



moving FORWARD

WINTER 2014

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

Improving Traffic Signals

New state Green Light-Go Program funds signal improvements

by Daniel P. Farley, Manager, Traffic Signal and Operational Analysis, Pennsylvania Department of Transportation

Municipalities looking for funding to improve traffic signals and help reduce congestion may be interested in Pennsylvania's new "Green Light-Go" Traffic Signal Program. This program, which is made possible by Act 89, Pennsylvania's far-reaching transportation plan signed by Gov. Tom Corbett in November 2013, makes up to \$10 million available for traffic signal improvements in the current fiscal year. The Act 89 allocation then increases to \$25 million in 2015-16 and \$40 million in 2016-17 and thereafter.

Traffic signal projects on corridors with fewer than 10,000 vehicles per day will be managed by the municipality, while projects on corridors with greater than 10,000 vehicles per day will be managed by PennDOT. Both types of projects require a 50 percent match from the municipality. For access to the application, program information, frequently asked questions, and other program guidance, please visit www.dot.state.pa.us and select the Green Light-Go icon in the left-hand navigation or go to www.dot.state.pa.us/Portal%20Information/Traffic%20Signal%20Portal/FUNDGLG.html.

Under the third element of the program (PennDOT Management Element), PennDOT will establish a plan to upgrade and take over ownership of traffic signals on key state-owned corridors with greater than 25,000 vehicles per day. Although additional regulation and legislative updates would be needed, such a change will be done in coordination with municipalities and will require new regulation and legislation.

To better support this effort, PennDOT will establish a fourth Regional Traffic Management Center in District 2. This center will support 24/7 traffic operations for Districts 3 and 9, and the boundaries of the current District 8 Regional Traffic Management Center will be adjusted to support Districts 4 and 5.

For additional information or questions regarding the Green Light-Go Program, email RA-PDSIGNALFUNDING@pa.gov.

Local Grant Element

- Designated Corridors (AADT less than 10,000)
- Municipal application & 50% match
- Act 89 motor license fund allocation
 - SFY 2014/15 – Up to \$10 Million
 - SFY 2015/16 – Up to \$25 Million
 - SFY 2016/17 and After – Up to \$40 Million
- Municipal managed projects

PennDOT Project Element

- Critical Corridors (AADT greater than 10,000 or at the end of limited access ramps)
- Municipal application & 50% match
- Program funds as allocated
- PennDOT managed projects (ECMS)

PennDOT Management Element

- Super-Critical Corridors (PennDOT identified)
- PennDOT will upgrade corridors and take over operations and management once completed
- Program funds as allocated
- PennDOT managed projected (ECMS)

The Green Light-Go Program is comprised of three elements: the Local Grant Element (Designated Corridors), the PennDOT Project Element (Critical Corridors), and the PennDOT Management Element (Super-Critical Corridors). Under the Local Grant and the PennDOT Project elements, municipalities will have an opportunity to apply for Green-Light Go Program funding each year for traffic signal improvement projects on state-owned highways.

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Aquatic Invasive Plant Species

by Robert M. Peda, P.E., Navarro & Wright Consulting Engineers, Inc.

Pennsylvania roadways are becoming increasingly susceptible to invasive plant species within the highway right-of-way, and the establishment of these plants creates new and increasing challenges for road crews to control. By implementing a roadside vegetation management program, municipalities can both improve the aesthetics of the roadside and ensure motorist safety by improving driver sight distance to oncoming vehicles, bicycles, and pedestrians and providing clear visibility of signs and roadside safety hardware.

Although Pennsylvania road crews are typically equipped to handle vegetation management, they face increasing challenges when it comes to controlling aquatic invasive plant species. By becoming familiar with aquatic invasive plant species and understanding the best treatment and management options, municipal road crews can do their part to control the spread of these invasive plants.

What Are Aquatic Invasive Plants?

Aquatic invasive plant species are non-native plants that can cause harm to the environment or economy by growing aggressively and spreading to displace other plants in an ecosystem. Invasive species spread when water, mud, seeds, or plant fragments get moved from one location to another by people or natural dispersal or by hitchhiking on vehicles or equipment.

