

# ***Distracted Driving Creates Dangerous Situations***

*By Chief Murray Pendleton Chairman, Connecticut Police Chief's Association, Highway Safety Committee*

Driving large municipal trucks and special purpose vehicles, including cars, can be challenging enough even when full attention is given to the road and potential hazards.

It only takes a second for a crash to happen. Distractions occur when drivers concentrate on something other than operating their vehicles – such as engaging in cell phone conversations. NHTSA (National Highway Traffic Safety Administration) estimates that 25% of all crashes involve some form of driver distractions.

National surveys show that most drivers at least occasionally engage in behaviors that draw some of their attention away from their driving task. The most common of these behaviors include such general activities as;

- Talking or texting on a cell phone;
- Talking with passengers;
- Changing radio stations or CD's;
- Eating or drinking while driving.

Operating municipal trucks is unique. The fact that most of the trucks have special equipment requires more attention to detail, leaving no room for *distractions*.

Driving is a full-time job, and operating snowplows, trash pick-up trucks, fire engines, etc. while using a cell phone, reading a road map, or talking to fellow employees is potentially dangerous.



- Make adjustments to vehicle controls such as radios, air conditioning, or mirrors before beginning to drive or after the vehicle is no longer in motion;
- Don't reach down or behind the driver's seat, pick up items from the floor, open the glove compartment, clean the inside windows, or perform personal grooming while driving;

- You should not eat or drink while driving, but if you do, get something that is not messy and that you can hold in one hand. Set your food up next to you before you take off and make sure you use a cup holder for your drink.
- Know where you are going and how to get there before you start out.

For more than 10 years studies have been conducted which focus on the risks associated with various types of distractions. There clearly is ample information to believe a distracted driver is at an increased risk of a crash.

Your complete attention to driving is not only in the best interest of you and your passengers but can clearly save lives as well as reduce serious injuries.

*Continued on Page 3...*

## **In This Issue...**

- Distracted Driving Creates Dangerous Situations.....Front Page & Page 3**
- New Council Member and Staff.....Page 2**
- Idaho T2 Summer Classes 2010.....Page 3**
- Traffic Calming on Main Roads Through Rural Communities.....Pages 4, 5 & 8**
- Are Your Roads "EasyRiding" for Motorcycles?.....Page 6**
- Penny Wise, Pound Foolish.....Page 7**
- Road Safety Audits.....Page 7**
- Small City has Big Question about Street Name Signs.....Page 8**
- Retroreflection = Reflection? A Quick Lesson.....Page 9**
- National MUTCD Tip.....Page 9**
- First Annual Safety Fest of the Great NW—Pocatello April 2010 Hosted by the Idaho T2 Center.....Page 10**
- Safety Fest of the Great Northwest Lewiston—September 21-24, 2010.....Page 10**
- Summer Safety Driving Tips.....Page 10**
- Idaho T2 Road Master & Road Scholars.....Page 11**
- Calendar Of Events.....Back Page**



## LOCAL HIGHWAY TECHNICAL ASSISTANCE COUNCIL MEMBERS

### Idaho Association of Highway Districts

**Dick Edinger, Chairman**  
Commissioner, East Side Highway District

**Clark Kauffman**  
Commissioner, Filer Highway District

**Dan Schaeffer**  
Commissioner, Hillsdale Highway

### Idaho Association of Counties

**Lan Smith, Vice Chairman**  
Commissioner, Gem County

**R. Tad Hegsted**  
Commissioner, Jefferson County

**Don Ebert**  
Commissioner, Clearwater County

### Association of Idaho Cities

**Mac Pooler, Secretary/Treasurer**  
Mayor, City of Kellogg

**Randall Prescott**  
Council Member, City of Soda Springs

**Kevin Poole**  
Mayor, City of Lewiston

### Ex-Officio Members

**Stuart Davis**, Executive Director  
Idaho Association of Highway Districts

**Tony Poinelli**, Deputy Director  
Idaho Association of Counties

**Ken Harward**, Executive Director  
Association of Idaho Cities



## IDAHO T2 ADVISORY BOARD

The members listed below help guide and direct the policies and activities of the Idaho T2 Center. You are invited to contact any of them to comment, make suggestions, or ask questions about the T2 Program.

