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



BUILD A BETTER

M O U S E T R A P C O M P E T I T I O N

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:

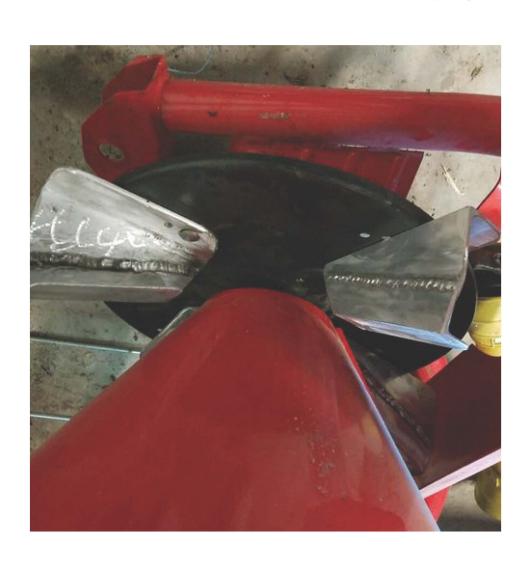
To overcome the dispensing issue of the CaCl2 pellets, we modified a grass seed spreader. We needed a wider distribution area with less pellets per square foot. To achieve this, we fabricated a modified caster increasing the distributing radius from 20 degrees to 40 degrees, and restricted the feeder 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 wielder, 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.

 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

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?



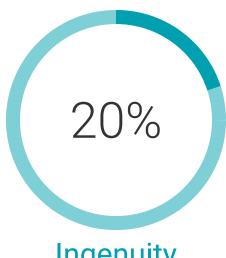
Effectiveness

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



Ease of Transfer

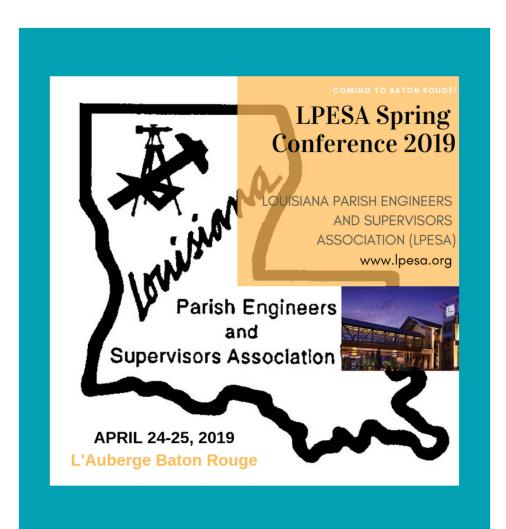
Is the project easily transferable or applicable in other areas regardless of agency size, population, etc.?



Ingenuity

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

AWARDING OF WINNERS



 The winning entry as well as the People's Choice Award recipient will be awarded at the LPESA Spring Conference on April 24-25, 2019.

See the Conference Agenda here.

• REMINDER: Voting for People's Choice Award closes on April 19, 2019.





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









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 (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







