

ON THE MOVE

Vol. 17, No. 4

Fall (October) 2004

Sharing Knowledge. Improving Communities.



A Word from the Assistant Director:

Saved Any Lives Today?

by G. Stuart Thompson, Assistant Director, Utah LTAP Center

Federal Highway Administration (FHWA) and Utah Department of Transportation (UDOT) are funding a Local Sign Program based on the Local Technical Assistance (LTAP) Programs Mendocino County Low Cost Safety Improvement Showcase. Robert West, Eric Redd, and Matthew Leavitt of Summit County and Larry Prettyman and Brad McCourt of Carbon County and Ed Rufener of South Salt Lake and Bill Swenson of St. George will participate in the showcase to be held in Mendocino County, California on September 28 & 29.

The showcase will demonstrate the effectiveness of a concentrated effort in the installation and update of traffic signing based on crash analysis and on site inspection. Carbon and Summit Counties will then be involved in an in-depth analysis of crash history to identify high crash locations and on site investigations to determine signing requirements to best communicate to the roadway user unusual conditions. Once identified appropriate engineering will be performed and the sign installation will be performed by a contractor. The Mendocino Case studies have shown a cost benefit of 1/300 for this type program which equates to a significant

decrease in crashes. A typical example of roadway misinformation is shown in the photo on this page. What's wrong with this picture? (Refer to the photo on page 12 for the correct signing and the answers to this question!)

Other local safety related efforts by the Utah LTAP Center, UDOT, and FHWA include the Roadway Safety Improvement Program (RSI), Roadway Safety Audits (Reviews), training for Low Cost Safety Improvements, and training for safe school areas.

The RSI program is facilitated by Robert Clayton of UDOT and Roland Stanger of FHWA. This funding source is earmarked exclusively for correction of unsafe roadway conditions and available for use on local roadways as well as state and federal highways. Agencies with questions regarding accessing these dollars should contact Robert Clayton.

Roadway Safety Audits and Reviews are another tool being used by transportation agencies in Utah. These principles can be applied to new construction as well as upgrades, and maintenance of roadways. On site inspections are being offered through the Utah LTAP Center to aid in these audits. The highest demand has been for inspection of School Areas for compliance to UDOT Part 7 supplement to the MUTCD. Other areas have included speed setting and ADA issues. These inspections are done in conjunction with UDOT and FHWA. For scheduling contact the Utah LTAP Center.

(continued on page 2)

Table of Contents

- Legislative & Regulatory Update 3
- Sign Maintenance Also Includes Maintaining Proper Sight Distance 4
- Work Zone Safety & Mobility 4
- ADA Accessibility Guidelines and Detectable Warnings 5
- Senate Panel Approves Record Highway Investment..... 5
- Summit County, Ohio Plans to Nail Down Troubled Soil..... 6
- Utah's "OSHA" 7
- Utah Joint Highway Committee Report: A Struggle to Meet Transportation Needs..... 7
- U.S. DOT Announces Historic Low Highway Fatality Rate in 2003 8
- "Fall" Back to Training With LTAP Workshops (includes workshop registration form) 9
- What Our Partners Are Doing..... 10
- Don't Wait for the Snow to Fall: Get Your Winter Maintenance Manual TODAY!! 11
- Sign Photo Quiz 12



Check out the sign quiz on page 12! Can you get it right?

Utah LTAP Center

Page 1

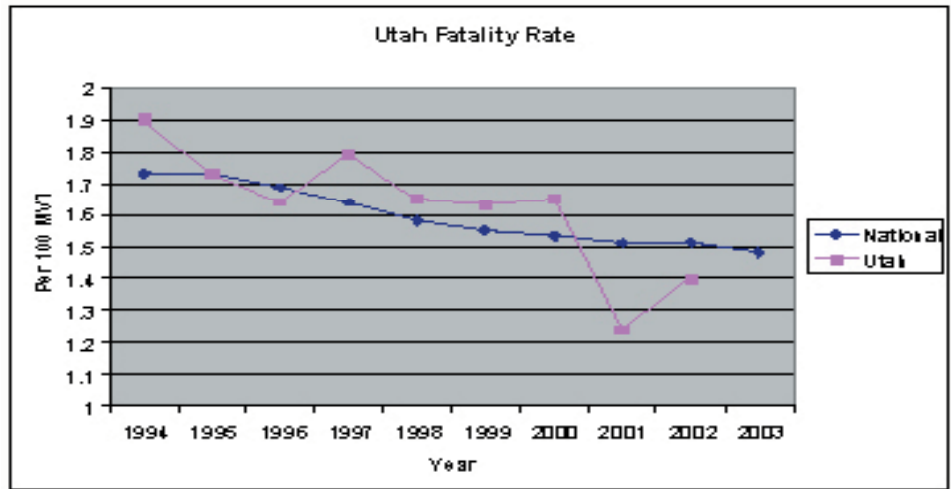
April 2004



(continued from page 1)

Utah Local Crash History and Trends

In 2003 there were 262 Fatal Crashes resulting in 309 traffic fatalities on Utah State roadways, down from 328 in 2002. These numbers include drivers, passengers, pedestrians, and cyclists. As shown in the following graph fatalities in Utah have been below the national rate since the year 2000.



were on local roads. The remaining 70% were on the Interstate, State Highways, or U.S. Highways. Seventy-three (73) of the crashes resulted in one fatality, five resulted in multiple fatalities.

fast for conditions. Forty-three percent of drivers were not cited.

