

## Pavement Preservation Critical to Providing Cost-Efficient Travel

excerpt from TRIP: The Road Information Program Web Site [[www.tripnet.org](http://www.tripnet.org)]

**One-fourth of major urban roads provide unacceptable ride, costing the average motorist nearly \$400 annually. Inadequate Federal investment will result in greater costs.**

The top 10 urban metropolitan regions (cities and surrounding suburbs with at least one million people) where motorists pay the most annually in extra vehicle operating costs because of roads with poor ride quality are: Los Angeles (\$706), San Jose (\$705), San Francisco/Oakland (\$674), San Diego (\$667), Detroit (\$621), New Orleans (\$617), Baltimore (\$612), Sacramento (\$609), Boston (\$606) and Oklahoma City (\$578).

One out of every four major urban roads in the United States provide drivers with an unacceptable ride quality and are in need of resurfacing or reconstruction, according to a new report released today by a national nonprofit transportation research group based in Washington, DC.

The Road Information Program (TRIP) report, *“Keep Both Hands on the Wheel: Cities with the Bumpiest Rides and Strategies to Make our Roads Smoother,”* finds that motorists in the nation’s major urban regions are paying an average of \$396 annually per driver in extra vehicle operating costs to drive on roads in need of repair.

“Congress has the opportunity to increase federal funding to improve these roads when it reauthorizes federal surface transportation legislation this year,” said William M. Wilkins, TRIP’s executive director. “Without additional federal investment, our nation’s roads are going to get worse and motorists are going to pay a higher “hidden tax” in the form of additional vehicle operating costs,” he added.

The high level of pavement deterioration on major urban roadways can be attributed to a significant increase in urban traffic, particularly from large trucks, which increases wear on these key roads. Further significant increases in travel in the years ahead will put further wear and tear on roads and make it even more costly to improve and maintain them.

Overall travel on urban roads increased by 30 percent between 1991 and 2001. Travel by large commercial trucks increased by 46 percent over the same time period. Vehicle travel is projected to increase by 42 percent by 2020, while travel by heavy trucks is projected to increase by 49 percent.

While a desirable goal for state and local governments is to maintain 75 per-

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## About *On the Move*

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## About the *Utah T<sup>2</sup> Center*

The Transportation Technology Transfer Program 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.

For more information about the LTAP program or items in this newsletter, please call us at 1-800-822-8878.



# Legislative & Regulatory Update

## Proposed Federal Rulemaking to Improve Work Zone Safety & Mobility

The FHWA published a notice of proposed rulemaking in the May 7 Federal Register to update 23 CFR 630, Subpart J. The proposed regulation update reflects more consideration of work zone impacts in project development and execution. *The comment period will close on September 4, 2003.*

The FHWA proposes to amend its regulation that governs traffic safety in highway and street work zones. The FHWA recognizes that increasing road construction activity on our highways can lead to an increase in congestion and crashes, as well as loss in productivity and public frustration with work zones. The results of a recent FHWA nationwide survey indicated that work zones were cited as second only to poor traffic flow in causing traveler dissatisfaction. The survey also found that the top three improvements indicated by the public as a "great help" to improve roadways and transportation are related to roadway repairs and work zones. Therefore, these proposed changes are intended to facilitate consideration of the broader safety and mobility impacts of work zones in a more coordinated and comprehensive manner across project development stages.

The notice of proposed rule making is available at the Federal Register (68 FR 24384) Web site [[http://www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)].

## Public Beware

### Take Steps to Avoid West Nile Virus provided by the Bear River Health Department

With the spread of West Nile Virus beyond the East Coast, it's time for those who work outside--and the public in general--to take steps to avoid contracting the potentially deadly West Nile Virus. Citizens and local agency personnel alike should be aware that a community mosquito abatement or mosquito treatment program is not a foolproof safeguard for you or your family.

Here are some things individuals can do:

- Reduce time spent outdoors when mosquitos are most active--between dusk and dawn
- Wear long sleeve shirts and long when outside
- Apply insect repellent to exposed skin areas while outside (for adults 30-35% DEET concentration, for children use less than 10% DEET)
- Make sure screen doors and window screens are in good condition.
- Eliminate standing water sources around housing areas.

For more information on what local agencies can do to reduce public exposure to west nile virus, please visit the Bear River Health Department Web site [[www.brhd.org](http://www.brhd.org)].

