



Build a Better MOUSETRAP Competition



Kentucky LTAP Now Accepting 2020 Applications

Those involved in the transportation industry often find and implement better, faster, and more cost/time efficient techniques to apply to their daily job duties. Basically, any idea that improves the safety and quality of a project, or an innovative process that results in a costs saving initiative and/or improves workforce efficiency. It is typically the people on the front lines who discover the most unique, innovative ideas.

The Kentucky LTAP's Build a Better Mousetrap competition's purpose is to collect and distribute real world examples of new best practices, tips from the field, and assist in the transfer of technology for local and county transportation workers and other LTAP clients. The competition provides a great opportunity for local governments to share those new ideas with their peers.

We are looking for project submissions from local agencies that have discovered unconventional solutions to problems or found better, safer ways to enhance their job performance. We are looking for unique tips and innovative ideas from those transportation employees to share with other Kentucky transportation workforce communities and leaders. Projects can be anything from the development of tools, equipment modification, and/or processes that increase safety, reduce cost, improve efficiency, and improve the quality of transportation. Some of the focus items you may consider are:

- Maintenance: tools, equipment fabrication, and methods (e.g., lifters, modifications, assembly)
- Transportation facilities improvements (e.g., storage, access, operations, services)
- Inspection and data collection (e.g., automated/remote means, testing, time)
- Asset management techniques (e.g., GIS, mapping, decision-support systems)

A state winner will be selected from all of the local agency entries, and that entry will be recognized in the [LINK](#) and elevated to the National Build a Better Mousetrap Competition! This competition is sponsored by the Federal Highway Administration's Local Technical Assistance Program and Tribal Technical Assistance Program. National winners will be announced at the annual National LTAP Conference in 2020.

To compete in 2020, please complete the [ENTRY FORM](#) and email to martha.horseman@uky.edu or submit by **May 29, 2020** to:

Technology Transfer Program – Mousetrap
176 Raymond Building
Lexington, Kentucky 40506-0261

For additional information on the Build a Better Mousetrap Competition, contact us at 800-432-0719 or visit our website at www.kyt2.com. View information about previous winners [here](#).



Build a Better

MOUSETRAP

Competition



2020 Entry Form

The Build a Better Mousetrap National Competition’s purpose is to collect and distribute real world examples of best practices, tips from the field, and assist in the transfer of technology for local and county transportation workers and other LTAP clients.

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

Agency	
Contact Person	
Address	
Address	
City, State, Zip	
Phone	
Fax	
Email	

ENTRY TITLE: _____

Problem Statement:

Discussion of Solution:

Labor, Equipment, Materials Used:

Cost:

Savings/Benefits to the Community:

* Please include a photo or schematic of your project with submission if possible (not required).

NOTES:

Deadline to submit entry: May 29, 2020

Submit entries by:

Mail: Kentucky Transportation Center
Technology Transfer Program - Mousetrap
176 Raymond Building
Lexington, Kentucky 40506-0261

Fax: 859-257-1061

Email: martha.horseman@uky.edu

For additional information on the Build a Better Mousetrap Competition, contact us at 800-432-0719 or visit our website at www.kyt2.com.

Previous Submissions for the Build a Better Mousetrap Competition



The Discharge Control Door - Submitted by the City of Bowling Green.. The door provides a safer means of mowing right-of-way. Cost efficient spring loaded door that can stop the discharge of debris being thrown onto streets, sidewalks and when traffic approaches. Cost for each unit: \$25.00. Easy to install, easy to operate.



Manhole Lift – Submitted by the City of Bowling Green. Safe and effective means of lifting and placing man holes. Device was welded with materials from current stockpiles and cost approximately \$300 to make. The lift has proven to be a safer and more productive way of performing drainage projects.



Handler Mechanism for Snow Plow Edge – Submitted by Marshall County. A snow plow edges weigh 205 pounds each. It takes no less than two employees to install it and results in many employee back injuries. \$114, plus parts, eliminates one person man power and enhances job safety. Used every season while installing plows to our Road Department fleet.

Build a Better Mousetrap

NATIONAL COMPETITION



Photo Credit: Federal Lands Highway



U.S. Department of Transportation
Federal Highway Administration

OFFICE OF INNOVATIVE PROGRAM DELIVERY



Dear LTAP and TTAP Centers,

I would like to thank you for your interest in recognizing innovative ideas in your state. For over a decade, the Build a Better Mousetrap national competition has highlighted some truly amazing innovations local agencies and tribes use in their daily work activities. Our goal is to share and celebrate this creative work. Whether the idea is big or small, these ideas change the way agencies perform their work. FHWA is providing this process guide on nominating your local applicants.

We want to make this process as easy and rewarding as possible for you. Please submit as many nominations as you deem worthy under the four categories. The final winners will be announced at the NLTAPA Annual Conference.