Wet conditions along Pennsylvania roadsides are a favorable environment for aquatic invasive plants to become established and eventually spread off the legal right-of-way. When established in a new site, invasive species alter the natural or native habitat for fish, waterfowl, and mammals and are often difficult and expensive to control and nearly impossible to eradicate. Identifying and preventing the spread of aquatic invasive species is a key step in providing long-term control.

By Executive Order 13112 of 1999, the National Invasive Species Council was created to deal with invasive species. With representation from 13 federal departments and agencies, the council focuses on how to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts they cause. As part of the executive order, state, local, and regional levels are encouraged to plan and take action to address invasive species.

In Pennsylvania, the Department of Agriculture administers the state's Noxious Weed Control Law. A Noxious Weed Control Committee establishes a Noxious Weed Control List and adds or deletes plants from the list. The current list is composed of bull thistle, Canada thistle, giant hogweed, goatsrue, jimsonweed, Johnson grass, kudzu-vine, marijuana, mile-a-minute, multiflora rose, musk thistle, purple loosestrife, and shattercane. This list is limited compared to the multitude of invasive plants present in Pennsylvania. It is a violation of the law to sell, transport, plant, or otherwise propagate any of these weeds within the commonwealth.

Aquatic and Facultative Plants in Pennsylvania

Any of the noxious weed species on the list may be eligible for federal and state eradication and control programs, which provide

funding for suppression, control, or eradication of the weed. Beyond this list, however, other invasive plant species prevalent along Pennsylvania roadsides require control or eradication efforts without the benefit of outside funding.

Following are several aquatic or facultative invasive species that may be found in either wetlands or non-wetlands along roadways in Pennsylvania:

Purple Loosestrife: This Pennsylvania Noxious Weed is an upright perennial that can grow 3 to 10 feet high in freshwater or brackish



wetlands, riparian corridors, ditches, and other moist areas. The stalks of the attractive purple flowers are long-lasting and capable of producing 2 to 3 million seeds per plant per year. The plants are very successful colonizers and can spread vegetatively via underground stems at a

rate of one foot per year. Once established, the plant spreads quickly competing with native grasses and plants that provide high-quality food and habitat for wildlife.

Mile-A-Minute: This Pennsylvania Noxious Weed is an annual vine that can reach lengths of up to 20 feet. It grows in open and disturbed areas along edges of woods, wetlands, stream banks, and roadsides and prefers wet environments with poor soil structure and full sunlight. Its leaves are light green in color and triangular shaped. The vines have downward-pointing barbs that enable them to climb to areas of high light and attach to other plants that get in their way. This plant grows rapidly overtaking shrubs and other native vegetation and reducing their access to sunlight.



Common Reed (Phragmites)

This perennial grass is a non-native strain from Europe that grows from 6 to 15 feet high in dense stands. It prefers borders of lakes, ponds, and rivers but also occurs in freshwater marsh communities, roadsides, and disturbed areas where water is still



or slow moving. It is spread primarily through vegetative means, such as rhizomes. Its seed viability is low, but heavy machinery such as mowers can disperse the plants along the roadsides.

Japanese Knotweed: This shrub-like perennial plant is also called elephant ear bamboo due to the resemblance of its stems that can grow to a height of 13 feet. Flowers are greenish to white in branched



clusters. The plant is found in moist, open habitats along roadsides, hillsides, and riverbanks. It tolerates adverse conditions, such as high temperatures, high salinity, drought, and floods. The plants, which are capable of establishing thick colonies through

underground rhizomes, plant fragments, and seeds, can be spread naturally by water and wind, but also by human interactions.

Reed Canary Grass: This cool-season perennial grass grows to heights of 2 to 9 feet and forms large stands that can dominate an

area. The plant is light green to straw in color, and seed clusters 3 to 6 inches in length appear at the top of stems from May to mid-June. It grows in wetlands that are saturated for most of the growing season, such as roadside ditches, rights-of-way, shallow marshes, and meadows. Seeds can be spread easily by waterways, animals, humans, and machinery.



