In the year since the I-35W bridge in Minnesota collapsed without warning in August 2007, government officials in many states, including Pennsylvania, have been concerned with the condition and inspection status of their infrastructure. State-owned bridges are on an inspection schedule, but it is more difficult to determine the total number and the condition of locally owned bridges since federal regulations do not require inspections of bridges less than 20 feet in length.

In an effort to coordinate local bridge inventory and inspection activities, the Williamsport Metropolitan Planning Organization (MPO) is developing a comprehensive local bridge inventory program in Lycoming County. This pilot program is the first step toward understanding the local bridge inventory needs of the region.

Since no inventory of local bridges currently exists, the Williamsport MPO surveyed all Lycoming County municipalities to locate bridges that are less than 20 feet in length. To identify these bridges, MPO staff reviewed local bridge maps with the roadmaster or the director of streets in the municipalities. Then, certified bridge inspectors began to inventory 8 to 10 bridges per day. Field inventory was to be completed by the end of September.

So that future inspection schedules can be established, the data collected from this inventory will be provided to the Bridge Inspection Unit at PennDOT to be entered into the statewide Bridge Maintenance System database (BMS2). A good–fair–poor rating is assigned to each bridge, and this rating system will be used to identify structures that should be inspected during the first round of scheduled inspections.

To help coordinate and later implement the local bridge inventory program on a statewide scale, LTAP has formed a task group, comprised of representatives from PennDOT, MPOs, and Regional Planning Organizations (RPOs), that will

continued on page 5
PennDOT Revises Publication 213
by Christopher Zivovich & Steve Thompson, Pennoni Associates, Inc.

Temporary Traffic Control Guidelines
Roadway workers must wear high-visibility safety apparel and helmets, and any equipment, vehicles, and materials associated with road construction must be stored behind a barrier or curb or at least 30 feet away from the nearest open travel lane. These are just two of the most recent changes that Pennsylvania’s Department of Transportation has made to Publication 213, Temporary Traffic Control Devices, in hopes of improving traffic control in work zones and complying with recent rules imposed by the Federal Highway Administration (FHWA).

This article summarizes these and other changes addressed in the most recent version of Publication 213, which was updated in February 2008. Local governments, as well as contractors, utilities, and state and federal governments, must comply with these regulations anytime work is performed on or near roadways and workers, equipment, or materials either encroach on the roadway or interfere with the normal movement of traffic. Municipal road officials are urged to review PennDOT’s revised Publication 213 before setting up any work zones on a roadway.

Safety Apparel
Anyone working within the rights-of-way of federal-aid highways, including flaggers and road construction and maintenance crews, must wear high-visibility safety apparel and a helmet. As described in Note 9 of Publication 213, all apparel must be either fluorescent orange or yellow-green in color and contain retroreflective material that meets ANSI 107-2004 Class 2 requirements. (See photo.) Flaggers working at night should wear Class 3 high-visibility apparel to ensure additional visibility in dark conditions.

This entire apparel provision complies with final rules of the FHWA (23 CFR Part 634). (Additional information on this requirement can be found in the Winter 2008 issue of LTAP’s Moving Forward newsletter.)

Equipment, Vehicle, and Material Storage
At the end of the work day or whenever practical during work hours, all equipment, vehicles, and material storage associated with a work zone must be stored at least 30 feet from the nearest open travel lane, behind a longitudinal barrier, or 2 feet behind the curb. Note 15 of Publication 213 explains that if site conditions prevent these requirements from being met, barricades, drums, or other protective devices should be placed around the storage site to warn and protect the traveling public. In addition, workers must not park their vehicles within the road right-of-way.
Other Traffic-Control Guidelines

Local governments will also want to know about the following regulations related to temporary traffic control addressed in the latest version of Publication 213.

**Sequence of Traffic-Control Setups** — Note 17 in Publication 213 provides guidelines for installing and removing traffic-control devices around work zones. This provision gives the suggested sequence of what is to be placed first, second, and so forth during the setup of traffic-control devices. It also has a recommended dismantling sequence. This note suggests placing a shadow vehicle, when available, between the approaching traffic and the workers who are installing the devices.

**Cones as Warnings** — Note 21 discusses the optional use of traffic cones to alert oncoming traffic to a flagger. Three cones may be placed in the center of the roadway 150 feet in advance of the flagger to alert traffic to the flagger and the work zone. The cones should be placed between 10 and 50 feet apart.

**Shadow Vehicle for Mowing** — The use of a shadow vehicle during mowing operations is now optional, under Note 23 of Publication 213. Therefore, for most mowing that occurs on local roads, only advance signs are needed whenever the mower is encroaching on the road. On roads where mower operators want additional protection, a shadow vehicle, one or two flaggers, and additional signs could be used.

**Revised and New Figures**

In the recently revised Publication 213, several of the figures related to Pennsylvania Typical Applications (PATA) have changed slightly and some new figures have been added.

**Sign Spacing** — The most visible change to the figures in Publication 213 is the addition of a “Conditions” box to every PATA figure providing sign-spacing requirements based on the type of highway upon which the work is being performed. The old “10 times the speed limit” rule no longer applies.

In urban areas, signs announcing road construction or maintenance are to be spaced at 200-foot intervals. Signs are to be spaced at 500-foot intervals on all other highways except freeways and expressways, where the intervals are 1,000 feet. The Conditions box also includes guidance on the use of distance plaques on advance warning signs.

