

PennDOT Local Technical Assistance Program

DEPARTMENT OF TRANSPORTATION

pennsylvania

# moving FORWARD

**SUMMER 2012** 

A quarterly review of news and information about Pennsylvania local roads.

# **Key Traffic Sign Regulations Eliminated**

FHWA Revises the 2009 MUTCD to Ease Compliance Deadlines

The Federal Highway Administration has extended the compliance date for implementing a sign assessment or management method for maintaining regulatory and warning signs at or above minimum retroreflectivity levels to June 2014. Municipalities now have an additional two years to implement and start using this assessment method.



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Municipalities will be happy to hear that the Federal Highway Administration (FHWA) recently eliminated 46 regulations on traffic signs to provide more flexibility for state and local governments, including allowing communities to replace and upgrade traffic control devices when they are worn out rather than requiring signs to be replaced by a specific date.

The changes adopted are intended to reduce the financial impacts of compliance dates on state and local highway agencies and streamline and

simplify information contained in the 2009 Manual on Uniform Traffic Control Devices (MUTCD) without reducing safety.

Under the new rules, the requirement that municipalities implement a sign assessment or management method for maintaining signs at or above minimum retroreflectivity levels has been extended until June 2014 for regulatory and warning signs. The final rule also eliminates deadlines for increasing the size of various traffic signs, such as PASS WITH CARE and LOW CLEARANCE. Instead, communities will be able to replace and upgrade these signs when they reach the end of their useful life. The FHWA will also allow communities to retain historic streetname signs in historic districts.

Twelve deadlines for sign upgrades, including those deemed critical to public safety, have been retained, such as installing ONE WAY signs at intersections with divided highways or one-way streets and requiring STOP or YIELD signs to be added at all railroad crossings that don't have trainactivated automatic gates or flashing lights.

On August 31, 2011, a Notice of Proposed Amendments (NPA) was issued in the Federal Register proposing to revise Table I-2 in the Introduction of the 2009 MUTCD to eliminate, extend, or otherwise revise most of the target compliance dates for upgrading existing traffic control devices in the field that do not meet the current MUTCD standards. On May 14, 2012, the FHWA issued a Final Rule on the 2009 MUTCD revisions. The MUTCD is a compilation of national standards for all pavement markings, street signs, and traffic signals.

The Final Rule revises Table I–2 of the MUTCD by eliminating the compliance dates for 46 items (eight that had already expired and 38 with future compliance dates) and extends and/or revises the dates for four items. The three-page Table I-2 that appeared on pages I-4 through I-6 of the 2009 MUTCD has been replaced with a one-page Table I-2 that now appears only on page I-4. (See reprinted table on page 4.)

Please note that there are no changes to any standards, only to compliance dates. All requirements and standards remain in place, including the minimum retroreflectivity standards. However, the January 2012 compliance date for implementing a sign assessment or management method for maintaining signs at or above minimum retroreflectivity levels has been extended until June 2014 for regulatory and warning signs. Although MUTCD language requiring agencies to have and

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### Streamlining the Highway Occupancy Permit Process

# PennDOT's Electronic Permitting System (EPS) provides easier, cheaper, quicker method for obtaining a HOP

by Adam R. Melewsky, P.E., Pennoni Associates

PennDOT owns and maintains more than 40,000 miles of roadway. If you want to access these state routes or occupy the associated right of way, you will need PennDOT's permission, which it grants with a highway occupancy permit (HOP). Each year, PennDOT issues approximately 15,000 HOPs, and many of these are issued to municipalities and their authorities.

In the past, HOP applications were submitted by paper to the applicable PennDOT county maintenance office. But in October 2011, in an effort to streamline and improve the HOP process, PennDOT implemented the Electronic Permitting System, or EPS, which allows applicants to submit HOP applications electronically.

