Safety Edges: An Easy, Low Cost Way to Reduce Run-off-road Accidents & Fatalities
by Nicholas R. Jones, Director, Utah LTAP Center
with excerpts from FHWA Safety Edge Brochure (FHWA-SA-09-023)

The Federal Highway Administration recently provided valuable information that will help federal, state and local agencies improve roadway safety using "safety edges"—shaping the asphalt to an angled edge rather than a vertical drop. Using safety edges on roads with gravel shoulders has the potential to reduce run-off-road accidents by as much as 18 percent. This finding is significant because these types of accidents are much more likely to be fatal.

The safety edge solution has virtually no cost if used during the construction or overlay construction of asphalt pavements. It simply involves the contractor installing a safety wedge shoe (see photo below) on the lay down machine to provide the 30 to 35 degree "safety edge." This helps drivers whose tire has crossed the edge regain control without throwing the vehicle into over correction that is dangerous and often fatal.

The following information comes from the Federal Highway Administration regarding the importance of safety edges and how they are constructed.

Pavement Edges Can Pose Serious Safety Risks

Roadway departures account for 53 percent of fatal crashes. While national data documenting the role of pavement edge configuration in the sequence of events leading to crashes are not available, some State-level studies point to the life-saving potential of safety edges. For example, researchers studying crashes in Iowa during 2002-2004 reported that pavement edges may have been a contributing factor in as many as 18 percent of rural run-off-road crashes on paved roadways with unpaved shoulders. This type of crash was four times more (continued on page 2)
likely to include a fatality than rural crashes overall on similar roads. (See Hallmark et al.: Safety Impacts of Pavement Edge Drop-Offs, AAA Foundation for Highway Safety, Washington, DC, September 2006.)

**How Pavement Edges Affect Crash Severity**

When a tire drops off a paved surface, sometimes just inches from the travel lane, a driver can have difficulty re-entering the roadway if the pavement edge is nearly vertical—especially if the height difference is significantly more than 2 inches. When a driver drifts off the pavement and tries to steer back on, the nearly vertical edge can create a “tire scrubbing” condition that may result in over-steering.

If the driver over-steers to return to the paved surface without reducing speed, they are likely to lose control of the vehicle. The vehicle may veer into the adjacent lane, where it may collide with, or sideswipe oncoming cars; overturn; or run off the opposite side of the roadway and crash.

A simple and cost-effective way to promote pavement edge safety is to adopt a standard specification for all resurfacing projects that requires a 30°-35° angle “safety edge.” After paving, the adjacent material is graded flush with the top of the pavement.

**Solutions to the Pavement Edge Drop-off Risk**

- Require a 30°-35° angle asphalt wedge “safety edge” at the graded material interface in asphalt resurfacing projects.
- Routinely resurface shoulders when roadways are resurfaced, and add the safety edge.
- Maintain edge drop-off depths at 2 inches or less on high-speed highways.

The asphalt wedge provides a safer roadway edge, and a stronger interface between the pavement and the graded material. The additional cost of the asphalt wedge is minimal when included as part of resurfacing projects. Benefits include the avoided economic and social impacts of fatalities, injuries, and property damage.

The placement of the asphalt wedge during resurfacing operations mitigates the risk posed by edge drop-offs as soon as the paving machine lays down the asphalt mat, allowing the highway agency reasonable time to restore the shoulder or other adjacent graded material.

For more information about roadway departure issues and effective countermeasures to prevent roadway departure crashes, go to the FHWA Office of Safety’s Web site at http://safety.fhwa.dot.gov and click on “Roadway Departure.” FHWA contacts for technical assistance with the safety edge are listed below:

Frank Julian  
FHWA Resource Center  
Safety & Design Team  
Frank.Julian@dot.gov

Chris Wagner  
FHWA Resource Center  
Pavement and Materials Team  
Christopher.Wagner@dot.gov

Cathy Satterfield  
FHWA Office of Safety  
Roadway Departure Team  
Cathy.Satterfield@dot.gov

You can also contact the Utah LTAP Center for additional information by calling 1-800-822-8878.
Leaders representing transportation, education, law enforcement, and emergency response, along with elected officials and various stakeholder groups met recently in Cache Valley to discuss ways to reduce and eventually eliminate serious and fatal transportation related crashes. Attended by well over 100 individuals, the Cache Valley Transportation Safety Leadership Summit was a joint effort organized by Cache County Attorney James Swink, the Cache Metropolitan Planning Organization, and UDOT’s Zero Fatalities Safety Group.

