



2024 Innovation Champion Nominees



Todd May, INDOT Director of Innovation

Mitch Ison, Innovation Coordinator

Rhoni Oliver, Innovation Coordinator

Idea: Spinner Storage

Submitters: Jimmy Baker – LaPorte District
Doug Naylor – Seymour District



Problem

- Spinners are often stored in piles on the ground outside which causes them to rust and degrade.

Solution

- Spinner rack will store the spinners in an organized manner, off the ground, and ideally out of the elements.
- Spinners can be more easily maintained on the rack.

Idea: Retirement Flag

Submitter: Mark Shields
Vincennes District



Problem

- There is no standard for recognizing years of service upon retirement.

Solution

- Award State of Indiana flag flown at the local reporting location as a retirement gift.
- Place in appropriate display case featuring years of service and message of appreciation.

Idea: Circuit Tester w/Breaker

Submitter: Robert Spencer
Greenfield District



Problem

- Light fuses short out.
- The current process of diagnosing where the short is located wastes multiple fuses.

Solution

- The circuit tester replaces the use of inline fuses during testing.
- The breaker trips and can be reset.
- More testing may be performed to find the location of the problem at a lower cost.

Idea: Integrated Uniform Snow & Ice Training
Submitters: Milt McCoy & Keith Norred- LaPorte District
Adam Szyal & Allison Claypoole - Central Office
Pat Szewczak, Ashley Roe & Steve Holley - Greenfield District
Steve Smith & Megan DeLucenay - Crawfordsville District



Problem

- Current snow and ice training is not uniform across the state.
- Some classes are more dynamic and engaging than others.
- Material is not always district specific.

Solution

- Uniform curriculum will include all necessary information in a dynamic format.
- Training will include options for district specific materials.
- Interactive education will include truck inspections, preventative maintenance, and trouble shooting tips.
- Snowplow simulators will be utilized during training.
- Tenured employees will be asked to mentor new employees during their first snow season.

Idea: Thermal Integrity Profile Test for Drilled Shafts
Submitters: Athar Khan & Mir Zaheer – Geotechnical Services
Tom Brummett – Vincennes District
Kurt Pelz – Central Office



Problem

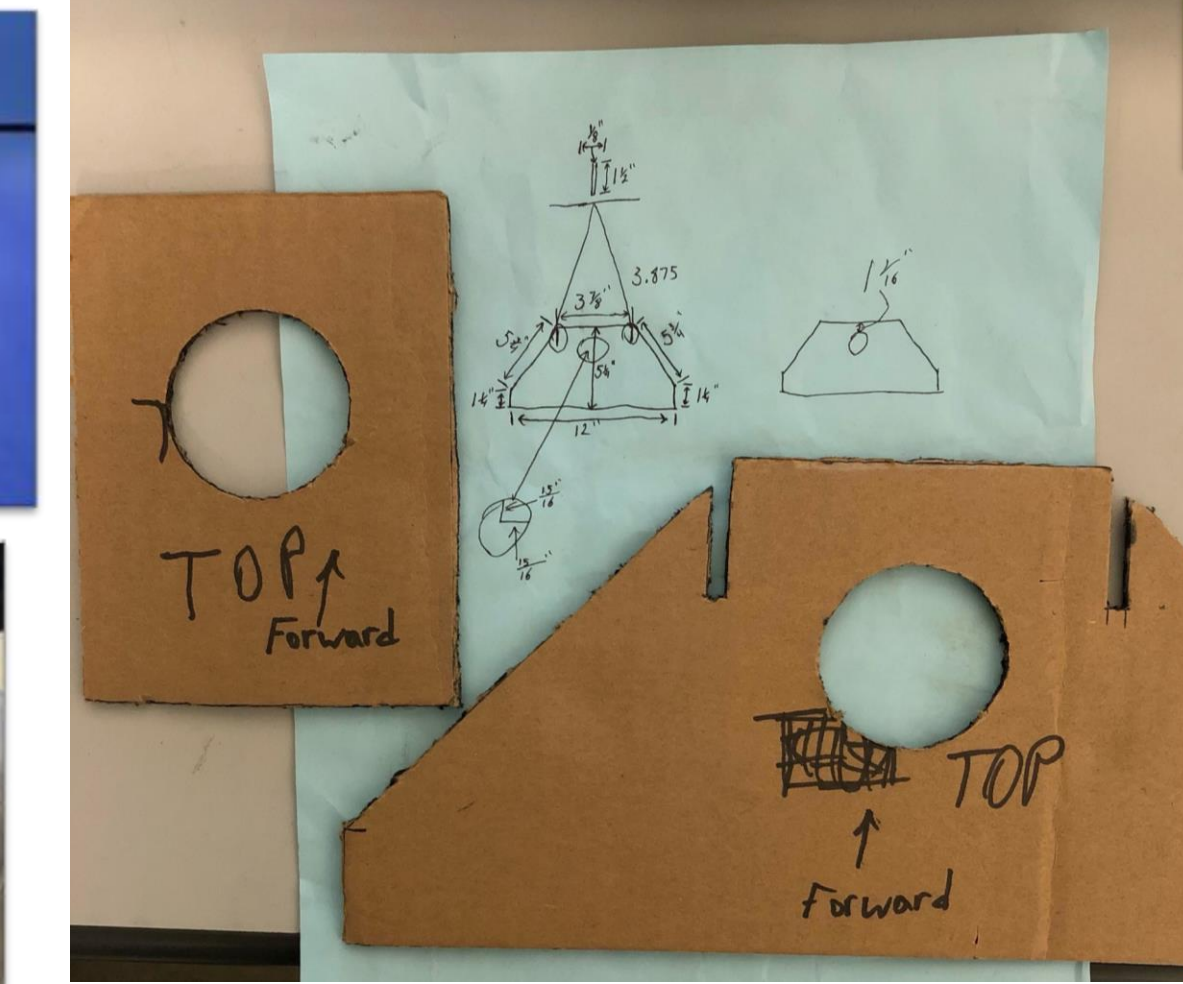
- Use of multiple tests or less efficient measurement tools for volume of concrete, cage alignment, shaft shape, etc.

