



# *T<sup>2</sup> Roads on the Range*

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Spring 2007

## 12th ANNUAL TRANSPORTATION & SAFETY CONGRESS

This year's Transportation and Safety Congress had something for everyone. Over one hundred and fifty people participated in the two-day event. In addition, twenty three vendors demonstrated the benefits of using their products to the participants.

The opening session included presentations covering timely and important topics as seen by the Center's director and our partners at the state, federal, and local levels. Del McOmie, WYDOT chief engineer, emphasized the importance of investing more resources in Wyoming's infrastructure in the years to come. Del also showed a short video clip on the projected condition of I-80. Philip Miller, Wyoming FHWA Division

Administrator, described in his presentation FHWA's approach to managing the safety program. He also described the heavy emphasis on the development and implementation of the strategic safety plan. Rocky McWilliams, WACERS Vice President, gave the background of WACERS and provided an overview of the various activities of that organization.

At the end of the opening session, the roads scholars and the master roads scholars "Class of 2007" were acknowledged. They received plaques and mugs celebrating their achievements. This year the Center honored 5 Master Roads Scholars and 12 Roads Scholars:

### Master Roads Scholars

Brandon Brady, City of Green River  
Don Hauf, City of Sheridan  
Dean Lang, City of Gillette  
John Lasco, Town of Saratoga  
Denis Smith, City of Laramie

### Roads Scholars

Steve Brown, City of Laramie  
Anthony Carson, Sweetwater Co.  
Ken Curry, Albany County  
Bart Evans, Carbon County  
Howard Grable, City of Gillette  
Del Ray Jones, Park County  
Joe Kizzire, City of Green River  
Kevin Knopik, City of Casper



Master Roads Scholar Class of 2007: (Left to right) Dean Lang, Brandon Brady, John Lasco and Don Hauf.

Lance Luckow, City of Casper  
Gregory Simpson, City of Laramie  
Dean Welch, City of Casper  
Jerry Zierke, City of Cody



Roads Scholars Class of 2007: (front, left to right) Anthony Carson, Del Ray Jones, Gregory Simpson; (back, left to right) Joe Kizzire, Ken Curry, Howard Grable, Lance Luckow and Dean Welch.

Being recognized as a Roads Scholar requires the successful completion of at least twelve (12) Wyoming Technology Transfer Center workshops. Of these, one must be the Annual Transportation and Safety Congress and one must be Work Zone Traffic Control.

Recognition as a Master Roads Scholar requires the successful completion of at least twenty (20) Wyoming Technology Transfer Center workshops, with the same two required workshops as for Roads Scholar recognition. There are now a total of 45 Master Roads Scholars and 109 Roads Scholars.

The technical program included several important presentations which started with Matt Carlson who provided an update on the Wyoming

Comprehensive Safety Plan. Ron Tabler presented the findings of his recent research project on crash incidence and snow snakes. Greg Fredrick described WYDOT's off-system bridge replacement program. There were also presentations by the T<sup>2</sup> center staff members on the new safety project and the asset management project.

The second day included a panel discussion on dust control. It was followed by a presentation by Paul Harker, FHWA, on transportation safety. Participants interested in surface treatments enjoyed the presentation on chip seals/slurry seals by Brett Hone.

On the soft side of the program, there was a presentation by Erik Molvar entitled "Don't Fence Me Out: Wilderness & Public Lands in Wyoming". This presentation generated lots of interesting discussion and questions.

This year's Transportation and Safety Congress was truly beneficial and enjoyable. We have already started working on the program for next year. Mark your calendar now – next year's Safety Congress will be on April 2<sup>nd</sup> and 3<sup>rd</sup>, 2008.



# 2007 “YOU SHOW US” CONTEST



The Wyoming Technology Transfer Center is pleased to announce the “You Show Us” Contest for 2007! We want to know what you are doing. What is the best idea you have implemented in your county within the last few years? This is your opportunity to showcase something that has worked that you are proud of and to share this information with your counterparts across the nation, and even the world!

## WE WANT TO KNOW WHAT CREATIVE THINGS YOU'RE DOING

The contest is open to all county governments in the State of Wyoming. The winner of the Wyoming contest will compete with counties in the states of Colorado, Montana, Nebraska, North Dakota and South Dakota to determine the regional winner.