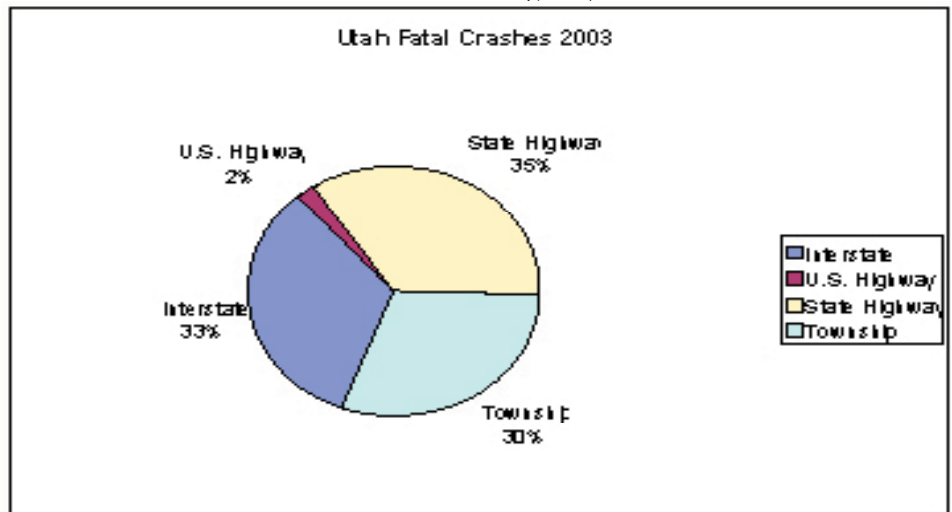
Facts on Local Roads

Local roads in Utah account for 76% of the roadway system and 26% of vehicle miles traveled. Thirty-four percent (34%) or 3,775 of Utah's serious injury and fatal crashes occur on local roads. Rural local roads have 11% of Utah's serious injury and fatal crashes, and 6% of Utah's vehicle-miles traveled

Costs

The National Safety Council makes estimates of the average costs of fatal and nonfatal unintentional injuries to illustrate their impact on the nation's economy. The costs are a measure of the dollars spent and income not received due to accidents, injuries, and fatalities.

Of the 262 fatal crashes that occurred on Utah Highways 79 or 30% of these fatalities



Alcohol was involved in 7.2% of the fatal crashes occurring on either county or township roads. Seventeen percent of drivers were cited for failure to yield right of way, 16% for driving in an erratic or reckless manner, and 14% for speeding or driving too fast. Serious injury and fatal crashes, occurring on local roads, for one year would result in a savings of at least 1.7 million dollars. Solutions to reducing crash rates are best accomplished through the identification of high crash locations and correction of unsafe acts and conditions.

The calculable costs of motor-vehicle crashes are wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and uninsured employer costs. The average cost per death (not each fatal crash), injury (not each injury crash), and property damage crash was:

2003 Average Economic Cost per Death, Injury, or Crash

Death	\$1,120,000
Nonfatal Disabling Injury	\$45,500
Property Damage Crash (including non-disabling injuries)	\$8,200

A reduction of 1% of the 3,775 seri-

Federal Highway Administration and Utah Department of Transportation are funding a Local Sign Program. Two counties have been chosen as a pilot to assess the effectiveness of a concerted effort in the installation of traffic signing based on crash analysis and on site inspection. Case studies have shown a cost benefit of 1/300 for this type program which equates to a significant decrease in crashes. Additionally, funding is available for locals through the Roadway Safety Improvement (RSI) Program for correction of unsafe conditions. Roadway safety inspections are



Legislative & Regulatory Update

Sign Maintenance and Retroreflectivity: Proposed Changes to the MUTCD Affect EVERY city, town and county!

The following notice has been posted by FHWA. Note that these changes not only outline minimum levels of retroreflectivity but also outline recommended sign maintenance procedures. If you are interested, please reference the entire notice at the Web site listed and submit comments. **This proposal affects every city, county, and town.**

NOTICE: A Notice of Proposed Amendments (NPA) to the MUTCD regarding Sign Retroreflectivity has been issued by the FHWA. These amendments are designated as PROPOSED Revision No. 2 of the 2003 MUTCD.