Controlling Aquatic Invasive Plants

One common method of controlling aquatic invasive plant species is through the application of herbicides. Due to requirements of both federal and state laws, the Pennsylvania Department of Agriculture administers a certification process for pesticide/herbicide applicators. This certification requires completion of two written exams (core and category) and registration within 12 months of successfully passing the exams. Under the Pennsylvania Pesticide Control Act, a municipality must acquire a Pesticide Business license, have at least one certified pesticide applicator, obtain appropriate insurance, and maintain records of all pesticide applications.

Typically, certified municipal pesticide applicators are certified in Category 10, “Right-of-Way and Weeds.” For this category, the certified applicator may use pesticides to:

- Maintain a public road, utility, and railroad right-of-way.
- Control vegetation around a structure, parking lot, or fence.
- Control an invasive weed species.

The label on the pesticide must specify Right-of-Way. For aquatic pest control, Category 9 certification is required for treating ponds, lakes, and standing or running water. However, aquatic invasive plant species may be treated under Category 10 certification, in highway rights-of-way, as long as the pesticide label specifies “Application in Aquatic Environment.” Check with the Pennsylvania Department

of Agriculture regional office in your area if you have additional questions.

When herbicides are used to control aquatic invasive plant species, careful attention must be paid to the plant biology and appropriate treatment timing for effective control. Since most of these invasive species are perennial plants, an effective control option must address the root system. Frequently, these species require repeat control over a period of several growing seasons. Due to the wet environment the plants thrive in, pesticides must be approved for “Application in Aquatic Environment.”

In addition to herbicide treatments, municipalities can apply Best Management Practices (BMPs), which are methods or techniques for preventing or reducing the spread of invasive plants while making optimal use of resources. By using preventive BMPs to reduce the spread of invasive species, the municipality can lower future maintenance costs, reduce use of herbicides, and protect wildlife habitat, native plants, beneficial insects, and threatened and endangered species. Some examples of BMPs include:

- **Prevention Training for Staff** – Identification of invasive plants; plant biology for timely control; equipment-cleaning protocols; and consequences of invasive impacts to the environment
- **Scheduling of Work Activities to Avoid Spread** – Prioritize reducing seed production along roadways; avoid work during rain events; mow when seed is not present; and control invasive species before ground-disturbing activities

Continued on page 8

References

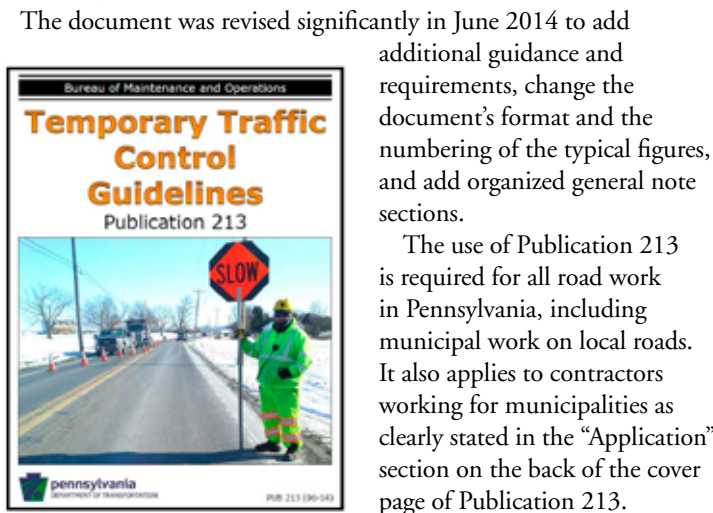
More detailed information on aquatic invasive plant species, their identification, and their control are available through the following references:

- *Pennsylvania’s Field Guide to Aquatic Invasive Species*
- Penn State College of Agricultural Sciences – Plant Science: <http://plantscience.psu.edu/research/projects/vegetative-management>
- *Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers*, Third Edition, California Invasive Plant Council
- PA Department of Agriculture: http://www.portal.state.pa.us/portal/server.pt/gateway/PTARGS_0_2_24476_10297_0_43/AgWebsite/ProgramDetail.aspx?name=Pesticide-Certified-Applicators-and-Registered-Technicians&navid=12&parentnavid=0&palid=113&
- PA DEP Pesticide Application Permitting: http://www.portal.state.pa.us/portal/server.pt/community/wastewater_management/10582/pesticides/1692499
- Penn State Extension – Pesticide Education: <http://extension.psu.edu/pests/pesticide-education>