**Nate Marvin – Chairman**  
Public Works Superintendent  
City of Weiser  
208-814-1965

**LeRoy Lewis**  
Road Supervisor  
Jerome Highway District  
208-324-4601

**Kim Reed**  
Road/Bridge Director  
Gem County Road/Bridge Dept.  
208-365-3305

**T2 Ex-Officio Member**  
**Lance Holmstrom**  
LHTAC Administrator  
800-259-6841

**Kevin Eckersell**  
Public Works Director  
Bonneville County Road & Bridge  
208-529-1290

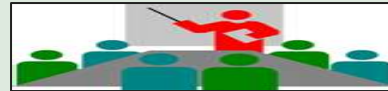
**Terry Little**  
Traffic Manager  
Ada County Highway District  
208-387-6140

**Stuart Davis**  
Executive Director  
Idaho Association of Highway Districts  
208-345-5176

**T2 Associate**  
**Ned Parrish**  
ITD Research Program Manager  
208-334-8296

**John Perry**  
Field Operations Engineer  
Federal Highway Administration  
208-334-9180 Ext. 116

**Steve Hyndman**  
Training Specialist  
Idaho Transportation Department  
208-799-4242



## LHTAC STAFF

**Lance Holmstrom, M.U.P.**, Administrator

**G. Daniel Shirilla**, Deputy Administrator

**Susan Lasuen**, Office Manager

**Cindy Stewart**, Publication/Council Manager

**Nancy Ziebarth**, Secretary/Receptionist

**Gerald H. Flatz, P.E.**, Federal-aid Manager

**Wayne Herbel, P.E.**, Deputy Federal-aid Manager

**Dan Coonce, P.E.**, Deputy Federal-aid Manager

**Michael Moffett**, Assistant Federal-aid Manager

**Vicki Courtois**, Federal-aid Administrative Assistant

**Todd Bartolome, P.E.**, Construction Engineering Manager

**Jessica Barnes**, Construction Records Inspector

**Byron Walker**, Construction Engineering Team

**Jim Zier**, Asset Manager

**Dylan Karaus**, Highway Certification Coordinator

**Matthew Syphus**, GIS Specialist

**Bruce Drewes**, T2 Manager

**Lorie Cover**, T2 Training Coordinator

**Denise Shields**, T2 Event Coordinator

## New Council Member and Staff

We would like to welcome our new member now serving on the Local Highway Technical Assistance Council (LHTAC). Mayor Kevin Poole, City of Lewiston has been appointed by the Association of Idaho Cities (AIC). Mayor Poole brings to the Council his extensive experience in highway matters. We look forward to working with all of our Council members and to an exciting year.



We would also like to welcome Byron Walker who has joined LHTAC's Construction Engineering Team. Byron is currently studying Construction Management at Boise State University and he and his wife are expecting their first baby this September.

**Local Highway Technical Assistance Council (LHTAC)**  
**Idaho Technology Transfer Center (T2) - LTAP**  
3330 Grace Street, Boise, ID 83703  
Phone: (208) 344-0565 (800) 259-6841  
Fax: (208) 344-0789  
LHTAC webpage, [www.lhtac.org](http://www.lhtac.org)  
Idaho T2 Center webpage, [www.idahot2.org](http://www.idahot2.org)

...Continued from Front Page

**Below is a list of common distracters:**

- Use of cell phones
- Eating/drinking/smoking
- Texting and e-mailing
- Personal hygiene
- Changing radio stations/CD's/DVD's
- Sight Seeing/gawking
- iPods
- In-car information screens
- Adjusting mirrors/heat/AC
- Searching for items
- GPS
- Unsecured objects
- Reading maps/directions/books/magazines/newspapers

Such distractions may not only cause you to lose control of your vehicle, they may cost someone, including you....your life.

**Texting is a Major Distracter**

The National Safety Council estimates that 80% of Americans admit to using cell phones, and 20% admit to texting, while driving. That amounts to about 100 million drivers.




Driving while using a cell phone incurs a 4 times greater risk of crashing, which is equivalent to driving while drunk (with a 0.08 blood-alcohol level.) For texters, the risk is eight times greater.

Talking on a cell phone while driving slows down the reaction time of even the most experienced driver.

All drivers of municipal vehicles must be committed to reducing serious injuries and deaths on our roadways. This all starts with your commitment to not become a distracted driver.

*Reference: Connecticut Technology Transfer, Spring 2010*



## Idaho T2 Summer Classes 2010

See our website for more details: [www.idahot2.org](http://www.idahot2.org)

Date	Workshop	Instructor	Workshop Location	Road Scholar Program
July 26, 2010	Traffic Monitoring for Technicians	TBD	Boise	Elective
July 27-28, 2010	Speed Limits & Speed Zones	Doug Chase	Caldwell	Road Master
August 26, 2010	Microsoft PowerPoint	Tony Loomer	Post Falls	Elective
Registration Fees		How To Register		
<b>Agency</b> Local Highway Jurisdictions: \$45 State & Federal: \$80 Out-of-State & Private: \$105		Go to the Idaho T2 Center website: <a href="http://www.idahot2.org">www.idahot2.org</a> and login into the site with your user name and password. If you do not have a user name and password, on the left side of the webpage, click on the link "request logon". Once logged in you can register by viewing available classes on the training calendar or go to "Your Info" on the left navigation bar.		
Class Information				
Class information is posted online: <a href="http://www.idahot2.org">www.idahot2.org</a>  All classes start at 8:30 AM unless noted otherwise. Attendees will have a one-hour lunch break; lunch will not be provided.  Register two or more weeks in advance to receive a \$5 discount per person ( <i>early registration discount does not apply to heavy equipment courses.</i> )		Registration Cut Off: Is 10 business days prior to the class  Cancellation Policy: If you must cancel, please call us at 208-344-0565 or at 800-259-6841. There will be no refunds will unless a cancellation notice is received at least two (2) business days before the class.		
Please contact the Idaho T2 Center if you need assistance on how to register online for a class or on how to access your class transcripts from our website. Contact us at <a href="mailto:IdahoT2@lhtac.org">IdahoT2@lhtac.org</a> or call 208-344-0565 or 800-259-6841.				

