

KUTC Newsletter

Winter 2008

A quarterly newsletter of the Kansas Local Technical Assistance Program (LTAP) at the University of Kansas Transportation Center with funding from Kansas DOT and the Federal Highway Administration

We're 25!

Celebrating 25 years
of service to Kansas
KS LTAP • Since 1983

An issue on safety

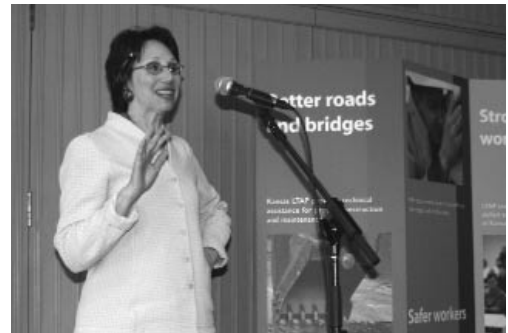
LTAP celebrates anniversary

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Please help us reach more people in your agency by routing this newsletter.

- ____administration
- ____engineering
- ____shop



... by Lisa Harris

In 1983, Ronald Reagan was president, John Kemp was Kansas' Secretary of Transportation, and the Baltimore Orioles won the World Series. It was also the year that LTAP came to the nation and to Kansas.

The Federal Highway Administration created the Local Technical Assistance Program (LTAP) to answer a pressing need for training and technical assistance at the local level. Local governments are responsible for maintaining more than three million miles of road and over 300,000 bridges in America's transportation system.

The LTAP network includes 58 individual centers; one LTAP Center in each state and Puerto Rico, and seven regional "TTAP" Centers that serve tribal governments. The program started with 10 Centers across the country, and Kansas was included in those first 10.

Kansas LTAP serves primarily local road and bridge, public works, and engineering officials. Some of our material is also targeted to elected officials.

Kansas Secretary of Transportation Deb Miller described the value of Kansas LTAP to the state's transportation system at LTAP's 25th anniversary celebration. Mike Bowen, Kansas Division FHWA Administrator, and Joe Lee, Kansas LTAP's first director, also spoke at the reception on March 11 in Lawrence. More photos on pages 2-3.

An important aspect of LTAP is the face-to-face, hands-on training that allows participants to learn from instructors and have the opportunity to share issues and solutions with their peers. For many local agencies in Kansas, LTAP is the primary source of professional development for their administrators, supervisors and crews.

Another important aspect of the program is the development, over the years, of strong professional relationships.

"The success of the program is really attributed to our partnerships with local agencies and staff at KDOT and FHWA," said Pat Weaver, executive director of the KU Transportation Center (KUTC) that

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LTAP 25th anniversary,
continued from page 1



LTAP stakeholders gather for reception

Kansas LTAP kicked-off its 25 anniversary celebration with a reception at the historic Union Depot in Lawrence Kansas. Guests included LTAP advisory board members and customers, KDOT and FHWA funding partners, and university officials.

1. Kansas Transportation Secretary Deb Miller, KU Transportation Institute Director Bob Honea, and Stuart Bell, Dean of the KU School of Engineering. **2.** Mehrdad Givechi (KUTC), Mark Huffhines (FHWA), Kansas FHWA Division Administrator Mike Bowen, and KUTC Executive Director Pat Weaver. **3.** Carl Kurt (KU engineering professor), Rose Lichtenberg (KUTC-retired), Lisa Harris, (KUTC), and Vicky Johnson (KDOT). **4.** Clark Rusco (Barton County). **5.** Keith Browning (Douglas County, and official representative for the Kansas County Highway Association). **6.** Larry Emig (KDOT-retired) and Joe Lee (KUTC-retired). **7.** Clarence Munsch (George Butler Associates, Inc.) and JR McMahon, Miami County.





8. Tom Mulinazzi (department chair of civil, environmental and architectural engineering, and Kansas LTAP co-director) and Mark Huffhines (FHWA). **9.** Rose Lichtenberg (KUTC-retired) and Norm Bowers (Kansas Association of Counties). **10.** Sandy Krider (Labette County) and her mother, Leta Holloway. **11.** Joe Lee (KU Transportation Center founder). **12.** Yong Bai (KU engineering professor). **13.** Andy Haney (City of Ottawa). **14.** Susan Barker (KDOT), David Nagy (KDOT) and Yogesh Agashe (KUTC). **15.** Kristin Kelly (KUTC) and Ariel Heckler (KU Transportation Research Institute).

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Above, some of the attendees of the Kansas LTAP 25th Anniversary reception, on March 11, 2008, pose for a photograph to commemorate the occasion.

LTAP 25th anniversary, *continued from page 1*

administers LTAP in Kansas.

LTAP is well known nationally for providing excellent value for the tax dollar. Half of each LTAP Center's core funds are from FHWA; the other half are typically from a state's DOT, as in Kansas.

Services offered by LTAP vary from Center to Center. Kansas LTAP has an advisory board that helps identify needs in our state for training and information, and ways to meet them, whether through face-to-face training, newsletter articles, Web site resources, or written material (glove-box manuals, posters, etc.). The advisory board includes members from cities, counties, and townships, along with KDOT and FHWA officials. (See page 16 for a list of members.)

KS-LTAP's advisory board met recently, in March, for a 2-day strategic planning retreat. The board identified topics for which there is a need for more training or information:

- Sedimentation/stormwater
- Extending pavement life
- Roadway safety
- Incident command
- RR crossing safety and maintenance
- Proper use of traffic controls
- Employee safety
- Educating townships

- Replacing and retaining workforce
- Gaining support of elected officials
- Design for non-motorized travel
- Human resource management
- Stretching dollars
- Funding options
- Improving project planning
- Asset management
- GIS training
- MUTCD training
- "Green" training
- Public relations skills
- Security/emergency preparedness

Nationally, FHWA sees LTAP continuing to have an important role in workforce development.