### What is EPS?

The Electronic Permitting System, often called ePermitting, is a web-based program for obtaining HOPs. As established by state regulations, there are essentially two types of HOPs: 1) access to and occupancy of highways by driveways and local roads under Pennsylvania Code, Title 67, Chapter 441, and 2) occupancy of highways by utilities under Chapter 459. The regulations were created to ensure security, structural integrity of the highway, economy of maintenance, preservation of proper drainage, and safe and convenient passage of traffic.

To comply with these regulations, customers can submit applications using EPS for driveway, utilities, and miscellaneous work such as curb or embankment removal. EPS is used by homeowners, businesses, developers, engineering firms, municipalities, PennDOT county maintenance offices, PennDOT engineering districts, PennDOT Central Office, and the Federal Highway Administration.

### Why should I use EPS?

The capabilities of EPS make it easier to find information, cheaper, quicker, and simpler to apply and obtain an HOP.

For starters, the secure, user-friendly EPS is easy to use. It provides the tools you need to create a HOP application, attach documents, submit the package to PennDOT, monitor the review process, view the response, and obtain the permit, all electronically.

At any time after an application is submitted, the customer can log into EPS to determine the status of the application and see who at PennDOT has been assigned to review the application. The system also calculates the estimated PennDOT response date. If an applicant chooses not to check on the status of an application, EPS has automatic email notifications to update the customer of the status. The notification may request additional information per the comments included. Upon receiving electronic notification that the HOP has been issued, the applicant retrieves the permit through EPS. EPS will save you money through the capability to attach electronic documents to your application which will reduce your preparation time and reproduction costs. You will also save on postage and phone calls. Electronic submissions mean less paper use at every step: you'll produce fewer copies of plan sets, complete paperless forms, and receive e-mail instead of paper notifications. Under the old paper system, four of five copies of the entire submission were required so PennDOT could route them to the appropriate reviewers and maintain record copies at various locations.

With EPS, PennDOT can now issue permits faster since it does not have to rely on postal service and internal routing of the application materials. A municipal representative can set up the application and application team, coordinate with its engineer to upload applicable plans and other material, and then submit the application with an electronic signature. With notifications sent by email, an applicant can receive a response almost immediately once an application is issued.

EPS simplifies and streamlines the permitting process, especially with more complex projects. On larger development projects, for example, a municipality can easily be added as a co-applicant for certain portions of work. A municipality can also be added as part of the Application Team, which allows the municipality to search and view applications and permits they are listed on. By requesting that it be identified on all HOP projects, a municipality can use EPS as an administrative tool to help manage projects within their jurisdiction. With the search capabilities of EPS, municipal officials can see all applications and permits in the municipality and even sort by type, date, or status. In addition, the EPS online application management system keeps organized records of all the permit applications automatically and allows for electronic storage and archiving of permits and associated material (e.g. reports, construction plans, etc.).

Communication among project members is improved with EPS. Municipal officials can use the system to consult with their applicant team electronically to finalize all the details and documents. Through the transparency of the system, team members can access contact information of the entire review team and develop better communication. Since forms, checklists, publications, and sample plans can be accessed online, EPS can act as a project bulletin board to post important information related to the project.

#### Why did PennDOT create EPS?

EPS was created to improve the HOP process and to establish a more efficient framework for all types of permitting with PennDOT. The new system employs a flexible information technology solution to improve customer service, develop consistency across the state, obtain transparency both internally and externally, and implement more

### EPS makes it easier, cheaper, quicker, and simpler to obtain a highway occupancy permit.

robust internal reporting.

With the transparency of EPS, PennDOT's Central Office can provide quality assurance reviews to promote consistency within the department. The result is more accountability. Deadlines are established for each application, and EPS automatically adds timestamps when an application is acted upon. Not only does the system capture reasons for returning the application, but it logs the workflow steps along with the approval time for each and measures the number of times the application was returned to the customer. From the data that is developed and stored by EPS, Central Office can generate and review a variety of reports to identify problems, resolve issues, and improve efficiency in the permitting process.