Publication 213 Revisions Bring Changes to Work Zone Regulations

by Stephen Thompson, Pennoni Associates

The primary resource for temporary traffic control guidance in Pennsylvania is PennDOT Publication 213, *Temporary Traffic Control Guidelines*. Recent revisions to this publication change some of what you need to know for your work zone setups, including safety garments worn by workers, flagger requirements/positioning at active work sites, and the use of shadow vehicles in work zones.



The document was revised significantly in June 2014 to add additional guidance and requirements, change the document's format and the numbering of the typical figures, and add organized general note sections.

The use of Publication 213 is required for all road work in Pennsylvania, including municipal work on local roads. It also applies to contractors working for municipalities as clearly stated in the "Application" section on the back of the cover page of Publication 213.

Hard Hats and High-Visibility Vests

One of the most important safety requirements in Publication 213 is that all workers in a field of operation and/or who are exposed to moving vehicles and equipment, including visitors and others present in an official capacity, are required to wear hard hats and high visibility vests, T-shirts, or sweatshirts that meet ANSI Class 2 or 3 safety garment requirements (General Note A-8). During inclement weather, a raincoat or jacket meeting ANSI Class 2 or 3 safety garment requirements may be worn. The publication shows additional requirements for PennDOT employees, and separate apparel requirements are shown for first responders.

Flaggers and Flagging Operations

Pub 213 has also incorporated several changes that affect flaggers and flagging operations. General Note B-4 indicates that additional flaggers must be used to maintain control of traffic at all side roads and driveways that intersect the work zone between the primary flagger locations, and that additional flaggers may be used to control all movements within an intersection.

The positioning of flaggers has also been modified; refer to the appropriate Pennsylvania Typical Application (PATA) drawing to determine the requirements for your specific situation. Several PATA drawings showing flagging scenarios with two flaggers place the flagger station 40 feet from the beginning of the taper. Examples are PATA 106, 107, 109, 110, as well as others.

“Publication 213 has precedence over information found in the MUTCD. Furthermore, the PATA drawings shall be utilized in lieu of a MUTCD Typical Application drawing when roadway conditions are similar...”

Pub 213, Application page

The practice of placing a STOP/SLOW paddle into a traffic cone, hand cart, or other channelizing devices for support is prohibited by Publication 213. General Note B-9 indicates that the STOP/SLOW paddle must be held under the flagger's control at all times. Although the document further indicates that the paddle may be placed in any approved paddle support device listed in Publication 35, *Bulletin 15*, no such devices are approved by PennDOT at this time.

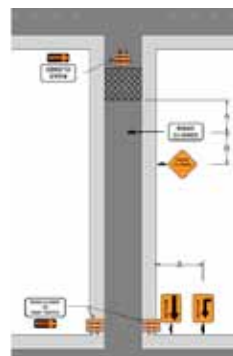
Shadow Vehicles in Work Zones

Changes have also been made regarding the use of shadow vehicles in work zones. On each PATA, the placement of the shadow vehicle and roll-ahead distances is shown. The roll-ahead space, which is the area between the shadow vehicle and work space, must be kept free of all equipment, material, etc. During a mobile operation, shadow vehicles must maintain between 125 and 200 feet of roll-ahead space. That distance may be increased to 1,000 feet for paving operations.

The shadow vehicle is required to have a flashing, oscillating, or yellow light with 360-degree visibility. Four-way flashers are not acceptable. Shadow vehicles must not be used as a work vehicle.

Road Closure Signs

The new Pub 213 also provides updates to the signing requirements for road closures. PATA 116 requires that a ROAD CLOSED (R11-2) sign be used along with the Type III barricade to indicate a closed road.



R11-3A road closed signs mounted on Type III barricades.

