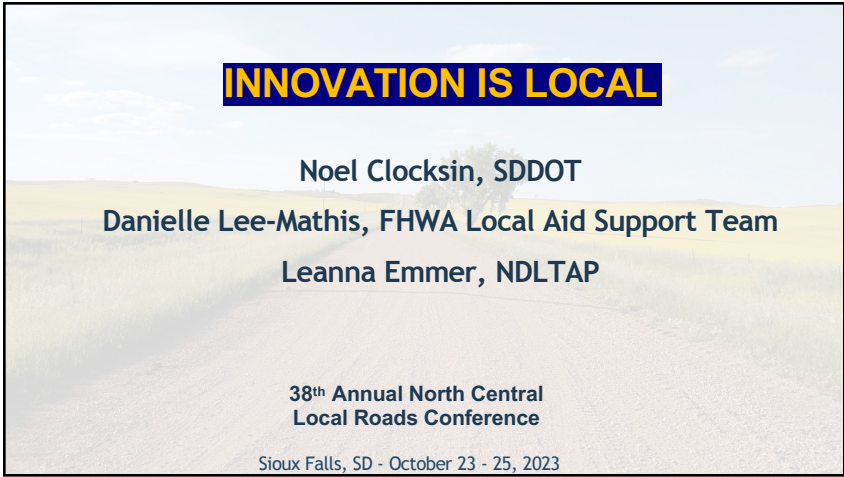




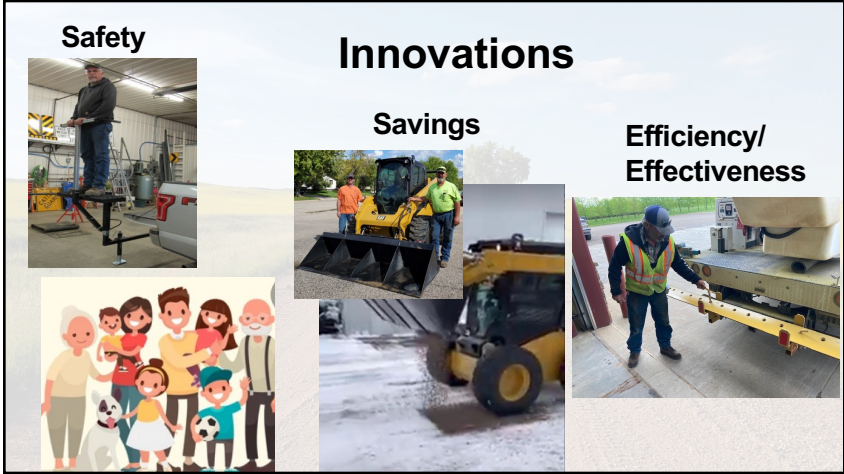
1



2



3



4

**Build a Better MOUSETRAP**

Build a Better  
Mousetrap Program  
*National Recognition Program*

Presented by: **FHWA Local Aid Support**

U.S. Department of Transportation  
Federal Highway Administration

Office of Innovation and Workforce Solutions

LOCAL AID SUPPORT

5

**Congratulations!**

**Record number of nominations!**

- **53** nominations
- Some states submitted nominations for the first time!
- Many thanks to the States who submitted nominations: **AZ, CA, CO, FL, GA, IA, ID, IL, IN, KS, MI, MN, ND, NH, NJ, NY, PA, SC, TN, TX and NW TTAP**

LTAP  
Local & Tribal Technical Assistance Program

6

**NATIONAL BUILD A BETTER MOUSETRAP CATEGORIES**

**1 INNOVATIVE PROJECT AWARD**  
Any solution that addresses any or all phase(s) of the "project" life cycle—Planning, Design/Engineering, Construction, Operations, and Maintenance. This project shall introduce new ideas and be locally relevant, original, and creative in thinking.

**2 SMART TRANSFORMATION AWARD**  
A locally relevant, significant change in any transportation activity or process that is SMART, "Specific, Measurable, Achievable, Realistic, and Time bound," in nature that results in improved efficiencies.

**3 BOLD STEPS AWARD**  
Any locally relevant, high-risk project or process showing a breakthrough solution with demonstrated high reward.

**4 PIONEER AWARD**  
A locally relevant, product/tool that is among the first to solve a maintenance problem with a home-grown solution.

