



Montana LTAP Workshop Descriptions 2015

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AASHTO Roadside Design Guide *(Updated Materials)*

All safety features of our roads and streets and streets are considered here. Clear zones, drainage facilities, sign supports, roadside barriers, medians, crash attenuators, bridges and railings, and work zones are all considered here. Crash-testing video clips are also shown in this training module.

Cattle Guards

Each county places a different level of importance on cattle guards. This module describes two different designs for the construction of cattle guards. Safety, cost sharing, maintenance, design and placement are also covered.

CDL Truck Safety Training *(NEW)*

This overview of the Montana Department of Transportation's 2012-2014 CDL manual highlights safety features such as vehicle inspection walk-arounds for tires, wheel and rim, brake drums/shoes, steering system, suspension system, exhaust system, and required emergency equipment. Review of safe driving procedures is covered including backing, driving space, distracted driving, winter driving, and railroad crossings. The last portion focuses on the technical aspects of air brakes.

Culvert Placement Trenching

Basic Hydraulic design, culvert selection, culvert placement and backfill and maintenance of culverts are all touched on in this class. Safety in and around trenches is also emphasized.

Community and Personal Preparedness

Do you have a plan? This seven-part presentation is in response to the recent disasters, such as Hurricane Katrina, and covers Roles & Responsibilities, MUTCD Chapter 6I-Traffic Incident Signing, MUTCD Chapter 2N-Emergency Management Signing, Winter Survival Overview, SPCC, Summer Survival, and 72-hour Kit.

County Road Standards

Why are there particular standards for county roads? The main reasons are to assure a level of quality and meet driver expectation the road will be reasonably safe and offer positive guidance. There will also be uniformity by having standards and reduce liability. Montana Public Works Standard Specifications and AASHTO's Geometric Design of Highways and Streets are introduced as resource materials.

Dump Truck Safety

The number one cause of death in construction is falls. The number two cause is being struck by a vehicle or object. Seventy-five percent of these fatalities involve trucks, cranes, and other heavy equipment. This module covers dump truck safety preventative measures, potential hazards, and safety inspections.

Dust Control (Updated Materials)

How to use stabilizers such as chlorides, resins, and natural clays in dust control: Presentation includes application tips on good surface gravel, road preparation, applying the product, and optimum moisture. The 2004 Gravel Road Stabilization study is also discussed.

Emergency Management Signing and Incident Management

The world we live in is very different than it was ten years ago. The 2009 MUTCD includes a Chapter (2N) to assist agencies dealing with emergency management signing.

Chapter 6I, Traffic Incident Management, is also covered with this module. Information covering the three general classes of duration: Major, Intermediate, and Minor. The 2009 MUTCD standards include High-Visibility Safety Apparel and Use of Emergency-Vehicle Lighting.



Forklift Operations

Study of surface conditions, load stability, lifting a load, putting down a load, working with stacks, traveling tips, special hazards and operating safety.

Forklift Fundamentals

Design of the forklift, parts of a forklift, forklift vs. cars, controls and instruments, pre-use inspection, forklift stability and stability in practice.

Finer Points of a Gravel Road

This module reviews the maintenance of roads and existing ditches and shoulders, including moldboard positions when cutting vee ditches, crowning, and number of passes when reshaping the road.

Gravel Road Maintenance (Updated Materials)

Covers basic Engineering basics, *Road Readin'*, good surface materials, dust palliatives/base stabilizers, equipment & methods to maintain a good gravel road.



Load Securement

It is important to conduct examinations of loads and securements and important to rechecking them as to prevent damages and wrecks. Topics covered include rules for calculating, securement, safe ways for tightening and loosening binders, and tarping.

Loader Operations

Covers basic equipment operation, walk-around inspection, safety, start-up and shut down procedures, effective truck loading and stockpile management and modern equipment.

Millings (NEW)

Two county road supervisors demonstrate through slides step-by-step process when applying millings to a gravel road, when they use Reclamite, and different types of dump trucks.

Paved & Unpaved Road Management (PASER) (Updated Materials)

“How to break pavement network into manageable segments”, “How to set up a Pavement Condition Survey”, “How to develop a pavement management presentation to a City or County policy board.” By showing examples of road ratings, both paved and unpaved, counties and city governments can then begin establishing a five-year plan based on engineering ratings of roads. (PASER – PAvement Surface Evaluation Rating)

Reading Grade Stakes & “Leveling With You”

This course begins with an overview of culvert installation and then introduces the procedure for reading grade stakes and what the different markings indicate.