With EPS, PennDOT has obtained a centralized location to store HOP-related forms, materials, and other reference material. The EPS links have been created so that anyone can quickly navigate to the specified document or website. With oversight from PennDOT Central Office and the use of automatic notifications and standard comments, EPS has resulted in a reduction in department errors and review time.

### What's in the future?

PennDOT will enhance functionality of the system in phases. The following are just a few of the improvements that the department has recently implemented or is looking to implement:

• Fully transition from the old system to EPS so that all permits and data will be accessible through EPS. Ultimately, PennDOT would like to dispose of paper and microfilm archives.

• EPS now includes a link to PennDOT's Video Log Application (now applicable in a recent release). After entering the work description with the state route, segment and offset, the applicant or reviewer can click on a link to bring up a video log screen at the location of the proposed driveway or other work. This is an easy way for both the applicant and PennDOT to view and verify the location.

• Future integration with Multi-Modal Project Management System (MPMS) including GIS mapping that allows anyone to view basic information about the HOP project and to see all PennDOT and other HOP projects in the area.

• Integrate with Roadway Management System and right of way archives to provide data directly from straight-line diagrams for segment and offset information, pavement histories, and traffic count data. Right of way archives could be linked to provide record plan information and right of way widths.

• Apply for, issue, and maintain Bridge Occupancy Licenses (BOLs) through EPS. About 50 of these licenses are issued yearly.

• Allow fees to be filled in automatically on the application. Currently

to make a payment, a check or money order must be sent to the PennDOT county maintenance office once the application has been submitted in EPS. In a future phase, payment will be accepted electronically via credit or electronic debit.

• Simplify the process for homeowners by creating a simple online application similar to PennDOT's form for minimum use driveways, M-950-A. Once this process is accomplished, a homeowner may be able to schedule a PennDOT county employee to come to his or her home or site so that a minimum use driveway or other minor miscellaneous permit could be issued on the spot.

• Simplify the process for a utility to apply for, obtain, and use Emergency Permit Cards to eliminate the need for the utility to log the usage manually.

• Automatically add municipalities to the application team so that the municipality will receive automatic notifications about the application and can have read-only access to all applications and permits in jurisdiction.

### How do you access EPS?

A link to EPS can be found at www.dot.state.pa.us. Select "Services and Software  $\rightarrow$  DOT Online Services  $\rightarrow$  EPS-ePermitting System (Highway Occupancy Permits)" to navigate to the EPS home page: www.dot14.state.pa.us/EPS/home/home.jsp.

To use EPS, you will need a login (username and password). There are several types of EPS log-ins depending on the frequency in which you work with PennDOT and submit HOP applications. The first type is a PennDOT Engineering Construction and Management System Business Partner (ECMS BP). This login is recommended for organizations that do other business with PennDOT, such as utilities, construction companies, and engineering firms. Multiple employees in your organization can be assigned individual user IDs. As an ECMS BP, your organization will have access to ECMS, EPS, and other PennDOT systems.

The second way to access EPS is to be an ePermitting Business Partner, which is recommended for organizations that wish to create a business partner account with multiple users to access only ePermitting. These organizations apply for or work with HOPs on a regular basis and include developers, retail chains, and engineering firms.

The final way to access EPS is with a Single-Use ePermitting ID, which is recommended for organizations and individuals who apply for a single or occasional permit. This streamlined process is specifically designed for infrequent applicants, such as small business owners, private engineering firms, or homeowners.

PennDOT is prepared to assist new applicant teams with preparing and submitting their applications electronically.

### Key Traffic Sign Regulations Eliminated

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use a management/assessment method on regulatory and warning signs is not changing, municipalities now have an additional two years to implement and start using it. Guide signs are no longer required to be included in the management/assessment method for maintenance of signs. This Final Rule took effect June 13, 2012.