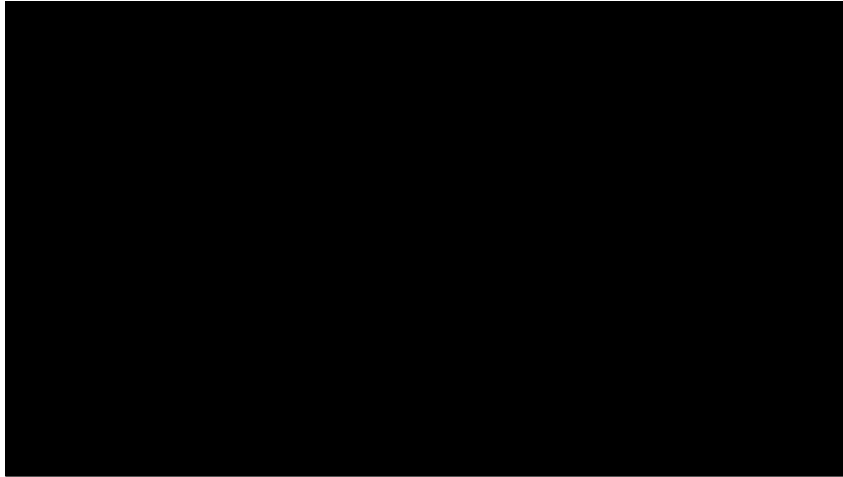
OFFICE OF INNOVATING PROGRAM DELIVERY

7

The 2023  
**Build a Better Mousetrap**  
Winners ARE:

8






9

## Build a Better **MOUSETRAP**

### Innovative Project Award Winner

**Confederated Tribes and Bands of the Yakama Nation (NW TTAP)**

- Innovative Solution: Mobile Unit Sensing Traffic (MUST) Device.
- A collaborative effort with the University of Washington
- The MUST device was specifically implemented for use along rural roads with limited infrastructure support, including limited internet connectivity.
- The device operates independent of infrastructure
- To protect community privacy, data processing is performed within the device itself, minimizing the need for external data transfers.
- Success of the device has yielded invaluable information that support traffic planning
- This project marks the beginning of a comprehensive approach to enhance transportation and infrastructure within the Tribal and rural community.



10

## Build a Better **MOUSETRAP**

### Pioneer Award Winner

**City of Walnut Creek, CA (CA LTAP)**

- Innovative Solution: Safe Sightings of Signs and Signals (SSOSS) Software Application
- An automated process for identifying and addressing obstructed traffic signals
- Proactive approach
- Saves time
- Increase accuracy
- Significantly reduces the risk of error and danger
- Cost-effective for agencies of all sizes



11

## Build a Better **MOUSETRAP**

### Smart Transformation Award Winner

**St. Louis County Public Works Dept., MN (MN LTAP)**

- Innovative Solution: Solar-powered Remote Cameras
- The Solar Powered Cameras come with a rechargeable internal battery that decreases service intervals and improve cold weather performance
- Cameras are compatible with virtually any cellular network
- They can be remotely operated to assist with gathering current conditions
- Access to instant information ultimately leads to safer roads at significantly less cost



12


## Bold Steps Award Winner

Build a Better **MOUSETRAP**


**New Jersey Department of Transportation (NJ LTAP)**

- Innovative Solution: Route 71 over Shark River Road Diet
- Roadway reduced to one-lane in each direction to move traffic flow away from damaged areas of the bridge
- Work completed in phases over one month
- Solution saved millions
- The Solution also enhanced bicycle, pedestrian, and motorist safety along the bridge and roadway.

Before



After




13

## Download the 2023 Booklet

Build a Better **MOUSETRAP**



[https://www.fhwa.dot.gov/clas/pdfs/2023\\_mousetrap\\_entries\\_booklet.pdf](https://www.fhwa.dot.gov/clas/pdfs/2023_mousetrap_entries_booklet.pdf)



14

Build a Better **MOUSETRAP**



We **ENCOURAGE** you to submit your innovations for 2024! Visit our website: <https://www.fhwa.dot.gov/clas/babm/>