Please visit the MUTCD Web site (<http://mutcd.fhwa.dot.gov>) to view the Federal Register notice dated July 30, 2004, which describes the proposed changes and the reasons for them, and also to view the text of the proposed Revision No. 2 MUTCD changes. [Comments to the docket on Proposed Revision No. 2 are due by October 30, 2004.](#)

Discussion of Proposed Amendments to Part 1—General

2. In Section 1A.11 Relation to Other Publications, the FHWA proposes to add the publication “Maintaining Traffic Sign Retroreflectivity” to the list of other publications that are useful sources. “Maintaining Traffic Sign Retroreflectivity” is included as an appendix to the preamble. This document can be downloaded from the FHWA Web site (<http://safety.fhwa.dot.gov/fourthlevel/sa03027.htm>).

Discussion of Proposed Amendments to Part 2—Signs

3. In Section 2A.09 Minimum Retroreflectivity Levels, the FHWA proposes changing the title of the section by deleting the word “levels” from the title to better describe the content of the section. The FHWA proposes to replace the SUPPORT statement with new SUPPORT, GUIDANCE, and OPTION statements that refer to minimum sign retroreflectivity. In the SUPPORT statement, the FHWA proposes to provide a reference to Section 2A.22 Maintenance, stating that retroreflectivity is one of several factors associated with maintaining nighttime sign visibility.

In the GUIDANCE statement, the FHWA proposes to indicate that except for those signs specifically identified in the OPTION statement, one or more of the assessment or management methods described in this section should be used to maintain sign retroreflectivity above the minimum levels identified in the FHWA document “Maintaining Traffic Sign Retroreflectivity.”¹⁹ The methods are visual nighttime inspection (including three procedures: calibration signs, consistent parameters, and comparison panels), measured sign retroreflectivity, expected sign life, blanket replacement, and control signs. The GUIDANCE statement includes a brief description of each method and the following SUPPORT statement includes a reference to “Maintaining Traffic Sign Retroreflectivity” that provides more information about these methods and their association to minimum maintained retroreflectivity levels for traffic signs.

As part of the descriptions of the various methods in the GUIDANCE, the FHWA proposes to include a statement

the minimum levels should be replaced. In the OPTION statement, the FHWA proposes to list several sign series that agencies may exclude from the proposed assessment methods and minimum maintained sign retroreflectivity levels.

The FHWA proposes to exclude these sign series, because additional research is needed to support establishment of minimum retroreflectivity levels for these signs. The sign series that the FHWA proposes to exclude are: (1) Parking, Standing, and Stopping signs (R7 and R8 series), (2) walking, Hitchhiking, and Crossing signs (R9 series, R10–1 through R10–4b), (3) Adopt-A-Highway series, (4) All signs with blue or brown backgrounds, and (5) Bikeway signs that are intended for exclusive use by bicyclists and/or pedestrians. This list will not exclude those signs from existing MUTCD retroreflectivity and maintenance requirements and guidance.

In Section 2A.22 Maintenance, the FHWA proposes changing the first paragraph of the GUIDANCE statement by replacing the phrase “adequate retroreflectivity” with “retroreflectivity levels as indicated in Section “2A.09.”

The reference to Section 2A.09 Minimum Retroreflectivity, enables readers to access information specific to retroreflectivity more easily. The FHWA proposes a new sentence that reads, “Maintenance activities should consider proper position, cleanliness, legibility, and daytime and nighttime visibility of a sign.”

This table outlines the recommended minimum levels of retroreflectivity. The first column lists the sign colors; the

(continued on page 4)

For more information on the proposed changes to the MUTCD, please go the MUTCD Web site:

<http://mutcd.fhwa.dot.gov>

Americans with Disabilities Act (ADA) Accessibility Guidelines and Detectable Warnings

by Dwight A. Horne, Director, Office of Program Administration

The US Access Board, the federal agency responsible for developing accessibility guidelines under the Americans with Disabilities Act (ADA), published the ADA/ABA Accessibility Guidelines (ADA/ABA-AG) on July 23, 2004. The Access Board is charged with developing minimum guidelines to assist the Department of Transportation (DOT) and Department of Justice (DOJ) in establishing design standards. Although the publication of these guidelines marks the completion of the Access Board's responsibilities, these guidelines will not become ADA standards until the Departments of Justice and Transportation go through standard notice-and-comment rulemaking to adopt the new guidelines into the standards they maintain under the ADA, a process which is expected to take one to two years.

In the interim, agencies must continue to use current ADA standards--including those for detectable warnings at curb ramps and blended transitions--when building new and altering pedestrian facilities. Therefore, there have been no changes to the existing requirements (since July 26, 2001) that detectable warnings must be applied to curb ramps in new construction and alterations.

As part of updating the guidelines, the Access Board is also developing more specific guidelines for public rights-of-way. On June 17, 2002 the Board released a draft of these guidelines for public comment in advance of publishing a proposed rule. Included are provisions for sidewalks, curb ramps, street crossings and related pedestrian facilities that are not addressed in the newly published ADA/ABA-AG. Both FHWA and the Access Board encourage use of the June 17, 2002 draft's scoping and technical provisions for detectable warnings as an equivalent facilitation to the current requirements in the 1991 (current) ADAAG.