"Projections are that nearly half the current transportation workforce will be eligible to retire by 2010. It is crucial that we provide technical assistance and training programs that are timely and relevant so that we can build a strong transportation workforce for the future," said Denise Saunders, LTAP/TTAP Program Manager for FHWA (Headquarters).

Deb Miller, Kansas Secretary of Transportation, described the importance of a well-trained road and bridge workforce in Kansas. "Our citizens don't know whether they are driving on a state, city, or county road, and they shouldn't have to. When we have well trained transportation professionals we are better prepared to

Kansas LTAP facts

The number of training programs offered each year by Kansas LTAP has increased over six-fold: from eleven in 1983 to 69 last year!

The Kansas County Highway Association, in partnership with Kansas LTAP, the Kansas Association of Counties and KDOT, started the Kansas Road Scholar Program with a technical skills certificate (Level 1) and a supervisor skills certificate (Level 2) in 2001. Since then, the program has added APWA Kansas Chapter as a partner and one more certificate level. The program has had 150 individuals complete the Level 1 certificate program so far.

Since 1983, Kansas LTAP has provided well over 1,000 road and bridge related articles in the *KUTC Newsletter*.

In 2000, Kansas LTAP added a Web site that offers online training registration, resources to download, and a searchable lending library catalog at www.ksltap.org.

Through its lending library, workshops and exhibits at conferences, Kansas LTAP distributes, on average, about 4,000 resources to local governments each year.

provide excellent and consistent service to our taxpayers."

LTAP has been proud to serve Kansas and its road and bridge needs for the last 25 years, we look forward to working with you to serve our citizens in the years to come.

A final note: We have been blessed at KS-LTAP with strong supporters. Special thanks to Susan Barker (KDOT) and Mark Huffhines (FHWA Kansas Division) for their support and involvement in our program. And thanks to you, our local agency customers—we could not have done it without you! ■

Labette County Road Supervisor becomes first Level 3 Road Scholar



Deb Miller, Kansas Secretary of Transportation, at left, presents the state's first Road Scholar Level 3 certificate to Sandy Krider, road supervisor for Labette County.

... by Lisa Harris

Sandy Krider was honored at the LTAP 25th anniversary reception for reaching a milestone—becoming the first person to complete all three levels of the Kansas Road Scholar Program.

The road scholar training program, for cities, counties and townships, is a partnership between the Kansas County Highway Association, Kansas Chapter of APWA, Kansas DOT, Kansas LTAP and the Kansas Association of Counties. It offers three levels of training. The first focuses on technical skills related to road and bridge work, the second on supervisory skills, and the third on administrative/executive skills.

For Krider, completing all three levels meant taking 31 courses over the last eight years.

Krider is a strong proponent of training, and has set a good example for her employees. Two more Labette county road and bridge staff

members—their blacktop supervisor and their shop supervisor—are enrolled in the program to complete all three levels. “They seem really excited about going, and that’s great,” she said.

Krider says she always tries to learn everything she can about her job, and to do the very best job she can. “You never quit learning; I try to learn something new all the time,” she said. Her passion for learning made participation in the road scholar program an easy choice. “I jumped on it,” she said.

Krider is grateful that Labette county’s commissioners have been supportive of staff education. “They really encourage it,” she said. “They know that any knowledge we bring back will benefit the county.”

Labette County does not have an incentive program like some other communities that provides raises for receiving road scholar certificates, but Krider said that the personal benefits of taking the training are clear. “The more knowledge you have, the more opportunity you will have,” she said.

Krider has been with Labette County since 1981, starting at the treasurer’s office and then as office manager for the road and bridge department. She became the county’s road supervisor in 2001.

Krider’s husband and three daughters were unable to attend the LTAP reception, so Sandy’s mother accompanied her to share the experience. See a photo of Sandy and her mom on page 3.

Congratulations, Sandy, on this important achievement! ■

Looking for pavement marking guidance? KDOT policy can help.

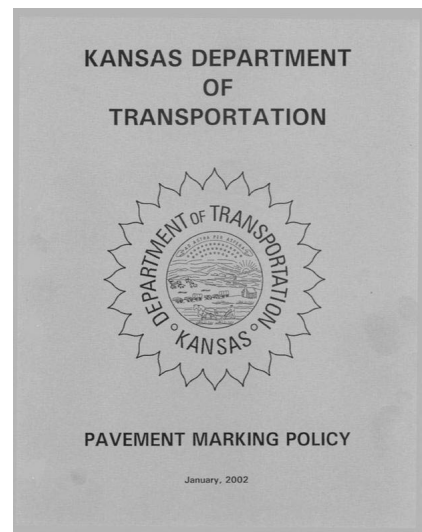
... by Lisa Harris

KDOT has a policy manual for the purchase and use of pavement markings — and it is not just useful for state roads. The manual contains information on the properties of different types of pavement markings, where best to use them, average life of the markings, etc.

Although local governments are not required to follow KDOT policy on locally-owned roads, “information like this may be very useful to local governments,” said Keith Browning, public works director for Douglas County, Kansas.

Check it out for yourself. You can download the policy manual at <http://www.ksdot.org/publications.asp>. Look for the link entitled “Pavement Marking Policy.”

KDOT’s Brad Henry wrote KDOT’s manual. He’d be happy to answer any questions you have about pavement markings. You can reach Brad at (785) 296-3618. ■



Get ready for 23 CFR Part 634! (Translation: Worker Visibility Law)

Rules about high-visibility clothing require compliance by November 24, 2008 for EVERYONE working on or near Federal-aid Highways.