## Traffic Calming on Main Roads Through Rural Communities



"35 MPH" pavement legend with red background.

Speed management is a significant challenge for most communities in the United States. This is particularly true for small, rural communities where the main roadway through the town serves a dual role. Outside the town, the roadway provides high-speed travel over long distances; within the built-up area, however, the same roadway accommodates local access, pedestrians of all ages, on-street parking, bicycles, and the many other features unique to the character of a community. This convergence of roadway purposes presents both an enforcement challenge for the community and a potential safety problem for the public.

Addressing the issue through law enforcement alone often leads to temporary compliance at a significant cost. A more permanent way to reinforce the need to reduce speed is to change the look and feel of the road by installing traffic calming treatments that communicate to drivers that the function of the roadway is changing. Traffic calming has been evaluated and used extensively within low-speed urban areas in the United States but less so in rural areas where driver expectations and traffic characteristics are different.

Traffic calming is more common in rural communities in Europe where multiple measures such as colored pavement, physical lane narrowing, signing, and landscaping are often combined. A

gateway treatment intended to evoke lower speed on the approach and entrance to the community is usually followed by a series of other measures repeated throughout the community to encourage drivers to maintain appropriate speeds. Speed reductions up to 15 mph from rural traffic calming have been reported in France, Denmark, and the UK, although speed reductions of 5 mph were more typical. Total accidents were reduced by 50 percent and injury accidents by 25 percent or more.

This article summarizes an evaluation of the effects on speed of low-cost, traffic-calming treatments on main rural highways passing through small, rural communities in Iowa. The full report, *Appropriate Traffic Calming Techniques for Small Iowa Communities (TR- 523)*, is available on the Iowa State University Web site: <http://www.ctre.iastate.edu/research/detail.cfm?projectID=-226410767>.

### Summary of Effectiveness

In the table to the right, you will find a summary of the speed impact, cost, and maintenance requirements for the various traffic-calming treatments evaluated in this study. You will note that the effectiveness of the treatments in reducing speeds varied widely.

The most effective treatments were the speed feedback signs, speed table, median island using tubular markers, and speed limit markings with red background. The converging chevrons and transverse pavement markings were somewhat effective with speed reductions generally less than 3 mph. Lane narrowing using pavement markings to create a center island, lane narrowing using shoulder markings in combination with on-pavement speed limit markings, and on-pavement "SLOW" markings were either not effective or were only marginally effective.

### Lessons Learned

The following lessons were learned during the course of the study and may be helpful to small communities considering traffic calming on main rural roads:

- Vehicle road usage should be considered when determining the type of traffic-calming treatment to implement. For example, farm vehicles and heavy truck traffic are common in many rural communities and must be accommodated.
- Maintenance can be an issue with many traffic-calming treatments. For example, the tubular channelizing markers used in this study to create a center island were effective in reducing speeds, but the tubular markers were frequently struck by vehicles and required frequent maintenance. The speed feedback signs provide a different example in that, to be effective, agencies must establish the capability to troubleshoot and maintain lane narrowing with center island using tubular markers these signs within a reasonable response time.
- Cost effectiveness is always a factor in selecting traffic-calming treatments. While speed feedback signs were effective in all situations, their higher cost make them most appropriate for areas where it is critical that drivers slow down, such as near schools, playgrounds, or community pools.
- Durable pavement marking materials (such as thermoplastic, tape, epoxy, or other paint alternatives) should be considered when the markings extend within wheel paths. Standard paint products wear quickly and without frequent reapplication can reduce the effectiveness of the message.

*Continued on Page 5...*

...Continued from Page 4

- Community buy-in is important. In several cases, although community leadership was onboard, the community was opposed to the treatment, even when it was proven to be effective.
- Lane narrowing using just pavement markings to create a center island or shoulder was not effective. The lane narrowing treatment that used tubular markers to create a center island was more effective, suggesting that lane narrowing is most likely to be effective when drivers are presented with a physical object that causes deflection.
- Small communities may not be familiar with traffic calming and may need additional education.