Thank you so much again for your interest. If you have any questions please feel free to contact us at CLAS@dot.gov. I look forward to seeing all your submissions!

Sincerely,

Victoria Peters
Director, FHWA Center for Local Aid Support

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Overview

What is Build a Better Mousetrap?

Build a Better Mousetrap National highlights innovative solutions to everyday challenges that local and tribal transportation professionals encounter. These solutions range from the development of tools and equipment modifications, to new processes that enhance safety, reduce cost, increase efficiency and improve the quality of transportation.

How does the Competition work?

- 1) Centers solicit their own nominations within their state.
 - The Build a Better Mousetrap is open to any local government agency (town, borough, city, township, county or parish) and tribal governments in the United States.
 - Applicants submit a Build a Better Mousetrap Nomination Form
 - Photographs are required to illustrate each entry with owner's credit shown and should be included as separate files
 - An optional Spotlight Video can be submitted to demonstrate the problem, the development, and the working solution
 - Applicants must respect OSHA principles
- 2) Centers select nominations they would like to forward. Multiple nominations in multiple categories may be submitted to increase the odds of winning. FHWA may ask for additional information during the evaluation process.
- 3) Centers submit their nominations to the Build a Better Mousetrap at CLAS@DOT.GOV under one of four categories:
 - Innovative Project Award – This category celebrates a local agency or tribe that implemented a new technology or design in construction. The innovation enhances the quality, timeliness, cost effectiveness, safety, environmental benefit and/or efficiency of the highway project.
 - Bold Steps Award – This category recognizes a local or tribal agency that embraced forward thinking in the development and implementation of an innovative practices that improves or streamlines transportation related processes. The innovative change should show improvement in performance, management and efficiency. This award could include advancements in areas of program and project management, finance, safety, mobility, sustainability, and maintenance.

- Smart Transformation Award– This category celebrates development and deployment of solutions that improve field data capture, data analysis, automation and real-time collection, and/or implementation of smart infrastructure. This award category is not intended for the implementation of “off the shelf” products or customizable solutions that are available in the market and/or provided by a specific vendor.
- Pioneer Award – This category recognizes agency inventors that develop new tools and equipment that provide a better way to do a job or advance road maintenance and construction. Implemented tools and methods should be an original design or creative adaptation that results in significant advancement, rather than the result of natural evolution of existing methods, common sense or good practice. Entries should demonstrate genuine change and innovation that can impact the wider transportation community.

Please Note: If the panel of judges believes an entry has been improperly categorized, the entry may be moved to a different category without consent from the entrant.

- 4) Previously submitted entries are not eligible for resubmission under the above categories unless significant, unique and innovative enhancements have been made to the entry. At its sole discretion, FHWA reserves the right to disqualify entries that fail to show significant improvements have been made to a previously submitted product or technology.
- 5) Nominations are accepted only through LTAP and TTAP Center submission. Applications are due by June 1, 2020. Please submit electronically to CLAS@dot.gov

How are the winners selected?

In each category, we are looking for original, innovative projects that provide long-term value to the transportation community. In selecting a winner, the following criteria are considered: recognized importance/ impact; originality; applicability to others; cost effectiveness; time savings; agency or community benefit; and the overall quality of the application. Entries with a Spotlight Video will receive bonus points!

Winners will be selected by an independent panel of judges and will be announced at the annual NLTAPA Conference.

A top **Honoree** will be selected for each category and awarded a certificate of recognition. From the list of top Honorees, a **Best of Innovation** award will be made by casting votes at the annual NLTAPA conference. The winner of the Best of Innovation award will be provided invitational travel to a biennial EDC Summit. Additional award benefits include industry wide recognition through media promotion, exposure on the FHWA website, and the opportunity to have the innovation showcased at the EDC summit.

All qualifying entries will be compiled into an electronic booklet posted on the FHWA’s Center for Local Aid Support’s (CLAS) website at https://www.fhwa.dot.gov/innovativeprograms/centers/local_aid/ so you and your customers can learn more about the best practices from around the country.

Build a Better Mousetrap Entry Form

Agency Name:

Contact Person:

Contact Phone #:

Contact Email:

Contact Address:

Entry Title:

Submittal Date:

Category (check one):

- Innovative Project Award
- Bold Steps Award
- Smart Transformation Award
- Pioneer Award

- 1) What was the challenge (problem) or objective you set out to solve? (up to 500 words max):
Fully describe the challenge. Provide specific details on the issues you faced and why it needed to be addressed.
- 2) How did you develop and implement your solution? (up to 500 words max):
Provide details on how you developed, built, and implemented your solution to meet your objective(s). Address the originality of the solution and why you selected this solution.
- 3) What labor, equipment, plans or materials did it take to make the solution work?
What did it take to make this solution a reality? Include design sketch, drawing and materials list as applicable.
- 4) What was the cost of implementation?
Add supporting data such as salary time, cost of materials, equipment used, etc.
- 5) What was the positive impact / results / outcome of your efforts? (long-term benefits, productivity, financial, personnel performance, benefits to the community, safety etc...)
Include a discussion of data or evidence to support the outcome and /or the revised level of effort upon implementation to complete the job or process. Has this been shared? With whom? Results?

