed.

Since their initial introduction in Canada, several U.S. State highway departments and local road agencies have adopted practices and policies concerning this countermeasure. Additionally, the FHWA has encouraged this treatment as a human factors enhancement of traffic signal visibility and conspicuity for older and colorblind drivers. Adding retroreflective borders is also advantageous during periods of power outages when the signals would otherwise be dark. The retroreflective sheeting continues to provide a visible cue for travelers to take note of the dark signal and adjust their actions accordingly. Per the study included in the Crash Modification Factor Clearinghouse, the use of backplates with retroreflective borders may result in a 15 percent reduction in all crashes at urban, signalized intersections.

### Guidance

Backplates with retroreflective borders should be considered as part of efforts to systemically improve safety performance at signalized intersections. Adding a retroreflective border to an existing signal backplate can be a very low-cost safety treatment, as the materials are simple strips of retroreflective sheeting. For existing traffic signals that lack even standard backplates, the addition of backplates with a retroreflective border can often be accommodated on existing mast arm and span wire assemblies, but the structural capacity of the supports must be properly evaluated. The most effective means of implementing this proven safety countermeasure is to adopt it as a standard treatment for signalized intersections across a jurisdiction so that it is consistently included with all new construction and modernization projects, as well as being a worthy retrofit project for existing signals at intersections with red-light running crash histories. It is important to note that the Manual on Uniform Traffic Control Devices (MUTCD) specifically allows this treatment as an option that is discussed in Part 4. In terms of color and size, implementation of backplates and retroreflective borders must be consistent with the latest edition of the MUTCD.

For further information, including links to other available resources, please check out the full document [here](http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_007.htm).
Chris Potter is UDOT’s newest Local Government Programs Engineer replacing Daniel Page. Chris graduated from the University of Utah in 1999 with a Bachelor’s Degree in Civil Engineering. His first job after graduating was with H.W. Lochner Engineering where he spent 8 years working primarily on the roadway design and construction management of UDOT and Local Government Projects.

Chris joined the UDOT Structures Division in 2006 where he managed the Bridge Operations & Planning Section for nearly 5 years. He enjoyed working closely with Bridge Inspectors as they inspected state and local government bridges and coordinated efforts to maintain, rehabilitate and replace bridges throughout our state.

Chris has spent the last 3 years in UDOT’s Central Construction Division providing assistance to construction management groups in Regions 1 & 2. A significant amount of his time involved implementation and training on the new Buy America Specification. He had the opportunity to travel with FHWA providing training to Local Governments on Buy America so you may recognize him.

Chris was born and raised in Salt Lake City, Utah. He and his wife are the parents of two daughters.

Chris loves the outdoors and especially enjoys hunting, fishing, 4-wheeling, backpacking, boating, dirtbiking, etc. He has probably enjoyed the great outdoors in every county of Utah in some form or another and looks forward to seeing new areas of our beautiful state through working in this position.

Chris is excited to work with our Local Governments throughout the state and is looking forward to meeting each of you during the Spring annual visits.

If you would like to contact Chris regarding a local government programs issue, he can be reached by phone at (801) 633-6255 or by e-mail at cpotter@utah.gov.

UDOT Local Government Programs Corner
from Chris Potter, P.E., UDOT Local Government Programs Engineer

UDOT Annual Local Government Visits Continue

UDOT has already begun meeting with all Utah counties and cities and will continue through the end of May (schedule link here). The visits are extremely important to UDOT as they serve as a forum to discuss upcoming projects, funding, local government concerns and issues, and provide training. As in previous years, we invite our partners from the MPO’s, RPO’s, and LTAP to participate and share the latest in formation on upcoming projects in your area, and available training.

Joint Highway Committee Applications Update

A total of 15 applications were submitted this year for the programs overseen by the Joint Highway Committee. The Off-System Bridge Program received one application, the Small Urban Program received three applications, the new Transportation Alternatives Program received 6 applications, and the Non Urban Program received 5 applications. Thank you to all those who took the time and effort to prepare and submit applications to the Joint Highway Committee.
This EDC Exchange will focus on real world examples of where Intelligent Compaction (IC) has been used by contractors. Local public agencies can benefit from this technology by adapting IC roller retrofit kits to existing vibratory rollers. It gives the local public agency the opportunity to upgrade their existing fleets and take advantage of this technology. The implementation of this technology and the availability of retrofits kits make using IC more affordable to everyone.

Compaction is one of the most important processes in roadway construction. It is needed to achieve consolidation and uniformity of the materials, which in turn better ensures a stable base platform and pavement surface. Construction materials possess optimum densities that ensure adequate support, stability, and strength. Achieving uniform compaction consistently is extremely important. Current processes using conventional compaction machines may result in inadequate and/or non-uniform material compaction, which can be one of the major factors that result in premature failure in pavements. IC helps to overcome this.

IC refers to the compaction of road materials, such as soils, aggregate bases, or asphalt pavement materials using modern vibratory rollers equipped with an integrated measurement systems (high precision positioning systems, accelerometers, and onboard computer reporting systems) to provide feedback to the roller operator. By integrating measurement, documentation, and control systems, the use of IC rollers allow for real-time feedback to the contractor of the compaction process. IC rollers maintain a continuous record with color-coded plots that include the number of passes, stiffness values, temperature, frequencies, amplitude, and roller speed as well as the location of the roller drum.

