

THE
ROADRUNNER

Nebraska Department of Transportation

Fall 2020 - Winter 2021



Photos by Jake Daniels

Continuing to Challenge the Way We Do Business



Moe Jamshidi

At the Nebraska Department of Transportation, we're never satisfied by doing the same thing over and over with little to no change. At every level of our business, we emphasize the importance of thinking outside the box, challenging existing business practices, and continuously improving our processes wherever possible. Each employee is empowered to look at current processes

in place and search for a better way to serve the citizens of Nebraska. Challenging our business practices has become a part of our routine and the culture at NDOT.

As we near the end of another year, we've been taking time to look back at 2020 and celebrate all that our team has accomplished. We've had a challenging year, which I'm sure you can relate to. This year has brought more uncertainty than we could have imagined, and more than ever, we've been confronted with new and unprecedented obstacles. Unsurprisingly, though, our teammates across the state have stepped up to the challenge and have found increasingly innovative ways to continue to get business done effectively and efficiently.

We know that the future of transportation is coming quicker than we could ever imagine. NDOT continues to evaluate and plan for things like connected vehicles, active transportation, Transportation Systems Maintenance and Operations (TSMO) improvements, expanded transit options, and much more. Unless we're willing to take a step back and challenge the way we currently do business, we'll never be prepared for these advancements in transportation. I know that this is exactly what is happening across the State, and I have confidence that our teams will meet the challenges in front of them head on.

I am proud of the people who work at the Department of Transportation, and I'm proud of the way they serve their communities. No matter what is thrown our way, we persevere and continue to strive for excellence. Together, we'll continue to look for ways to embrace change where it makes sense and challenge our business practices to ensure better service to our great state. ■

the Roadrunner

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Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION

Innovation Challenge Continues to Cultivate Community Connections



After much anticipation, the winner of the “Innovation of the Year” and three runners-up were announced to Nebraska Department of Transportation (NDOT) employees during the fourth annual Innovation Showcase, held on July 10th in the NDOT Central Headquarters Auditorium in Lincoln.

The Showcase recognizes NDOT employees who go above and beyond in their jobs to improve the department and make a positive impact on their communities.

The winning entry, selected by a vote of their peers from a record-setting 32 projects, was “**Delaminated Concrete Drag**,” submitted by Nick Smets, Bill Wright and Harvey Winslow, representing District 4 from Kearney. Each member of the winning team received \$750 each, plus a set of NDOT Innovation coasters. The innovators created a tool from an old rolling golf club stand that can aid in bridge inspections, reducing the time it takes to sound a bridge deck to about a quarter of the time compared to the older method.

Runner-up was the “**Sliding Sign Rack**,” by Tim Johnson and Derik Ashmore, District 5 in Chappell. Each team member received \$300 plus a set of coasters. This innovation involved creating a rack system for storing signs that is more organized, saves space, and protects the signs from damage.

Third place, “**Striping Application**,” was submitted by Claire Inbody and Shelley Schulte, Business Technology Support Division (BTSD), and Dallas Hayes, District 1 in Lincoln. Each team member received \$200 plus a set of coasters. Supervisors can use this application to easily plan and organize maintenance activities, saving time and improving efficiency.

Fourth place went to Kyle Liebig, Project Development, and Chris Wiebke, BTSD, for the “**Local Projects Mapping Application**.” Each team member received \$150 plus a set of coasters. This Local Project Mapping Assistance application makes it possible for other NDOT divisions to view LPA projects to aid planning between state and local projects and avoid potential conflicts.