Adapted with permission from *The Bridge*, Michigan LTAP, November 2007 edition.

The Federal Highway Administration published final rules regarding worker visibility as Part 634 of Title 23 Code of Federal Regulation. The rule meets part of the SAFETEA-LU Section 1402 requirements to reduce the likelihood of worker injury and maintain the free flow of traffic when workers are on or in close proximity to Federal-aid highways. Formerly, this compliance was a recommendation in the Manual of Uniform Traffic Control Devices (MUTCD). By November 24, 2008, all workers shall wear ANSI 107-2004 Class 2 or Class 3 apparel while working on or in the rights-of-way of Federal-aid highways.

It's clear that our aging road infrastructure needs an increasing number of workers in the field to build and maintain our roads. It's also clear the increasing traffic volume on our roads means that we can't close every road we work on. This combination means that more and more workers have to spend their days and nights working near more and more vehicles traveling at high speeds. To help protect these workers, construction and maintenance crews follow safe practices and set up work zones; and now all workers, regardless of their affiliation with construction or maintenance, will have to wear clothing that makes them more visible in the workplace.

Which apparel?

First of all, be sure that you refer to the correct standard when selecting apparel. The ISEA/ANSI 107-2004 and 107-1999 standards appear very similar, but ISEA/ANSI 107-2004 completely replaces the older standard. Many agencies adopted ISEA/ANSI 107-2004 high-visibility Class 2 or Class 3 apparel when the Federal Highway Administration recommended this apparel in the 2000 and 2003 versions of the MUTCD, so the transition from a recommendation to a requirement should be smooth. The MUTCD discusses high-visibility apparel in Section 6D.03 and refers to ANSI standards in Section 1A.11.

The selection of Class 1, 2, or 3 apparel is based on your proximity to traffic, the speed of traffic that is expected to be near you while you work, and whether your work allows you to pay attention to traffic while you work.

Class 1 Apparel

Class 1 apparel is not permitted for workers on or near Federal Aid Highways. You can recognize a Class 1 garment by inspecting the label, which should be clearly marked. This class of apparel is for workers exposed to traffic traveling less than 25 MPH. The main difference between Class 1 and Class 2 apparel is the amount of fluorescent background material and retroreflective material.

Typical occupations that require Class 1 apparel include parking lot attendants, warehouse workers, sidewalk maintenance personnel, and

shopping cart retrievers. Even if you have employees who might perform these kinds of tasks, most transportation-agency workers are likely to also perform other tasks that require Class 2 or Class 3 apparel, so purchasing Class 1 apparel isn't recommended.

Class 2 Apparel

Class 2 apparel offers many workers adequate visibility to motorists traveling at 25 MPH or more and in inclement weather. Class 2 is for workers whose attention might be distracted from approaching traffic and work in close proximity to moving vehicles. The most common Class 2 garments are shirts, jackets, or sleeveless vests. This apparel provides 360 degrees of torso visibility with horizontal and vertical retroreflective stripes.

Typical occupations for workers who must wear Class 2 apparel are:

- Forestry operations
- Ship cargo loading operations
- Roadway construction, utility and railway workers
- School crossing guards
- Delivery vehicle drivers
- High-volume parking and toll gate personnel
- Airport baggage handlers/ground crew
- Emergency response and law enforcement personnel
- Trash collection and recycling operations

Some "safety" vests look similar to Class 2, and the only way to be sure you are wearing the right apparel is to inspect the tag. There are many other design features besides visibility that differentiate the classes and separate "genuine" ANSI 107-2004 apparel from other "safety" apparel. If the tag on your high-visibility garment is missing or not clearly marked, then don't wear it and discard it.

Remember that an inspector will check the tag to see if you are in compliance, so the only thing protecting you from being cited for a violation is the proper tag.

Class 3 Apparel

The main difference between Class 2 apparel and Class 3 apparel is the larger area of your body that Class 3 apparel covers. There are no sleeveless vests that, when worn alone, provide Class 3 protection. Class 3 apparel is for workers who are constantly exposed to high-speed traffic and who cannot pay attention to approaching traffic. If you aren't sure which class of apparel to wear, you can't go wrong with the extra protection provided by Class 3.

Typical workers who must wear Class 3 apparel include:

- Roadway construction personnel and traffic regulators
- Utility workers
- Survey crews
- Emergency response personnel

Law enforcement and firefighters on your roads

Firefighter apparel must meet different visibility and protection requirements than construction and law enforcement apparel. Law enforcement personnel have different rules for when they must wear ANSI clothing, but Class 2 apparel meets the visibility requirements for these workers when they are present on Federal Aid roads and are not exempt from the rule.

Other applications


Class 1 and Class 2 apparel are excellent for those evening runs and walks. Class 2 and Class 3 apparel is also GREAT for accompanying trick-or-treaters, and will earn you lots of compliments from envious parents. Plus, you're likely to collect some treats since you are "in costume!"

References

For specific information regarding when, what, and where to use ANSI Class 2 or 3 apparel in Kansas, call Kelly Geer at KDOT Construction and Maintenance, (785) 296-3576.

XYZ Manufacturer
ANSI/ISEA 107-2004
100% Polyester
Reflective Material
Model #: abc
Size: Large

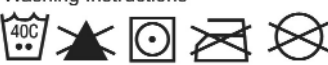
Must be marked
ANSI/ISEA 107-2004
to comply with new regulations



Class 2
Level 2

Must show **Class 1, Class 2, or Class 3**. Select the correct class according to where and when you'll work.

