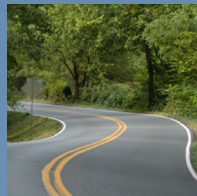


LOCAL TECHNICAL ASSISTANCE PROGRAM



Summer 2012

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Regional DOT, FHWA, and LTAP Representatives Gather in Denver for a Local Road Safety Peer Exchange

The Federal Highway Administration (FHWA) in coordination with Region 7 of the National Local and Tribal Technical Assistance Program sponsored a “Local Road Safety Peer Exchange” in Denver, Colorado from May 31 – June 1, 2012. The peer exchange convened regional representatives from the FHWA, state departments of transportation (DOT), local and tribal technical assistance programs (LTAP/TTAP), and local government agencies to discuss local road safety issues. The peer exchange was designed to facilitate the exchange of information and exploration of opportunities between state safety stakeholders on local road safety including:

- Improving local road safety data collection and analysis;
- Local involvement in Strategic Highway Safety Plan (SHSP) development and implementation; and
- Local involvement in the Highway Safety Improvement Program (HSIP).

“The Peer Exchange was a great opportunity to listen, learn and collaborate with other professionals at all levels of government - local, state and national.”

Martina Wilkinson,
Larimer County Traffic Engineer

A primary goal of the event was to improve the coordination between FHWA, state DOTs, LTAPs, and local officials within each state to better address local road safety issues. Forty-one representatives from Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Wyoming, and FHWA participated in the event. Five local agency reps also traveled to Denver to participate including Local Road Engineers, Public Works Directors, and County Highway Superintendents from Region 7. The peer exchange provided a key opportunity to get Colorado’s local safety stakeholders together – including Major Kris Meredith, Colorado State Patrol; Charles Meyer, CDOT Safety and Traffic Engineering Manager; Bryan Allery, CDOT HQ Traffic Engineer;

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<http://ltap.colorado.edu/>





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The Local Technical Assistance Program (LTAP) is sponsored by the Federal Highway Administration, the Colorado Department of Transportation, and the University of Colorado at Boulder to provide information on the latest transportation issues facing Colorado's state and local governments.

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Recently Updated CDOT Manuals

2013 Pavement Design Manual - The Pavement Design Manual provides pavement designers with a uniform and detailed procedure for designing pavements on CDOT projects. This manual should be used after July 1, of the manual year.

2013 Field Materials Manual - The purpose of this manual is to provide an official guide to CDOT Field forces for the sampling and testing of materials on construction projects and the subsequent documentation. This manual is to be used on projects advertised after July 1, 2012.

2012 Laboratory Manual of Test Procedures - The purpose of this manual is to provide an official guide for the uniform testing of tests not normally performed by project personnel.

2012 Colorado Guide Signing Policies and Procedures - This document addresses Guide signing policies and uses. The signs featured are designed in accordance with the sizes, shapes, colors, and legends contained in the latest editions of the "Standard Highway Signs" book and "CDOT Sign Library" website.

The easiest way to find publications on CDOT's new website is to type what you're looking for in the "Search" engine on the homepage at: <http://www.coloradodot.info/>. For instance, typing in "Pavement Design Manual" will lead you directly to the page where you can download a .pdf copy of that manual. If you would like to purchase hard copies, a list of CDOT's Publications for Purchase is available at: <http://www.coloradodot.info/business/publications-for-purchase.html/>.



LTAP Spring Training Graduates

Roads Scholar I

Lou Harding - Arapahoe County
Barry Crumrine - City of Arvada
Anthony Jackson - City of Arvada
Joseph Huerta - City of Brighton
Doug Henry - City of Evans
Trevor Tucker - City of Golden
Dugan MacDonald - City of Grand Junction
Randy Samuelson - City of Lafayette
Ed Stout - City of Lafayette
Kevin Kaminski - City of Thornton
Ryan Nash - City of Thornton
Tyler Rathert - City of Thornton
Eric Risedorf - City of Thornton
Troy Mackley - Clear Creek County
Terry Baker - Delta County
Bruce Davis - El Paso County
Charles Mobley - El Paso County
James Coulter - El Paso County
Don McAllister - El Paso County
Tracey Atkinson - El Paso County
Edwina Renteria - El Paso County
Curtis Stone - Fremont County
Cliff Addie - Garfield County
Russ Bateman - Grand County
Anthony Lubin - Gunnison County
Joe Lucero - Gunnison County
Carl Piccoli - La Plata County
Jim Byerly - Mesa County
Dan LaFountain - Mesa County
Paul Roe - Mesa County
Sharon Williams - Teller County