USDOT is an implementing agency for the title II of the Americans with Disabilities Act and for section 504 of the Rehabilitation Act; the FHWA is the

USDOT agency responsible for overseeing Title II and 504 compliance for pedestrian access in public rights-of-ways. USDOT is evaluating the ADA/ABA-AG and considering possible changes to USDOT section 504 regulations to reflect current detectable warning requirements until such time as the new public rights-of-way guidelines can be issued. The FHWA

MUTCD staffs are also pursuing inclusion of detectable warnings in Chapter 3 Markings. NCHRP and FHWA research is also underway to improve truncated dome maintenance and contrast. For more information and resources on detectable warnings, consult the Board's Web site at <http://www.access-board.gov/adaag/dws/update.htm>.



3rd Annual ACPA Concrete Pavement Workshop

January 29, 2005 in Salt Lake City

Featuring the theme of "quality is no accident," the ACPA Utah Chapter and the Utah LTAP Center are hosting the 3rd annual Concrete Pavement Workshop at the Little America Hotel in Salt Lake City, January 29, 2005.

General sessions will cover such topics as innovative contracting, life cycle cost analysis, a low-bid system panel discussion, FHWA's concrete pavement technology program, fast track paving, and concrete pavement longevity. Concurrent break-out sessions will cover the areas of

tools for quality concrete and techniques for design, construction and maintenance.

The cost is \$60/person if registered before January 16, and \$70 after that date. Call Mitzi McIntyre at (801) 556-9561 for more information or registration materials.

Utah LTAP Center

Page 5

April 2004



Summit County, Ohio Plans to Nail Down Troubled Soil

Machine launches steel rods into earth to prevent slides.

by Lisa A. Abraham, Beacon Journal staff writer, posted Thursday, June 24, 2004

[<http://www.ohio.com/mlld/beaconjournal/>]

Summit County Engineer Greg Bachman believes he has found the solution to the county's landslide problem: nails. Really, really big nails driven into hillsides at applications of the soil nail technology speeds of more than 200 mph.

Bachman has convinced the County Council that a technique called "soil nailing" is the solution for landslides that have been troubling parts of the county since last summer's heavy rains and flooding.

It will be the first time the nailing technique, which involves the insertion of 20-foot steel rods into unstable soil, will be used in Ohio, Bachman said. Using high-pressure compressed air, a nail launcher with a movable arm blasts the rods into an embankment in a grid pattern at extremely high speeds.

The council...agreed to hire Grand Junction, Colorado, contractor Soil Nail Launcher Inc. to perform work on seven embankments in the county that have had landslides or are at risk of having them.

The process works because the soil consolidates around the rods, keeping it from slipping away and preventing slides, Bachman said.

"The nails are driven in quickly and with so much focused force there is virtually no visible damage to the surrounding area," he said, including none of the potential waterway sediment pollution caused by traditional excavation methods.

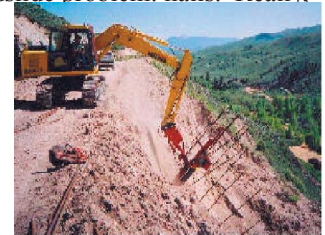
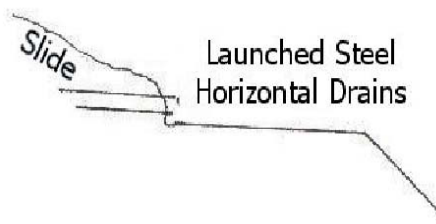
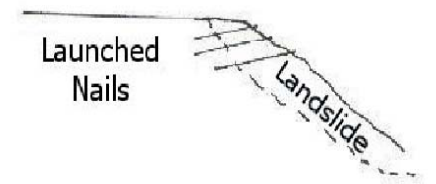
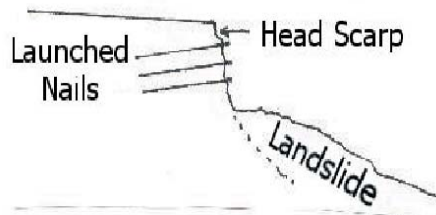
While the technique has not been used in Ohio, it has been used successfully in California, Oregon and Colorado by the U.S. Forest Service and by the Colorado Department of Transportation, Bachman said. [There are numerous potential

applications of the soil nail technology in Utah and other states as a low-cost solution to geotechnical hazards.]

According to the company's Web site, the nail launcher was originally developed as a secret weapon in Great Britain. The British military developed the compressed-air launcher to deploy nerve gas canisters as far as seven miles away. When nerve gas warfare was abandoned, a private company acquired the device and modified it to launch steel bars.

Traditional soil stabilization of the seven areas in Summit County, Ohio could cost between \$900,000 and \$3.5 million, Bachman said, but the company has agreed to perform the nailing work for no more than \$300,000.

"We're saving money doing it this way as opposed to traditional methods," said Councilman Tom Teodosio, D-Munroe Falls, who is chairman of the council's public works committee.