# Highway Safety Fact Sheet: How Road & Bridge Improvements Save Lives

excerpt from the TRIP Web site [[www.tripnet.org/hsfactsheet.htm](http://www.tripnet.org/hsfactsheet.htm)]

Approximately 42,000 people are killed in highway crashes each year in the U.S., and 3.5 million are injured. Highway crashes are the leading cause of death of people ages six to 28 and are the cause of more permanent impairments than any other type of accident. Highway fatalities nationwide have increased by seven percent since 1992.

Statistics show that increased investment in road and bridge improvements save lives. Making road lanes and shoulders wider, adding medians and improving bridges are just a few of the improvements which have been shown to cut fatalities significantly. This highway safety information is based on data obtained by The Road Information Program (TRIP) from the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration. Data are the latest available.

- Every \$100 million invested in highway safety improvements will result in approximately 145 fewer traffic fatalities over a 10-year period.
- Approximately 500 people are killed annually in crashes at rail-highway crossings.
- About 12,000 people are killed annually in traffic crashes involving collisions with a fixed object such as a tree, guardrail, utility pole, curb, or light or support pole.

Listed are key road and bridge improvements evaluated over a 20-year period by FHWA and the related reduction in fatality rates.

<u>Improvements at Intersections</u>	<u>Reduction in Fatality Rate</u>
Turning lanes and traffic channelization	47 percent
Sight distance improvements	56 percent
New traffic signals	53 percent

<u>Bridge Improvements</u>	<u>Reduction in Fatality Rate</u>
Widening a bridge	49 percent
New bridge	86 percent
Upgrade bridge rail	75 percent

<u>Roadway Improvements</u>	<u>Reduction in Fatality Rate</u>
Construct median for traffic separation	73 percent
Widen or improve shoulder	22 percent
Realign roadway	66 percent
Groove pavement for skid treatment	33 percent

<u>Roadside Improvements</u>	<u>Reduction in Fatality Rate</u>
Upgrade median barrier	66 percent
New median barrier	63 percent

## Advisory Board

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Utah Local Governments Trust

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Utah Risk Management  
Mutual Association

The T<sup>2</sup> Center Advisory Board meets twice annually (and as needed) to make recommendations and evaluate the effectiveness of the program.

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cent of its roads in good condition, only three of the nation's urban areas of one million people or more—Atlanta, Orlando and Phoenix—achieve this goal. In fact, only 14 major urban areas have at least 50 percent of their major roads in good condition. These major arterial routes carry 78 percent of the more than 1.7 trillion miles driven annually in urban America.

A 2002 U.S. Department of Transportation (DOT) study prepared for Congress found that urban road and highway pavement conditions are likely to get worse at current funding levels. The DOT study concluded that improving the physical condition and performance of urban roadways would require a 49 percent increase in annual funding, from \$13.6 billion annually to \$20.2 billion per year.

***The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), which increased federal spending on road and bridge improvements over the past six years expires Sept. 30. Congress has begun deliberations on reauthorizing new federal surface transportation legislation. The leadership of the U.S. House of Representatives' Committee on Transportation and Infrastructure has proposed that federal funding of roads and bridges during 2004 to 2009 be increased to \$300 billion.***

“This level of investment will not only allow state and local governments to improve pavement conditions, but provide needed funds to improve safety and traffic flow,” said Wilkins. “An added benefit will be the creation of thousands of badly needed jobs,” Wilkins added.

The report also stated that there are new materials and techniques, which offer the opportunity of building and reconstructing roads and highways to provide a smoother ride to the public and for longer periods, delaying the need for major road repairs.

TRIP offers the following recommendations for ensuring a smooth drive:

- Build and rebuild roads and highways with the highest level of smoothness.
- Insure that foundation for roads and highway pavements is built and maintained in good condition.
- When critical routes are constructed or reconstructed, consider using pavement designs that will provide a longer-lasting surface.
- Implement a pavement preservation program that postpones the need for significant rehabilitation by performing initial maintenance on road surfaces while they are still in good condition.
- Resurface roads in a timely fashion using pavement material that is designed to be the most durable given local climate and the level and mix of traffic on the road.
- Maintain an aggressive pothole repair program that uses the best patching material available.
- Invest adequately to insure that 75 percent of local road surfaces are in good condition.

