



T² Roads on the Range

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Fall 2009

FROM THE DESK OF THE DIRECTOR

By Khaled Ksaibati

It is hard to believe that 2009 is behind us. The year has been very productive for us here at the Wyoming T²/LTAP Center. Early in the year, we completed our Wyoming Rural Road Safety study. Matt Carlson, State Highway Safety Engineer, worked out the arrangements so that counties interested in the program can apply for safety funding through the WYDOT safety office. More than eight counties have already participated in this safety program and we are currently working with two more counties to identify high crash locations and then recommend low cost safety improvements. If your county is interested in implementing this program, there is going to be another round of applications early in the Spring.

On a different note, we started a gravel road management study. Experts in gravel road management from all over the country have participated in this study to develop comprehensive guidelines for gravel road management. The final report on this short study will be published in the Spring of 2010. It is anticipated that this report will help in developing software for managing gravel roads which should be very helpful to Wyoming Counties.

Looking ahead, we came up with our training agenda for 2010. We are excited to offer various

classes covering a wide range of topics including: winter maintenance, welding, concrete and asphalt maintenance, as well as the transportation and safety congress. You can find more details in this newsletter about our training schedule.

Finally, I am excited to mention that we have updated our lending library this year after a careful review. You will find in this newsletter a list of a large number of new training videos and reference books that you can check out of our library. All you need to do is to give us a call and we will mail the requested items to you at no charge.

From all of us at the Wyoming T²/LTAP center, we wish you happy holidays and a productive new year.

LOOK INSIDE!

**Workshops in 2010
New DVDs
New Publications**

TO ADAM LARSEN: WELCOME!

The WYT²/LTAP Center would like to extend a warm Wyoming welcome to Adam Larsen, the new Safety Engineer with the Wyoming Division of the Federal Highway Administration. Adam comes to Wyoming from his previous position in Springfield, Illinois as the FHWA Highway Safety Engineer in the Professional Development Program. His work included research, reports, conducting road safety audits, developing a procedure for safety project evaluation, GIS mapping, development of training courses, recommending changes to data analysis

processes, learning about traffic management with intelligent transportation systems, and other tasks. He participated in AASHTO peer exchanges and safety summits in multiple states.

Adam received his Bachelor of Science in Civil Engineering from Portland State University in Portland, Oregon. Before he began working for the FHWA, he worked for the Washington State DOT on a variety of projects. He also has experience as a City Engineer, working as an intern for the City of Battle Ground, Washington.

Pictured at right are Khaled Ksaibati, Wyoming T²/LTAP Director, Tom Bonds, Planning and Research Manager, FHWA Wyoming Division, and Adam Larsen, Safety Engineer, FHWA Wyoming Division.



New Reference Materials in the T² Lending Library

New additions to the T² lending library are grouped by the organization from which they were purchased and listed below:

American Society of Civil Engineers

Interpreting Construction Contracts
Ten Commandments of Better Contracting
Construction Contract Claims, Changes & Dispute Resolution, 2 Ed.
Surety Bond for Construction Contracts

Reducing Brittle and Fatigue Failures in Steel Structures

Manhole Inspection and Rehabilitation

Pipe Ramming Projects

Pipe Bursting Projects

Manual for Streets

Practical Road Safety Auditing, 2nd Ed.

Role of the Civil Engineer in Highway Safety

How to Work Effectively with Consulting Engineers

Institute of Transportation Engineers

Traffic Engineering Handbook, 6th Ed.
Highway Capacity Manual 2000 - US
Customary Units
Traffic Signal Timing Manual
Trip Generation, 8th Ed.: An ITE Informational
Report
Urban Street Geometric Design Handbook
Transportation Planning Handbook, 3rd Ed.

American Concrete Institute

ACI Design Handbook
Building Code Requirements for Structural
Concrete and Commentary

Asphalt Institute

A Simplified Method for the Design of
Asphalt Overlays
Basic Asphalt Emulsion Manual, 4th Ed.
Asphalt Binder Testing Manual

Portland Cement Association

Manual on Control of Air Content in
Concrete

American Traffic Safety Services Association

Basic Traffic Control for Utilities Guide Book
Emergency Traffic Control for First Responders
Guardrail Inspection Checklist
Quality Guidelines for Temporary Traffic
Control Devices & Features
Retroreflective Sheeting Guide
Roadway Safety Glossary, 2nd Ed.
Standard Highway Signs Manual, 2004 Ed.
Supervisor's Work Zone Inspection Logbook
Temporary Traffic Control in Work Zones
Temporary Traffic Control Slide Chart
Traffic Control Devices Handbook

American Association of State Highway and Transportation Officials

Practitioner's Handbook #13: Developing
and Implementing a Stormwater
Management Program in a Transportation
Agency
A Guide for Methods and Procedures in
Contract Maintenance, 2nd Ed.
Maintenance Manual for Roadways and
Bridges, 4th Ed.
Guide for Snow and Ice Control

Guidelines for Maintenance Management
Systems

A Guide for Accommodating Utilities within
Highway Right-of-Way, 4th Ed.