Bachman said he has an informal confirmation from the Federal Emergency Management Agency that the county may be able to get some of the costs reimbursed, since Summit County has been declared a disaster area because of storms. On Memorial Day weekend, there were severe landslides along North Revere and Sourek roads in Bath Township.

The nailing will be used at the Revere site, but not on Sourek because soil conditions there aren't right for the technique, Bachman said. The nailing works best in areas where there is a high clay content in the soil.

While most of the sites haven't had severe slides, they have had continuous slipping over the years, with repeated cracking in pavement, Bachman said. "They're slow-moving ones where we've had to go and repave the road and it cracks by the next week," he said.

For more information on soil nailing, please check out the **Soil Nail Launcher, Inc.** Web site:

<http://soilnaillauncher.com>

Utah Occupational Safety & Health (UOSH)

A Brief Summary of it's Services for the Public Sector

How can the Utah Occupational Safety and Health (UOSH)--Utah's state equivalent to OSHA--help the public sector employees and various associations and organizations? Utah OSH can offer help through two distinct functions:

The first is public sector consultation. Utah's OSH is a federally qualified state occupational safety and health program. As a federally qualified state Utah OSH must set job safety and health standards that are at least as effective as comparable Federal OSHA standards, and their plans must cover public employees.

State and local governments in such states must comply with their state laws. OSHA standards and compliance information can help local governments in their state law compliance efforts, and can also help them implement safety programs for hazards not addressed by the state law, such as with the Safety and Health Achievement Recognition Program (SHARP). Employers may also be eligible to be deferred from OSHA enforcement inspections for a 12 month period, while they are working to achieve SHARP certification.

OSHA's standards and compliance materials can help state and local government employers identify and address workplace hazards before they cause a work-related injury. Preventing work-related injuries before they occur is the first line of defense against workers' compensation losses and the other hidden costs of work-related injuries.

As a consultant for the state, city or county, Utah OSH performs full site surveys including monitoring for chemical and physical hazards, training and education etc. A public sector survey comes without any citations or penalties. You can call Utah OSH at (801) 530-6860 for more information.

The second service is in compliance assistance. Through compliance assistance we provide services such as, training, presentations, workshops etc. Compliance Assistance Specialists

(CAS) can provide general information about OSHA standards and compliance assistance resources. They respond to requests for help from a variety of groups, including small businesses, trade associations, union locals, and community and faith-based groups. They are available for seminars, workshops, and speaking events.

They promote cooperative programs, such as Consultation Programs, SHARP, the Voluntary Protection Programs, the Strategic Partnerships Program, and the Alliance Program. They also promote OSHA's training resources and the tools available on the OSHA web site. The federal OSHA Web site is [www.osha.gov] and the Utah OSH Web site is [www.uosh.utah.gov].

Utah Joint Highway Committee Report: A Struggle to Meet Transportation Needs

The delay in reauthorization of Federal Funding and the growing capacity and preservation needs in Utah, presents a major hurdle to both UDOT and local agency officials to meet the needs of road users. Much discussion was had amongst Utah Joint Highway

Committee representatives last month on how to address the issue of inadequate funds to meet both current and future transportation needs. UDOT Deputy Director Carlos Braceras cited several enlightening statistics with respect to congestion alone:

- Highway travel continues to outpace population growth.
- Vehicle miles travel on the Wasatch Front is expected to increase 180% over the next several years.
- The peak hour commute between Provo and Salt Lake today takes one hour but in 2030 it is expected to take over 2 hours.
- A recent Texas Transportation Institute study on urban mobility shows drivers in the Salt Lake areas lost 32 hours last year due to congestion (up from 3 hours in 1982) wasting 26 million gallons of fuel.

- Rural areas of the state are also seeing negative effects caused by increased travel.

Regarding funding impacts Mr. Braceras reported that in addition to congestion:

- Increased travel accelerates the rate of deterioration of the highway system, requiring additional investment for maintenance, system preservation and rehabilitation/reconstruction.
- On the state highway system proactive and preventive maintenance needs will increase about 57% to \$226 million over the next ten years.
- At current funding levels UDOT is unable to meet these needs. For example, there are 1,750 bridges statewide, but UDOT averages reconstruction or rehabilitation of only 15 bridges a year. At

this rate, bridges need to last 100 years.

- There are no new major capacity projects funded beyond those already programmed. All new capacity projects or major reconstruction projects are funded through the Centennial Fund statewide or in the Salt Lake area through the 1/16 cent sales tax. No other funding is available to meet any other capacity or major reconstruction needs in the urban or rural areas.

Much discussion was had regarding potential funding sources to meet these needs. It was pointed out that even a substantial increase in gas tax would not meet the future funding needs alone
(continued on page 8)



(continued from page 7)

when coupled with the rising cost of construction materials. A combination of approaches need to be brought before the public and the State Legislature to address this funding issue. In addition,

U.S. Department of Transportation Announces Historic Low Highway Fatality Rate in 2003

The U.S. Transportation Secretary Norman Y. Mineta recently announced that the fatality rate on the nation's highways in 2003 was the lowest since record keeping began

29 years ago. The number of crash-related injuries also dropped to a historic low in 2003.