Washing Instructions



Wash warm - max 25 x
Do not bleach
Tumble dry low
Do not iron
Do not dry-clean

Sample ANSI/ISEA 107-2004 Garment Label. If the garment isn't marked ANSI/ISEA 107-2044, you should not wear it. The label must also clearly show the Class compliance.

Sources:

mmm.com: *ANSI/ISEA 107-2004 MADE EASY: A Quick Reference to High-Visibility Safety Apparel.*

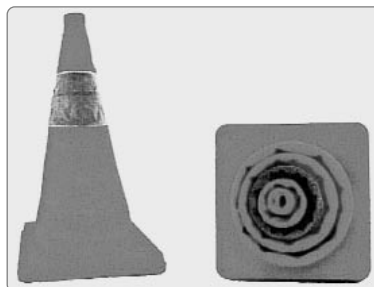
Federal Register: November 24, 2006 (Volume 71, Number 226). Page 67792-67800. From the *Federal Register Online* via GPO Access.
<http://www.gpoaccess.gov/fr/Index.html>.

DOCID:fr24no06-4. U.S. Department of Transportation, Federal Highway Administration. 23 CFR Part 634. *FHWA Docket No. FHWA-2005-23200. RIN 2125-AF11.* ■

Mark your calendar! October 14-15, 2008
MINK Local Roads Regional Meeting, St. Joe, Missouri

Pop-up cones make safety easier

Here's a tip from one of our advisory board members, Russ Tomevi, public works director for the City of Winfield. His department uses pop-up traffic cones for short-duration road maintenance. They purchased a set of 28-inch cones manufactured by MSC Industrial Supply for \$97 plus shipping, and have had good success with them, even in windy conditions. You can find the cones at PMSI in Wichita—call (316) 838-0300. They are also available online at www1.mscdirect.com. If you have a question about using the cones, call Russ Tomevi at (620) 221-5520.



Looking out for Kansas counties

... by Jacob Bustad

Although county roads serve as a vital link in rural areas like Kansas, there is a tendency to overlook this aspect of the transportation system. A new program developed by the Kansas Association of Counties (KAC) and the Kansas Collaborative is aimed at addressing this issue: the Local Roads Engineering Service, headed by Norm Bowers. A grant from KDOT allowed KAC to hire Bowers as Local Road Engineer, which is currently a half-time appointment. Bowers has over 30 years of experience with Kansas county roads, and his desire for a larger county road presence at the state level led him to promote the new program.

According to Bowers, he is “working for you,” by listening to local concerns, looking out for local interests at the state level, and providing information from outside of a given county or community. The position as Local Road Engineer means that information can be shared freely, without worry about politics.

“I can say things that KDOT and others can’t say,” Bowers explained.

Duties of the Local Road Engineer

“Being in Topeka, I have the opportunity to keep in contact with regulatory agencies to answer concerns they have, communicate county concerns, provide comments when appropriate, and keep the counties informed on regulations,” Bowers said. “Not everyone has the time to read the *Federal Register* and *Kansas Register*, so regulations can be developed and adopted without that knowledge at the county level.”

Through the first 12 months of the program, Bowers has concentrated on a few key issues related to each of



Norm Bowers

There are seven major duties for Bowers’ position:

1. Represent the counties’ interests with federal and state regulatory agencies.
2. Represent counties in working with associations representing special interests in the public works arena.
3. Improve communications between KDOT and the counties.
4. Legislative advocacy — represent counties in legislation development.
5. Prepare templates for use by the counties for operations and complying with regulations.
6. Communications — serve as a clearinghouse for State of the Practice, and providing notice on new regulations.
7. Compile road and bridge laws and administrative regulations.

the seven duties outlined above. This includes meeting with regulatory agencies that interact with counties, such as the Kansas Department of Health and Environment (KDHE), the Corps of Engineers, and the Environmental Protection Agency (EPA) about water pollution regulations; meeting with special interest groups like the Kansas Contractors, National Society of Professional Engineers (NSPE) and others; and working to improve communication between counties and KDOT on a range of issues, from bridge inspections to scenic byways.

Bowers also developed templates for use by counties for Project Water Pollution Control Plans, Spill Response Plans, and Spill Prevention Control and Countermeasures (SPCC) Plans. An SPCC Plan is required by EPA regulations for any facilities storing 1320 gallons or more of petroleum products above ground, or 42,000 gallons underground. (For more information on SPCC plans, see our Fall 2007 issue.) According to Bowers, this regulation was a perfect example of why the Local Roads Service is necessary and important,

because many counties throughout Kansas were unaware of the regulation and what it meant, and many counties can use the template to save money on plan preparation.

Communication is central to the Local Roads Service, because it is important for each county to be informed of developments both at the state level and in other counties. While Bowers continues to improve this element of the program, an initial step was compiling a list of all the county road superintendents, to which Bowers sends out a bi-weekly email with relevant information for counties. An email might include hiring/firing announcements, upcoming meetings, reminders of new regulations, answers to frequently asked questions, equipment availability on state bids, and more.

“If you are a road supervisor and not getting these emails, the world is passing you by and you don’t even know it,” Bowers said.

Equally important is the program’s goal to serve as a resource for the types of information shared in these emails, which means that Bowers welcomes any and all ques-

tions sent his way, either through email or by phone. He can check with sources in Topeka and elsewhere and get the information back to the person that inquired, and if of general interest will include the information in his bi-weekly email.

Bowers worked with the Kansas County Highway Association and KDOT to revise the *County Engineers Annual Report* format to make it easier to prepare and still contain information that is needed at a state level. KDOT and KAC hope that the simplified format will help raise the number of Kansas counties reporting.