Guidance on Sharing Freeway and Highway
Rights-of-Way for Telecommunications

Guide Specifications for Highway Construction,
9th Ed.

A Guide for Achieving Flexibility in Highway
Design

Guide for Consultant Contracting

Guide for the Planning, Design, and Operation
of Pedestrian Facilities

Guide for Pavement Friction

Guide for the Development of Bicycle
Facilities, 3rd Ed.

Guide to Quality in Preconstruction
Engineering

Hazardous Waste Guide for Project
Development

Highway Drainage Guidelines

Highway Safety Design and Operations
Guide

Roadside Design Guide Chapter Six
Update

Roadway Lighting Design Guide

Segregation - Causes and Cures for Hot-Mix
Asphalt

Uniform Vehicle Code - Millennium Ed.

Standard Specifications for Transportation
Materials and Methods of Sampling and
Testing, 29th Ed. and AASHTO Provisional
Standards, 2009 Ed.

LRFD Bridge Design Specifications, US Units,
4th Ed., 2009 Interim Revisions

Manual for Bridge Evaluation

Standard Specifications for Highway Bridges

Standard Specifications for Structural Supports
for Highway Signs, Luminaries and Traffic
Signals, 5th Ed.

A Guide for Transportation Landscape and
Environmental Design, 2nd Ed.

Guide to Wetland Mitigation Issues for
Transportation Engineers

A Manual of User Benefit Analysis for
Highways, 2nd Ed.

Comparative Performance Measurement: Safety
Quality Assurance Guide Specification

Transportation Glossary, 4th Ed.



WYT² 2010 WORKSHOPS

Erosion & Sediment Control

February 9, 2010 – Douglas Best Western
1450 Riverbend Drive

February 10, 2010 – Riverton Holiday Inn
900 E. Sunset

Asphalt Maintenance

March 9, 2010 – Buffalo Bozeman Trail Steakhouse
655 E. Hart

March 11, 2010 – Cheyenne Holiday Inn
204 West Fox Farm Road



15th Annual Transportation & Safety Congress

April 7 & 8, 2010 – Casper Platte River Resort
(Formerly Parkway Plaza Hotel)
123 West “E” Street



Work Zone Traffic Control & ATSSA Flagger Certification

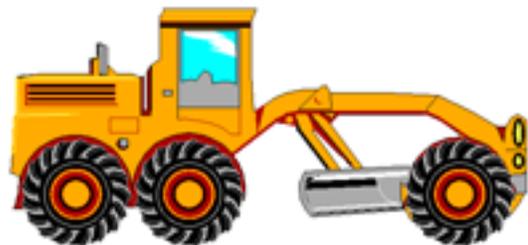
May 4, 2010 – Worland Ramshorn Cafe
625 Big Horn Avenue

May 5, 2010 – Rawlins Best Western Cottontree Inn
2121 West Spruce

Gravel Roads

June 7 & 8, 2010 – Riverton Holiday Inn
900 E. Sunset

June 9 & 10, 2010 – Douglas Best Western
1450 Riverbend Drive



WYT² 2010 WORKSHOPS

Beginning & Advanced Welding

July 2010 – Casper

July 2010 – Rock Springs

(Specific dates and locations to be determined.)



Winter Maintenance

October 5, 2010 – Buffalo Bozeman Trail Steakhouse

655 E. Hart

October 6, 2010 – The Inn at Lander

260 Grand View Drive

October 7, 2010 – Laramie Hilton Garden Inn

2229 Grand Avenue

Maintenance of Concrete Pavements

October 26, 2010 – Rawlins Best Western Cottontree Inn

2121 West Spruce

October 27, 2010 – Buffalo Bozeman Trail Steakhouse

655 E. Hart



Construction Inspection

December 8, 2010 – Douglas Best Western

1450 Riverbend Drive

December 9, 2010 – Rock Springs Outlaw Inn

1630 Elk Street

NEW DVDs HAVE ARRIVED – CHECK THEM OUT!

Road System Traffic Safety Review (FHWA)

of the safety rules, requirements and emergency procedures. (12 min.)

Reduce Congestion Through Access Management (FHWA)

Achieving a Drug Free Workplace: An Employee's Perspective

Roadway Safety + Disaster Response

Ex-substance abusers and their co-workers share their story on creating and maintaining a drug free workplace. (35 min.)