**Other Considerations**

In visiting a large number of small com-

munities to select pilot study locations, the research team observed a number of practices that could affect the successful outcome of main road traffic calming. These and other implementation issues are noted as follows:

- Small communities often do not have a traffic engineer and appear to be addressing perceived speeding problems by lowering the speed limit, believing wrongly that this will change driver behavior. While lower travel speeds may be desirable, reducing the speed limit is not likely to have much effect.
- Speed limits which are not consistent with the area characteristics and roadway function lead to disregard for posted speeds and create animosity toward law enforcement. The



Lane narrowing with center island using tubular markers.

recently released USLIMITS Web-based speed zone advisor could be a useful tool in setting appropriate speed limits in rural communities.

- Speed limits in the transition zone between the rural and built-up area in small communities were often improperly set, extending well passed the edge of the community into rural agricultural areas where there was no reason for reduced speeds. In other cases, the speed reductions were abrupt without appropriate speed reduction warning signs.
- The maximum speed reduction observed in this study was 9 mph. Physical measures such as roundabouts and curbed center islands may be needed to achieve the speed environment that rural communities often desire.
- Large areas of pavement markings, such as the speed limit markings with colored background, may become slippery when wet. Communities planning to use such treatments should ensure adequate skid resistance is provided. High friction surface material should be considered.
- Speed tables are only appropriate when the posted speed limit is 30 mph or less and approach speeds are less than 40 mph. Speed tables are not recommended for use on routes with significant (more than 5 percent) truck and bus traffic. Because emergency response times may increase, emergency service providers should be consulted before installing speed tables.

**Summary of Impacts & Costs of Rural Traffic Calming Treatments**

Treatment	Change in 85 <sup>th</sup> % speed (mph)	Cost	Maintenance	Application
Transverse pavement markings	-2 to 0	\$	Regular painting	community entrance
Transverse pavement markings with speed feedback signs	-7 to -3	\$\$\$	Regular painting	community entrance
Lane narrowing using painted center island and edge marking	-3 to +4	\$	Regular painting	entrance or within community
Converging chevrons and "25 MPH" pavement markings	-4 to 0	\$	Regular painting	community entrance
Lane narrowing using shoulder markings and "25 MPH" pavement legend	-2 to 4	\$	Regular painting	entrance or within community
Speed table	-5 to -4	\$\$	Regular painting	within community
Lane narrowing with center island using tubular markers	-3 to 0	\$\$\$	Tubes often struck needing replacement	within community
Speed feedback sign ( 3-months after only)	-7	\$\$\$	Troubleshooting electronics	entrance or within community
"SLOW" pavement legend	-2 to 3	\$	Regular painting	entrance or within community
"35 MPH" pavement legend with red background	-9 to 0	\$	Background faded quickly; accelerated repainting cycle	entrance or within community
\$ under \$2,500				
\$\$ \$2,500 to \$5,000				
\$\$\$ \$5,000 to \$12,000				

...Continued on Page 8

# Are Your Roads “Easy Riding” for Motorcycles?

*Adapted from: Roadway Safety for Motorcycles, FHWA, 2007.*

The number and rate of motorcyclist deaths on U.S. roads are rising dramatically. Motorcycle rider fatalities rose 115 percent between 1997 and 2005. During the same time, fatality numbers and rates for passenger car crashes dropped. In just one year—2005—motorcycle crash-related fatalities increased by 13 percent, making motorcycle rider fatalities a leading contributor, along with pedestrian fatalities, to the slight overall increase that year in the national highway fatality rate.

Trends associated with the rising motorcyclist death toll include a dramatic increase in motorcycle ownership, particularly by riders over 40, along with changes in other factors such as motorcycle size and rider experience. The rate of increase in fatalities has outpaced the rate of increase in motorcycle registrations. The death and injury rates among middle-aged motorcycle riders have increased most rapidly.

## Roadway factors for safer riding

Road design and maintenance factors can, and do, affect motorcycle crashes, injuries and fatalities. Those involved with roadway design and maintenance can reduce hazards to motorcyclists by doing the following:

### Pavement surface . . . . .

- **Patch potholes promptly.** Potholes are more dangerous to the operation of motorcycles than to larger vehicles.
- **Specify pavement surfaces with adequate pavement friction.** Examine the friction characteristics of asphalt sealants and intersection markings. The use of thermoplastics, particularly for broad, horizontal intersection lines, can create slippery surfaces for motorcycles that stop at the intersections. Metal road surface components—either temporary or permanent—offer limited traction in many cases, and, when wet, are difficult to see.
- **Reduce uneven road surfaces.** Milled surfaces, parallel paving lane joints, parallel grids on bridges, steel plates, and other uneven roadway surfaces can be especially hazardous for motorcycles.
- **Require tidy crack repairs.** A motorcycle’s traction can be seriously compromised by “tar snakes”—excess asphalt or other sealants used for crack repair.
- **Remove debris and fluid spills quickly and thoroughly.** Roadway debris and fluid-spills pose greater hazards to the operation of motorcycles than to larger vehicles. Debris can



deflect a motorcycle’s wheel or hit the motorcyclist. Fluid-spills can easily cause loss of traction.