Solution

- Thermal Integrity Profile Test collects information and tests the entire volume of concrete, cage alignment, estimated shaft shape, necks (bulges or inclusions), concrete cover, and overall quality of concrete.
- The values gained from the use of the TIP Test are shaft serviceability, durability, and strength of the bridge substructures which are needed for quality lifespans of the structures.
- Receive increased value of information at overall lower cost.

Idea: Pinnacle Brace

Submitters: Eric Barnard & Zach Ross
Seymour District



Problem

- Signal head breaks in high winds due to use of plastic housing.
- Techs spend considerable time replacing signal heads.

Solution

- Installing a metal pinnacle brace strengthens the signal head.
- Less time and money is spent repairing/replacing signal heads.

Idea: Chip Seal Reflector Placement Tool

Submitter: Brian Huffman
Crawfordsville District



Problem

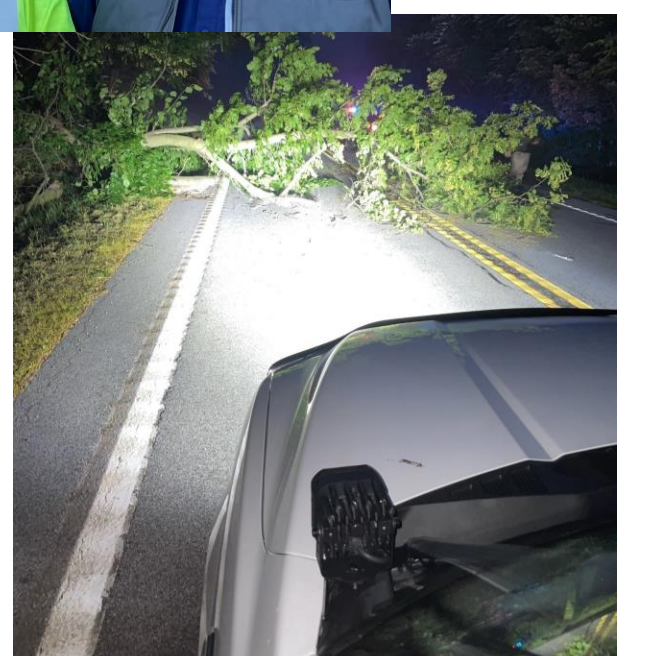
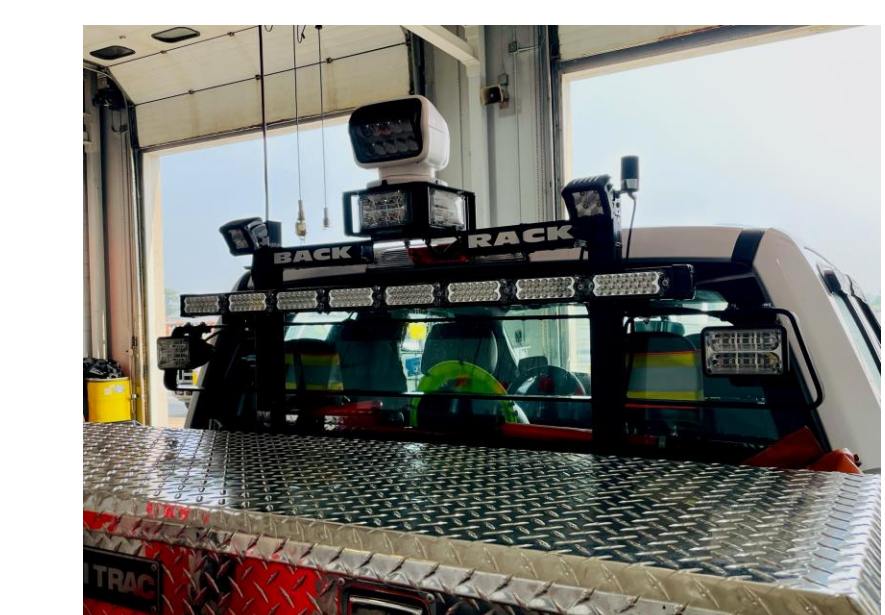
- When placing temporary reflectors during chip seal operations, highway technicians must bend over and place reflectors every 40 feet for miles.

Solution

- The reflector placement tool will hold the reflector in place and put even pressure on it to install the reflector without bending over.
- The result is fewer injuries.

Idea: Scene Lighting on Vehicles

Submitters: Justin Francis – LaPorte District
Dakota Stevens, Dalton Hardy
& Steven Fleek – Seymour District



Problem

- Inability to see accidents, down trees, or storm debris at night causes safety hazards.

Solution

- Add front bumper mount flood/spotlight and top mount spotlight for scene lighting.
- Include flood lights on the top of headache rack facing down in truck bed, so you can see and access equipment in truck bed safely at night.