“More counties are reporting, up to 72, but that information is still not as helpful if we can’t get every county in the state to report. We need to be able to have good statewide totals to track long term trends and quantify budget needs,” Bowers said.

Other current projects

While the Local Roads Engineering Service will continue to pursue interests in each of the duties described above, there are several projects that are currently of high priority. In terms of legislative advocacy, Bowers was not hired until after the last legislative session had been completed. However, his duty will mean that rather than serve as a lobbyist, he will contribute credible information to lobbyists.

Bowers is working to compile bridge and road laws so that counties have better access to this information. Having all the current regulations in a central document would provide immediate benefits, though the sheer size of this project means that it will continue into the future. Bowers is also working on a checklist for environmental permits needed for construction projects.

Where you come in

The main purpose of the Local Roads Engineering Service, Bowers said, is to provide a resource for information, guidance and communication so that those with experience in county public works management can make their jobs easier, and those new to the job can learn better and faster. And he wants your help. Any communication about policies being discussed in Topeka or rumors about new regulations, or a unique approach to a problem that might be shared is appreciated. Every question is welcome.

“If you have a question, give me a call,” Bowers said. “Others might be wondering about the same thing.”

You can contact Norm Bowers at bowers@kansascounties.org or (785) 272-2585. ■

New resources to help you plan transportation safety improvements

... by Jacob Bustad

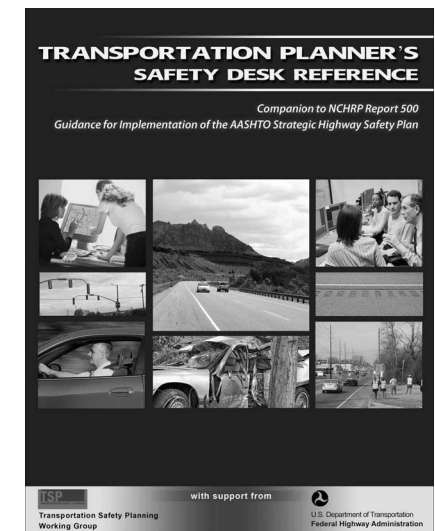
The goals for transportation planning are simple—moving people and goods safely. However, the actual planning process is highly complex, due to the many factors involved. To address this complexity, the Transportation Safety Planning Working Group (TSPWG)—transportation and safety representatives from multiple federal agencies and national organizations—has developed the *Transportation Planner’s Safety Desk Reference*. This article will describe this guide and also a helpful Web site at which it is found.

In Kansas transportation planning is often done locally, sometimes with the assistance of KDOT’s Bureau of Transportation Planning. In the

absence of specifically-dedicated planning staff, the task of transportation safety planning typically falls to engineering and road and bridge professionals. This scenario makes the information on the *Desk Reference* even more valuable for you.

The *Desk Reference* project was supported by the Federal Highway Administration (FHWA), and provides strategies for transportation planners based on materials from the popular National Cooperative Highway Research Program (NCHRP) Report 500 series (see sidebar on next page), making the information in those materials useful in practice.

The 90-page *Desk Reference* is divided into three major sections. One section deals specifically with integrating safety concerns and issues into



current planning processes, at the state, regional and local levels.

Using the *Desk Reference*, planners can learn how to analyze crash and other data to identify safety problems, and develop strategies for preparing documents and facilitating discussions in the planning process. Some suggested basic steps include:

continued on page 12 ►

A Leg Up

Safety and liability concerns re: multi-use trails

... by Jacob Bustad

Multi-use trails are now being developed and built in rural, suburban and urban areas across the country, and many communities have seen the benefits of these projects. Yet for those involved in the development, construction and maintenance of these trails, questions always arise about safety and liability. Public agencies and private landowners alike have concerns about liability issues regarding trail users; and while experience has shown that these groups have not suffered from trail-building, the concerns still exist.

For example, consider a trail being built through a mostly rural area. The presence of attractions next to trails, such as livestock or ponds or shade trees, can present the issue of liability if trail users leave the trail to get up close. Similarly, the use of pesticides on adjacent farms, or hunting on adjacent lands, raises the question of who is responsible for possible accidents. The same can be said for hazardous remains of materials in former railroad corridors. Yet if understood correctly in each context, liability can be handled in a manner appropriate for all involved.

Forms of protection

There are three different legal precepts that define and limit liability for injuries that occur on or near a trail. The first of these is **duty of care**, or the responsibility that that a landowner, whether public or private, has to anyone on their land. The legal duty of care that landowner owes a member of the general public is not the



Laws may provide protection, but undoubtedly the best defense against liability for a trail manager is an appropriate policy for trail use and good practice of trail maintenance.

same in each state, but generally is divided into four categories. In most states, the landowner's responsibility depends on the status of the injured person: "trespasser," a "licensee," an "invitee," or a "child." These classifications have implications for the level of liability a landowner can incur.

But what if a landowner wants members of the public to come onto their land?—for example, if they own an attraction like a winery or B&B. All 50 states now have **Recreational Use Statutes (RUS)**, which provide protection to landowners who allow the public to use their land for recreational purposes. These statutes were created with the idea that if landowners were protected from liability, they would be more likely to open up their land for public recreational use and

thus reduce state expenditures to provide these areas.

Statutes related to recreational use of personal property in Kansas are K.S.A. 58-3201 to 3207. While they generally protect landowners from liability, these laws do not prevent a user from suing a property owner in case of injury on that property. It does mean that such a suit would not advance in court if certain conditions are true. The landowner may incur costs to defend himself or herself, which is the principal reason for purchasing liability insurance.