Format Changes

The new Publication 213 includes a wide variety of format changes. The General Notes found in Publication 213 are now organized by category. For example, notes that are specifically about flaggers and flagging operations are found in Section B of the General Notes. If you need information about channelizing devices, look to Section C. The general notes categories are:

- Section A: General Items
- Section B: Flaggers and Flagging Operations
- Section C: Traffic Control Devices – Channelizing Devices
- Section D: Traffic Control Devices – Signs and Warning Lights
- Section E: Traffic Control Devices – Portable Changeable Message Signs (PCMS)
- Section F: Traffic Control Setup and Removal
- Section G: Equipment, Vehicle, and Material Storage
- Definitions
- Reference Publications
- Legend for PATA Drawings

Two important clarifications are now identified in the General Notes. First, no work should be performed over open traffic lanes (Note A-8). Secondly, mobile operations must proceed in the direction of normal traffic flow (Note A-12).

PATA Drawing Updates

A significant change in the document has been the updating of the Pennsylvania Typical Application (PATA) drawings. The PATA drawings are now rendered in color, similar to the Typical Application (TA) drawings found in the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA). Publication 213 PATA drawings have precedent over MUTCD TAs when there are similar highway conditions. If the applicable PATA is not found in Publication 213, then the applicable MUTCD TA would be used. Furthermore, if the applicable application cannot be found in either Publication 213 or the MUTCD, a custom traffic control plan would need to be developed.

Exemptions to Shadow Vehicles

Title 67 of the Pennsylvania Code, Chapter 212.402, exempts the following activities from the requirements of Publication 213 and the MUTCD:

- Snow plowing and other snow or ice control operations.
- Refuse collection, trash collection, leaf pick-up, street cleaning, municipal street sweeping, and residential lawn care.
- Mowing operations on roads with less than 10,000 vehicles per day where the equipment is completely off the road.
- Construction, maintenance operations, or utility work in areas outside the highway right-of-way; except when the work is so close to the highway that workers, equipment, or materials encroach on the highway.
- Construction, maintenance operations, or utility work where all workers, equipment or materials are behind a guide rail, more than 2 feet behind a curb, or 15 feet or more from the edge of a roadway.
- Studies or inspections of highway or utility features, which may be completed without blocking any part of a travel lane.
- Operations that do not involve construction, maintenance operations, or utility work, such as mail, newspaper, home fuel, or other local deliveries.

The PATA drawings are also arranged by category in the latest document. For example, PATA drawings about short-term stationary operations on conventional highways have their own section and are labeled the PATA 100 Series. The 100 series drawings will apply to most township and borough work zone setups. PATA drawings about long-term stationary operations on conventional highways are labeled PATA 200 Series, and mobile operations are PATA 300/600 Series.

Continued on page 7

PATA Reference Guide Conventional Highways

Number of Lanes	Work Description	Short-Term	Long-Term	Mobile
Any	Work Space On Or Beyond The Shoulder (No Roadway Encroachment)	101		301
	Work Space Beyond Shoulder		201	
	Work Space On Shoulder		202	
	Work Space On Or Beyond Shoulder (Minor Roadway Encroachment)	102		
	Work Space Has A Major Encroachment On The Roadway	103		
	Road Closure With Detour	116		
	Detour Of A Numbered Traffic Route		215	
	Detour Of A Quadrant Route		216	
	Sidewalk Closure; Pedestrian Detour	128	217	
	Sidewalk Closure; Pedestrian Diversion	129	218	
	Sidewalk And Crosswalk Closure; Pedestrian Detour	130	219	



Planning Partner Perspective

by Steve Herman, Transportation Planner, SEDA-COG

LTAP Planning Partners Hold Annual Meeting

One of the unique aspects of Pennsylvania's Local Technical Assistance Program (LTAP), when compared to other states, is the central role played by the LTAP Planning Partners. Pennsylvania's 16 LTAP Planning Partners represent Metropolitan or Rural Planning Organizations (MPOs/RPOs) that conduct a variety of transportation planning and programming activities. In terms of LTAP, they actively promote and facilitate the training and technical assistance activities for municipalities in their member counties. This partnership helps to increase LTAP participation levels, tailor LTAP offerings to local needs, and stimulate application of best practices for road safety and maintenance.