Skid Steer Operator Safety (NEW)

Because With the variety of attachments now available for the skid steer, it is becoming one of the essential pieces of equipment city and county road departments are using in their operations. This module reviews safety walk-arounds and possible hazards involving the skid steer.

Sign Retroreflectivity

Because agencies have established and implemented a sign assessment or management method to maintain minimum levels of sign retroreflectivity, this module covers the sheeting materials and the importance of sign maintenance. By 2015, all signs should be in compliance with meeting the minimum retroreflectivity requirements.

Sign Vandalism

Study of the types of sign vandalism and of the overall effect of sign vandalism from the cost to society to the dangers it presents in every day driving conditions. Also covered are the various state-level programs that have been implemented to combat sign vandalism.

Signing & Sign Management

Signing basics out of the new MUTCD are covered in addition to an introduction of how to keep track of in-place signing. Inventories can be manual or computerized.

Slips, Trips, & Falls

These types of injuries can happen anywhere and can range from minor to very serious. This module covers the prevention of slips, trips and falls through taking stock of your surrounding, keeping a clean and organized shop, and safety practices around equipment.

Spill Prevention, Control & Countermeasure

The SPCC Rule is the oil pollution prevention regulation promulgated under the authority of the Federal Water Pollution Control Act (Clean Water Act). The rule addresses requirements for Spill Prevention, Control and Counter measures plans and this seminar presents information about what these regulations are, who they apply to, and what to do to get up to code.

Staking a Curve

This course includes mathematical problems on how to stake a curve using a compass and also using a transit.

Stormwater Management (BMP)

Water quality is always a concern when working on new or existing roadways. This module reviews best management practices when near wetlands of any kind with focus on sediment control, riprap, erosion, stabilization, and flood impact mitigation.

Summer Survival (Updated)

Basics of recognizing, understanding the differences, and treatment of dehydration, heat injury, heat exhaustion, and heat stroke. Water and the human factor are discussed, as well as locating and purifying this essential liquid. How to dress and provide appropriate shelter are covered.



Technical Leadership (Updated)

For Commissioners, Road Supervisors, City Street Superintendents and other technical leaders. This course is designed to help communication, expectations and professionalism. Leaders will learn the difference between leadership and management as shown in the award winning Covey Leadership.



Use of Roto-milling

A current maintenance practice by MDT is to mill the surface of Interstate roads down to a smooth surface and repave. Counties and Cities have successfully used these millings to surface unpaved roads. The details of preparation, material use and application of rejuvenating agents are discussed.

Weed Mowing

Operator safety is the key focus of this weed mowing module. Workers are made aware of the importance of personal protective gear, being trained, health concerns, and pre-operative equipment inspections, and weed identification.

Winter Maintenance

(Updated)

Winter road maintenance, when to use salt and sand, anti-icing, winter snow removal operations and winter travel hazards.



Winter Survival *(Updated)*

Overview of winter travel hazards faced by vehicle and equipment operators. Simple survival techniques, survival kits and the latest winter safety equipment; recognizing hypothermia and treatment.



Work Zone Flagging *(Updated to MUTCD 2009)*

Combination of lecture, manuals, video and hands-on problem solving. Flagging duties and responsibilities, safety, uniformity and liability issues will be covered. Certification card is valid for three years from date of course. New 2013 Montana Flagger Handbook used as class reference.



Work Zone Traffic Technician - Level I *(Updated to 2009 MUTCD)*

- Flagging (Certification)
- 2010 Guidelines Handbook - powerpoint
- Montana Work Zone Statistics
- North Carolina Film
- Introduction
- Basics
- Five Parts of Work Zone
- Montana Standard Maintenance Sheets

Traffic Control Supervisor Course *(Updated to 2009 MUTCD & Rev. 1 & 2)* **Work Zone Supervision - Level II**

- 4,000 Hours of Verifiable Field or Design of Temporary Traffic Control Work Zones
- Typical Applications
- Set-up and Take-Down
- Devices
- Crash Test
- New Standards MUTCD
- Hands-On
- TCP - Drawing and Review
- Test Including:
 - True/False
 - Multiple Choice
- Working with Media
- Emergency Personnel



NOTE: Available for viewing are recorded Montana LTAP 30-minute safety webinars offering an outline of some courses listed above: <http://www.coe.montana.edu/ltapv2/resources/webinars/index.html>