The 2009 MUTCD with Revisions 1 and 2 incorporated is

available at http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/pdf\_index.htm. The complete text of the Federal Register notice for 2009 MUTCD Revision 2 – Compliance Dates can be accessed at www.gpo.gov/fdsys/ pkg/FR-2012-05-14/pdf/2012-11710.pdf.

2009 MUTCD Section Number(s)	2009 MUTCD Section Title	Specific Provision	Compliance Date
2A.08	Maintaining Minimum Retroreflectivity	Implementation and continued use of an assessment or management method that is designed to maintain regulatory and warning sign retroreflectivity at or above the established minimum levels (see Paragraph 2)	2 years from the effective date of this revision of the 2009 MUTCD*
2A.19	Lateral Offset	Crashworthiness of sign supports on roads with posted speed limit of 50 mph or higher (see Paragraph 2)	January 17, 2013 (date established in the 2000 MUTCD)
2B.40	ONE WAY Signs (R6-1, R6-2)	New requirements in the 2009 MUTCD for the number and locations of ONE WAY signs (see Paragraphs 4, 9, and 10)	December 31, 2019
2C.06 through 2C.14	Horizontal Alignment Warning Signs	Revised requirements in the 2009 MUTCD regarding the use of various horizontal alignment signs (see Table 2C-5)	December 31, 2019
2E.31, 2E.33, and 2E.36	Plaques for Left-Hand Exits	New requirement in the 2009 MUTCD to use E1-5aP and E1-5bP plaques for left-hand exits	December 31, 2014
4D.26	Yellow Change and Red Clearance Intervals	New requirement in the 2009 MUTCD that durations of yellow change and red clearance intervals shall be determined using engineering practices (see Paragraphs 3 and 6)	5 years from the effective date of this revision of the 2009 MUTCD, or when timing adjustments are made to the individual intersection and/or corridor, whichever occurs first
4E.06	Pedestrian Intervals and Signal Phases	New requirement in the 2009 MUTCD that the pedestrian change interval shall not extend into the red clearance interval and shall be followed by a buffer interval of at least 3 seconds (see Paragraph 4)	5 years from the effective date of this revision of the 2009 MUTCD, or when timing adjustments are made to the individual intersection and/or corridor, whichever occurs first
6D.03**	Worker Safety Considerations	New requirement in the 2009 MUTCD that all workers within the right-of-way shall wear high-visibility apparel (see Paragraphs 4, 6, and 7)	December 31, 2011
6E.02**	High-Visibility Safety Apparel	New requirement in the 2009 MUTCD that all flaggers within the right-of-way shall wear high-visibility apparel	December 31, 2011
7D.04**	Uniform of Adult Crossing Guards	New requirement in the 2009 MUTCD for high-visibility apparel for adult crossing guards	December 31, 2011
8B.03, 8B.04	Grade Crossing (Crossbuck) Signs and Supports	Retroreflective strip on Crossbuck sign and support (see Paragraph 7 in Section 8B.03 and Paragraphs 15 and 18 in Section 8B.04)	December 31, 2019
8B.04	Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings	New requirement in the 2009 MUTCD for the use of STOP or YIELD signs with Crossbuck signs at passive grade crossings	December 31, 2019

### Table I-2. Target Compliance Dates Established by the FHWA

\* Types of signs other than regulatory or warning are to be added to an agency's management or assessment method as resources allow.

\*\* MUTCD requirement is a result of a legislative mandate.

Note: All compliance dates that were previously published in Table I-2 of the 2009 MUTCD and that do not appear in this revised table have been eliminated.

# **Flooding and Debris Effects on Bridges**

by H. R. Riggs, Professor, University of Hawaii

Floodwaters, natural vegetation, and bridges are not a combination made in heaven. Floodwaters sweep vegetation—often older, dying, and dead trees and bushes but also healthy vegetation—downstream. Even houses and shipping containers can get swept downstream. This debris represents a potential threat to a downstream bridge, and the combination can increase the severity of the flooding as well.