In August 2014, the LTAP Planning Partners gathered for their annual meeting at the PSATS Educational Center in Enola. Early in the agenda, each partner presented a summary of recent activity or program updates. It was evident that the partners are employing many techniques (newsletters, brochures, email blasts, special events, social media, etc.) to market LTAP in their areas. As a result, they have obtained widespread success in filling LTAP classes and generating technical assistance requests from municipalities. In addition to specific requests from interested host municipalities, the partners rely on surveys and personal outreach to help determine class schedules and locations. Once courses are scheduled, the partners regularly market classes from each other's regions, and they exchange ideas about how to make LTAP even more effective.

Other LTAP updates and topics were discussed during the August LTAP Planning Partners meeting. These included safety funding and a new PennDOT proposal for regionalized local road safety projects; new planned LTAP courses; an updated Traffic Safety Development

The LTAP Planning Partnership helps to increase LTAP participation levels, tailor LTAP offerings to local needs, and stimulate application of best practices for road safety and maintenance.

Plan course; LTAP website functioning; PennDOT Publication and New Products updates; the LTAP Advisory Committee; and a Traffic Sign Assessment and Inventory webinar.

Two representatives from the Federal Highway Administration, who were spending the week at PennDOT to learn about Pennsylvania's experience with LTAP and the deployment of new available technologies to local governments, attended part of the meeting. The Planning Partners were pleased to share their perspectives on LTAP and its fundamental importance with the FHWA staff. Attendees left confident of the value that's added by LTAP and renewed in their commitment to it.

To learn more about the LTAP Planning Partner organization covering your region, click on "LTAP Planning Partners Resources" from the LTAP website.

LTAP SUCCESS STORY Before & After



BEFORE



AFTER

This stop sign at the intersection of North Street and Route 10 in Caernavon Township in Berks County was frequently hit and knocked down, and the poles were a hazard to the motoring public. During a site visit to the township, LTAP technical experts suggested the stop sign be placed in a barrel as a short-term solution. They also recommended a stop bar be painted on the road and a supplemental stop sign be placed on the left side of the road. In the long-term, access control and curbing should be added to help make the intersection even safer and provide a space for the stop sign.

**Want to make your streets safer?
Schedule a FREE Tech Assist with LTAP today!**

Upcoming 2015 Classes

To Register:
PHONE: 1-800-FOR-LTAP (367-5827)
WEBSITE: www.ltap.state.pa.us

This represents some of our scheduled courses. Look for updates on the website.

Drainage

April 24, McKean County

Equipment & Worker Safety

April 7, York County

Principles of Paving

March 25, York County

Risk Management Strategies

February 18, York County
March 5, Dauphin County

Stormwater Facility Operation & Maintenance

February 5, York County
April 24, Dauphin County

Traffic Calming

February 4, York County

Work Zone (Temporary) Traffic Control

February 17, Dauphin County
April 7, Montgomery County

Publication 213 Revisions *continued from page 5*

The categories of the PATA drawings are:

- Standard Applications – PATA 0XX Series
- Conventional Highways – 100 through 300 Series
- Freeways and Expressways – 400 through 600 Series
- Temporary Traffic Signals – 700 Series
- Hauling – 800 Series

As a help to users, each PATA drawing includes the old PATA designation next to the new number in its title. As a further help to those readers who are familiar with the old numbering system, the document includes a matrix showing old PATA numbers along with their respective new PATA numbers. This matrix is found at the

beginning of Publication 213.

The new Publication 213 also has a simplified Reference Guide to help readers select the right PATA drawing for their particular circumstance. To use the new Reference Guide, a reader needs to know the number of lanes of their roadway, the type of highway, the work to be done, and whether the operation is short-term, long-term, or mobile. PATA drawing numbers are listed in the short-term, long-term, and mobile operations columns. If you are accessing the new document on a computer, the PATA drawing numbers are linked to the respective drawings, which can be accessed by clicking the number.