"America's roads and highways are safer than ever," said Secretary Mineta. "The decreasing number of traffic fatalities and record low death rate on our roads shows that we are headed down the right road - one that leads to a safer America."

Secretary Mineta pointed to efforts by the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) that contributed to the reduction in the fatal accident rate, including campaigns to encourage safety belt use and discourage impaired driving, work with state legislatures to pass tougher safety belt and drunk driving laws, and rulemaking efforts to improve vehicle safety standards.

A total of 42,643 people died, and 2.89 million were injured in 2003. The fatality rate per 100 million vehicle miles traveled (VMT) was 1.48 in 2003, down from 1.51 in 2002. It was the first time the rate has dropped below 1.5. In 2002, 43,005 were killed and 2.93 million were injured.

"We at NHTSA are proud of the progress we've made and the success of the priorities we've established during this Administration," said NHTSA Administrator Jeffrey Runge, M.D. "But much of the credit goes to the committed professionals in the states

there is the risk of losing the 1/16 cent sales tax which would have a major impact on transportation funding at all levels. Considerable effort needs to be made at all levels of government to build support and come up with feasible ways of meeting these transportation needs. A call for support is being made herein and at all

levels of government.

and communities who implement the programs, and to safety professionals in the automotive industry who offer safer vehicles."

Alcohol-related fatalities also dropped significantly in 2003, the first such decline since 1999, as more states adopted laws that allowed them to prosecute drivers at .08 blood alcohol content (BAC) and above. 2004 marks the first year that all 50 states, the District of Columbia and Puerto Rico were able to prosecute drivers at .08 BAC.

In 2003, VMT increased to 2.88 trillion, up from 2.86 trillion in 2002, according to the DOT's Federal Highway Administration.

NHTSA's Fatality Analysis Reporting System (FARS) also shows that between 2002 and 2003:

- Motorcyclist fatalities increased from 3,270 to 3,661, a 12 percent rise.
- Rollover deaths among passenger vehicle occupants declined 3.3 percent from 10,729 to 10,376. Sport utility vehicle (SUV) rollover fatalities increased 6.8 percent from 2,471 to 2,639, even as SUV registrations increased 11 percent. Rollovers declined in passenger cars (7.5 percent; 4,794 to 4,433) and pickup trucks (6.8 percent; 2,755 to 2,569).
- Twenty-seven states had decreases in the total number of fatalities. The highest percentage decreases were in Colorado (-15 percent); Vermont (-12 percent); Connecticut (-10 percent);

Ohio (-10 percent); Oklahoma (-10 percent); and West Virginia (-10

percent). The highest percentage increases were in the District of Columbia (+43 percent); Rhode Island (+24 percent) and Oregon (+17 percent).

- Passenger vehicle occupant fatalities dropped to 31,904 - the largest decrease since 1992. Declining fatalities in passenger cars are consistent with increases in safety belt use and more crashworthy vehicles.
- Passenger vehicle fatality rates per 100,000 registered vehicles declined for all passenger vehicle types except vans.
- Pedestrian deaths declined 2.1 percent from 4,851 in 2002 to 4,749.
- Fatalities in large truck crashes increased slightly from 4,939 to 4,986.
- In 2003, there was a decline in the number of unbelted fatalities, reflecting an increase in safety belt use. Still, 56 percent of those killed in passenger vehicles were not wearing safety belts. This underscores the need for states to adopt primary safety belt laws.

NHTSA earlier estimated that highway crashes cost society \$230.6 billion a year, about \$820 per person.

NHTSA annually collects crash statistics from 50 states and the District of Columbia to produce the annual report



Utah LTAP Center

Page 8

April 2004

"Fall" Back to Training With LTAP Workshops

The following workshop offerings are scheduled to-date by the Utah LTAP Center during the fall training season. Additional workshops may be added, so please check our Web site for up-to-date details on available workshops.

In addition, we offer workshops on-demand as instructor schedules permit. If you need training, please contact us as soon as possible to arrange a workshop for your area!

As a service to our participants, CEU credits are available for these courses through Utah State University. Workshop participants may apply for the CEU credits using the form available on our Web site. The cost is \$20/course.

To streamline your workshop registration needs, we have provided a fall training registration form below. You can also register for specific workshops on-line at our Web site.