We are aware that in many instances there are not enough transportation dollars available to maintain our transportation systems to the desired level of service. This is particularly true when it comes to local government transportation programs. The costs for repairs and improvements are increasing while the available finances, at least the real value, are actually decreasing.

Solving these problems requires efficient use of existing funds and materials, along with the application of cost-reducing and innovative techniques. Today's problems are not easily solved with yesterday's solutions!

All participating Wyoming counties will receive a certificate of participation and their entries will be published in our newsletter. The Wyoming T<sup>2</sup>/LTAP Center will send one county employee

to represent the state winner at the 2007 Local Road Coordinators' Conference where the state and regional awards will be presented.

The Wyoming T<sup>2</sup>/LTAP Center encourages you to enter the “You Show Us” contest. It is a great way to share your innovative ideas with others who may benefit from your concept. This is also a good way for you, your crews, and your department to get some well earned recognition for your efforts. It's a real morale booster for everyone!

## Contest Requirements

Entries should be no longer than two typewritten pages and should include the following:

- County name, contact person and address or e-mail
- Problem statement
- Discussion of problem solution
- Labor, equipment and materials used
- Total cost
- Savings and/or benefits to agency
- Photos are strongly encouraged

**All entries must be received no later than August 31, 2007.** We will be glad to help you put your entry together.

For assistance or for additional information call: Khaled Ksaibati or George Huntington at 307-766-6783 or 800-231-2815. See previous entries at the T<sup>2</sup> website: <http://www.eng.uwyo.edu/wyt2>.

*We look forward to your entry!*

**GOOD LUCK!**

# BUILD A CRASHWORTHY WORK ZONE SIGN STAND

by Lloyd H. Rue, Design-Safety-Traffic Engineer, Federal Highway Administration, Helena, Montana  
(Article reprinted with permission from Montana LTAP Matters, Winter 2007)

Where there are cars, there will be collisions.  
When there are collisions, people will get hurt.

How do we lessen the chances of injuries when there are collisions with sign stands in our work zones?

We make sign stands 'crashworthy.' Once upon a time, work zone devices were not held to a crashworthy standard. Crashworthy work zone devices now, and for the last decade, follow an industry standard.

Making a crashworthy device can be complicated.  
The ultimate proof for a crashworthy device is



Crash-testing a work zone device (TTI).