Please join the Federal Highway Administration, the Utah Local Technical Assistance Program Center and the Utah Department of Transportation for a presentation on the Intelligent Compaction: Understanding the Technology via a live webinar on

April 3, 2014 from 12:00 pm to 2:00 pm Mountain Daylight Time

Registration is now open at www.utahltap.org

Brown Bag Lunch or Lunch will be available for $9.00 please add lunch order and pay at time of on-line registration

The following are locations for your participation:

UDOT Calvin Rampton Complex, East Conference Room
4501 South 2700 West
Salt Lake City, UT 84104

Arrive Early! Check in at the UDOT Front Entrance
### Spring/Summer LTAP Center Training

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<th>Cost</th>
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<td>28-29 Apr</td>
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<td>Spring</td>
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<td>Designing for Pedestrian and Bicycle Safety - 2 Day</td>
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1  Road Scholar Level - 1, 2 or E (Elective)
TBD  To Be Determined
*  prerequisite for Techniques of Heavy Equipment Operation (Hands-on) workshop

Full course descriptions and on-line registration can be found at our [website](http://example.com) or by calling: 1-800-822-8878.

Please check back frequently for additional training dates and opportunities that are added as they become available.

You can also request a specific workshop in your area by calling 1-800-822-8878 or e-mail us at utahltap@usu.edu.

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**Utah Career Days is HERE!**

**April 28-29, 2014**

at the Davis Applied Technology College in Kaysville

For more information, check out the [website](http://example.com).
The mission of APWA is to provide a method for education, leadership, professional progress, and industry enrichment. Registrations, RSVPs and resources can be found at the APWA website.

- **Chapter meetings** are generally held on the 4th Thursday of each month at The Gathering Place in West Jordan at Gardner Village (1100 West 7800 South) or Ruby River in Provo.
- The **Southern Utah Branch** meets the 1st Tuesday of each month at the Holiday Inn in St. George.
- The **Central Utah Branch** generally meets the 1st Wednesday of each month at locations to be determined.
- The **Utah Stormwater Advisory Committee (USWAC)** meetings are held the 2nd Wednesday of each month.

For information on ITE activities, please contact Ryan Kump by e-mail at [rkump@sandy.utah.gov]. ITE, Utah Chapter monthly luncheons are generally held on the third Tuesday of each month at 12 noon at the Chinese Gourmet Restaurant in Murray (4500 South State Street).

**54th Annual Intermountain ITE Conference & Vendor Show Snow King Resort, Jackson, WY**
- **Conference**—May 15-17, 2014
- **Vendor Show**—Friday, May 16, 2014 (3:30-6:30 pm)

Individual conference registration is now available on-line here. Vendor booth registration closes March 28, so ACT NOW! Fees are $450/booth. Display spaces will be limited and reserved on a first come/first serve basis. Early registration is recommended. Only 30 spaces are available! In order to be fair to those that can only pay by check, you may register immediately and mail the check within 10 days of mailing, faxing or registering online. Credit Card payments are also accepted. Payment must be received within 10 days to ensure your registration; failure to send in payment will result in forfeiture of your reservation. Confirmation of registration will be mailed to each vendor.

For information on UAPA activities, or to register for a UAPA sponsored event, please call them at (801) 566-5620 or go to their website. Don't forget to check into their on-line webinar offerings through their Asphalt Academy!

For more information on UAC activities, or to register for a UAC sponsored event, please call them directly at (801) 265-1331 or go to their website.

**Utah Association of Counties**

**UAC Management Conference**
**April 16-18, 2014 (SLC)**
Registration and information is now available on-line here.

If you desire more information on ACPA, Utah Chapter activities, or to register for an ACPA-sponsored event, please call (435) 647-5935 or check out their website.

If you desire more information on UAPA activities, or to register
If you desire more information on League activities, or to register for a League sponsored event, please call the Utah League of Cities & Towns directly at (801) 328-1601 or 1-800-852-8528 or go to their website.

Midyear Conference
April 9-11, 2014 (St. George)
Registration and information is now available on-line here.

Road School
April 22-25, 2014 (St. George)
Registration and information is now available on-line here.

Utah Local Governments Trust

For information on training and other Trust activities, please call 1-800-748-4440, or check the Trust website. Check out their 2014 training and events calendar here for more details on these offerings. Upcoming webinars, workshops and other training include:

• Safety Moment webinars,
• Loss Prevention
• Ergonomics, and
• Defensive Driving.

Registration is available on-line here.

Utah Risk Management Mutual Association

For more information or to register for URMMA training activities, please call Joanne Glantz at (801) 225-6692. You can also find more information at their website.
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About the Utah LTAP Center
The Utah LTAP Center is an integral part of a nationwide Local Technical Assistance Program (LTAP) financed by the Federal Highway Administration, state departments of transportation and local transportation agencies. The Center bridges the gap between research and practice by translating the latest state-of-the-art technology in transportation into implementable products and information for the special use of local transportation agencies and personnel. Located at Utah State University, the Utah LTAP Center is also part of the Utah Transportation Center (UTC), a Tier II University Transportation Center of the U.S. Department of Transportation.

About On the Move
On the Move is issued quarterly by the Utah LTAP Center at Utah State University. Subscriptions are free and are available by contacting the Utah LTAP Center. To obtain permission to reprint any articles from On the Move, please call the Center.

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Assistant Program Coordinator .................................................. to be announced
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Facebook ........................................................................ www.facebook.com/UtahLTAP

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Director .......................................................... Paul Barr, Ph.D.
Associate Director & LTAP PI ............................................. Kevin Heaslip, Ph.D., P.E.

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