Supervisory Skills

John Hardy - City of Golden
Tony Chavez - City of Lakewood
Joseph Dolance - City of Lakewood
Troy Dunkin - City of Lakewood
Jevon Joseph - City of Lakewood
Mike Nelson - Town of Castle Rock



Work Zone Operations

Best Practices Guidebook

This Guidebook provides an easily accessible compilation of work zone operations practices used and recommended by various States and localities around the country. It is a reference document that can be updated with new approaches, technologies, and practices for effectively managing work zones and reducing the impacts of work zones on mobility and safety as they are identified. The best practices are describe approaches that have been successfully used by transportation agencies, along with contact information to find out more from the agency using the practice. The Guidebook is available in 3 formats: hardcopy, CD, and a web-based version. The CD and web versions provide added electronic search capabilities.

Access a copy today at: <http://www.ops.fhwa.dot.gov/wz/practices/best/bestpractices.htm>

2012 You Show Us Contest

2011 CO State and Regional Winner
City of Cherry Hills Village



We are pleased to announce the 2012 "You Show Us" contest!
In it's 17th year, the concept began in 1994 with the FHWA "Show Us How" contest.

contest requirements

what is the best idea or invention implemented at your agency?

There are not enough transportation dollars to maintain our local government systems to the desired level of service. The costs for repairs and improvements are increasing while available finances are actually decreasing. Solving these problems requires efficient use of existing funds and materials, along with the application of cost reducing and innovative techniques.

WE WANT TO KNOW WHAT CREATIVE THINGS YOU'RE DOING

This is your opportunity to showcase something that has worked and of which you are proud. In prior contests, entries have been related to cost saving, safety, and operational efficiency improvements. Share what you've learned with your counterparts across Colorado, the nation, and even the world!

ALL ENTRIES MUST BE RECEIVED BY AUGUST 31, 2012

Entries should be no longer than two pages and must address the following:

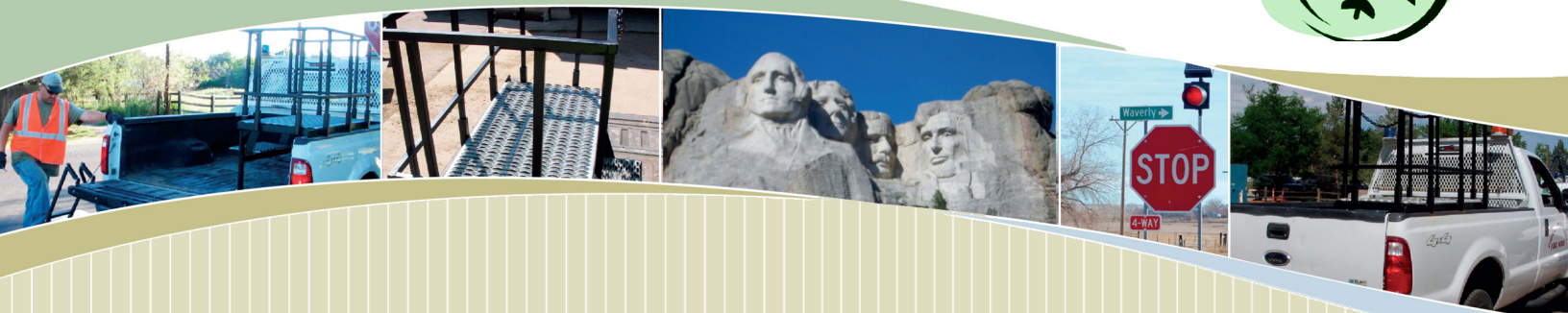
1. Project Title, Agency, Contact Person, Address and Email
2. Problem Statement
3. Discussion of Solution
4. Labor, Equipment, and Materials Used
5. Total Cost
6. Savings and Benefits to Agency (monetary and/or safety)

PHOTOS ARE STRONGLY ENCOURAGED

We encourage you to enter the "You Show Us" contest as a profitable way to share your innovative ideas with others that may benefit from your concept. It is a good way for you, your crews, and your department to get some well earned recognition for your efforts! The contest is open to all *government* agencies in Colorado. The winner of the Colorado contest will compete with the state winning entries from LTAP Region 7 states to determine a Regional winner. Entries may be submitted by mail or email. If emailing - please *submit photos separate* from your text file. All participating Colorado agencies will receive a certificate of participation and their entries will be highlighted in our Newsletter. Just let us know if you need help putting your entry together!

win a travel stipend!

Colorado LTAP offers a travel stipend for two employees to represent their state winning project at the 2012 Local Road Advisors' Conference. The state and regional awards are presented at this conference, to be held in Rapid City, South Dakota, October 24-25, 2012.