Office of Innovation and Workforce Solutions

LOCAL AID SUPPORT

15

## Colorado – City of Monte Vista

**Innovator:**  
**Dave Sisneros**

**Low Deck Equipment Trailer**

16





17



18



19



20





**Type 3  
Barricade  
Weight**

**Innovator:  
Jim O’Hearn**

**Iowa – Clay  
County  
Secondary  
Road Dept**

21

**North Dakota – McKenzie County  
Highway Dept.  
Fifth Wheel Quick Attach Sander**



22

**Innovators:  
Rob McIntyre  
Brandon Kummer  
(not shown)**

**McKenzie County  
Highway Dept - ND**

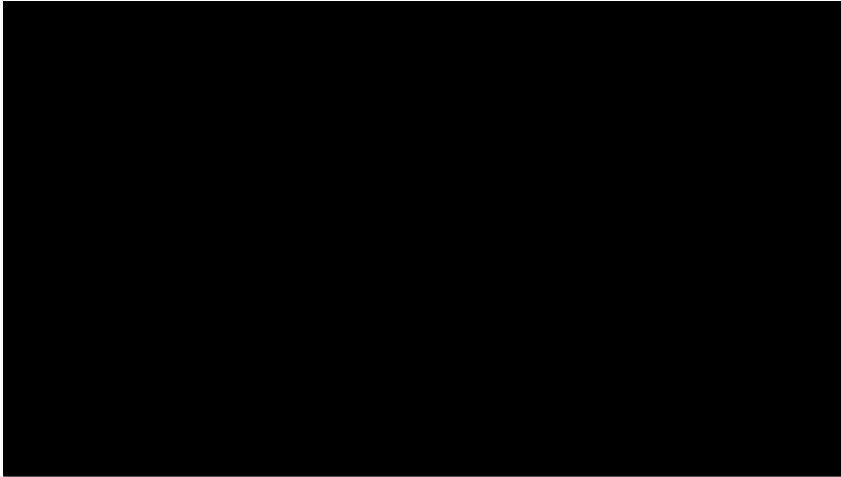


23



24





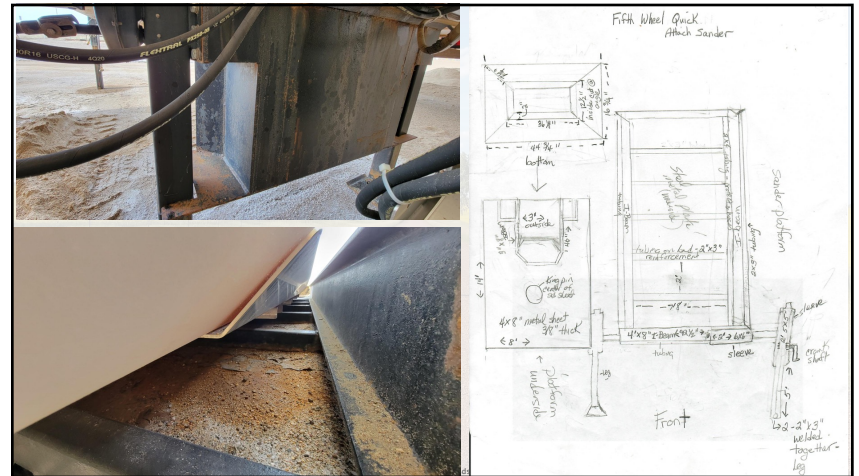
25



26



27



28

## Fifth-Wheel Quick-Attach Sander

**Innovators:**  
**Rob McIntyre,**  
**Brandon**  
**Kummer**

**McKenzie County**  
**Highway Dept - ND**



29

## Kansas - Saline County Road & Bridge

**High**  
**Visibility**  
**Stop**  
**Sign**



30

## High Visibility Stop Sign

**Innovator:**  
**Darren Fishel**

**Saline County**  
**Road & Bridge, KS**



31

## High Visibility Stop Sign

- High Speed Roads
- Stop Signs
  - 36-inch (vs 30-inch)
  - 3-inch X 48-inch red retro-reflective tape
  - All locations – regardless of road speed
- Stop Ahead Warning Signs
  - 3-inch X 48-inch yellow retroreflective tape



32





**High Visibility  
Stop Sign**

**Innovator:  
Darren Fishel**

**Saline County  
Hwy Dept. - KS**

33



**Nebraska – City of Hastings Street  
Department**

**Asphalt  
Trailer**

34



**Asphalt Trailer**  
**Innovator: Steve Kostner**  
**Hastings Street Dept, NE**

35



36





37



38



39



40



## Cofferdam - Enhanced

Innovators:  
Daren Peterson  
Justin Layher

Clay County  
Hwy Dept - SD



2023 North Central Local Roads Conference

41

## Culvert Cofferdam



42

## 2023 Regional Ingenuity

**INNOVATION IS LOCAL**



43

## Innovation is Local Panel of Judges

- Tim Blow, Pierre Region Equipment Shop Foreman
- Gary Brennan, Brosz Engineering Managing Principal
- Marc Hoelscher, FHWA SD Division Structures Engineer
- Jim Hyde, SDDOT Region Operations Engineer
- Travis Sparks, SDDOT Highway Maintenance Supervisor / Former County Highway Superintendent

2023 North Central Local Roads Conference

44



**2023**

**Regional**

**Winner**

**INNOVATION IS LOCAL**

2023 North Central Local Roads Conference

45

**South Dakota –  
Grant County Highway  
Department**

**Culvert  
Cofferdam**



**Innovators:**  
Daren Peterson  
Justin Layher



46

**INNOVATION IS LOCAL**

Noel Clocksin, SDDOT  
605-773-4256  
[Noel.Clocksin@state.sd.us](mailto:Noel.Clocksin@state.sd.us)

Danielle Lee-Mathis, FHWA Local Aid Support Team  
703-235-0528  
[Danielle.mathis-lee@dot.gov](mailto:Danielle.mathis-lee@dot.gov)

Leanna Emmer, NDLTAP  
701-405-4502  
[Leanna.emmer@ndsu.edu](mailto:Leanna.emmer@ndsu.edu)



2023 North Central Local Roads Conference

47

36<sup>th</sup> Annual North Central Local Roads Conference



48