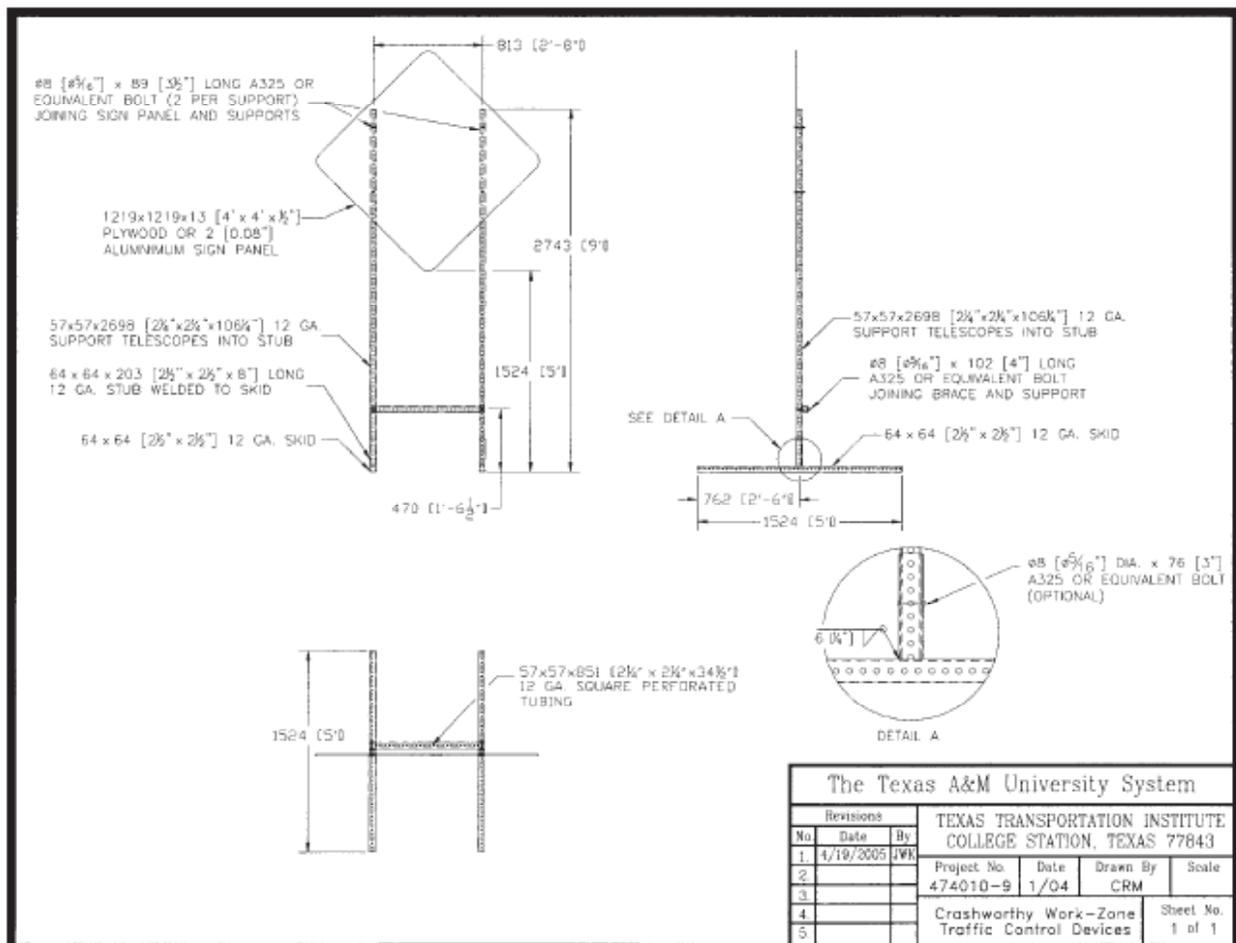


Figure 9.8. Details of the strong dual-upright sign support system with sign panel mounted at a height of 1.5 m (5 ft).

testing at highway speeds with test vehicles. One test criteria examines whether there is an intrusion into the occupant compartment. A gaping hole in the windshield, for example, would cause the test to fail.

Numerous types of crashworthy sign stands can be purchased from suppliers. Often these sign stand designs are patented. Patented or proprietary devices usually are more costly than those fabricated in a local shop.

There is a crashworthy, non-patented sign-stand design that uses commonly available materials – thanks to some recent research. The sign-stand design (among other devices tested) is outlined in a research report from the National Cooperative

Highway Research Program, *Report 553: Crashworthy Work-Zone Traffic Control Devices*. And, the Federal Highway Administration issued an acceptance letter on the device (September 8, 2006, WZ-240).

The following figures show the basic dimensions and components for the design. One figure shows dimensions for a 5-foot mounting height, while the other figure shows dimensions for a 7-foot mounting height. Either plywood or aluminum sign substrates may be use.

If you need new sign stands for your county or city crews, here is a non-patented design that you can use.