Local Road Safety Peer Exchange

.....continued from page 1

Shane Chevalier, CDOT Local Roads/Traffic Engineer; Renée Railsback, CO LTAP Director; Lindsay Marshall, CO LTAP Training Coordinator; Ron Hall, CSU TTAP Director; John Cater, FHWA CO Division Administrator; Dahir Egal, FHWA CO Division Safety /Traffic and Operations; Rick Santos, FHWA CO Division LTAP Manager; and Hillary Isebrands, FHWA Resource Center Safety Specialist.

John Cater, the FHWA Colorado Division Administrator, welcomed participants to the Peer Exchange. Mr. Cater emphasized FHWA's commitment to reducing fatalities and serious injuries on local rural roads. FHWA aims to support decision makers in reducing fatalities and serious injuries through a data-driven, systematic approach. He cited statistics that demonstrated the disproportionate share of traffic fatalities that occur on rural roads and described different forms of support FHWA offers that can help to address the issue – such as technical assistance, support for LTAPs, training, and data analysis. In addition, FHWA administers several valuable safety funding programs that can be used to address local road safety issues including the HSIP, the High Risk Rural Roads Program (HRRRP), the Railway-Highway Grade Crossing safety program, and Safe Routes to Schools. He encouraged participants to listen to each other and remain open-minded throughout the exchange.

Rosemarie Anderson, FHWA's Local and Rural Road Safety Program Manager, provided an overview of the 1.5-day workshop and moderated the event.

Peer exchange participants made presentations covering three broad topics:

- Improving Local Road Data Collection/Analysis;
- Local Involvement in the SHSPs; and
- Local Involvement in the HSIP.

After each set of presentations on a particular topic, event participants broke into smaller groups to discuss the issue to identify challenges, noteworthy practices, and strategies for addressing challenges. The noteworthy practices gleaned from these group discussions are listed here below each topic.

Improving Local Road Data Collection and Analysis

Dan Cady, NE LTAP and Dan Waddle, NE Department of Roads provided an overview of local road safety data collection activities in Nebraska, their electronic accident report form, work to promote use of handheld global positioning system (GPS) devices to improve information on crash locations, and resources for locals on training and equipment to assist in the analysis of traffic data.

Iowa has a reputation for having very good road safety data. (Iowa has 10 years of crash data on rural roads as well as estimated traffic volumes!) Tom McDonald, Safety Circuit Rider for Iowa LTAP described how data analysis combined with road safety audits is used to plan, implement and evaluate safety countermeasures. Iowa is researching crash mitigation methods on unpaved rural roads; traffic control at low-volume intersections; and evaluating countermeasures such as Safety Edge and narrow width rumble strips on low volume rural roads. Through a grant from Iowa's Safety Bureau, dashboard laptops were purchased for local law enforcement agencies so

that they can report timely crash data electronically. IDOT has made its crash data and several analysis tools available for local agency use. Safety analysis tools include:

- Crash Mapping and Analysis Tool (CMAT) – provides reports of crashes and crash characteristics;
- Incident Mapping and Analysis Tool (IMAT) – provide geospatial information on law enforcement citations; and
- Safety Analysis, Visualization and Exploration Resource – allows analysts to locate crashes and explore detailed crash characteristics.

Karen Scurry, FHWA Office of Safety HSIP Manager, gave an overview of the Highway Safety Improvement Program. HSIP is a federal funding program that can be used for safety improvements on all public roads. The program supports strategic safety planning, data-driven roadway safety management, and infrastructure-related safety improvements. HSIP is an umbrella funding program that includes the Railway-Highway Crossing Program, Strategic Highway Safety Plans, and the High Risk Rural Road Program. Ms. Scurry encouraged state and local officials to use a systemic approach to identify and address roadway safety issues. The systemic approach defines a set of specific, proven, low-cost countermeasures and analyzes crash data to identify high risk roadway geometric features where they can be deployed cost effectively. The approach allows states to address safety issues in a more proactive and cost-effective manner. Additional resources and online training are available on this approach.

As determined in participant breakouts, the following are effective strategies to access and use safety data:

- Provide training to locals on data collection, analysis, and interpretation;
- Assist local agencies in analyzing existing data;
- Provide access to loan equipment to perform data collection and analysis;
- Promote, fund, streamline use of electronic records;
- Improve local access to timely data through electronic data systems and evaluation tools; and
- Conduct traffic data collection audits to assess and improve data collection processes.