*Editor's Note: Pavement condition data is based on the Federal Highway Administration's (FHWA) 2001 annual survey of state transportation officials on the condition of major state and locally maintained roads, based on a uniform pavement rating index. The report contains data for urban areas one million and greater (Appendices A & B) and 500,000 to 1,000,000 residents (Appendices C & D).*

For more information, contact Frank Moretti, Paul Haaland or Carolyn Bonifas at The Road Information Program (TRIP) by mail, phone or fax:

TRIP

1726 M Street, N.W., Suite 401  
Washington, DC 20036  
Phone (202) 466-6706  
Fax (202) 785-4722

You can also view a .pdf file containing the entire report along with this newsletter at the Utah T<sup>2</sup>/LTAP Center Web site [[www.utaht2.usu.edu](http://www.utaht2.usu.edu)].

## Slow the Flow...

### Save H<sub>2</sub>O

#### Water Conservation

#### Begins at Home

excerpt from the Utah Division of Water Resources Web site [[www.water.utah.gov](http://www.water.utah.gov)]

As Utah enters its fifth year of drought, it's important that everyone does their part to conserve one of our most precious resources--WATER!

The number one water (and money) saving tip is to only water your lawn from 6 pm to 10 am (for automatic sprinklers the optimum time for watering your lawn is between 12 am to 8 am). Also, water your lawn only when and where it needs it! A good way to see if your lawn needs water is to step on the grass--if it springs back up when you move, it doesn't need water. For more information on this, go to [[www.uc.usbr.gov/progact/watercons/pdfs/2PageIndex.pdf](http://www.uc.usbr.gov/progact/watercons/pdfs/2PageIndex.pdf)].

The number two water (and money) saving tip is to install water-saving faucets and showerheads and lower the water level in the toilet tank!

For more tips on water conservation, go on-line or contact your local Extension Services office! ***Remember, if we all do a little, we can save a lot!***

# FYI: For Your Information

With the busy summer construction and public works season upon us, the training schedule for the Utah T<sup>2</sup> Center is not as full as it is during the rest of the year. But that doesn't mean we are not offering training for local agencies who need it! We are also making plans now for our busy fall and winter training seasons and encourage you to contact us as soon as possible to schedule the workshops your agency personnel need! **Remember, we are here to serve you!**

The following dates are currently on the calendar for the Utah T<sup>2</sup> Center. Additional dates will be added in the

months ahead. For updates, please go on-line to our Web site [[www.utaht2.usu.edu](http://www.utaht2.usu.edu)].

## July

- 4 Independence Day (office closed)
- 24 Pioneer Day (office closed)

## August

- 12 Pavement Marking Workshop (Ogden)
- 12 Pavement Marking Workshop (SLC)
- 14 Pavement Marking Workshop (Richfield)
- 25 Flagger Certification (Ogden)

- 27 Flagger Certification (SLC)
- 28 Flagger Certification (Provo)

## September

- 1 Labor Day (office closed)
- 10 Signal Warrants & Traffic Studies (Ogden)
- 15 TCT (SLC)
- 15-17 TCS (SLC)
- 19 Flagger Certification (St. George)
- 23 Crash Analysis Workshop (Ogden)
- 24 Crash Analysis Workshop (SLC)
- 25 Crash Analysis Workshop (Richfield)

**Updates on these and other calendar items are available at the Utah LTAP/T<sup>2</sup> Web site [[www.utaht2.usu.edu](http://www.utaht2.usu.edu)]; or call the Utah T<sup>2</sup> Center at 1-800-822-8878.**

## FHWA Public Safety & Security Program

### *Keep American Moving Through Emergencies & National Security Events*

excerpt from a brochure from the U.S. Department of Transportation, FHWA, Office of Operations

When disaster strikes, America's transportation system is its lifeline. Then transportation system conveys those at risk away from danger, and provides access to emergency response and recovery units. If your community is not actively planning to optimize the operation and coordination of its transportation system during natural disasters or national security events, there's a missing link in your emergency preparedness plans.

Safe, continuous movement of people and goods during emergencies depends on well-coordinated operations plans and policies. The full capability of the transportation system must be harnessed and optimized.

Before an incident, transportation and other emergency response agencies need to interact regularly in preparing emergency plans, and they need to practice joint response activities in exercises.

Transportation agencies need to prepare for their emergency roles, and they need to be prepared to deliver their full disaster response capabilities. Other responders need to have a full understanding of transportation's role and capabilities.