Debris primarily threatens "smaller" bridges. High bridges well above the flood level typically do not have substantial problems, although debris can even increase scouring of piers of large bridges.

### Increasing severity of flooding

Consider the bridge shown in the photo on the right. This was taken in the fall of 2011 after severe flooding. Clearly, substantial debris has accumulated on the upstream face of the bridge to block the flow of the floodwaters. When this happens, the floodwaters try to get under the bridge, but the blocking debris causes the floodwaters to rise and either go over or around the bridge.

**Debris damming by a bridge after the fall 2011 flood.** (Photo courtesy of PennDOT)

According to the requirements of the Pennsylvania Department of Environmental Protection (DEP) for the hydraulic performance of bridges and culverts, as stated in 25 PA Code, Chapter 105, Subchapter C, the structure "may not significantly increase water surface elevations," and the 100-year flood must pass "with less than a one-foot increase in the natural unobstructed 100-year water surface elevation." With the amount of blockage depicted in the photo, it is unlikely either of these requirements will be met.

After a storm, the debris must be cleared as quickly as possible because a subsequent storm may cause additional flooding. Additionally, the bridge foundation and possibly the superstructure itself cannot be inspected adequately until the debris is removed.

Obviously, it is not economically feasible to raise most bridges to a height such that debris is not an issue. The only other feasible alternative is to control the source of the potential debris. As stated in 25 PA Code, Chapter 105, Subchapter C, "the owner or permittee of a culvert or bridge is responsible for maintaining the structure opening thereof in good repair and assuring that flood-carrying capacity of the structure is maintained. The owner or permittee shall inspect the opening and approach of the culvert or bridge at regular intervals of not less than once each year and shall, after obtaining the verbal or written approval of DEP, remove silt and debris which might obstruct the flow of water through the structure. It shall be assumed that the flow of water is obstructed when there has been a reduction of the effective area of the structure opening of greater than 10%."

### Increasing hydraulic load on the bridge

Another concern with debris accumulation is that the damming

effect can increase the hydraulic load on the bridge. The photo on the right shows a bridge failure caused by debris damming. The hydraulic force on the bridge results from the water pressure acting on the effective vertical area of the bridge. Obviously, when the opening under the bridge is blocked, this effective area can increase



Bridge failure from debris damming. (FHWA-IF-04-16, Hydraulic Engineering Circular No. 9)

substantially. This is especially true if the water rises to the level of the deck since large lateral forces from the fluid can potentially wash the bridge deck off its piers or abutments. In addition, the damming effect can increase the scour and erosion around the piers, abutments, and stream banks.

### **Debris impact forces**

Large debris, such as a tree or telephone pole, can cause significant impact forces when it hits a bridge. Recent tests at Lehigh University reveal that a telephone pole with a diameter between eight and 10 inches can cause an impact force of approximately 60,000 pounds when propelled at a speed of only five miles per hour. Floodwaters can flow much faster, and the force increases linearly with speed and area of the pole, at least until the wood pole begins to crush. That means that a pole or tree moving at 10 miles per hour can easily impart an impact force of 120,000 pounds to a bridge deck. Bridges are not typically designed for such lateral impact loads.

### Maintenance

To protect your bridges from this type of damage, existing debris at all bridges should be removed periodically. Good facility management might also include a proactive element to reduce potential debris. However, clearing potential debris upstream of a bridge is not as straightforward since there are other conflicting goals.

DEP has identified stormwater runoff as one of the top causes of water quality impairment, and the department places a strong focus on stormwater management. The Comprehensive Stormwater Management Policy (document 392-0300-002) notes that "stormwater should be managed at the source or origin as an

# Have Twin Trailers and 102-Inch-Wide Trucks on Your Roads?

How to Respond to Expanded Access Requests

Expanded access is about allowing larger trucks, such as 102-inchwide trailers or twin trailers, to leave approved routes to access needed terminal locations. Truck access on many roadways may be limited by weight, height, width, or length. The expanded access approval procedure allows access on state and locally owned roads based upon truck width or length.