### Roadside safety . . . . .

- **Install Safety Edges.** Untapered vertical shoulder drop-offs are even more dangerous for motorcycles than for other vehicles. Adopting a standard contract specification requiring a 30-35° angle asphalt wedge along each side of the roadway in all construction and resurfacing projects is a simple and cost-effective way to assure pavement edge safety.
- **Consider motorcyclist safety when designing roadsides.** The potential impact on motorcycle riders should be considered in design and placement of roadside safety hardware, clear zones and side slopes, and other roadside safety strategies.

### Visibility and warning . . . . .

- **Consider installing motorcyclist hazard warning signs.** Signage targeted toward motorcyclists can warn of conditions that are especially hazardous for them. These might include uneven pavement surfaces, rumble strips or crosswinds.
- **Ensure visibility of signs and roadway markings.** Keep in mind that many motorcycles have only a single head lamp for illumination.

Safer roads are just a small part of the solution to reducing the alarming trend toward increased motorcyclist injuries and fatalities.

Motorcyclists should equip themselves with helmets and other protective clothing and equipment, get professional driving training, maximize their conspicuity through lighting and apparel, obtain the proper motorcycle license, and absolutely never drink and ride.

Motorcycles should be properly maintained and operated. All road users, including drivers, motorcycle riders, and pedestrians need to obey the rules of the road and respect the rights of all. Only by addressing the problem from all angles can we achieve the desired result of safer roadways for all users.

For more information, contact Dr. Morris Oliver, FHWA, Office of Safety Programs at (202) 366-2288. <http://safety.fhwa.dot.gov/mac>

*Reference: KUTC Newsletter, Winter 2009*

## Penny Wise, Pound Foolish

By Lisa Harris

Poorly maintained roads wreak havoc on the vehicles that use it. The U.S. Department of Transportation found that road deterioration increases the cost of vehicle ownership, repair, fuel and tire costs. They also found that these deteriorated roads accelerate the depreciation of vehicles in proportion to the roughness of the surface. At the same time, each passing vehicle increases the damages.

The maintenance needs of most local roads have been chronically underfunded. Billions of dollars of needed repairs on local roads go unfunded each year in the United States.

During lean economic times, it is tempting to delay road maintenance or to cut corners on maintenance and pavement design. While it is always a good idea to seek efficiency in spending taxpayer dollars, it is important for elected officials to understand the basic factors that contribute to a well functioning road so they don't cut corners too far.

As for the benefits of having good roads, a recent national report on road conditions and pavement preservation gets right to the point: "Good roads cost less." They are also safer. In *Rough Roads Ahead: Fix Them Now or Pay Later*, the American Association of State Highway and Transportation Officials cooperated with TRIP, a national research group, to



Everyone is pinching pennies now, but try not to lose sight of the big picture – and squander your community's infrastructure investments.

get the message out about how road deterioration accelerates with neglect. The best strategy for managing your infrastructure is to extend the service life of roads before they need major rehabilitation or replacement. Making basic road maintenance a "cut of last resort" has been a strategy for some counties.

For road departments that lack the funds to maintain hard surfaced roads, the cost of rebuilding them is even further out of reach. Some of those communities are taking paved roads back to gravel. The cost to return a road

to gravel is a fraction of the cost to rebuild a hard surface road. Additionally, gravel roads are cheaper to maintain. The trade-off in the situation is that gravel roads offer lower capacity, lower speeds, rougher rides and increased nuisances to the property owners that border the road.

What will your community's strategy be?

#### Sources:

*Road Funding Alternatives: Pay Now or Pay Later, Saginaw County (Michigan) Road Commission, 2009.*

*Rough Roads Ahead: Fix Them Now or Pay Later, AASHTO and TRIP, 2009. <http://www.roughroads.transportation.org>*

*Reference: Kansas LTAP Newsletter, 2009 Fall, Edited by LHTAC Staff*

## Road Safety Audits



Prompt lists, sometimes called checklists, are one of the tools used in conducting Road Safety Audits (RSAs) that help the auditors to identify potential safety issues and ensure that they do not overlook something important in an audit. There are, however, many challenges in using RSA prompt lists. The main one is that the use of comprehensive RSA prompt lists has the potential to become an exercise of "ticking" the boxes instead of an aid for the application of knowledge and experience of the auditors. Another concern is that with the use of hi-level, broad prompt lists deprive the auditors of sufficient detail that might be needed. The FHWA Road Safety Audit (RSA) Software was developed to address these challenges and to support the practical implementation of the FHWA RSA Guidelines.

The RSA Software is not just a mere automation of RSA prompt lists – it is intended to be a guiding and process tracking tool enabling the use of RSA prompt lists at variety of detail levels, while providing a way to accompany each safety issue raised with a discussion and assessment. Using the software helps auditors to think about and justify their findings. The software assists in drafting RSA reports, enables users to record safety issues both by prompt list topic and by location, helps verify issues and locations entered, and can be used in RSA training.