Mr. Swink addressed his concern with the recent increase in fatal crashes in Cache Valley. Mr. Swink and staff from his office were involved in the Reggie Shaw distracted driving (texting) case that resulted in the death of two Cache Valley residents. A resulting educational video offered on UDOT’s Zero Fatalities Web site has gained statewide and national media attention. In fact, the story will be profiled on the Oprah Winfrey show sometime in January.

Participants received a summit charge from Utah’s Commissioner of Public Safety, Lance Davenport. Commissioner Davenport charged those in attendance with basing decisions on quality data, continuing the cooperative safety planning effort, and remembering to focus on changing behavior one person at a time.

In an effort to put a human face to the traffic statistics, those in attendance heard from family members representing victims of recent fatal drowsy and distracted driving related crashes in Cache County. They described the impact of losing loved ones in their family and offered suggestions for how to ensure others will not have to share their experience in the future.

Glen Ames and Scott Jones from UDOT also provided a statistical summary of crash histories specific to Cache Valley. With the analysis of the crash data as a base, four specific breakout sessions were organized. The intent was to have participants identify activities and actions needed to help reduce serious crashes related to drowsy and distracted driving, younger (teen) drivers, bicycle and pedestrian safety and impaired driving.

Participants came up with a number of good suggestions and ideas that ultimately will lead to a regional Comprehensive Safety Plan. Group facilitators included Logan Mayor Randy Watts and Cache County Representative Curt Webb.

Breakout session recommendations included physical engineering solutions as well as education outreach and targeted law enforcement. Many of the groups have committed to reconvene to advance implementation of the summit recommendations. Participants were committed to ensuring the plan does not go unused and have concluded that “zero fatalities” is the only acceptable outcome for Cache Valley.

Those interested can view a web video archive of the summit proceedings at [http://kutatv.com/page.php?26.27] or for more information contact Jeff Gilbert by e-mail at [jeff.gilbert@cachecounty.org].
Warmest new year greetings from UDOT’s Local Government Programs office! As we begin a new year, there are several important topics to be discussed.

**Transportation Enhancement Program**

I am happy to announce that Tim Boschert (see photo below) has joined the UDOT Local Government Programs Section and is currently assigned as coordinator for the Transportation Enhancement Program. Tim worked for a number of years in the UDOT Planning Division and has a diverse background in planning, access management, traffic and other related areas. You can contact Tim Boschert by e-mail [tboschert@utah.gov] or phone at (801) 965-4175.

The committee met on November 17, 2009 to review initial new project letters of intent. There were 60 letters of intent submitted. Sponsors were requested to include enough information for a preliminary review by the committee. Of the 60 submittals, 28 proposals were selected to move forward for preparation of a full application. Final applications are due on January 14, 2010.

The Enhancement Advisory Committee will meet again in February to make a final selection and recommendation on projects for fiscal years 2012 and 2013.

**Joint Highway Committee New Project Applications**

New projects for the Joint Highway Committee recommended programs were due to UDOT Systems Planning and Programming by December 30, 2009. These programs include the STP Non-Urban, STP Small Urban, Off-System Bridge, and State Park Access programs. Applications will be reviewed in February. The project application form and other relevant information are located on the UDOT main web page www.udot.utah.gov under Local Government Assistance.

**ARRA Stimulus Projects**

Specific questions on the bridge inspections or any bridge related question can be directed to the bridge inspection group by e-mail [bridgeinspection@utah.gov] or by calling the Structures Division directly at (801) 965-4188.

**Bridge Operations**

The UDOT Bridge inspection team inspects all bridges over 20 feet in length once every two years. Currently UDOT is beginning the local cycle of inspections. From now until July of next year, the bridge inspection group will be moving through the State inspecting and collecting data on local bridges. Upon completion of the inspections each local government entity will receive a letter including: a list of the bridges for which the entity is responsible; recommendations for maintenance, safety, or contractual activities; and a soon-to-be-completed packet of common bridge terms, definitions, and maintenance activities. If inspections have already been completed the packet will follow as soon as it is completed.

