

# Build a Better Mousetrap

Louisiana Competition 2019



## LOUISIANA SUBMISSION & JUDGING PROCESS

Entries will be judged by an independent panel of judges consisting members of the Louisiana Parish Engineers and Supervisors Association (LPESA), a board member from Louisiana LTAP, and a representative from the Federal Highway Administration (FHWA) Louisiana Division.

### CRITERIA FOR JUDGING:

Cost Savings	
/ Benefits to the Community	30%
Effectiveness	30%
Ease of Transfer	20%
Ingenuity	20%

### SUBMISSION CATEGORIES:

- Inspection and Data Collection  
(automated means, testing, time)
- Asset Management Techniques  
(GIS, mapping, decision support systems)
- Maintenance Tools and Methods  
(lifters, reachers, assembly)
- Facilities Improvements  
(storage, operations, services)

Based on above criteria, a state winner will be selected from all of the local public agency entries, and that entry will be submitted to the National Local Technical Assistance Program Association/Tribal Technical Assistance (NLTAPA/TTAP) Build a Better Mousetrap Competition. Louisiana winners will be announced at the LPESA Spring 2019 Conference. The national winners will be announced at the NLTAPA/TTAP Conference in Vermont in August 2019.

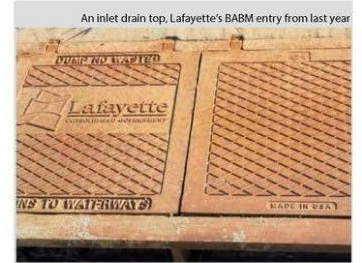
## WHAT IS BUILD A BETTER MOUSETRAP?

The Build A Better Mousetrap is a national competition that highlights innovative solutions to everyday problems and issues that local and tribal transportation workers as well as other LTAP/TTAP clients encounter. They can range from the development of tools, equipment modifications, and/or processes that increase safety, reduce cost, improve efficiency, and enhance the quality of transportation.

Gain national attention for your agency and your community's commitment to safe and maintained roadways!



Louisiana Local Technical Assistance Program  
Louisiana Transportation Research Center  
4099 Gourrier Avenue  
Baton Rouge, LA 70808  
[www.louisianaltap.org](http://www.louisianaltap.org)



## BUILD A BETTER MOUSETRAP COMPETITION

HAVE YOU CREATED SOMETHING INNOVATIVE? SOMETHING THAT IS BENEFICIAL AND COST-EFFECTIVE?

SUBMIT AN ENTRY!  
Deadline is on April 15, 2019



# Entry #1 (In a Pinch) Salt Spreader

Category: Maintenance Tools and Methods



- Submitted by Terrebonne Parish Consolidated Government

- Problem Statement

During the deep freeze of 2016, our area experienced record days of below freezing temperatures that caused roadways and bridges to become iced over. We had a large amount of calcium chloride for dust control and decided to use it as a deicing agent. However, we did not have a method to dispense the pellets.

- VOTE for this entry to win the People's Choice Award. [LIKE it on Facebook.](#)

# Entry #1 (In a Pinch) Salt Spreader

Category: Maintenance Tools and Methods



- **Discussion of Solution:**

To overcome the dispensing issue of the  $\text{CaCl}_2$  pellets, we modified a grass seed spreader. We needed a wider distribution area with less pellets per square foot. To achieve this, we fabricated a modified caster increasing the distributing radius from 20 degrees to 40 degrees, and restricted the feeder plate to allow for less pellets per rotation.

- **Labor, Equipment and Approximate Cost**

4 hours of labor; Materials include King Kutter Cosmo Seeder XB, aluminum welder, aluminum flat plat.