RSA Software is finalized and available for download from <http://safety.fhwa.dot.gov/rsa/software/>.

*Reference: MASS LTAP, Spring 2009 Newsletter*

...Continued from Page 5

- STOP signs should not be used for traffic calming.
- The chevron markings, transverse markings, and red background for pavement legend evaluated in this study are not standard devices and require experimental approval in accordance with section 1A.10 of the MUTCD.

This study was performed by Center for Transportation Research and Educa-

tion at Iowa State University under Cooperative Agreement Number DTFH61-06-H-00003 with the Iowa Department of Transportation. Tom Welch was the Project Director. Shauna Hallmark and Neal Hawkins were the Principal Investigators.

Please note that traffic calming measures on State roads are limited, so it is critical that local agencies interested in implementing traffic calming measures on State roads in their com-

munities involve their local UDOT region early on to determine what measures are feasible.

For more information about this research, contact *Ray Krammes, FHWA Project Manager, HRDS, (202) 493-3312, ray.krammes@fhwa.dot.gov* or *Edward Sheldahl, HSSD, (202) 366-2193, edward.sheldahl@dot.gov*.

*Reference: On The Move, Vol. 22, No. 3, Summer (July) 2009, Utah LTAP*

## Small City has Big Question about Street Name Signs

By Lisa Harris



*The MUTCD recommends increasing the size of street signs for streets posted higher than 25 mph.*

Does my city really need to replace all its street name signs? That was a question asked recently by Alan Brown, City of Riley Public Works Director (population under 700). The question refers to new federal regulations for increasing the size of street name signs on two lane streets.

All of the street-name signs in the City of Riley are 4 inches high, and the speed limit on local roads is 30 mph. The *Manual on Uniform Traffic Control Devices (MUTCD)*, SECTION 2D.38, says that lettering on ground-mounted street name signs should be at least 6 inches high in capital letters, or 6 inch upper-case letters with 4.5 inch lower-case letters. It goes on to give an exception, saying that, for local roads with speed limits of 25 mph or less, the lettering height may be a 4 inches or higher. (The compliance date is January 2012.)

So does Riley need to replace all its street name signs? The answer is not necessarily. The MUTCD language for this uses the word “should” rather than “shall,” so changing the size of the signs is recommended, but not mandated. However, Kansas LTAP’s Tom Mulinazzi, who has served many times as an expert witness in road-related liability lawsuits, says, “If you deviate from ‘should’ recommendations, you’d better have good reasons.”

Mulinazzi thinks there are good reasons in the case of Riley and other small cities, and it’s important to document them. He suggests having the city commission adopt a policy, and keep it in a file, that states that the city’s policy is to use 4-inch street signs along local streets for the following reasons:

- Drivers typically travel at 25 mph or less, even though the posted speed is higher;
- Drivers are primarily local residents and are familiar with their environment;
- Traffic volumes are very low.

However, if there are parts of a city where vehicles do travel at 30 mph or higher, or traffic volumes are generally higher than residential streets (like a commercial area or on a state road passing through the city), Mulinazzi suggests changing signs along those streets to the larger size.

Another idea is to change the speed limit to 25 mph on roads drivers are traveling at that speed anyway. Since speed limits are appropriately set at the 85th percentile speed, if the assumption of traffic moving at 25 mph for the most part is correct, that ought to be the speed limit anyway.

In any case, as you replace your 4-inch street signs over time, consider replacing them with the larger signs, which are easier to read for your older residents.

For more information, consult Section 2D.38 of the MUTCD online at <http://mutcd.fhwa.dot.gov/HTM/2003r1/part2/part2d2.htm>, or contact Tom Mulinazzi at (785) 864-2928 or email [tomm@ku.edu](mailto:tomm@ku.edu).

*Reference: Kansas LTAP Newsletter / Summer 2009*

# Retroreflection = Reflection? A Quick Lesson

Retroreflectivity --rolls right off your tongue, doesn't it? Why such a complicated word when you could just say "reflectivity?" Well, because they're not the same.

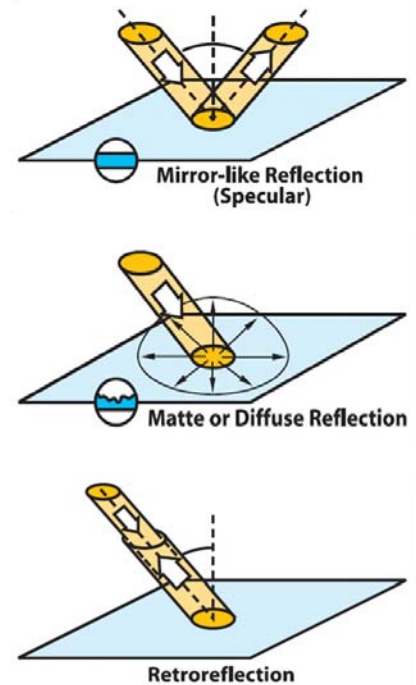
For many, the figures at right help de-mystify this cumbersome word that we in the transportation arena have begun to hear at every turn. For our purposes, light can reflect in three primary ways. The first is the very familiar mirror reflection --if we look direct perpendicular at the mirror surface we see ourselves, but if we look at an angle, we see those objects to the left or the right, up or down.

