

2021

Build a Better Mousetrap Competition:

Recognizing Innovative Inventions and Improvements

PennDOT Local Technical Assistance Program

Four categories, four potential winners!



pennsylvania

DEPARTMENT OF TRANSPORTATION

LOCAL TECHNICAL ASSISTANCE PROGRAM



Have You Built a Better Mousetrap?

Have you or one of your coworkers 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 Build a Better Mousetrap Competition.

PennDOT is looking for projects that you, your employees, or crew designed and built. It can be anything from the development of tools, equipment modifications, and/or processes that increase safety, reduce cost, improve efficiency, and improve the quality of transportation.

New this year, the contest will have four categories for submitting entries, with a potential winner in each. From among these winning entries, an overall Pennsylvania winner of the contest will be chosen.

If you have something you think would qualify for this competition, submit your entries by **Friday, March 5, 2021**. 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 four winning category entries will be submitted to the national competition to compete for recognition and, of course, bragging rights. Winners of the national competition will be announced at the annual LTAP/TTAP national conference. All entries at the national level will be posted on the LTAP/TTAP program website and compiled into an electronic booklet.

To enter the competition, complete the entry form that follows and **return it by Friday, March 5, 2021**

If you have questions, please feel free to email them to ltap@psats.org, or call Karen Atkinson at 717-763-0930 ext. 156.

Judging Criteria

The competition is judged on the criteria listed below within the framework of a 10-point rating scale. Provided is a list of the judging criteria and the rating scale. The winner is the entry with the highest number of overall points.

Judging Criteria

- Cost Savings/Benefits to the Community
- Ingenuity
- Ease of Transferability to Others
- Effectiveness

Five-Point Rating Scale

- 5 = Excellent
 - 4 = Very Good
 - 3 = Good
 - 2 = Fair
 - 1 = Poor
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2020 Build a Better Mousetrap: Pennsylvania Competition Winners

1st Place Pennsylvania Winner and National Winner

Winning Entry: Black Top and Shoulder Stone Paver Lower Heidelberg Township, Berks County, PA

The Lower Heidelberg Township, Berks Co., Pa. public works department created the Black Top and Shoulder Stone Paver. "When doing spot repairs or filling in shoulders, we would have to hand shovel and rake the material, which can cause an uneven road surface," Matt Clay, the township's road foreman, says. "Shoveling and raking could also cause back injuries."

The paver that the road crew developed allow stone and blacktop to be unloaded and laid down in just six to eight minutes compared to 35 minutes by hand. The result is more efficient operations and a smoother riding surface.



Runner-Up: Sign Post Driver Upper Mount Bethel Township, Northampton County, PA

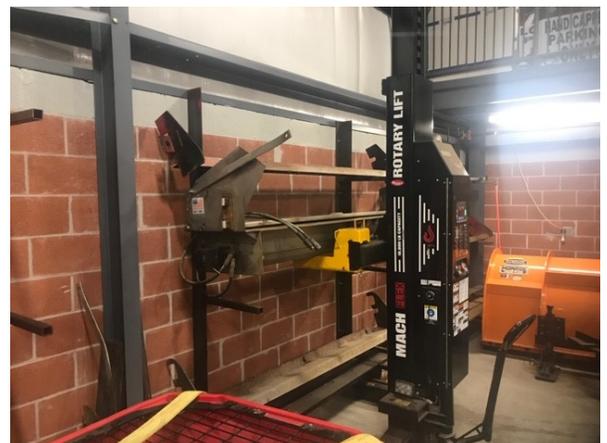
An employee designed signpost driver saves money and improves efficiency when installing signposts. The new device is an improvement over the township's previous driver, which would swell and crack signposts when installed in rocky terrain. The old driver, which only extended into the post 2 inches, would also twist and damage the footer, causing the township to waste signposts. The new driver extends 9 inches into a signpost, and the design allows either a round or flat bar to be inserted.



Runner-Up: Spreader Storage Rack London Grove Township, Chester County, PA

The storage rack allows the road department to efficiently store, install, and remove salt spreaders. For around \$200 and eight hours of labor, staff used steel, a welder, and fasteners to create the device, which was then installed on an empty wall in the garage.

With the use of a portable hydraulic vehicle, a single person can quickly remove a spreader from the rack and transport it to a piece of equipment for installation. The quick and efficient installation and removal of the spreader allows the equipment to be used for other tasks between storms.



2021 Build a Better Mousetrap Competition Entry Form

Agency Name: _____ Contact Person: _____

Contact Phone #: _____ Contact Email: _____

Contact Address: _____

County: _____

Entry Title: _____

Contest Category (Check the category that best fits your mousetrap.)

___ **Data Collection and Asset Management** – innovation in collection processes, tools or modeling/analysis that improves outcomes for an organization.

___ **Sustainability** - innovation in the delivery of durable pavements, maintenance functions and advances in safety, energy efficiency, and materials recycling.

___ **Design and Construction Methodology** – innovative design and construction strategies that can be replicated or serve as examples to advance the process of road construction.

___ **New Tools, Applications or Equipment** – innovative solutions that enhance quality, improve efficiency, increase safety, or enable new construction techniques.

Problem Statement:

Discussion of Solution:

Labor, Equipment, Materials Used:

Cost:

Savings/Benefits to the Community:

Please email photographs to ltap@psats.org and include the municipality and the entry title.

You may enter more than one entry. Use separate forms for each entry.

Please return your completed form by **Friday, March 5, 2021**, to ltap@psats.org, fax it to 717-763-9732, or mail it to:



PennDOT LTAP
c/o PSATS
Attention: Karen Atkinson
4855 Woodland Drive
Enola, PA 17025

Questions? Please call Karen 717-763-0930, ext.156.