As a courtesy to local governments the inspection teams will be notifying cities and counties as they get close to the dates for inspections in each area of the state.

This notification is to allow the local government engineers and other officials the opportunity to ask questions and provide valuable input while the inspectors are on site.

Over the past couple of months the Enhancement Advisory Committee was re-constituted with representatives from UDOT, the Utah Transportation Commission, each of the Utah Metropolitan Planning Organizations, Utah State Parks and Recreation, and several public volunteers.
Infrasound Avalanche Monitoring System Evaluated
by Maria Vyas, AICP, Senior Transportation Planner, Fehr & Peers and Abdul Wakil, P.E., UDOT Research Division

Little Cottonwood Canyon Road, or SR-210, connects the Salt Lake Valley with the Town of Alta, Alta Ski Lifts, and Snowbird Ski Resort at the top of Little Cottonwood Canyon. SR-210 is threatened by 35 major avalanche paths, and the White Pine, White Pine Chutes, and Little Pine avalanche paths are some of the most active paths in the canyon.

Currently, avalanche control is accomplished through road closure and artillery control, occasionally supplemented by helicopter control. UDOT’s avalanche forecasters in Little Cottonwood Canyon have some of the most technologically advanced equipment available, but they still face difficulties in the canyons. For instance, inclement weather or low visibility, provide great challenges in order to determine visually whether avalanche activity is occurring naturally or whether control efforts have been successful. To combat this problem, UDOT Region Two installed an Infrasonic Avalanche Detection system in 2006. The system was installed with the help of Intermountain Labs (IML), to monitor White Pine, White Pine Chutes, and Little Pine avalanche paths.

The Infrasonic Avalanche Detection System provides remote sensing of avalanche activity to allow Little Cottonwood Canyon forecasters to monitor avalanche risks when visibility is poor. In 2008, UDOT undertook a research evaluation to determine whether the infrasonic system provided reliable early warning of natural avalanche cycles and confirmed avalanche control operations; whether it reduced UDOT’s costs; and what improvements to the system are needed. The research is still in progress. This research evaluation is being conducted by...
Jon Nepstad and Maria Vyas of the Fehr & Peers group.

Little Cottonwood Canyon’s infrasonic system has three separate infrasound monitoring arrays, each of which has six sensors. The infrasound sensors sit on wooden pallets, and are attached to a series of cables extending outward from each sensor (see photo center column). The sensors are powered by solar panels and transmit data via cables to a central datalogger at the array, which in turn transmits the data to UDOT’s Lower Guard station via wireless radio link. At Lower Guard, a central processing unit (CPU) compiles the data which is then presented through a user interface. The infrasonic system operates in near real-time, providing information in 90-second intervals on a continual basis. The CPU at Lower Guard processes the data from the arrays to determine which of the transmitted signals represent avalanche activity. If infrasound signal events are detected, the CPU classifies each detected signal event as either an “identified” avalanche event or as a “discriminated” non-avalanche, or interference, event. The CPU classifies each event into either an “identified” bin or a “discriminated” bin, which are then represented to the user as red or yellow command buttons, respectively. The user can then inspect the signal events assigned to either of the two bins by clicking on the appropriate command button.

In addition, the infrasonic system currently provides remote notification of avalanche events to IML via text-messaging to a cell phone. However, none of the avalanche forecasters currently receive remote notification, nor would cell phone text message be the most appropriate method of communication in Little Cottonwood Canyon, where several locations lack cell phone service due to the steep and enclosing canyon walls. Instead, radio notification of the infrasonic system avalanche identifications would be useful, as it could be broadcast to all forecasters simultaneously. This research evaluation is still in progress and will be completed in a near future. The technical advisory committee members for this research evaluation are: Shana Lindsey, Ralph Patterson, Liam Fitzgerald, Jon Nepstad, Maria Vyas, and Abdul Wakil. For more information about this research, please contact Maria Vyas at [M.Vyas@fehrandpeers.com] or Abdul Wakil at [awakil@utah.gov].