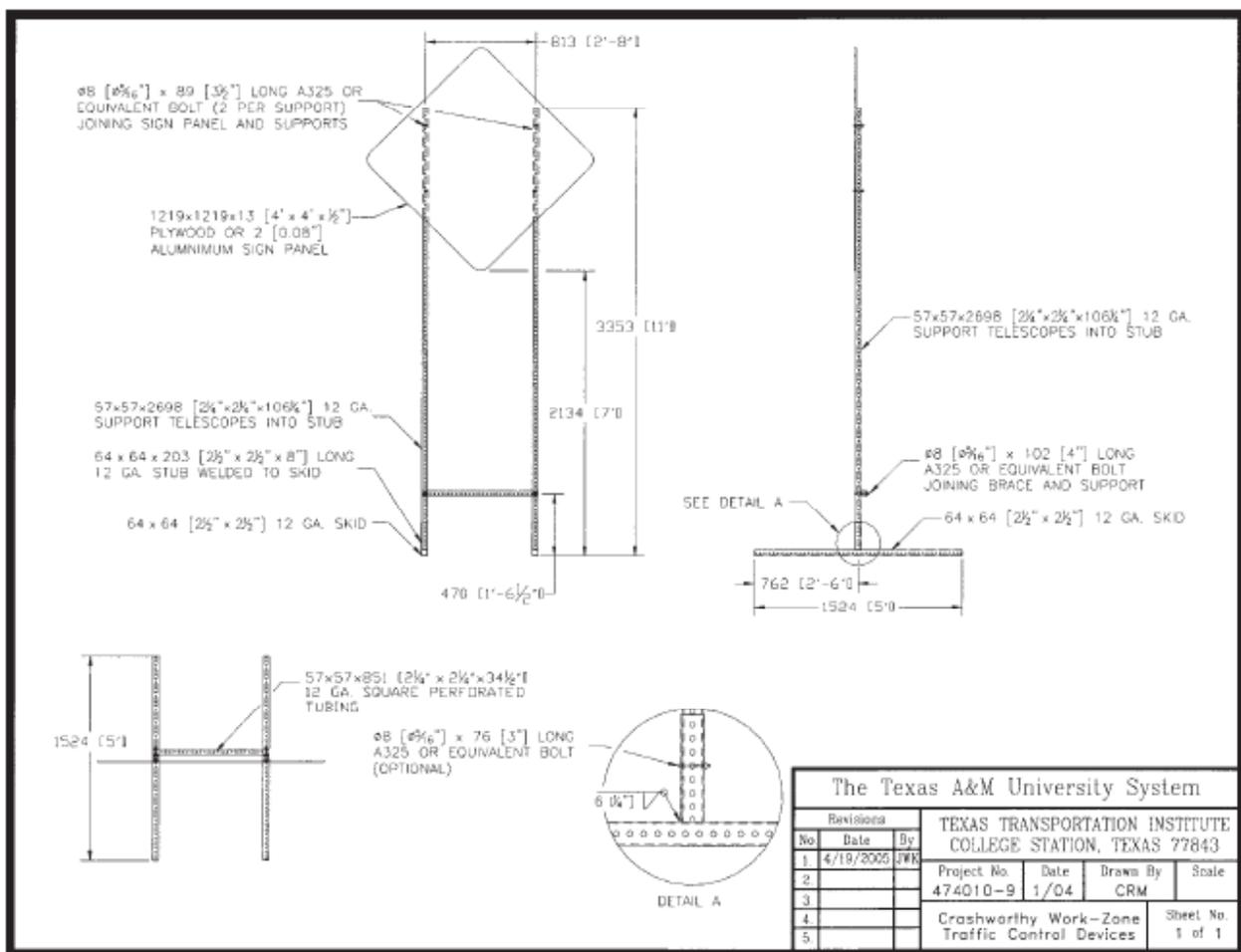


Figure 9.9. Details of the strong dual-upright sign support system with sign panel mounted at a height of 2.1 m (7 ft).

# CHECK IT OUT!



The T<sup>2</sup> Center has a large number of video tapes available for check out from our lending library. Here is a list of some of the most popular tapes:

- |         |   |         |  |
|---------|---|---------|--|
| DC 7212 | Stabilization for Low Volume Roads  | DC 7286 | Building Construction: Basic Site Evaluation   |
| DC 7218 | Asphalt Paving Inspection, Pothole Repair   | DC 7289 | Building Quality Concrete Driveways  |
| DC 7219 | Tilt Bed Trailers, Part I & II  | M 7205  | Upgrading Gravel Roads, Rural Roads-A New Approach, Low Volume Road Maintenance      |
| DC 7223 | Concrete Bridge Deck Construction, Low Slump Dense Concrete for Bridge Deck Restoration, Field Testing Concrete | M 7250  | Reshaping Earth and Gravel Shoulders   |
| DC 7224 | Introduction to Asphalt Materials, Rolling Plant-Mix Asphalt Pavements  | M 7264  | White Gold, Plow Power, Straight Blade Snow Plows: Parts I and II                    |
| DC 7225 | Bituminous Plant Inspection, Bituminous Concrete Paving, Bituminous Seal Coat                                   | M 7265  | Snow and Ice Control: Parts I and II   |
| DC 7226 | Bridges, Clean Air that Engines May Live, Efficient Cooling Systems that Engines May Live                       | M 7297  | Surface Placement, Pile Cap Replacement, Detecting Flawed and Nonstandard Concrete   |
| DC 7250 | Hydrated Lime: Key to Improved Asphalt Pavements  | M 7306  | Maintaining Asphalt Roads, Subsurface Utility Engineering                            |
| DC 7258 | Quality Control of Concrete Site  | M 7327  | Snowplow Safety  |
| DC 7265 | Utility Cuts in Paved Roads   | M 7334  | Snow Removal Techniques – Plowing Tips from the Pros                                 |
| DC 7273 | Backhoe Loader Safe Operating Techniques  | PA 7201 | Subdivisions: A Local Dilemma  |
| DC 7274 | Wheel Loader Operating Techniques   | PA 7276 | Pavement Management System, Inspecting Unsurfaced Roads                              |
| DC 7276 | Flagging You're the Director  | PA 7287 | Concrete Paving Inspection   |
| DC 7277 | Backhoe Loader Pre-Start Inspection   | ST 7286 | A Striper's Survival Guide, To Warn, Guide, and Protect: An Introduction to Flagging |
| DC 7278 | Rigging and Lifting with Mobile Construction Equipment  | ST 7318 | Winter Safety  |
| DC 7281 | Crawler Excavator Safe Operating Techniques   | ST 7341 | Driving Snow: The Keys to Winter Driving   |
|         |   | ST 7354 | Trenching and Shoring Safety   |
|         |   | ST 7355 | Forklift Safety  |