During and after an emergency, transportation agencies must be full and equal partners with other emergency responders: at the incident scene; in the transportation management center; and at the emergency operations center.

The FHWA Office of Operations is working to ensure that surface transportation agencies throughout the Nation have the necessary tools and techniques to prepare for, prevent, manage, and recover from both natural and man-made disasters.

As part of that effort FHWA is partnering with other Federal agencies, State and local agencies, industry, and universi-

ty research organizations. Current projects and activities include:

- regional emergency management workshops
- telecommunications vulnerability reduction
- emergency management case studies
- Homeland Security Advisory System information for transportation agencies, etc.

Additional projects and activities are also planned in the areas of (1) emergency transportation planning, (2) operational tools, and (3) defense preparedness.

For more information, please contact: Vince Pearce, Public Safety & Security Team Leader. He can be reached by e-mail at [[vince.pearce@fhwa.dot.gov](mailto:vince.pearce@fhwa.dot.gov)]. You can also access additional resources on-line at [<http://ops.fhwa.dot.gov/OpsSecurity>].



# What Our Partners Are Doing

## More Training Opportunities for YOU!!!



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



### 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](http://www.ulct.org)].

#### Annual Convention

**September 10-12, 2003 (Salt Lake City)**

This three-day conference, held every September in Salt Lake City, highlights important municipal topics. Keynote addresses, concurrent workshops and a trade show provide excellent information for all who attend. At the Annual ULCT Business Meeting (included in this conference) League policies are formed and officers and board members are elected. A spouse's program also offers informative workshops for the spouses of elected and appointed officials.



### 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](http://uacnet.pegasus.ultraservers.net)].

**USACC Local Authority Oversight Meeting & July Meeting**  
**July 17-18, 2003 (Richfield)**

**Property Tax Administration in Utah**  
**September 18, 2003 (Richfield)**

**USACC Fall Workshop & Annual Conference**  
**September 24-25, 2003 (Midvale)**

**Annual Convention**  
**November 12, 2003 (St. George)**  
Plan now to attend. More information will be available in the next newsletter and on-line.



### APWA, Utah Chapter

For more information on APWA activities please visit their Web site [[www.apwautah.org](http://www.apwautah.org)]. Please note that monthly luncheons have been replaced with quarterly meetings. 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.

**3rd Quarter Meeting**  
**August 7, 2003 (Glen Canyon, Provo)**

The meeting will begin at 11:30 at Canyon Glen Park in Provo Canyon. Two speakers will be making presentations on the Provo Canyon Road UDOT project and the Deer Creek Reservoir Dam project.

**APWA Congress**  
**August 24-27, 2003 (San Diego)**

For more information about this event, please visit the national APWA Web site [[www.apwa.org](http://www.apwa.org)].



### ITE, Utah Chapter

For information on ITE activities, please contact Sara Colosimo with Riley Transportation; her e-mail address is [[scolosimo@rileytransportation.com](mailto:scolosimo@rileytransportation.com)]. Please note that the monthly luncheons are held the third Tuesday of each month starting at 12 noon at Shanghai Gardens (7200 South 300 West, Salt Lake City, Utah) unless otherwise indicated.



### Utah Local Governments Insurance Trust

For information on regional training dates and topics, and for more about other Trust activities, please call Craig Bott at 1-800-748-4440. You can also e-mail Craig at [[cbott@ulgt.org](mailto:cbott@ulgt.org)]. Also, check out their Web site at [[www.ulgt.org](http://www.ulgt.org)].



*"Serving Utah Municipalities"*

### Utah Risk Management Mutual Association

For information or to register for these and other URMMA training activities, please call Joanne Glantz at (801) 225-6692 ext. 18. You can also check out their Web site at [[www.urmma.org](http://www.urmma.org)].

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# The Personal Side of Public Works

**Law Enforcement Roundtable**  
July 8, 2003 (TBA)

**POST Simulator Training**  
July 15, 2003 (Layton)  
August 26, 2003 (Spanish Fork)  
September 16, 2003 (Centerville)  
This training is limited to URMMA members only.

**WCF Personal Protection Equipment**  
July 18, 2003 (Orem) from 9-11:30 am

**NSC Defensive Driver Training**  
July 22, 2003 (South Jordan) from 9 am-1 pm  
September 17, 2003 (Spanish Fork) from 1-5 pm  
The cost for this recommended training is \$10 for URMMA members, \$20 for non-members.