Reduce Winter Driving Speed
by Lynn Bernhard (as excerpt from UDOT Maintenance Planning Newsletter, November 2009)

According to the Utah Department of Transportation, the most effective safety tips for winter driving are simply to take your time and pay attention to your surroundings. Slow down for wet, snowy or icy conditions; when visibility is poor; or when conditions are changing or unpredictable. Using your vehicle’s cruise control can be a fatal mistake during winter driving conditions. UDOT says turning off your cruise control and not exaggerating vehicle steering, braking or accelerating are other highly effective safety measures.

Carlos Braceras, UDOT Deputy Director, says, “You need to be in control of when your vehicle accelerates based on road conditions — don’t let the cruise control make a bad decision for you. Because snow and ice cause slick conditions, avoid excessive actions while steering, braking or accelerating to lessen the chances of losing control of the vehicle.”

Braceras says drivers should also allow additional room between vehicles. Slick winter road conditions often result in longer stopping distances. He says not to take chances when pulling out in front of approaching vehicles because the other driver may not be able to slow down and you may not be able to accelerate as quickly as on dry pavement.

Even when the pavement appears to be just wet, slow down when approaching intersections, off-ramps, bridges, or shady spots. These are prime locations for black ice — a thin coating of clear ice that can form on the pavement surface that may be difficult to see.
UDOT Chooses Cost Savings Over Tradition
excerpt from an article by Paul Madsen, Director, Modular Construction, Inc.

UDOT was recently faced with a problem of deteriorating culverts on Highway 6 near Santaquin. There were 11 separate corrugated metal pipe (CMP) culverts that were on the verge of failure. After careful consideration, UDOT chose the Snap-Tite culvert rehab system as an alternative solution to traditional dig and replace. Benefits of this system include reduced cost, minimal traffic interruption, ease of installation, water volume throughput and extended service life.

UDOT selected S&L Excavation and Landscaping, as the general contractor, and Modular Construction, as the subcontractor. S&L Excavation and Landscaping installed Snap-Tite high density polyethylene (HDPE) liners in nine different culverts, after cleaning out sediment and debris. Different sized liners were pushed into existing corrugated metal pipe (CMP). For example, a 42-inch liner was pushed into a 48-inch irrigation culvert; 20-inch liners were pushed into 24-inch CMP culverts and 4-inch liners were pushed into 8-inch CMP culverts.

After liner headwalls were installed, Modular Construction pumped cellular concrete grout to fill the annular space between the HDPE liner and the CMP. Additional sections of HDPE liner material and end treatments were used to extend the overall length of each culvert and were buried with road base. Two CMP culverts were filled with concrete “flowable-fill” and left in place.

Traffic impact was minimized since this is a no-dig trenchless system. Cleaning of the debris filled CMP and installation of the HDPE liners were performed from the side of the road. Nearly all culvert renewal was performed off-road, with minimum disturbance to the right-of-way. Since traffic disruption is a major cost factor in road construction, this benefit alone, saved dollars for UDOT and the traveling public since the road was never closed to traffic.

The cost of culvert relining is estimated to have saved UDOT and Utah taxpayers between $40,000 and $60,000, as compared to traditional dig and replace cost estimates. UDOT factored in the ease of installation, reduction of required equipment and training, and minimized traffic control as well as overall dollar cost in making this choice. Additional savings also came in time saved for the traveling public, as well as time saved to complete the job.

On-the-Job Details
Snap-Tite’s patented male/female machining allows the liner to be ‘snapped’ together. The required 70- to 80-foot lengths were achieved with multiple section lengths. These smaller, 9-11 foot sections, were selected due to the limited right-of-way access. Sections were snapped together by S&L Excavation, without the need for specialized training or specialized equipment.

Snap-Tite’s solid-wall HDPE liner system outperformed the CMP it replaced. The liners smooth interior surfaces achieved higher volume throughput levels than the existing CMP. The Snap-Tite liner system included a watertight seal at each joint, meeting ASTM D3212 requirements and AASHTO M326 Standard.
2010 Utah Career Days Events
Coming to a County Near YOU!!

Utah Career Days Events are coming to a county near you! Mark your calendar and plan now to get involved! Be a sponsor, share your trade, and expand the horizons of the workforce of tomorrow!