Gravel Road Maintenance: Meeting the Challenge

Backing, Parking and Intersections

A Snowplow Operators' Guide to Snow and Ice Equipment

In this DVD, the focus is placed on three of the most dangerous situations concerning driving for any type of driver. Excellent advice is provided to reduce the risk involved in all three topics. (17 min.)

Highway Safety and Trees: The Delicate Balance

Back Safety: Proper Lifting Procedures

Personal Protective Equipment: Awareness and Attitude

This DVD provides vital information for anyone who needs to lift and carry anything! Team lifting procedures are also included. (17 min.)

Machines, Operators and Guards: Real Accidents, Real Stories

Managing the Anger to Prevent the Violence

Working Safely in Cold Weather

This DVD approaches the issue of workplace violence by providing excellent training in anger management. (11 min.)

Understanding and Working Safely with Electricity

Emergency Preparedness: A Supervisor's Role

Safe Handling of Hot Asphalt

This DVD shows all the basics a supervisor needs to know in preparing their employees and facility for an emergency. (30 min.)

Finish Concrete Flatwork

Emergency Preparedness: An Employee's Responsibility

What to Expect When You're Inspecting

This DVD shows all the basics an employee needs to know in being prepared for an emergency. (25 min.)

Fundamentals of Quality Concrete

Skin Safety with Cement and Concrete

Top Ten Myths in Concrete Construction

Highway Work Zone Safety

Trenching and Shoring: Meeting the Requirements

This program addresses the proper steps to set up a work zone that is safe for workers and traffic. It also includes traffic control devices and trained flaggers. (12 min.)

This DVD provides an awesome explanation

Power Tool Safety

This DVD illustrates the hazards associated with many of the common power tools found on the jobsite. (15 min.)

A DUI Story: What If?

A DUI accident changes the life of friend, family and co-workers. Listen to the powerful testimony of all those whose lives were turned upside down and inside out. (23 min.)

Opening All Doors: ADA Accessible Design

(Set of 2 DVDs)

This set discusses interior design strategies that fulfill the requirements of the Americans with Disabilities Act (ADA). It includes compliance decision charts and a detailed index to the ADA guidelines. (180 min. total)

Architectural Blueprint Reading (CD-ROM)

This CD-ROM includes nine self-paced lessons on plan sets, zoning ordinances, plot plans, architectural styles, floor plans, elevations, and roof styles.



To Engineer Is Human

Using original source footage of major engineering disasters, this program examines the scientific principles behind engineering failures. It features a professional engineer and practical demonstrations to explore miscalculations that cause such disasters as bridge collapses, fuselage cracks, and roof destruction and shows how to utilize testing to predict project failures. (50 min.)

Soil Basics for Engineers

This program examines the ways in which soil behaves and considers its role in engineering design and construction. It shows how to identify, classify, and test soils; presents techniques for improving low-quality soil; highlights problems caused by water; and explores soil engineering. (360 min.)

Sites and Soils

This program identifies basic characteristics and types of soils. It explains when a soil

investigation is required and covers site preparation, grading, and required separation for footings. (17 min.)

Soil and Water Relationship (CD-ROM)

Featuring interactive animations, this CD-ROM presents soil as a system of pores. It looks at aggregates and pores containing air or water in a variety of ratios and demonstrates the mechanisms of water retention and water movement in soil. It also covers soil moisture and texture.

Geosynthetics: An Overview of Designs

This program shows how to use geosynthetics in civil engineering. It covers such topics as walls, slopes, dams, roads, and erosion control. (48 min.)

Erosion Control Using Geosynthetics

This program shows how to use geosynthetics to reduce surface water pollution from soil runoff. It covers surface stream bank and coastal erosion control measures using geosynthetics. (180 min.)

Effective Teamwork

This program teaches how to create effective teams in business. It covers such topics as writing a team constitution, developing ideas, running a meeting, and managing conflict. (39 min.)

Engineering Occupations

This DVD examines the unique attributes of jobs in aerospace, mechanical, civil, electrical, petroleum, chemical, metallurgical, and mining engineering. It features professionals who discuss skills, responsibilities, and typical work environments. (48 min.)

Engineering an Empire (Set of 4 DVDs)

This set explores the feats of engineering and architecture that gave rise to modern civilization. It examines the dynasties, architectural marvels, and urban planning feats that altered the course of history. (564 min.)

Wyoming Technology Transfer Center
1000 E. University Avenue, Dept. 3295
Laramie, WY 82071

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Did you know?

In the entire state of Ohio in 1895, there were only two cars on the road, and the drivers of these two cars crashed into each other.

Wyoming T²/LTAP Staff:

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Don Beard
Tom Bruce

WYDOT Representatives

Tim Hibbard
Rich Douglass
Tim McDowell
Michael Patritch

Federal Highway Administration

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.

