

# **LTAP Fact Sheet**

A Service of The University of Kansas Transportation Center for Road & Bridge Agencies

## Safety or Liability? It's Your Call

A primer on basic temporary traffic control for maintenance supervisors.

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area, and that is accomplished through traffic control. This article will describe the basic tasks an agency must consider for setting up traffic control during maintenance operations, and will point you toward some helpful resources for more information.

Elements of traffic control for maintenance operations

The sidebar on page 3 lists the basics of traffic control "know how," or the things you need to know how to do. Of course, this an extremely simplified list; there are many variables for setting up a work zone properly. Where can you learn those things? The following are some great resources.

**Key publications** 

Manual on Uniform Traffic Control Devices (MUTCD). This document contains the federal standards. It is updated every few years; you need to use the version that is currently adopted in Kansas. At present, that is the 2009 edition with Revisions 1 and 2. To access that version, go to http://mutcd.fhwa.dot.gov/kno\_2009r1r2.htm.

Chapter 6 of the MUTCD covers temporary traffic control in general. Chapter 5 has additional language specifically for low volume roads, and says that a limited number of traffic control devices is often sufficient to communicate essential information on these roads. Chapter 5 suggests that, in low volume situations, the focus be on devices that warn of conditions not normally

encountered, prohibit unsafe movements, or provide minimal destination guidance.

If you find it necessary to deviate from the MUTCD in setting up temporary traffic control, the manual's Section 1A.09 states the design should be developed using an engineering study or engineering judgment by a licensed engineer with experience in traffic control.

Guidelines for Temporary Traffic Control. This popular laminated "glove box guide" produced by FHWA has illustrations of different set-ups for work zones. This has been updated to the 2009 MUTCD. Make sure your agency has one or more copies of this. Order at the Kansas LTAP Lending Library at http://www.ksltap.org.

Field Guide on Installation and Removal of Temporary Traffic Control for Safe Maintenance and Work Zone Operations. This ATSSA pocket guide provides basic information and safety tips. http://www.workzonesafety.org/files/documents/training/fhwa\_wz\_grant/atssa\_pocket\_guide\_traffic\_control.pdf

Building Safer Highway Work Zones: Measures to Prevent Worker Injuries from Vehicles and Equipment. CDC, NIOSH, 2001. A 78-page report on the topic. Includes an appendix with dozens of case studies of workers killed in work zones, to illustrate the hazards. Many were struck by equipment inside the work zone. http://www.cdc.gov/niosh/docs/2001-128/pdfs/2001-128.pdf

**KDOT** *handbooks for traffic engineering practices*. In 2005, KDOT produced traffic engineering handbooks

uch of the work of a city, county, or township road agency is routine maintenance. However, setting up a work zone for that work is anything but routine. It requires application of federal temporary traffic control standards, which can vary from work zone to work zone, and the ability to train your crews in how to be safe and also safeguard passing motorists. As the supervisor, you are responsible that your crew and passing traffic are well separated as the work is initiated and completed. This is a critical role you play in terms of safety and liability for your jurisdiction.

On low volume roads and streets, some agencies in Kansas just close the road for the time they are working it, put up some barricades and a couple of warning signs (such as "ROAD CLOSED TODAY ONLY") and then flaggers are not needed and they don't have the risks related to working close to traffic. However, when this is not possible, motorists need clear guidance on how they should travel through the

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### Basic Temporary Traffic Control "Know How"

Work zone supervisors need to:

- Know how to set up traffic control devices for the type of project you are doing and the type of road conditions you are doing it on. For example, you will have a different set-up if you are chip sealing a low volume road than if you are doing pothole patching at a curve on a high volume road.
- **Know how** traffic devices should be placed to safeguard your workers as they place them.
- **Know how** to decide if flagging is needed, and ensure your flaggers are well trained.
- **Know how** to train employees in the construction area to stay clear of motorists and the agency's own equipment.
- Know how to safely remove traffic control devices and open the road back up to traffic.
- Know how to safeguard worker health and safety with training, personal protection gear and frequent hydration.

for small cities and for low volume roads. Each has a chapter on temporary traffic control. The chapters are framed around questions often asked by local agencies about setting up work zones. These books have not been updated to comply with the current MUTCD. They are available on CD from Kansas LTAP.

#### A good website on traffic control

FHWA's Office of Operations webpage on worker safety has a concise list of useful links to resources for setting up a work zone. http://www.ops.fhwa.dot.gov/wz/workersafety/.

#### **Videos**

Kansas LTAP has several free training videos on DVD related to work zone traffic control. Go to http://www.ksltap. org and search for the key words "work zone" in the Lending Library. [Please note that while these videos contain useful

The webinar "Anatomy of a Work Zone: Safety and Liability in Improperly Prepared Work Zones," profiles an actual lawsuit on a low volume road.

information, many are dated and may not comply with the current MUTCD.]

#### Webinars

The National Work Zone Safety Clearinghouse has free webinars on work zone safety for 24/7 viewing. One of particular interest is "Anatomy of a Work Zone: Safety and Liability Exposure in Improperly Prepared Work Zones," describing an actual lawsuit involving a utility work zone on a low volume road, and lessons learned. This and other webinars are listed at http://www.workzonesafety.org/training/webinars/upcoming\_webinars.

#### **Face-to-face training**

Kansas has three sources of face-toface training re: work zones.

- 1) **Traffic Assistance Services for Kansas, or TASK,** provides training on using the MUTCD, among other traffic safety topics. See the TASK schedule at http://www.dce.k-state.edu/conf/task/.
- 2) **ATSSA.** The American Traffic Safety Services Association occasionally offers traffic control classes in our area. The next one, on traffic control design, is in Topeka, October 23-24, 2013. This is offered through ATTSA's work zone grant from FHWA, and the class registration fee is a bargain at \$25.00. For more information go to http://www.atssa.com/TrainingCertification/TrainingEventsStates.aspx?statecd=KS.
- 3) **Kansas LTAP** covers worker safety aspects of setting up work zones in its "Workplace, Jobsite and Equipment Safety" workshop. Call Kristin Kelly at (785) 864-2594 for more information.

#### In sum

Ultimately, your job in supervising a work zone is to get everyone home safely. It's a complex and critically important job. There are many different ways to obtain the information you need, and some primary resources are listed here. If you have a question you

can't find the answer to, and you need individual assistance, give Tom Mulinazzi a call at Kansas LTAP. He'd be happy to help. His number is (785) 864-2928.

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