Washington County
Washington County Fairgrounds—March 23-24, 2010

Central Utah
Davis County Fairgrounds, Legacy Event Center—April 13-15, 2010

Cache County
Bridgerland Applied Technology College—April 27-29, 2010

Have You Checked Out the Utah LTAP Center Web Site Lately?

The Utah LTAP Center Web site is a transportation resource to help you! You can register for workshops, receive technical assistance, borrow from our free lending library, link to our partners, download important material to help you on the job, and so much more!

If you haven't checked out this resource lately, you may be missing something! Don't wait, check it out today!

www.utahltap.org

On the Move
Page 8
January 2010

9th Annual Concrete Pavement Workshop
January 20, 2010 at the Little America in Salt Lake City, Utah

It's time once again for the must-attend conference of the year for everyone involved with concrete pavement!

Whatever your role in the process, you won't want to miss this important event! So mark the date and plan to attend January 20, 2010, at the Little America Hotel in Salt Lake City!

For more information, please contact Mitzi McIntyre, ACPA Utah Chapter Executive Director, by e-mail [mcintyre@utahacpa.com] or phone (toll free) 1-866-647-5935!

2010 Utah Asphalt Conference
March 3, 2010 at the South Town Expo Center in Sandy, Utah

Plans are being finalized for the 2010 Utah Asphalt Conference to be held March 31, 2010 at the South Towne Expo Center in Sandy, Utah. Both general and break-out sessions will be offered. Three tracks will aid participants in choosing sessions suited to their interests. The tracks will be: design/materials, construction, and maintenance.

The cost for this conference is $75 if received before March 16, $85 if received after that date. Lunch and breaks will be provided. Exhibitors are welcome! CEU credits will be available for this event. Register on-line at [www.utahltap.org] or call 1-800-822-8878.
Register Now for 2010 LTAP Workshops

Mail: Fill out this form and mail with your payment (payable to Utah LTAP Center):
Utah LTAP Center
Utah State University
4111 Old Main Hill
Logan UT 84322-4111
Fax: (435) 797-1582
E-mail: utahltap@usu.edu
On-line: www.utahltap.org

* Prerequisite for Techniques of Heavy Equipment Operation (Hands-on) workshop
** As part of Road School
● Cost per person: State & Local = $100. Out of State or Private sector personnel = $125.
●● Cost per person: State & Local = $250. Out of State or Private sector personnel = $275.
●●● Combined cost per person for both Vegetation Mgmt. and Gravel Roads Workshops = $80

All workshops listed here are part of our on-going Road Scholar program.

Other Upcoming Events
The dates and locations for these workshops are still being determined. Check out our Web site for updates!
• Full Depth Reclamation
• ADA Ramps and Structures
• MUTCD

If you have questions, or want to request a specific workshop in your area, please call 1-800-822-8878 or e-mail [utahltap@usu.edu].