Public agency liability

Often, federal, state and local governments can find protection under "sovereign immunity." This concept states that the sovereign entity (the

government) is generally immune from liability. However, Kansas has enacted the Kansas Tort Claims Act that allows individuals to sue governments in certain circumstances. K.S.A. 75-60-105-o says that governments can be sued if it (or an employee) is guilty of gross and wanton negligence. An example would be having a hazardous hole or rut on a trail that citizens repeatedly complained about but the government did not repair. If someone were injured because of that circumstance, the government might be found liable.

Insurance

Insurance is often seen as the last line of defense. While the above laws protect a government or landowner when in court, they do not prevent lawsuits from being filed. This means insurance is necessary for trail owners/managers and for adjacent public landowners; fortunately, most tend to have insurance already. Since most trails are operated by a public entity (parks department, etc.), that department is covered by the government body's insurance. Some governments are self-insured, and some trails owned by non-governmental organizations also purchase a comprehensive liability insurance policy.

Risk management

The above laws may provide protection, but undoubtedly the best defense against liability for a trail manager is an appropriate policy for trail use and good practice of trail maintenance. By developing a comprehensive management plan that uses risk management techniques, trails can be properly designed and maintained and the risk of liability will be significantly lower.

There are general guidelines from both the American Association of State Highway and Transportation Officials (AASHTO) and the *Manual on Uniform Traffic Control Devices* (MUTCD). Several basic suggestions

are listed in the box at right. When implemented, these techniques can not only ensure the proper maintenance of the trail and lower the risk of possible injury, but also lower the level of risk liability for the trail owner.

Special situations

Often the development of a bike trail means that trail users will be traveling next to adjacent lands that are used for other means: farming, hunting, railroads, etc. These and other special situations require proper management techniques that in some cases go beyond the basic steps listed above.

While the prospect of turning old rail lines into new bike trails ("rails-to-trails") has gained popularity, some trails also run next to or cross over rail lines still in use. In this case, the trail owner should be in contact with the appropriate company to address any liability issues that may arise. Some projects provide the railroad company with complete indemnification in any cases of injury among trail users; in theory, a RUS should also protect the railroad in this situation. However, the best management policy would involve contact with the company and developing a firm understanding of what legal issues are present.

Regarding concern about hazardous waste from prior railroad use, it's a good idea to have an environmental engineer check any areas of concern along the proposed trail route

Risk management practices for trail design and maintenance

During trail design & development:

- Develop an inventory of potential hazards along the corridor;
- Create a list of users that will be permitted on the trail and the risks associated with each;
- Identify all applicable laws;
- Design the location of the trail such that obvious dangers are avoided. Warnings about potential hazards should be provided and mitigated to the extent possible;
- Trail design and construction should be completed by persons who are knowledgeable about design guidelines, such as those listed in AASHTO and MUTCD documents;
- Trail regulations should be posted and enforced.

Once the trail is open for use:

- Regularly inspect the trail by a qualified person who has the expertise to identify hazardous conditions and maintenance problems;
- Maintenance problems should be corrected quickly and documented. Where a problem cannot be promptly corrected, post warnings easily visible to trail users;
- Procedures for handling medical emergencies should be developed. These procedures should be documented as well as any occurrence of medical emergencies;
- Records should be maintained of all inspections, what was found, and what was done about it. Photographs of found hazardous conditions can be useful.

before the trail is built.

The most common concerns about liability and multi-use trails is adjacent land used for farming and hunting. Farmers often voice concerns about using pesticides that could possibly contaminate trail users. Farmers may be technically liable, because pesticide spraying would constitute a hazard on the trail; however, simple warnings can reduce potential for injury. Because farmers only spray periodically, the trail owner and

continued on next page ➤

Safety and liability on trails,

continued from page 11

farmer can establish notification of when spraying will occur and warning signs can be placed both at the trail-heads and along the trail. Similarly, signs can be posted to warn trail-users about hunting seasons.

Finally, the issue of liability is raised when volunteers are working on the trail. The trail owner should make sure that their insurance covers volunteer workers. Also, volunteer workers (and the work they do) are covered by the Federal Volunteer Protection Act of 1997; this act protects volunteers of both nonprofit organizations and government agencies if they cause an injury; it states that volunteers are not liable for harm caused by their acts provided the acts were in good faith.

Case studies

Two real-world case studies provide an example of how risk management techniques can be used to both develop the trail properly and ensure that adjacent landowners are not at risk.

The Cowboy Trail, a 320-mile trail through Nebraska farmland, began development in 1996. Adjacent farmers were concerned about trail users accessing their land. The trail manager made it a top priority to educate the farmers on the various laws that protected them from being liable, including the state's RUS. The manager also sought to maximize the state's protection against liability by implementing signage along the trail, including signs to dismount when crossing a roadway or bridge. The project has been a success.

The Marsh Creek Trail, extending through 6.5 miles of rural land in Contra Costa County, California, also had to deal with liability issues. In this case, adjacent farmers were primarily concerned with their use of pesticides. The trail management was able to alleviate the farmers' concerns about liability, and worked with them to create

a definitive policy for when pesticide spraying took place, during which times the trail would be closed for use.

In sum

There is no doubt that trails are less dangerous for bicycle and pedestrian users than streets and highways; this is one reason for their popularity. By developing and managing a trail according to generally accepted guidelines, including incorporating the concerns of adjacent landowners, the issue of liability can be adequately addressed.

Once the trail is built, a sound management policy including regular inspection and documentation of maintenance on the trail can provide a good defense should an incident occur. This also includes an emphasis on signage—both permanent for known hazards, and as-needed warning signs for those dangers that arise.

Sources:

Rail-Trails and Liability: A Primer on Trail-Related Liability Issues and Risk Management Techniques, by Hugh Morris, Rails-to-Trails Conservancy in cooperation with the National Park Service Rivers, Trails and Conservation Assistance Program, September 2000.