\$250 (modified casters only)

# Entry #1 (In a Pinch) Salt Spreader

Category: Maintenance Tools and Methods



- **Savings/Benefits to the Community**  
These modified seeders allowed us to reopen the roads and bridges (in a pinch) when the needed equipment was unavailable.
- **Labor, Equipment and Approximate Cost**  
4 hours of labor; Materials include King Kutter Cosmo Seeder XB, aluminum welder, aluminum flat plat.  
\$250 (modified casters only)
- **VOTE for this entry to win the People's Choice Award. [LIKE it on Facebook.](#)**

# Entry #2 – Catch Basin Lid Assist Tool

Category: Maintenance Tools and Methods



- Submitted by Ouachita Parish Public Works Department
- Problem Statement  
The Public Works Department needed a lightweight mechanical means to lift and lower catch basin lids for inspection purposes.
- Discussion of Solution  
Leverage was the solution to lifting the lids. However the device needed to be lightweight, portable, and economical.
- VOTE for this entry to win the People's Choice Award. [LIKE it on Facebook.](#)

# Entry #2 – Catch Basin Lid Assist Tool

Category: Maintenance Tools and Methods



- **Labor, Equipment and Approximate Cost**

Public Works utilized Shop Labor to construct the tool from steel bar stock.

Approximate Cost: Less than \$100 include labor and materials

- **Savings/Benefits to the Community**

The Catch Basin Lid Assist Tool is efficient, lightweight and inexpensive to produce. One of the economic benefit is the monetary saving of the low production cost in comparison to purchasing an electro-magnetic dolly for over one thousand dollars. If the Catch Basin Lid Assist Tool is stolen, damaged or lost, the Parish is not out very much money. The safety benefit is the mechanical advantage of using leverage versus brute strength to lift and lower the catch basin lid. Pinch injuries to fingers and toes have been reduced.

- **View Video here:**

[https://drive.google.com/file/d/11iAEQtIIXs1bSYxRbb\\_zHBXpWKKLDfUA/view](https://drive.google.com/file/d/11iAEQtIIXs1bSYxRbb_zHBXpWKKLDfUA/view)

- **VOTE for this entry to win the People's Choice Award.**  
[LIKE it on Facebook.](#)

# CRITERIA FOR JUDGING

Rate each project based on the following criteria:



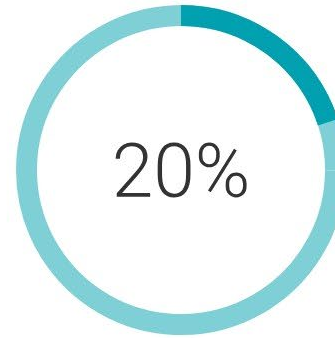
## Cost Savings/ Benefits to the Community

Did the project result in solving a problem at a lower than the historical cost or the projected cost? Did it benefit the community?



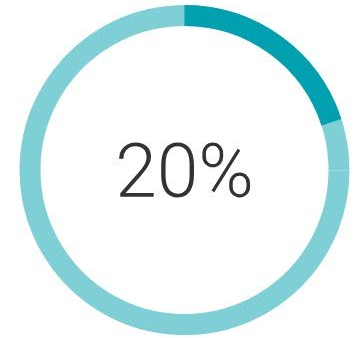
## Effectiveness

Was the project effective? Did it achieve the expected outcome, and did actually produce a deep & vivid impression?



## Ease of Transfer

Is the project easily transferable or applicable in other areas regardless of agency size, population, etc.?



## Ingenuity

Is the project innovative, original and to generally solve problems or overcome challenges?





Catch Basin Lid Assist  
Tool (Ouachita)

In-a-Pinch Salt  
Spreader (Terrebonne)

# CERTIFICATE OF ACHIEVEMENT

is awarded to

## **OUACHITA PARISH PUBLIC WORKS DEPARTMENT** **Catch Basin Lid Assist Tool** **1ST PLACE WINNER**

**in the 2019 Build a Better Mousetrap (BABM) Louisiana competition**  
Advancing transportation innovations at the local level  
**Category: Maintenance Tools and Methods**

**Given on April 25, 2019 during the LPESA Spring Conference in Baton Rouge, Louisiana**



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**DR. MARIE B. WALSH**  
Louisiana LTAP Director



# CERTIFICATE OF ACHIEVEMENT

is awarded to

## TERREBONNE PARISH CONSOLIDATED GOVERNMENT

(In a Pinch) Salt Spreader

## PEOPLE'S CHOICE AWARD WINNER

in the 2019 Build a Better Mousetrap (BAM) Louisiana competition

Advancing transportation innovations at the local level

Category: Maintenance Tools and Methods

Given on April 25, 2019 during the LPESA Spring Conference in Baton Rouge, Louisiana



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**DR. MARIE B. WALSH**  
Louisiana LTAP Director