Diffuse reflection is a phenomenon of light when it hits a matte or dull or other less than reflective surface and, instead of reflecting, tends to scatter or diffuse.

Neither of these reactions is helpful to us for seeing traffic signs at night. That's why sign sheeting materials are designed to be retroreflective, wherein the light source (in this case, from our headlights) is reflected back along the same axis with a minimum of scattering. This allows the sign to be located safely out of the line of travel and yet be visible at night.

So, while the misuse of the term reflection is understandable and, at best, a misdemeanor, the difference is real and it does matter.

Reference: *AZ Milepost, Vol. 4, No. 1, 2009*



## National MUTCD Tip

The National Manual on Uniform Traffic Control Devices (MUTCD) allows the addition of retroreflective material along the post of regulatory and warning signs. This increases the visibility of the sign and helps drivers see the sign sooner, especially at night or in other conditions of reduced or low visibility, such as weather.

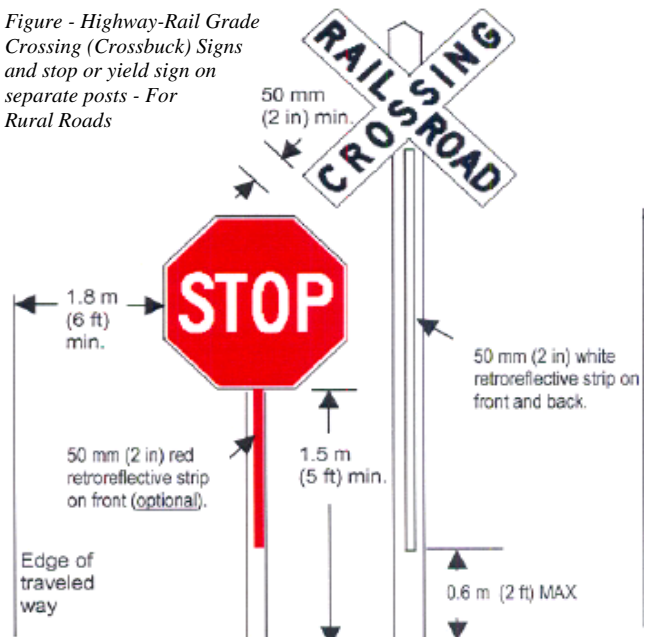
The strip should only be used when there is a need for extra emphasis. If it is added to every sign, it will lose its highlighting value.

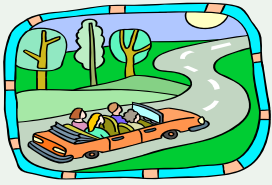
The strip needs to be at least two inches wide and should go from the bottom of the sign to within 2 feet of the ground.

To learn more go to MUTCD's website and search under resources and policy statements for Information: Guidance for Use of YIELD or STOP Signs with the Crossbuck Sign at Passive Highway-Rail Grade Crossings.

Reference: *Vermont Local Roads, June 2008*

Figure - Highway-Rail Grade Crossing (Crossbuck) Signs and stop or yield sign on separate posts - For Rural Roads





## Summer Safety Driving Tips

With kids home from school, you may be taking a vacation or just be out and about more. Here are tips for summer driving.

- \* Have your car serviced and inspected for safety.
- \* Wear your seat belt and make sure everyone else in the car wears theirs' also.
- \* Stay Alert. When you're tired, your reaction time is reduced and your awareness is decreased.
- \* Give yourself plenty of time and plan ahead for road construction delays. Look ahead for road signs. Last minute lane changing is dangerous for you and those around you.



In an effort to help save the environment by reducing paperwork and cost, we are offering to provide this publication by E-mail. If you would prefer an E-mailed copy of this publication instead of a printed copy, please send your request to: [cstewart@lhtac.org](mailto:cstewart@lhtac.org)

## First Annual Safety Fest of the Great Northwest—Pocatello, April 2010 Hosted by the Idaho T2 Center

The Idaho T2 Center hosted its first Annual Safety Fest of the Great Northwest on April 20<sup>th</sup> through 23<sup>rd</sup>, in Pocatello, Idaho. We are pleased to report that this event was a grand success, with its 667 participants who received training through the 38 *free* classes. Also presented were OSHA's 10 hour Construction and General Industry classes and 30+ other Safety courses, *all available at no charge*.