When trucking companies request an expansion of their access and the proposed routes include locally owned roads, the municipalities that own those roads have a responsibility to respond to such requests. That responsibility includes investigating the safe use of the trucks on the proposed roads and working with PennDOT to publish any decisions made to approve or deny those requests. Requests for expanded access are automatically approved if no decision is made within 90 days of the date of the request. In order for PennDOT to complete the processing of requests within 90 days, PennDOT asks affected municipalities to respond to the Department within 30 days.

Municipalities have a responsibility to immediately forward expanded access requests to PennDOT.

If the affected municipalities do not respond to PennDOT's request for an investigation and decision within 30 days, or 45 days if requested, PennDOT will consider the portion of the proposed expanded access route on locally-owned roads to be approved. Ignoring these requests can result in larger trucks and combinations using locally-owned roads where safety

might be a concern, potentially increasing municipal liability.

The growth of natural gas drilling, particularly in the northern and central tiers of the state, has increased the demand for expanded access routes. While most requests come through PennDOT because state highways are involved, municipalities have a role in the process if the expanded route includes locally owned roads. In cases where a requested route involves only locally owned roads, municipalities may receive requests directly from the applicant. Municipal officials must be aware of their responsibilities to manage any requests that may come their way.

### The Expanded Access History

The Surface Transportation Assistance Act of 1982 (STAA) is a comprehensive federal transportation funding and policy act that included major changes for the trucking industry. Among these changes, the STAA allowed the use of twin-trailer combinations and set length limits for single and twin trailers on certain highways that became known as the National Network for Trucks. However, because food, fuel, rest, and other needed terminals are often located off this

National Network, the STAA requires states to allow trucks that meet certain conditions to have reasonable access to these facilities.

PennDOT established a process by which companies and individuals with an interest in using larger trucks and vehicle combinations might be allowed to access terminal locations off the National Network. Approving a route for expanded access does not require a permit in the normal sense, but rather it is a process by which

a route is examined and deemed acceptable for the safe operation of larger trucks and combinations. Unlike a permit, which is typically limited by time, event, or permit holder, approval of a route for expanded access remains in place for use by all with an interest to do so. Approved expanded access routes are published in PennDOT Publication 411. Pennsylvania STAA Truck Routes.

### **Related Resources**

Pennsylvania law, regulations, and policies that govern STAA Expanded Access Routes:

- Title 75 Pa. C.S. §4908
- Title 67 Pa. Code, Chapter 209
- PennDOT Publication 46, Traffic Engineering Manual, ages 1-16 through 1-25
- PennDOT Publication 411, Pennsylvania STAA Truck Routes PennDOT Publications 46 and 411 may be accessed online free of

charge through PennDOT's Sales Store at ftp.dot.state.pa.us/ public/PubsForms/Publications/ PUB%2012.pdf.

### **Municipal Responsibilities within the Expanded** Access Process

The first resource for understanding a municipality's responsibilities within the expanded access process is PennDOT's Traffic Engineering Manual (Publication 46). A thorough explanation of the process begins on page 1-16 of the February 2012 edition of that publication.

A municipality will become involved in the expanded access process if a request for an expanded access route includes locally owned road(s). If a request includes both state-owned highways and locally owned roads, the request will come to the municipality from PennDOT. If a request includes only locally owned roads, a request may come directly to the municipality from the company or individual requesting expanded access.