Kansas Statutes Annotated
§§ 75-6101 et seq. Ks Stat. Ann.
Sec. 58-3201 to 3207

Community Trails Handbook.
Brandywine Conservancy
Environmental Management Center.
Chadds Ford, PA. 1997.

"Land Trust Liability and Risk Management." *Exchange: Journal of the Land Trust Alliance*. Vol. 10, No. 1., 1991.

For more information on trails development in Kansas, call Becky Pepper, Statewide Bicycle and Pedestrian Coordinator, (785) 296-0346. ■

Roadway safety resource,

continued from page 9

—Determining high crash locations, types, and contributing crash causes.
—Identifying appropriate countermeasures to address these crashes.
—Creating goals, objectives, and performance measures to manage the transportation system's safety performance.

The *Desk Reference* also provides information and advice on 17 safety emphasis areas, ranging from older drivers and aggressive driving to collisions with trees to distracted driving. Each of these areas features a description of the problem including statistical data, followed by strategies that address the problem that can be incorporated into planning.

tsp.trb.org

The *Desk Reference* is available for download at the TSPWG web site, <http://tsp.trb.org>. This Web site is a great resource in itself: You can learn about the program and its goals, post a question on their Q & A Forum, and check out the Noteworthy Practices section. This section features reports from around the country that have successfully integrated safety concerns into transportation planning.


Get one for your desk

The TSPWG's *Transportation Planner's Safety Desk Reference* is a "one stop" resource for the latest information, techniques, and tools that transportation planners need to imitate such successful safety projects. It also helps planners meet the requirements of SAFETEA-LU, which elevated the importance of safety in the planning process. Be sure to visit <http://tsp.trb.org>, check out the site, and download the *Desk Reference* today. ■

KDOT Korner

Coming soon: KDOT funding for roadway safety assessments

... by Lisa Harris

 KDOT will be making a few changes to how it delivers its federally-funded High Risk Rural Roads Program in the near future. One change is that there will no longer be a \$300,000 cap on projects. The second is that conducting roadway safety assessments (RSAs)—and implementing their recommendations—will become a major focus for funding.

RSAs eligible for funding

“Our approach so far has been to take care of the worst locations in terms of safety,” said Lynn Berges, traffic safety engineer at KDOT’s Bureau of Local Projects (BLP). “Now we will be broadening our reach by adding consideration of safety issues on corridors, and using RSAs to identify those issues.”

A corridor in this context is the main route used for a specific purpose between two points, such as a route between two towns or from a highway to a manufacturing or agricultural center, said Berges.

What will be covered?

Berges said the RSA funding will cover three types of costs: 1) conducting the assessment; 2) low-cost corridor improvements; and 3) spot improvements. Some improvements may need significant funding and probably contractors to do the work.

Who would conduct the RSAs?

Local communities will put together their own teams with qualified participants. LTAP has one such team.

KDOT also anticipates having a list of qualified consultants who could perform RSAs.

What if an RSA has already been conducted?

Some communities have recently had RSAs conducted by Kansas LTAP, or have plans to have an RSA conducted. Those communities could submit the recommendations from those RSAs for consideration for funding.

Look for a memo from KDOT-BLP in the next month or two with more information, or contact Lynn Berges at KDOT at (785) 296-0410. ■

What kinds of improvements are eligible for funding?

Just a few examples of improvements that can be identified by RSAs are:

- signing
- striping
- rumble strips
- road widenings
- curve improvements
- removing the crest of a hill
- sight distance improvements



KDOT and BIA agreement receives national award

A project that resulted in a cooperative agreement between the Bureau of Indian Affairs (BIA) and the Kansas Department of Transportation has been recognized for a 2007 Exemplary Human Environment Initiatives Award.

The national honor was awarded by the Federal Highway Administration (FHWA) under the program category of “process improvements.” The innovative agreement allows the Prairie Band Potawatomi Nation to maintain control over work performed on a transportation enhancement project on the reservation under a self-determination process designed to foster self-sufficiency.

The agreement was developed after KDOT awarded the project—a 2.1 mile asphalt pedestrian/bicycle trail—for the Prairie Band reservation

in Jackson County. The trail that will connect housing clusters and a work complex on the reservation.

The BIA will serve as administrator on the project and the tribe will be responsible for construction activities. The new pedestrian/bicycle trail is under construction.

“By working with the BIA to administer funds and the tribe acting as the general contractor, we have formed an agreement that benefits all parties and serves as a model on which other agreements can be written,” said KDOT Secretary of Transportation Deb Miller.

The national Exemplary Human Environment Initiatives Award program is designed to support and measure FHWA’s environmental stewardship responsibilities and responsiveness to the needs of communities. ■

What's New

... by Lisa Harris

Low-Cost Treatments for Horizontal Curve Safety

This publication was prepared to provide practical information on low-cost treatments that can be applied at horizontal curves to address identified or potential safety problems. It describes treatments, shows examples, suggests when the treatments might be applicable, provides design features, and where available, provides information on the potential safety effectiveness and costs. Published by FHWA December 2006.

Access Management DVD Library

This DVD contains a wealth of information on access management. It has two videos: "Safe Access is Good for Business," and "(Benefits of) Raised Medians." It also contains 12 NCHRP reports and syntheses on access-related topics, including driveway regulation, capacity and operation effect of mid-block left turns, safety of U-turns at unsignalized median openings, driveway and intersection spacing, etc. The DVD includes proceedings from seven National Access Management Conferences. If you are looking for information on access management, you can't go wrong with this. 2007.