**Call us at 1-800-231-2815.**

## TRUE TEAM EFFORT SUSTAINS SUCCESSFUL SAFE CORRIDOR PROGRAM IN WASHINGTON STATE

by Gib Peaslee & Marie Roybal

Maintaining vehicle and pedestrian safety is a major public challenge but moving promising safety initiatives from the planning room into actual practice has also proven to be a daunting task for safety experts.

Because of this, many states are considering the Safety Corridor concept as a way to help reduce crash and fatality rates in identifiable problem areas. Washington is one such state. What makes Washington State's effort unique is a high level of integration of all safety interests throughout the entire process. Citizen and business groups, law enforcement, engineering, education and medical service safety professionals all play an equal role in the planning, development and construction process. Most importantly, the involvement of these interested parties is an important aspect for sustaining the effort over the long-term. Here's just a sample of the results of these integrated safety efforts, total collisions were reduced by 5%, total injuries were reduced by 11%, alcohol-related collisions were reduced by 15% and, fatal and disabling injury collisions reduced by 34%. Not only have federal and state agencies bought into the concept but the state has also been able to get local communities involved in their Corridor Safety Program (CSP).

Safety professionals are invited to participate in a Product Demonstration Showcase (PDS) of the Washington State DOT process, August 23 & 24, 2007 in Vancouver, WA. The Showcase (see information below) is co-hosted by the City of Vancouver, WA, WSDOT and the Federal Highway Administration's Washington state and Utah state Local Technical Assistance Programs

(LTAP). The Showcase will cover all aspects of the process that was used to bring the Safety Corridor Program to life. Including how all the parties were approached, the challenges they faced and how participation, planning, design and jurisdictional obstacles were overcome. Each partner will speak to their role and responsibilities. First, presentations will be covered in an interactive classroom format. Then Showcase participants, accompanied by a docent, will visit three real-time field sites including a 16 mile rural safety corridor along the Columbia River to experience original conditions and resulting solutions. This will be a two-way information sharing experience since participants may have solutions that WSDOT could consider.

If you're serious about traffic safety don't miss this unique well-rounded learning experience. Decision-makers cannot afford to miss this opportunity. CEU and PDH credits are available for this Showcase.

Registration is \$99.00 for the two day event and includes all handout materials, site visit transportation and dinner Thursday evening.

For those requiring overnight accommodations, a group room block has been arranged at the Hilton Vancouver Washington in Vancouver, WA for \$101.00 per night for single occupancy. You may contact the hotel direct at: 360.993.4500. Please mention the Corridor Safety Showcase to receive this rate. To register, or for more information please visit [www.utahltap.org](http://www.utahltap.org) or call Keri Shoemaker at the Utah LTAP Center 435.797.2931 or Mathew Enders at the Washington LTAP Center 360.705.6907.

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### Upcoming Workshops

#### Winter Survival

Douglas - Sept. 11th  
Rock Springs - Sept. 12th  
Thermopolis - Sept. 13th

#### Engineering Economics

Douglas - Sept. 18th  
Laramie - Sept. 19th

### Wyoming T<sup>2</sup>/LTAP Staff:

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**Philip Miller**  
**Vern Mickelsen**  
**Tom Bonds**

*The national Local Technical Assistance Program mission is to foster a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing knowledge of the transportation workforce and decision makers.*



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