<table>
<thead>
<tr>
<th>Sign-up Date</th>
<th>Course Title</th>
<th>Cost</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 11, 2010</td>
<td>ATSSA Flagger Training</td>
<td>$45</td>
<td>Vernal</td>
</tr>
<tr>
<td>Jan. 12, 2010</td>
<td>ATSSA Traffic Control Technician Workshop</td>
<td>$100/125</td>
<td>Vernal</td>
</tr>
<tr>
<td>Jan. 13-14, 2010</td>
<td>ATSSA Traffic Control Supervisor Workshop</td>
<td>$250/275</td>
<td>Vernal</td>
</tr>
<tr>
<td>Feb. 8, 2010</td>
<td>ATSSA Flagger Training</td>
<td>$45</td>
<td>Richfield</td>
</tr>
<tr>
<td>Feb. 9, 2010</td>
<td>ATSSA Traffic Control Technician Workshop</td>
<td>$100/125</td>
<td>Richfield</td>
</tr>
<tr>
<td>Feb. 10-11, 2010</td>
<td>ATSSA Traffic Control Supervisor Workshop</td>
<td>$250/275</td>
<td>Richfield</td>
</tr>
<tr>
<td>Feb. 23, 2010</td>
<td>Communication Skills for Supervisors</td>
<td>$60</td>
<td>St. George</td>
</tr>
<tr>
<td>Mar. 1, 2010</td>
<td>Integrated Roadside Vegetation Management (AM)</td>
<td>$40</td>
<td>Northern/TBD</td>
</tr>
<tr>
<td>Mar. 1-2, 2010</td>
<td>Gravel Roads (Mar. 1-PM &amp; Mar. 2-AM)</td>
<td>$60</td>
<td>Northern/TBD</td>
</tr>
<tr>
<td>Mar. 1, 2010</td>
<td>ATSSA Flagger Training</td>
<td>$45</td>
<td>Smithfield</td>
</tr>
<tr>
<td>Mar. 2, 2010</td>
<td>ATSSA Traffic Control Technician Workshop</td>
<td>$100/125</td>
<td>Smithfield</td>
</tr>
<tr>
<td>Mar. 3-4, 2010</td>
<td>ATSSA Traffic Control Supervisor Workshop</td>
<td>$250/275</td>
<td>Smithfield</td>
</tr>
<tr>
<td>Mar. 8, 2010</td>
<td>Heavy Equipment Safety Training *</td>
<td>$65</td>
<td>St. George</td>
</tr>
<tr>
<td>Mar. 9-10, 2010</td>
<td>Techniques of Heavy Equipment Operation (Hands-on)</td>
<td>$250</td>
<td>St. George</td>
</tr>
<tr>
<td>Mar. 11-12, 2010</td>
<td>Techniques of Heavy Equipment Operation (Hands-on)</td>
<td>$250</td>
<td>St. George</td>
</tr>
<tr>
<td>Mar. 9, 2010</td>
<td>Communication Skills for Supervisors</td>
<td>$60</td>
<td>Salt Lake City</td>
</tr>
<tr>
<td>Mar. 15, 2010</td>
<td>ATSSA Flagger Training</td>
<td>$45</td>
<td>Salt Lake City</td>
</tr>
<tr>
<td>Mar. 15, 2010</td>
<td>Heavy Equipment Safety Training *</td>
<td>$65</td>
<td>Tooele</td>
</tr>
<tr>
<td>Mar. 16-17, 2010</td>
<td>Techniques of Heavy Equipment Operation (Hands-on)</td>
<td>$250</td>
<td>Tooele</td>
</tr>
<tr>
<td>Mar. 18-19, 2010</td>
<td>Techniques of Heavy Equipment Operation (Hands-on)</td>
<td>$250</td>
<td>Tooele</td>
</tr>
<tr>
<td>Mar. 22, 2010</td>
<td>ATSSA Flagger Training</td>
<td>$45</td>
<td>Cedar City</td>
</tr>
<tr>
<td>Mar. 23, 2010</td>
<td>ATSSA Traffic Control Technician Workshop</td>
<td>$100/125</td>
<td>Cedar City</td>
</tr>
<tr>
<td>Mar. 24-25, 2010</td>
<td>ATSSA Traffic Control Supervisor Workshop</td>
<td>$250/275</td>
<td>Cedar City</td>
</tr>
<tr>
<td>Apr. 21, 2010</td>
<td>ATSSA Flagger Training **</td>
<td>$30</td>
<td>St. George</td>
</tr>
<tr>
<td>Apr. 22, 2010</td>
<td>ATSSA Traffic Control Technician Workshop **</td>
<td>$100/125</td>
<td>St. George</td>
</tr>
</tbody>
</table>

Name: _______________________________________________ Title: __________________________
Agency: ________________________________________________________________________________
Address: _______________________________________________________________________________
City/State/Zip: ___________________________________________________________________________
Phone: ___________________________ FAX: ___________________________
E-mail: _________________________________________________________________________________

Total Workshops Registered For: ____________________ Total Amount Due: ____________________

Method of Payment (Please check one)
___ Check enclosed (made payable to Utah LTAP Center)
___ Agency PO (Number: __________________________)
___ Credit Card (Visa/MC/Discover) #: __________________________ Exp. date: __________

Federal Tax ID #87-6000528
Partner Happenings
What You Should Know...

**Utah League of Cities & Towns**

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 Web site [www.ulct.org].

**Land Use Training**

January 8, 2010 (St. George)

**Local Officials Day at the Legislature**

January 27, 2010 (SLC)

**Mid-year Conference**

April 7-9, 2010 (St. George)

Please check their Web site for registration and conference information.