**Work Zone Signs Height and Placement** — Publication 213 now includes a sign layout sheet providing guidance on the height and lateral placement for work zone signs in rural and urban areas.

**Concrete Barriers** — A newly added concrete barrier transition sheet provides dimensions for the barrier that transitions from a shorter attenuating device or 32-inch-high barrier to a 50-inch-high barrier. A temporary barrier deflection table was added to Appendix B.

**New Tables** — Since Publication 213 was revised in February, PennDOT has issued additional changes to the guidelines related to the use of temporary traffic signals. (These more recent changes can be found in strike-off letters #470-08-05 and #470-08-06 issued by PennDOT.) The latest revisions are reflected in new PATA figures added to Publication 213. A table showing All-Red Clearance Intervals based on speed limit and length of the one-lane traffic section has been added to the guidelines. Another new table reveals the Signal Face Visibility for vehicles approaching the work zone. It should also be noted that the General Notes once found in the Appendix have been moved to the PATA figures and made specific to each individual figure.

**Appendix** — Appendix A discusses the use of portable traffic-control signals and addresses additional requirements, timeframes, approval processes, and guidelines for these temporary signals. Appendix A should be completely reviewed prior to installing any temporary traffic-control signals.

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**Did you know?**

Fascinating facts and useful trivia

Did you know you can use your CPR training for a class credit toward Roads Scholar designation?

**Details:** Successful completion of the American Red Cross CPR training earns you one workshop credit towards Roads Scholar certification. A copy of a completion certificate must be forwarded to the LTAP office in Harrisburg. Certificate must be earned within the three-year training window.

Visit [www.ltap.state.pa.us](http://www.ltap.state.pa.us) for more information.
This new Pennsylvania Typical Applications (PATA) figure found in Publication 213 provides guidance on a stop sign-controlled lane closure on a two-lane, two-way road.

**Upcoming Events and Conferences**

**November 23-25**
County Commissioners Association of PA Fall Conference in Hershey. For more information go to www.pacounties.org.

**December 9-11**
49th Annual Asphalt Paving Conference in Hershey. For more information go to www.pahotmix.org.

**Did you know?**
Fascinating facts and useful trivia

**Read Publication 213 Yourself**

**Details:** The latest version of Publication 213 is available for download at PennDOT's Web page, www.dot.state.pa.us. Go to “Forms, Publications, & Maps” in the top right corner and click on “Forms, Publications & Maps” in the list that appears. Then go to page 22 and click on “PUB 213.”
### Upcoming Workshops

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<td>November 21, 2008</td>
<td>Lycoming County</td>
<td>Unpaved &amp; Gravel Roads Practices Woodward Township Fire Hall 8:00 AM – NOON</td>
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<td>November 26, 2008</td>
<td>York County</td>
<td>Bridge Maintenance York Township Building (Dallastown) 8:00 AM – 2:00 PM</td>
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<tr>
<td>December 2, 2008</td>
<td>Lycoming County</td>
<td>Asphalt Roads Common Maintenance Problems Woodward Township Fire Hall 8:00 AM – 11:30 AM</td>
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<td>December 4, 2008</td>
<td>Venango County</td>
<td>Posting &amp; Bonding of Local Roads Cross Creek Resort 8:00 AM – NOON</td>
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<td>December 4, 2008</td>
<td>Allegheny County</td>
<td>Winter Maintenance Monroeville Public Safety Training Center 8:00 AM – 3:00 PM</td>
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<td>December 11, 2008</td>
<td>Lycoming County</td>
<td>Drainage: The Key to Roads that Last Woodward Township Fire Hall 8:00 AM – 2:00 PM</td>
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<td>Posting &amp; Bonding of Local Roads Monroeville Public Safety Training Center 8:00 AM – NOON</td>
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<td>December 16, 2008</td>
<td>Allegheny County</td>
<td>Risk Management/Tort Liability Monroeville Public Safety Training Center 8:00 AM – NOON</td>
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<td>Allegheny County</td>
<td>Posting &amp; Bonding of Local Roads Monroeville Public Safety Training Center 1:00 PM – 4:30 PM</td>
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<td>December 23, 2008</td>
<td>Centre County</td>
<td>Traffic Signs Marion Township Building 8:00 AM – 3:00 PM</td>
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### Inspecting Local Bridges

Continued from page 1

oversee the completion of the project. The group will determine the best way to collect data statewide so that consistency across regions is assured. The task force will then make sure that the collected data can be integrated into the department’s BMS2.

Before the inventory project can be taken statewide, certain issues must be addressed: What is the availability of funding for MPOs and RPOs to proceed with inspections? Will PennDOT district employees be available to assist with the inspections process? Where will municipalities obtain the funding for repairs?

From this pilot project, a final report will be written. This report will look at the process, barriers, and best practices for implementing the program in other areas of the state. In addition, LTAP will use the information obtained from the inventory program to target bridge training and assistance for municipalities.

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To Register:  
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WEB SITE: www.ltap.state.pa.us

This represents some of our scheduled courses, look for updates on the Web site:
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LTAP ADVISORY COMMITTEE MEMBERS

The PennDOT LTAP Advisory Committee is comprised of a group of municipal government (elected and/or appointed) officials who serve a critical role as program advocates and assist PennDOT by attending training courses, reviewing course materials and content, and functioning in an advisory role on a variety of LTAP issues.

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