Local Involvement in the Strategic Hwy Safety Plan

Kyle Thomas, Assistant Public Works Director for Lewis and Clark County, Montana described the role local agencies play in Montana's strategic highway safety planning process. MT DOT develops two safety planning documents with local support – the Community Transportation Safety Plan (CTSP) and the Comprehensive Highway Safety Plan (CHSP). The CTSP is a collaborative effort involving local and tribal governments to identify partnerships, prioritize projects, and develop educational and programmatic strategies to implement and monitor safety assistance to local communities. The CHSP is a collaborative data-driven statewide plan with emphasis areas across the 4E's, and is used to engage local stakeholders and identify risk areas. Montana has recently started doing smaller county and community safety plans.

Pat Weaver, KS LTAP and Lynn Berges, KS DOT described how Kansas formed local coalitions to develop and implement the Kansas SHSP. Their original 2006 SHSP had very limited mention of the local system, however,

when Kansas initiated a revision in 2009, they developed a plan to improve consideration of the local system. Kansas formed support teams for data, education and local roads. The revised plan includes local system safety statistics and specific activities and tools to address crashes on the local system. Kansas has created an SHSP Local Road Safety Support (LRSS) Team and has revamped its HRRR program to expand the types of improvements eligible for funding. The LRSS Team is helping form local safety coalitions at the DOT district level to improve coordination among local safety stakeholders. The SHSP Data Support Team works to improve the accessibility, accuracy and completeness of local roads data. Kansas has also established a federal funds exchange program, which allows local governments to exchange federally allocated funds from the Surface Transportation Program (STP) and Highway Bridge Program (HBP) for state funds.

Following the peer presentations, the breakout sessions found the following noteworthy practices for involving locals in the SHSP process:

- Emphasize benefits of diverse, local participation;
- Get LTAPs and MPOs involved;
- Hold safety summits – invite locals/elected officials/tribes;
- Provide training on systemic approaches to safety;
- Collaborate with FHWA to find flexibility in funding processes for locals - Consider establishing a federal funds exchange program; and
- Assign a champion or gain LTAP assistance for technical assistance, training, and project administration.

Local Involvement in the Highway Safety Improvement Program

John Miller, Missouri DOT discussed Missouri's approach to traffic safety, and gave an overview of Missouri traffic safety statistics. They have identified the 14 counties in Missouri where two thirds of the fatalities on local roads have occurred. Many of those fatalities occur on curves in rural roads and local intersections. MoDOT has analyzed the traffic safety data to develop a systemic or safety corridor approach; identified priority traffic corridors and uses local involvement to select and redesign priority intersections that have been identified as high risk. For example, Mr. Miller explained how one troublesome intersection was redesigned with offset J-turns to improve safety.

Matt Carlson, Wyoming DOT described how Wyoming uses the High Risk Rural Road Program to fund local safety projects. Wyoming LTAP developed a methodology to identify, fund and administer local safety projects. The methodology uses ten years of crash data and the results of windshield surveys to develop weighting factors for the roadway environment. The factors are combined into a crash and a geometric rating which are then ranked for priority as high-risk sites. The methodology has helped WYDOT identify

low-cost and high-impact projects like signs, striping, rumble strips and delineation projects. For example, Wyoming has used HRRRP funding to implement a statewide sign program to fund new safety signs for local agencies.

Charles Meyer, Colorado DOT explained how CDOT helps local agencies access the State's HSIP funding under the Hazard Elimination Safety (HES) Program. HES provides the opportunity for local agencies to apply for money to make improvements to roads with high accident ratings. The application is a fairly simple one page form asking local agencies to provide the location's accident history, a description of the proposed project, and the estimated timing and cost of the project. If agencies do not have the accident history readily available, CDOT can help get this information from their database. HES will cover 90% of the project cost. Local agencies must be willing to provide a 10% local funding match, however, if the project is on a state road, CDOT may cover the agency's 10%. The minimum sized project is \$50,000. Agencies can combine more than one location into a project. CDOT analyzes the crash data for the localities; and

uses the safety performance function methodology to establish high-crash locations and performs benefit cost analysis to determine which projects should be funded.

The breakout groups established the following noteworthy practices for states and locals selecting and implementing HSIP projects:

- Need for a flexible/collaborative funding process;
- Use LTAP to promote and provide training on HSIP funding options;
- Bundle multiple projects;
- Fund systemic improvements;
- Screen non-State network data to share with counties;
- Conduct Road Safety Audits (RSAs) to help identify and assess projects; and
- Use flex-funds to meet key non-infrastructure needs.