Entry Checklist

___ Entry Form

___ Photographs (two minimum)

___ Spotlight Video. Please keep in mind that photographs are to be included; a Spotlight Video is encouraged, but not mandatory.

___ Release Form(s) for image use

___ Release Form(s) for photo/video ownership

Photograph and Spotlight Video Guidance

PHOTOGRAPHS *

- Along with your entry, provide high-resolution digital photos measuring at least 300 dots per inch (dpi). A minimum of two (2) different photographs must accompany each entry.
- A camera that takes 3 megapixels (MP) or more will be fine. When shooting digital photos, ensure that the camera is set to take shots at the highest resolution possible. For instance, a Samsung S5 will take 16 MP photos. An iPhone 6 takes 8 MP photos.
- Digital photos may be provided via e-mail, CD-ROM/DVD, or through a file transfer protocol (FTP) electronic address. Please provide original source files, either in JPEG (Joint Photographic Experts Group) or (Tagged Image Format (TIF) format, and *not* be only embedded in your Microsoft Word file.
- Photos should be interesting to view; support and illustrate the ideas and activities described in your entry; and, whenever possible, show people or equipment in action. Ensure that all photos respect OSHA principles and show safe and appropriate actions, such as workers who are wearing hardhats and safety vests.
- Each photograph should include a detailed caption explaining what is shown and clearly identifying its relevance to the subject of the entry. Also include a photo credit (photographer's name and/or organization) or source (agency or company name).

SPOTLIGHT VIDEOS *

The Spotlight Video is an optional addition to your entry. If submitted, it should demonstrate your entry's problem, its development, and your entry's working solution. It should be no more than five minutes long and be in MP4 format. Deliver it via CD-ROM/DVD or through a FTP site. Staff at CLAS can assist with these details. Here are some tips from

<http://www.usatoday.com/story/tech/columnist/saltzman/2016/07/10/tips-shooting-great-video-your-smartphone/86806080/>.

- **Plan your script.** Write it out on large white board so the narrator can easily see it.
- **Turn the phone sideways.** Use landscape or horizontal shots.
- **Hold your phone steady.** Use two hands with arms in close. Tripods are good too.
- **Compose your shot.** Place your scene in the middle. Avoid background distractions.
- **Lighting is critical.** Avoid harsh sunlight, dark and light contrasts, backlights and windows. A bright but cloudy day is great.
- **Shoot straight, slow and close.** Match the height of your image. Gently glide in for close-ups.
- **Sound matters.** Background noise is distracting. Shut down motors, fans, hammers, and conversations.

- ***Editing is ok.*** Download and edit your video with free or commercial software. Cut, crop, adjust color and brightness, add transitions, special effects, music, narration, captions, and more. It's okay to ask the 14-year old kid down the lane to help you.

* Please request a Release Form (see the next page) from each person you photograph, record, or video. Include a copy along with your entry.

Release Form

US Department of Transportation
Federal Highway Administration (FHWA)

Name: _____ Location: _____ Date: _____

I hereby grant to the FHWA and U.S. Department of Transportation (DOT), its agents, contractors, and employees the absolute and irrevocable right and permission, in respect of the photographs or audio or video recording and their transcripts, that it has taken or has had taken of me, _____, or in which I may be included with others, to use, reuse, publish, and republish, and otherwise reproduce, modify and display the same, in whole or in part, individually or with other photographs, in any and all media now or hereafter known, for illustration, promotion, art, advertising and trade, or any other purpose whatsoever, and to use my name and identity therein or by descriptive text or commentary in connection therewith if it so chooses.

I hereby release and discharge FHWA, DOT, its agents, contractors, and employees from any and all claims and demands arising out of, or in connection to, the use of the photographs taken on _____ and ending on _____ in whatever media format used, including without limitation any and all claims for libel or invasion of privacy. I also understand that there will be no financial or other remuneration for recording me, either for initial or subsequent transmission or playback.

I am of full age and have the right to contract in my own name. I have read the foregoing and fully understand the contents thereof. This release shall be binding upon me and my heirs, legal representatives and assigns. I further release the FHWA from any responsibility for injury incurred during the photography or audio or video recording session.

- ❖ I represent that have read and understand the foregoing statement, and am competent to execute this agreement.

Signed: _____

(If minor, parent or legal guardian must sign and indicate both the child's name and the parent's name in the line below to constitute consent.)

Printed Name: _____

Address: _____

City, State, Zip

Phone: _____

Fax Number: _____

Email address: _____

Date: _____