**URMMA Summer Conference**  
August 6-7, 2003 (Ruby's Inn)  
For registration information and costs, please contact URMMA directly.

**WCF Accident Investigation Techniques**  
August 15, 2003 (Farmington) from 9-11:30 am

**WCF Fall Protection**  
September 19, 2003 (Spanish Fork) from 9-11:30 am

## Need More Information?

Please go to the Utah T<sup>2</sup> Center Web site [[www.utaht2.usu.edu](http://www.utaht2.usu.edu)] for quick, on-line access to our partners!

You can also call us at 1-800-822-8878 for information regarding our own training services and cooperative training efforts with these and other organizations.

We are here to help meet your training and technology transfer needs!

We are all familiar with the hard work and effort that goes into the tough job of serving the public! From these very pages you have often heard kudos expressed for a job well done--for outstanding projects, with innovative or cutting-edge equipment, or state-of-the-art materials.

But, as you know from your own lives, there is more to you than your professional life. You bring with you the experiences, talents, and interests developed outside the professional arena as well. To that end, we wanted to start a section of our newsletter devoted to the personal side of public works.

For our premier article, we are highlighting the poetry of Glade C. Allred, Street Superintendent for Vernal City. Glade Allred tells us that he enjoys penning his thoughts, ideas and feelings into poetry when so inspired! ENJOY this personal side of one of your colleagues in Public Works!

But don't stop there, we invite you to participate! Please share with us things about yourself or your co-workers that inspire you outside of your professional sphere! There's much more to public works than meets the eye! Call 1-800-822-8878 or e-mail [[utaht2@cc.usu.edu](mailto:utaht2@cc.usu.edu)].

## If Only

If only I was smarter, I could always get an A.  
If only I was bigger, maybe I'd have beat today.  
If only I ran faster, then I could always win.  
If only I was better, then I would never sin.  
If only I was prettier, I'd always have a date.  
If only I was organized, I never would be late.  
If only I was happier, I wouldn't feel so bad.  
If only I had better kids, I wouldn't get so mad.  
If only I was wealthy, maybe I could learn to share.  
If only I was patient, then I'd still have all my hair.  
If only I had better teeth, then I would learn to smile.  
If only I had lots more clothes, then I could dress in style.  
If only I was stronger, then I wouldn't be so weak.  
If only I was not so scared, then maybe I could speak.  
If only I was not so tired, I wouldn't sleep so late.  
If only I had lots more time, I'd fix the garden gate.  
If only I was anything, except what I am now,  
"If only" might not bother me if I could change somehow.  
If only I could be like you, how happy I would be!  
What's that you say? You've always wished that you could be like me?

by Glade C. Allred, Copyright (all rights reserved)

# School Zone Safety: A Primary Concern for UDOT

by Sharon Twitchell, UDOT State School Zone Safety Coordinator

School zone safety is a primary concern for the Utah Department of Transportation. Accordingly, UDOT has implemented a new School Zone Safety Program with the goal of decreasing auto/pedestrian accidents among school-aged children walking to and from school. The program is in its infancy, with policies and procedures currently under development, however, UDOT has identified the following key items to be included in the program:

- Implement and maintain a statewide school zone inventory on State routes;
- Upgrade the signing and striping of school zones and school crossings to current MUTCD standard;
- Monitor school safe routing plans;
- Partner with school districts to solve safety issues; and,

- Educate school-aged children on pedestrian safety.

UDOT is also in the process of updating the Manual and Specifications on School Zone Crossings, which was produced by UDOT, and is referred to as the Yellow Book. The Yellow Book is a supplement to Part 7 of the MUTCD and provides the requirements necessary to create a uniform system of traffic control devices, school-crossing guards, and child access routing plans for school crossing zones.

If there are any questions or comments regarding this program, please contact Sharon Twitchell of the Utah Department of Transportation. She can be reached at (801) 965-3880 or by e-mail [[stwitchell@utah.gov](mailto:stwitchell@utah.gov)].

## County Road Advisor's Conference Returns to Rapid City, South Dakota October 22-23, 2003

It's time to mark your calendars for the County Road Advisor's Conference being held October 22-23, 2003 in Rapid City, South Dakota.

Registration will be handled through the South Dakota LTAP Center (SDLTAP). You can reach their office by calling (605) 688-4185.

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