Modify Work Zones to Meet the Public's Needs

Many other changes have been made to Publication 213, such as word or dimension changes, but these are too numerous to mention here. As you use the PATA drawings and consult the notes, a careful reading is recommended. PATA drawings show general scenarios. Conditions at your work zone may not perfectly fit the PATA drawings and may require modifications. Try to understand the spirit of the PATA drawings, and view your work zone through the eyes of the public. Make sure there is sufficient warning and sight distance to recognize and understand changes in the travel way, with as little confusion as possible.

If you have not attended a work zone training class recently, check out the LTAP calendar at www.ltap.state.pa.us for a class near you or call 1-800-FOR LTAP to schedule a class. LTAP can also assist with your specific questions about Pub 213 and PATA applications. 🚧

TRAFFIC SIGN ASSESSMENT AND INVENTORY

Did You Know...

- Municipalities had to have a sign assessment or management method in place by June 2014?
- Other compliance dates for retroreflectivity have been suspended?

If you missed LTAP's Traffic Sign Assessment and Inventory webinar this fall, you can still obtain the information.

To access the recorded webinar, go to the LTAP website home page, www.ltap.state.pa.gov, and look under "News."



Local Technical Assistance Program

1-800-FOR-LTAP (367-5827)
ltap@pa.gov www.ltap.pa.gov

Publication 213, from June 2014, is available online at <ftp://ftp.dot.state.pa.us/public/PubsForms/Publications/PUB%20213.pdf>

Have You Built a Better Mousetrap?

Show it off by entering PennDOT LTAP's competition seeking innovative gadgets, improved transportation

Has one of your municipal employees recently built an innovative gadget or developed an improved way to do a job? If so, now is the time to show off a project your municipality is proud of in the 2015 Build a Better Mousetrap Competition.

PennDOT is looking for projects that municipal employees or road crews designed and built. It can be anything from the design of tools and equipment modifications to the development of processes that increase safety, reduce cost, improve efficiency, and improve the quality of transportation.

If you have something you think would qualify for this competition, submit your entries by **Friday, March 6**. A state winner will be chosen and announced in March. Entries will be judged by a committee of municipal road employees on cost, savings/benefits to the community, ingenuity, transferability to others, and effectiveness.

The winning entry will be submitted into a national competition to compete for prizes and, of course, bragging rights. Winners of the national competition will be announced at the annual LTAP/TTAP national conference next summer. All entries at the national level will be posted on the LTAP/TTAP program website and compiled into an electronic booklet.

The entry form can be accessed online at the LTAP website. To enter the competition, complete the entry form and return it by

Deadline: Friday, March 6

Friday, March 6, to PennDOT/LTAP, c/o PSATS, 4855 Woodland Drive, Enola PA 17025, or by email to katkinson@psats.org.



Upper Nazareth Township, Northampton County, the 2014 winner, built a road saw hitch receiver and carrier. Instead of having to hook up a trailer for transport and then block the road while cutting, the township designed and built a lightweight carrier that hooks easily to a truck, allows for quick and easy transport to a site, and eliminates the need to store and maintain another trailer.

Aquatic Invasive Species *continued from page 3*

- **Cleaning of Equipment** – Determine cleaning needs for tools, vehicles, and equipment; identify cleaning facilities; and acquire necessary cleaning tools
- **Cleaning Soils and Plant Materials** – Clean mowers and equipment of soils, seeds, and plant fragments to avoid spread; clean equipment without water using brushes, vacuum, or high-pressure air devices; clean equipment with water on a paved surface to prevent seed spreading through runoff; and include cleaning as part of routing maintenance for tools, equipment, and vehicles
- **Promoting Desirable Vegetation** – Schedule grass mowing after seed maturation to help promote desirable species; mow no shorter than 6 inches to reduce plant shock; and identify invasive plants that should not be mowed to avoid spreading them from plant fragments

Did you find the information in this newsletter useful? Do you know others who will, too?

Please share this newsletter with others, including:

- Road supervisors
- Public Works Department
- Road crew
- Elected officials
- Managers and secretaries
- Engineers

You can also direct them to the electronic version available at www.ltap.state.pa.us.



Want Off the Mailing List?

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pennsylvania

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