ATSSA Flagging

Cost for this workshop is **\$40.**

- o October 12, 2004 (Brigham) 9 am-1 pm
- o October 13, 2004 (Brigham) 8 am-12 pm
- o October 14, 2004 (Cedar)
- o October 28, 2004 (Kanab)
- o November 18, 2004 (Hurricane)
- o December 2, 2004 (St. George)

This course can also be scheduled on-demand for local Utah agencies! Call 1-800-822-8878 to scheduled a workshop

Heavy Equipment Safety Operations

Cost for this workshop is **\$60.**

- o October 25, 2004 (Tooele)
- o November 1, 2004 (St. George)

Heavy Equipment Hands-On Training

Cost for this workshop is **\$200.**

- o October 26-27, 2004 (Tooele)
- o October 28-29, 2004 (Tooele)
- o November 2-3, 2004 (St. George)
- o November 4-5, 2004 (St. George)

Improving Highway Safety with ITS

Cost for this workshop is **\$45.**

- o October 19-20, 2004 (Salt Lake City)

ADA Compliance

Cost for this workshop is **\$40.**

- o November 9, 2004 (St. George)

Low Cost Safety Improvement

Cost for this workshop is **\$40.**

- o November 15, 2004 (Salt Lake City)

Human Factors

Cost for this workshop is **\$40.**

- o November 16, 2004 (Salt Lake City)

Program Management

Cost for this workshop is **\$40.**

- o November 18, 2004 (Salt Lake City)

ATSSA Traffic Control Technician

(TCT)

Cost for this workshop is **\$75.**

- o December 6, 2004 (Salt Lake City)

ATSSA Traffic Control Supervisor (TCS)

Cost for this workshop is **\$185.**

- o December 7-8, 2004 (Salt Lake City)

APWA Inspector Training

Cost for this workshop is **\$200.**

- o December 7-9, 2004 (Salt Lake City)

School Area Training

This training is available on-demand for local Utah agencies. Topics covered include: child access routing plans and school zone signing requirements. Call 1-800-822-8878 to scheduled a workshop for your agency!

Workshop dates are subject to change. Please call us or go on-line to confirm

Using the boxes beside the workshop date, check the workshops you want to register for. Then use the form below to complete your registration and fax the entire page to the LTAP Center at (435) 797-1582. Questions?

Utah LTAP Center Fall 2004 Workshop Registration Form

Name: _____
 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: _____



What Our Partners Are Doing

More Training Opportunities for YOU!!!



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].



Utah Association of Counties

For more information on UAC activities, or to register for a UAC sponsored event, please call them directly at (801) 265-1331 or go to their Web site [uacnet.pegasus.ultraservers.net].

2004 Annual Convention

November 10-12, 2004 (St. George)

The registration deadline for this event is October 29, 2004. More information and registration is available on-line at the UAC Web site (see address above). Cost is \$190 for county officials, for everyone else the cost is \$380. (A spouse program is available.)



ITE, Utah Chapter

For information on ITE activities, please contact Walt Steinvorth by e-mail at [msteinvorth@utah.gov]. Please note that the monthly luncheons are generally held

the third Tuesday of each month starting at 12 noon at Golden Corral (8860 South Redwood Road, West Jordan).



APWA, Utah Chapter

For more information on APWA activities please visit their Web site [www.apwautah.org]. Please note that in addition to monthly luncheons, quarterly meetings will also be held. The quarterly meetings will last about 3 hours, and will include breakout sessions. The location of each meeting will vary to accommodate more of the APWA's diverse membership.

APWA/ASCE/UCEA Fall Conference October 6-7, 2004 (West Valley City)

The intent of this year's conference is to provide relevant training for a wide spectrum of public works professionals including, public works directors, civil engineers, consultants, fleets and streets personnel, and front-line personnel. More details and registration information are available on-line at their Web site [www.apwautah.org]. Cost is \$80/person.

Monthly Membership Luncheon November 18, 2004 (West Valley City)

This monthly event will be held at Stonebridge ClubHouse. The Board of Director's Meeting will begin at 10:30 am and the luncheon at 12 noon.



Utah Local Governments Insurance Trust

For information on these and other Trust activities, please call Craig Bott at 1-800-748-4440. You can also e-mail Craig at [cbott@ulgt.org]. The Trust is also offering internet training through

their Web site at [<http://www.ulgt.org/internettraining.htm>]. Please check out their Web site at [www.ulgt.org].

How to Snowplow Safety (9-10:30am) First Aid and CPR Training, Part One (10:45am-12 pm) First Aid and CPT Training, Part Two (1-2:20 pm)

Dealing Effectively and Legally with Problem Employees (2:30-4 pm)
November 8, 2004 (North Ogden City)
November 9, 2004 (Vernal)
November 10, 2004 (Price)
November 22, 2004 (Gunnison)
November 23, 2004 (Hurricane)

These courses are part of the basic regional training offerings provided by the Trust. Please contact Craig Bott (see information above) if you have any questions.

Citizen Planner Workshop (8 am-4 pm) November 11-12, 2004 (Trust Office)

Advanced registration is required. The cost for this training is \$25 per person for Trust members, \$50 per person for non-Trust members. To register, contact Marilyn Beesley by calling (801) 936-6400 ext.1302.

November 18, 2004 (Trust Office) Defensive Driving 9:30 am-12 pm

This course is specifically designed for persons involved in vehicular accidents.