Respond - If the proposed Expanded Access route includes stateowned highways and passes through one or more municipalities on locally owned roads, those municipalities will be notified of the request by the local PennDOT Engineering District and will be asked to

investigate their portion of the proposed route. The request from the Engineering District will be formatted as a form letter with instructions on how to proceed. A municipality has 30 days to respond to the Engineering District, although an additional 15 days may be requested. If a municipality does not respond within the approved time

### Time Limitations to the Request Process

After a request is received from PennDOT, a municipality:

- Has 30 days to respond with a decision.
- May request a 15-day extension by notifying the requestor in writing; no reason is necessary.

If a decision is not made within these time limitations, the locally owned roads in the proposed expanded access route will be automatically approved.

limit, the portion of the proposed route on any locally owned roads is considered approved. If a municipality intends to list restrictions or deny a request, it must respond in writing to the local PennDOT Engineering District.

Some requests for expanded access may come directly to the municipality. **Such requests should be forwarded immediately to PennDOT.** If a request comes directly to a municipality and includes state-owned highways, that request should be returned to the requestor with instruction to submit to PennDOT.

**Investigate** – Once PennDOT receives a request, it will notify affected municipalities about which locally owned roads must be investigated. To perform its investigation, a municipality will have to do some field work. Details about the process are available in a new Technical Information Sheet (TS #151), which has been attached to this edition of *Moving Forward*. Also, PennDOT has a new TE form (TE-149) that includes a checklist for recording the findings from investigations to support the decisions made. Investigations are to be subjective, based upon local knowledge. Roadmasters, public works directors, and police officers should be able to perform the investigations and make the appropriate decisions. Municipalities are not required to hire professional engineers for these investigations.

**Decide** – After investigating the proposed route, a municipality must decide if the route is to be approved for the vehicles requested,

approved with restrictions (approving only certain vehicles), or denied. The decision is communicated to PennDOT. The information to be included in the decision response is listed in PennDOT Publication 46 and the LTAP TS #151.

A request is considered approved if a municipality does not respond within the approved time limit. If a municipality intends to list restrictions or deny a request, it

### **Municipal Decision**

After a request for expanded access has been investigated, a municipality may make one of three possible decisions:

- Approved for all requested sizes and combinations
- Approved, but restricted to only certain sizes or combinations
- Denied

must respond to PennDOT in writing and include the completed TE form. While allowing the 30-day review time to pass without action may seem the easiest response, doing so will allow larger trucks to use municipal roads without an appropriate investigation of potential threats to safety and thus increase municipal liability. Responding to expanded access requests may seem an extra burden, but in reality appropriately investigating the safety issues can limit liability, improve safety, and become part of a municipality's Roadway Safety Improvement Plan.

**Publish** – If an expanded access route is approved, or approved with restrictions, that decision will be made public. PennDOT will handle all publications and notifications. The municipality must provide PennDOT with contact information for the local police department(s) with jurisdiction within the municipality.

### **Questions?**

Questions about municipal responsibilities may be directed to PennDOT's Bureau of Maintenance and Operations at Special Hauling Permit Section, 6th Floor, Commonwealth Keystone Building, 400 North St., Harrisburg, PA 17120. You can also contact the District Traffic Engineer at your local PennDOT Engineering District. Information about these districts can be found at www.dot. state.pa.us

### Congratulations to the following Roads Scholar recipients:

- Jeff Dipietro, East Pikeland Township
- Kenneth Geiger, Union Township
- Richard Kanaskie, Bethlehem Township
- Keith McGowan, Caernarvon Township
- Steve Miller, West Whiteland Township
- Paul Papi, Old Forge Borough
- Jeff Suchomelly, Caernarvon Township
- Carl Weikel Sr., Union Township

- Andrew Young, West Whiteland Township
- Harold Wagner, North Coventry Township
- Gene Bechtel, East Pikeland Township
- John Carroll, East Bradford Township
- William Christie, Ridley Park Borough
- Jeremy Corros, East Bradford Township
- Vince Dascanio, Ridley Park Borough
- Mike Geraghty, East Bradford Township