**Road School**

April 20-23, 2010 (St. George)

Please check their Web site for registration and program information.

---

**ITE, Utah Chapter**

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

**APWA, Utah Chapter**

For more information on APWA activities please visit their Web site [http://utah.apwa.net]. Chapter meetings will be held at The Gathering Place in West Jordan at Gardner Village (1100 West 7800 South) or Ruby River in Provo. Please note that the Southern Utah Branch meets the 1st Tuesday of each month at the Holiday Inn in St. George.

**Utah Association of Counties**

For more information on UAC activities, or to register for a UAC sponsored event, please call them directly at (801) 265-3333 or 1-800-328-5588 or go to their Web site [www.uacnet.org].

**County Officials Day at the Legislature**

January 29, 2010 (SLC)

---

**Utah Local Governments Insurance Trust**

For information on training and other Trust activities, please call 1-800-748-4440. You can also check out the Trust Web site at [www.ultg.org].

For questions about partner happenings, please contact our partners directly!

**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 check out their Web site at [www.urmma.org]. URMMA members can call URMMA at (801) 225-6692 to schedule free, in-house supervisor training, harassment training, customer service training and defensive driver coaching.

**Utah Safety Council**

For more information or to register for Utah Safety Council training activities, please call (801) 478-7878 or 1-800-933-5943 or e-mail [safety@utahsafetycouncil.org]. You can also check out their Web site at [www.utahsafetycouncil.org]. All workshops are offered at their location (1574 W 1700 S, Suite 2A, Salt Lake City) and some are even offered on-line. Online registration forms and scholarship applications (some covering up to 50% of the cost of the course*) are available at their Web site. On-site classes are also available.

**First Aid, CPR and AED for Business**

Dates: January 14, 2010
February 16, 2010
March 17, 2010
Cost: Member—$55*/Non-Member—$65*

This course provides participants with the most up-to-date First Aid, CPR and AED training specifically focused on medical emergencies in the workplace.
Approximately one out of every eight traffic fatalities results from a collision involving a large truck. Although professional truck drivers are involved in fewer collisions than other motorists, collisions involving trucks are far more deadly and costly. Professional truck drivers and their employers have a tremendous responsibility for keeping the highways safe for others. The National Safety Council's DDC-Professional Truck Driver (DDC-PTD) program gives truck drivers the defensive driving techniques that help them avoid collisions and violations and make them take personal responsibility for their driving decisions. The DDC-PTD Program is flexible and interactive with curriculum and materials that conform to all current US DOT standards.

Defensive Driving: Four-Hour Instructor Course (DDC-4)

Date: March 24-25, 2010, 8 am–5 pm
Cost: Member—$340/Non-Member—$440

The Defensive Driving Course (DDC-4) can help your organization increase your profitability by reducing the number of insurance claims, time away from work due to injuries and the cost of vehicle repairs. Our instructor course features updated curriculum and facilitation methods and allows the instructor to confidently adapt their teaching style to meet the unique needs and characteristics of their audience. DDC-4 offers practical strategies to reduce collision-related injuries, fatalities and costs. It addresses the importance of attitude in preventing crashes, and reinforces good driving skills. Let our experienced trainers provide you with the tools and knowledge to become an excellent trainer for your organization.

Blue Stakes of Utah

For more information on the services and activities of Blue Stakes of Utah, please visit their Web site [www.bluestakes.org] or contact their notification center at 1-800-662-4111. Remember, it's free and it's the law!
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 published quarterly by the Utah LTAP Center at Utah State University. Subscriptions are free and are available by contacting the Utah LTAP Center. Articles may be submitted to the editor at the above address. To obtain permission to reprint any articles from *On the Move*, please call the Center.

Utah LTAP Center Staff
Director ................................................................. Nicholas R. Jones, P.E.
Business Manager ........................................................... Pamela Pyle
Field Projects Manager ....................................................... N. Dee Hadfield
Project Leader ................................................................. Brant Whiting
Newsletter ................................................................. Julie H. Duersch
Phone/Fax ...................................................................(435) 797-2931/797-1582
E-mail ........................................................................... utahltap@usu.edu
Website ........................................................................ www.utahltap.org

USU is an equal opportunity education institution/equal opportunity employer.