"Serving Utah Municipalities"

Utah Risk Management Mutual Association

For more information or to register for these and other URMMA training activities, please call Joanne Glantz at (801) 225-6692. You can also check out their Web site at [www.urmma.org].

Supervisor's Risk Management Training
November 2, 2004 (Riverdale City)
November 18, 2004 (West Jordan City)
This required training is available for URMMA members and non-members

Utah LTAP Center

Page 10

April 2004

a like. Contact URMMA for cost and availability.

Leadership Communication Workshop for Supervisors

October 7-8, 2004 (Sherwood Hills)

For information (registration, cost, availability) on this recommended training, please contact URMMA.



Blue Stakes of Utah

Just a reminder from Blue Stakes of Utah: **Call Before You Dig: It's Free and It's the Law!**

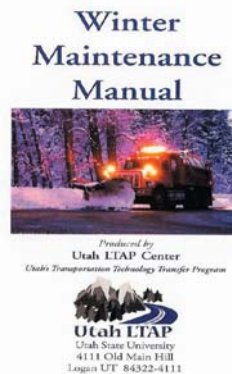
- Call two working days before excavation begins.
- Wait the required amount of time: give utility owners the allowed time to mark underground facilities.

Don't Wait for the Snow to Fall: Get Your Winter Maintenance Manual TODAY!!

The Utah LTAP Center and the Utah Department of Transportation, Maintenance Division, are please to make their Winter Maintenance Manual available for local Utah agencies! This manual is meant to fit into a glove compartment and serve as a quick reference guide for roadway maintenance personnel dealing with on-the-spot winter maintenance issues. The water resistant paper finish and coil binding assist with ease of use.

The manual covers every topic related to effective winter maintenance! From basic winter maintenance strategies, to winter storm management, product application tables, equipment issues, weather information sources, and more! There are plenty of graphs, charts, and easy-to-understand guides to help maintenance personnel make decisions about the best way to conduct winter maintenance operations.

Local Utah agencies should have already received a copy of the manual as Utah LTAP Center personnel made site visits around the state. If your agency would like additional copies (the cost is \$4/copy), please call 1-800-822-8878. Don't get caught out in the cold. Use this resource to help with your winter maintenance operations!



- Respect the marks: respect and protect markings throughout the duration of the excavation.
- Dig with care: hand dig with care within the 24-inch safety zone while exposing underground utilities!

This service is free of charge to excavators and homeowners and is funded by member utility companies. For more information, call toll-free 1-800-622-4111.

You can also visit them at their Web site, or contact their board of trustees with any ideas or issues you would like them to discuss. Our director, Doyt Bolling, serves on the Board and acts as your local issues representative. You can contact him by e-mail at [doyt@cc.usu.edu].

Our thanks to these important partners for sharing this information and working with us in our efforts to serve the local agencies of Utah.

Advisory Board

Joe Anderson
Utah Local Governments Trust

Loren R. Anderson, P.E., Ph.D
Utah State University

Dave Beach
Utah Highway Safety Office

Denton Beecher, L.S.
Box Elder County

Ken Berg, P.E.
Utah Department of Transportation

Sydney Fannesbeck
Utah League of Cities & Towns

L. Brent Gardener
Utah Association of Counties

Brett Hadley, P.E.
Utah Department of Transportation

J. Raymond Johnson, P.E.
Tooele County

Paul Mooney
FHWA, Utah Division

Clyde Naylor, P.E.
Utah County

Trace Robinson, P.E.
West Valley City

Dean Steele
Utah Risk Management Mutual
Association

William Swensen
St. George City

The Utah LTAP Center Advisory Board meets twice annually (and as needed) to make recommendations and evaluate the effectiveness of the program.

Utah LTAP Center

Page 11

April 2004



Sign Quiz:

What did you see?

Check out the photo on page 1. What is wrong with that sign?

Both signs warn the motorist of a



change in horizontal alignment. The MUTCD requires the selection of the horizontal alignment sign to be based on the advisory speed limit (as determined by an engineering study). In this case, the advisory speed is below 30 mph making the right reverse turn sign (shown above) appropriate. (MUTCD Part 2, chapter 2C)

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.

About On the Move

On the Move is published quarterly by the Utah LTAP/Transportation Technology Transfer 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 Doyt Y. Bolling
 Assistant Director..... Stuart Thompson
 Coordinator Keri Shoemaker
 Field Projects Manager Dee Hadfield
 Network Administrator Brian Birch
 Newsletter Julie Duersch
 Phone/Fax (435) 797-2931/797-1582
 E-mail..... utaht2@cc.usu.edu
 Web site..... www.utaht2.usu.edu

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

Utah State
UNIVERSITY



Utah LTAP Center
 Utah State University
 4111 Old Main Hill
 Logan UT 84322-4111



U.S. Department of Transportation
 Federal Highway Administration



NON-PROFIT ORGANIZATION
 U.S. POSTAGE PAID
 LOGAN, UTAH
 PERMIT#1

Return Service Requested