- Ron Hershey, York City
- Jim Hoerner, Mt. Holly Springs Borough
- Ali Howell-Clarke, Amity Township
- William Layton, West Pennsboro Township
- Kent Whistler, West Pennsboro Township
  - Glenn Wimer, Dickinson Township
  - Richard Yocum, West Pennsboro Township

### Flooding and Debris Effects on Bridges

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environmental resource to be protected rather than as a waste to be quickly discharged and moved downstream." One of the best practices for stormwater management are riparian forest buffers, as laid out in 25 PA. Code Chapter 102, *Erosion and Sediment Control.* 

Before clearing debris from a bridge, you should recognize that channel clearing is regulated. A general permit, BWM-GP-11, allows "the removal of debris and accumulated sediment to ensure adequate hydraulic capacity for bridges or culverts is limited to 50 feet upstream and downstream of the bridge or culvert and shall be conducted in accordance with the Department's Standards for Channel Cleaning at Bridges and Culverts." This standard states that "tree and shrub growth on stream banks shall not be disturbed unless absolutely necessary."

The bottom line is that bridges should be inspected at least once per year for existing debris. The debris should be cleared if the water channel is constricted by more than 10 percent. Except where additional permits are obtained, clearing of potential debris in stream channels is limited to 50 feet upstream and downstream of the bridge.

### 2012 Build a Better Mousetrap Competition

Pennsylvania LTAP is pleased to announce the winner of this year's competition!

### Providence Township/Lancaster County

Winning Entry: Hose Reel for Rubber Patching Rig

Description: Providence Township made a removable mount to attach a retractable hose reel so that the hose and wand would always be in front of the truck, ready at any time. They then fitted an air hose along the frame of the truck and attached quick connects on either end for easy hookup and disconnect. This provides the ability to move to the next job in minutes, and by needing only one vehicle, it results in less fuel usage and smaller work zones.

Providence Township's winning entry will represent Pennsylvania in the **2012 Build a Better Mousetrap: National Competition** that is sponsored by the FHWA LTAP/TTAP Clearinghouse. The national winner will be announced at the National Conference this summer.

### **Honorable Mentions**

**Baldwin Borough/Allegheny County** for its entry *The Lid Buster.* The tool solves a problem created by newer replacement manhole covers. The older style covers have a hole (or holes) through them and are removed by using a pick. The new covers are designed to minimize water infiltration through the cover and have two slots, rather than holes on the outer edges opposite each other. These slots are built into the cover, not through it. This makes traditional manhole cover removal methods obsolete. The Lid Buster locks onto these newer style covers, which enables the removal and replacement to be accomplished faster and easier.

**Pleasant Township/Warren County** for its entry *EZ Shaker* 2012. Through berm repairs and yard work, the road crew gathers unusable materials at its yard. The crew recycles millings and screens them to recover gravel. By switching the screen, they are able to filter fill dirt into fine top soil, or add compost mix to dirt creating valuable materials. All of this saves gravel, soil and trucking costs. This township says, "Recycling Works".

## Workshops

For a current listing of workshops, go to www.ltap.state.pa.us, select "Current Courses" - or to request a workshop in your municipality, send an email to ltap@state.pa.us

> LTAP Contact Information: 400 North Street, 6th Floor, Harrisburg, PA 17120 1-800-FOR-LTAP (367-5827) Fax: (717) 783-9152 Itap@state.pa.us www.ltap.state.pa.us

Additional Online Resources

Rules and Regulations, Title 25–Environmental Protection [25 PA. Code Chapter 102], Pennsylvania Bulletin, Vol. 40, No. 34, August 21, 2010 (www.pabulletin.com/secure/data/vol40/40-34/1573.html)

Executive Summary, Comprehensive Stormwater Management Policy, Document 392-0300-002 (www.dep.state.pa.us/dep/subject/advcoun/ smallbiz/2002/392-0300-002-92802%20Final\_Stormwater\_Management.pdf)

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