New MUTCD Sign Retroreflectivity Requirements: Maintaining Traffic Sign Retroreflectivity (2007)

This 4-page brochure describes new Section 2A.09 requirements that agencies maintain traffic signs to a minimum level of retroreflectivity as outlined in Table 2A-3 in the MUTCD. The brochure shows the MUTCD language, lists compliance dates, and describes assessment and management methods. Published by FHWA. December 2007. ■

Calendar

See our Web site for even more calendar listings.
Go to www.ksltap.org and click on "Training Calendar."

Culvert, Drainage, and Levee Workshop ▲T
April 22 - Chanute
April 23 - Hutchinson
April 24 - Burlington
April 25 - Lawrence

April 29-30
14th Annual Statewide Transportation Safety Conference
Topeka, KS
University of Kansas Continuing Education
877-404-5823 toll free

April 30 – May 1
*Part 1—Fundamentals of Road Safety Assessment;
*Part 2—RSA Concept and Procedures (participants can take one class or both)
Colby, KS

May 5-7
KCHA Spring Conference
Manhattan, Kansas
Phone: Daryll Lutz at (316)322-4101
dlutz@bucoks.com

May 7-9
APWA Mid-America Conference
Overland Park, KS
Call Andy Haney at 785-229-3630

May 15
Supervisory Techniques for Problem Solving ▲S
Iola, KS
Call Sarah Meyer, KAC
785-272-2585

May 16-17
Modern Roundabout Design Workshop
Kansas City, MO
Call Howard McCullough at (518) 783-5933
<http://roundabouts.cc>

May 18-21
National Roundabout Conference
Kansas City, MO
Contact: Richard Pain
RPain@nas.edu

May 20
MUTCD for Technicians (a TASK workshop)
Salina, KS
Kansas State University-Division of Continuing Education
Phone: 785-532-5569

May 22
APWA Kansas Chapter Snow Rodeo
Milford Lake, KS
Call Ray Iberra,
785-238-7142

The Supervisor's Role in Enhancing Work Relationships ▲S
July 15 – Larned
July 23 – Emporia
Call Sarah Meyer, KAC
785-272-2585

Snow and Ice Control ▲T
Oct 6 – Ulysses
Oct 7 – Dodge City
Oct 8 – Great Bend
Oct 9 – Salina
Oct 10 – Lawrence

Coming this summer and fall:

June
Public Works Issues I and II ▲S

July
GIS classes

July
HEC RAS Hydraulic Modeling

August
Local State Project Coordination ▲M

September
Road and Bridge Issues I and II

October
Bridge Maintenance

*For information on calendar items indicated with an * or to suggest a topic for an LTAP workshop, contact: Kristin Kelly, LTAP Training Coordinator, 785/864-2594, kbkelly@ku.edu.

▲T = KS Road Scholar Program—Level 1
Technical skills required course
▲S = KS Road Scholar Program—Level 2
Supervisory skills required course
▲M = KS Road Scholar Program—Level 3
Master Road Scholar required course

October 14-15
MINK Local Roads Regional Meeting in St. Joseph, MO
Call Lisa Harris at 785-864-2590

October 23
County Government/City Government 101 Service Excellence in Local Government ▲T
Great Bend, KS
Call Sarah Meyer, KAC
785-272-2585

Free Resources

Check off your selections, fill in the bottom portion, and return this form to:

KUTC Materials Request, 1530 W. 15th St., Room 2160, Lawrence, Kansas 66045
or fax to 785/864-3199

Mixed media

Access Management DVD Library

See description on page 14. Includes several publications and two videos: "Safe Access is Good for Business," and "(Benefits of) Raised Medians." Produced by Teach America for the TRB Committee on Access Management, 2007.

Publications

You are free to keep these unless otherwise noted. See descriptions on pages 1 and 14.

Low-Cost Treatments for Horizontal Curve Safety

See description on page 14.

New MUTCD Sign Retroreflectivity Requirements: Maintaining Traffic Sign Retroreflectivity (2007)

See description on page 14.

Equipment

We offer turning movement counter boards for loan to local highway agencies. Call us at (785) 864-5658 to arrange a loan. There could be a waiting list for these items.

Turning Movement Counter Board DB-400, Jamar Technologies, Inc.

A basic model for recording turning movements at intersections. The board is is lightweight and comes with its own case.

Turning Movement Counter Board TDC-8, Jamar Technologies, Inc.

Can be used to do turning movement counts, classification counts, gap studies, stop-delay studies, speed studies, and travel time studies. The board is lightweight and comes with its own case.

Order Form

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- send materials indicated
- address correction
- add to newsletter mail list

Note: Our video and publication catalog is accessible online, in a searchable format. Visit: www.ksltap.org

*For requests outside the United States: After receiving your request, we will notify you of the postage cost and will send materials after receiving payment for postage.

Kansas LTAP

Let us at the KUTC help you find the answers to your transportation-related questions.

KUTC, 1530 W. 15th St. #2160, Lawrence, KS, 66045
Call 785/864-5658 (fax 785/864-3199)
www.ksltap.org

The Kansas Local Technical Assistance Program (LTAP) is an educational, research and service program of the Kansas University Transportation Center (KUTC), located in the University of Kansas School of Engineering. Its purpose is to provide information to local and county highway agencies and transportation personnel by translating into understandable terms the latest technologies in the areas of roads, highways and bridges.

The *KUTC Newsletter* is one of the KUTC's educational activities. Published quarterly, the newsletter is free to counties, cities, townships, tribal governments, road districts and others with transportation responsibilities. Editorial decisions are made by the KUTC. Engineering practices and procedures set forth in this newsletter shall be implemented by or under the supervision of a licensed professional engineer in accordance with Kansas state statutes dealing with the technical professions.

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