We had many gracious vendors and sponsors who helped us offer break refreshments as well as lunch to all the attendees each day. Our 30+ qualified instructors *volunteered* their time to make this event possible.

We look forward to the upcoming Idaho Safety Fest events and anticipate to see an increase in attendance. The T2 Center and LHTAC want to thank everyone involved for their commitment to the safety and training of Idaho's workforce. *..Thank you!*

Reference: Bruce W. Drewes, T2 Manager and Denise D. Shields,, T2 Event Coordinator



## \*FREE TRAINING\*

## Safety Fest of the Great Northwest Lewiston—September 21-24, 2010

The Idaho T2 Center is proud to announce that we will be sponsoring our second Safety Fest of the Great Northwest FREE 4 day conference in Lewiston this September. This free training is available to the construction and general industry community to provide safety and health training to help reduce fatalities, injuries and illnesses on the job. The Lewiston conference will be held Tuesday, September 21<sup>st</sup> through Friday, September 24<sup>th</sup>, 2010 at Lewis & Clark State College.

This **FREE** Safety and Health Training Event:

- Is in an effort to reduce hazards presently causing fatalities, injuries and illnesses, as well as fines and penalties;
- Will emphasize construction, general industry, transportation, and mine safety and health: and
- Offers a Vendor Trade Show displaying Safety and Health products.

Registration at <http://www.safetyfest-lewiston.org>. is to open in July 2010 – (date to be determined). Please watch our website at [www.idahot2.org](http://www.idahot2.org) for more information and registration details or contact T2 Event Coordinator, Denise Shields at: [dshields@lhtac.org](mailto:dshields@lhtac.org), 1-800-259-6841 or 1-208-344-0565. *We hope to see you there!*



## 2010 Idaho T2 Center Road Scholars

### Blair Jones, Fremont County Road & Bridge, Road & Bridge Supervisor



Blair is originally from Ashton, Idaho. He graduated from North Fremont High and attended Ricks College in Business. Blair is a certified Advanced Emergency Medical Technician. He is also involved with numerous committees with work, church, and the community. His personal interests include hunting, fishing, hiking, and mountain biking. He likes to support the youth and has enjoyed watching his three boys wrestle and achieve seven State Championships. He now has three daughter-in-laws and five grandchildren to enjoy.

### City of Nampa, Street Division

Once again, the City of Nampa Street Division had three more employees complete the Road Scholar Program! On May 3, 2010, Mike Fusselman, Sam Clark and Jake Smith received their Road Scholar awards. Congratulations guys!



From left to right: Mike Fusselman, Sam Clark and Jake Smith

In our December 2009 Edition of the Idaho Technology Assistance Newsletter, we incorrectly listed the names of the City of Nampa Street Division Employees who received their 2009 Road Scholar Awards. We apologize for this misprint and have re-entered their pictures with the correct names below.



From left to right:  
Doug Standley, Matt Stanley, Curt Hensley, and Scott Hensley



From left to right:  
Shawn Fournier, Les Gibbens, Jeff Keeney and Don Barr

Local Highway Technical Assistance Council (LHTAC)  
 Idaho Technology Transfer Center (T2) LTAP  
 3330 W. Grace St.  
 Boise, Idaho 83703

Prsrt Std  
 U.S. Postage  
 PAID  
 Boise, ID  
 Permit No. 767

VOLUME 3, No. 4

IDAHO TECHNOLOGY ASSISTANCE NEWSLETTER

JUNE 2010

## CALENDAR OF EVENTS

July 16-20, 2010	National Association of Counties (NACo) Annual Conference & Exposition	Reno, NV
August 2-3, 4-5, 2010	How to Communicate with Tact & Professionalism (events.careertrack.com 800-556-3009)	Pocatello, Boise, ID
September 10, 2010	Local Highway Technical Assistance Council Meeting	Boise, ID
September 19-24, 2010	Idaho Association of Counties Annual Conference 2010	Garden City, ID
September 21-24, 2010	Safety Fest of the Great Northwest (Sponsored by the Idaho T2 Center)	Lewiston, ID
September __, 2010	Local Highway Efficiency Summit (date & location soon to be announced—www.lhtac.org)	_____, ID
October _____, 2010	LHTAC Application Workshops (dates & locations soon to be announced—www.lhtac.org)	_____, ID
November 8-9, 2010	Idaho Association of County Engineers and Road Supervisors Annual Conference	Coeur d'Alene, ID
November 9-12, 2010	Idaho Association of Highway Districts 62nd Annual Conference	Coeur d'Alene, ID
December 9, 2010	Idaho Technology Transfer (T2) Center Semi-Annual Board Meeting	Boise, ID

*If you are interested in additional information regarding any of the above referenced meetings and/or training sessions, please contact LHTAC/T2 at 1-800-259-6841 or [lhtac@lhtac.org](mailto:lhtac@lhtac.org).*