The final day of the peer exchange focused on the challenges states and locals face with coordinating to address local road safety issues and noteworthy strategies to address those challenges. The following list summarizes the noteworthy practices discussed:

- Host regional DOT meetings and invite LTAP and locals to attend;
- Extend staff to conduct outreach and training;
- Generate regional safety coalitions of local governments and agencies;
- Include stakeholders from outside the transportation field such as health agencies and advocacy organizations;
- Use LTAP as a liaison with locals; and
- Formalize relationships through memoranda of agreement.

Following each topical breakout group, participants met with peers from their own state to develop action plans to

"I found it very helpful to hear what others are doing, and how to better utilize the programs and support of state and federal resources. It was good to catch up with people I've known for some time, and I also made a couple of great new contacts that will be useful in the future. I came away with several specific ideas/initiatives that I look forward to pursuing in the next year. Thanks to Region 7 LTAP for organizing the event."

Martina Wilkinson,
Larimer County Traffic Engineer

address the particular challenges faced in their states. The action plans identify a list of objectives/tasks, resources and champions to achieve those objectives moving forward. Key actions identified to improve local and rural road safety in Colorado include:

- Increase the percentage of electronic data submittals;
- Streamline data collection processes to improve the timeliness and local accessibility of data;
- Utilize State DOT District offices as a liaison to locals;
- Promote local participation in the SHSP through the LTAP;
- Work with LTAP to improve distribution of HSIP funding and increase local awareness of the program;
- Promote the use of non-HSIP funds to improve traffic safety;
- Research the feasibility of establishing a Federal/State funding exchange program for locals; and
- Work with LTAP to develop a Circuit Rider program.

Many of the discussions reiterated how the LTAP centers can play an important role in helping local agencies and officials identify and develop safety projects, find available resources, and apply for funding. Colorado LTAP was encouraged by the progress made in the collaboration of Colorado's safety stakeholders and looks forward to future endeavors to improve safety on local and rural roads.

Copies of the peer exchange presentations are available upon request. The FHWA is also developing a final report of the complete Local Road Safety Peer Exchange.

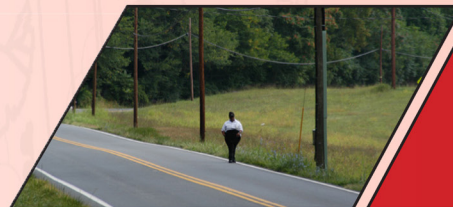


Developing Safety Plans

A Manual for Local Rural Road Owners

Approximately 60% of all road miles in the U.S. are non-Interstate, rural roads owned and operated by local entities, such as towns, counties, and tribal governments. In 2009, 56% of highway deaths occurred on rural roads and the fatality rate was 2.6 times higher in rural areas than in urban areas. Local road practitioners across the country play a critical role in addressing crash risks at the local level and may be able to identify the specific or unique conditions that contribute to crashes within their jurisdictions. The Local Road Safety Plan offers a foundation for consensus and focus. It defines key emphasis areas and strategies that impact local rural roads and provides a framework to accomplish safety enhancements at the local level. You can help your community take a proactive stance in reducing and preventing local road fatalities and injuries. This document can help guide you in the development of your own *Local Road Safety Plan*.

You can access the manual online at: http://safety.fhwa.dot.gov/local_rural/training/fhwasa12017/. Free hard copies are available from the LTAP Center.



U.S. Department of Transportation
Federal Highway Administration

<http://safety.fhwa.dot.gov>
FHWA-SA-12-017



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LTAP Fall Training



ROADS SCHOLAR II PREREQUISITE WAIVED

Our *Roads Scholar II: Road Master* program has a prerequisite requirement of having to take the Roads Scholar I's four Core classes to participate. However, because there was so much interest in the spring RS II classes by those that didn't meet this requirement and therefore ineligible to take the courses, it was decided that for the *first year only* people that don't meet the pre-requisite would be allowed to sign up for RS II classes on a wait-list initially. If at one week before the training there is still space available, you would then be contacted and allowed to attend. This will allow participants one year to complete the required RS I four Core classes in the meantime if needed.

The Colorado LTAP website has schedules of upcoming RS I, RS II, and SSDP classes. Online class register is also available.

Don't miss these upcoming RS I CORE classes if you need them.

RS I - CORE CLASSES

Drainage

September 20 – Ft Morgan, Morgan Cnty
October 1 – Pueblo, Convention Center
October 2 – Dillon, Comfort Suites
October 4 – Montrose, Holiday Inn Express

Safety on the Job

November 7 – Colo Spgs, El Paso County
November 13 – Loveland, The Ranch
November 27 – Grand Junction, Clarion Inn

<http://ltap.colorado.edu>