

NEBRASKA

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DEPARTMENT OF TRANSPORTATION

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Jim Pillen, Governor

FOR IMMEDIATE RELEASE

NDOT Announces Annual Innovation Showcase Winners

July 26, 2024 (Lincoln, Neb.) — The Nebraska Department of Transportation (NDOT) held its 7th Annual Innovation Showcase, on Thursday, July 25. This year's event featured 19 submissions, with just 11 votes separating the first and second-place winners. The Rest Area Open/Closed Sign, submitted by District 6, was named Innovation of the Year

"With Innovation Challenges, the groups keep expanding, which means more people are continuing to get involved," said NDOT Director Vicki Kramer. "They're talking to their neighbors and friends, asking 'How do we innovate?' The conversations and the pride in the organization and the process just keep growing."

Mark Dillon and Ethan Budke from District 6 developed the winning innovation to enhance safety for maintenance workers. Recognizing the danger maintenance workers face when manually switching "Open/Closed" signs for rest areas, they designed a solution to keep workers away from I-80 traffic and avoid slips, trips, and falls during winter operations. They installed a solar-powered control station to operate an LED OPEN/CLOSED display board, replacing static flip-up signs. The station uses the P25 radio system for remote control via DTMF codes and can also be operated locally with a switch. Future networking for remote control is also possible. "Not only does this keep our maintenance crews safe, but it also benefits the traveling public by giving them advanced warning the rest area is opened or closed," explained Budke.

Dillon and Budke also secured fourth place with their Arrow Board LED/Solar Conversions innovation. This project involved renovating older, diesel arrow boards, which had become unreliable and poorly visible. They removed the diesel generator, installed a solar control system, and added LED lighting. "Renovating our existing boards costs far less than purchasing new ones, saving state assets and improving safety in our work zones for both our crews and the public," shared Dillon.

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Second place went to Kasey McArthur and Levi Baughman of District 7 for their Adjustable Grader Screed. This innovation provides flexibility when grading asphalt patches, allowing adjustments from 40 inches to 68 inches in width for areas with varying widths. “Our innovation creates leveled and smoother patches. It saves time by having one piece of equipment that can do multiple jobs, leading to lasting, quality work,” said McArthur.

McArthur also claimed third place for his Snowplow Calibration/Validation Box. This innovation streamlines the process of calibrating snowplow controllers and spreaders, significantly reducing the time and workforce needed. Typically, calibrating the truck spreader and verifying the salt amount required four workers and seven to eight days for 15 trucks. With this new system, it only takes two to three days and two workers. “With this innovation, we can ensure the salt amount being applied to the roadway matches what the controller reads,” stated McArthur.

The annual Innovation Showcase highlights the ingenuity and dedication of NDOT employees, emphasizing the importance of innovation in enhancing safety, efficiency, and cost-effectiveness in transportation operations.

#NDOT#

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