Elite Eight Winners

Four additional winners, placing fifth through eighth, were named as part of the “Elite Eight.” Each winner received \$125 plus Innovation coasters. Winners included: “Binder Pods,” fifth place, submitted by Mike Reynolds – District 3 in Norfolk, Bob Rea and Jody Paul – Materials and Research, and Operations Division; “Silvex Hot Plate,” sixth place, submitted by Joe Morosic, McCook and Harvey Melton, Holdrege – District 7; “ER GIS APP,” seventh place, submitted by Kyle Liebig and Nick Burnham – Project Development, Claire Inbody, Marc Zaiger, Cole Davison and Tylia Penner – BTSD; and “Green Sheet Process Improvement Project,” eighth

place, submitted by Lori Ellison-Wiig, Ron Poe, Alison Krohn and Roy Leach – Project Development; Jamie Mikkleson – Roadway Design, and Lisa Mathews – Process Improvement.

The NDOT Director’s Office (Director Kyle Schneweis and Deputy Directors Moe Jamshidi and Khalil Jaber) also selected innovations that were not among the Elite Eight to be recognized and awarded at the Innovation Showcase, each receiving \$100. These included: “The Hot Box” – District 3; “Spot Patch Box” – District 1; “Refined Upgraded Heating Pot” – District 3 and Right of Way; “Visa Contract Purchases” – District 7 and Operations; “Emergency Relief County Reimbursement Status Application” – Local Assistance, BTSD, Project Development and Communication; “Concrete Clean Out Water System” – District 5; and “Removal of Performance Bond for Occupy ROW Permits” – Right of Way and Roadway Design.

The Innovation Showcase event and announcement of winners was the culmination of more than a month of voting by NDOT employees during the Innovation Challenge, with contestants’ names placed into brackets, face-offs in weekly head-to-head battles, and names whittled down until a winner emerged in the final round of voting. In addition to a record number of entries, there was a record number of votes placed by NDOT employees.

Members of the Innovation Challenge Team included: Korey Donahoo, Innovation Challenge Team Leader, Strategic Planning Division; Suzy Fredrickson, Business Technology Support Division (BTSD); Mackenzie Bartek, Communications and Public Policy Division; Anthony Tschirren, District 3; Scott Clinger, District 5; Charlene Shaw, BTSD; and Brandon Varilek, Construction Division.

High Stakes

The stakes were high this year with increased prize money available, thanks to a \$3,000 grant from the Western Association of State Highway and Transportation Officials (WASHTO). Each employee who was a part of a winning innovation received an equal share of the prize money.

“This is by far the best year we’ve had for innovations, both in terms of participation and the quality of the submittals,” said NDOT Director Kyle Schneweis. “NDOT employees continue to raise the bar high as they create solutions in their workplaces and make positive contributions to their communities. It reflects well on our team at NDOT.”

Due to the COVID-19 pandemic, precautions were taken for social distancing and wearing masks during the Innovation Showcase. A video of the awards presentation was available to all employees after the event.

Those considering entering next year’s challenge are reminded that submissions are welcomed all year round on DotSpot. See you in 2021! ■



Center, l to r, Harvey Winslow and Nick Smets, District 4, with NDOT Innovation Challenge Team Leader Korey Donahoo and NDOT Director Kyle Schneweis, outside l and r. Not pictured: Bill Wright.



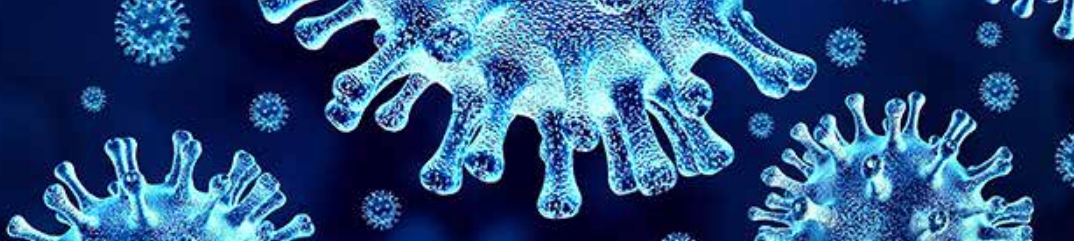
Derik Ashmore, District 5, with Donahoo and Schneweis. Not pictured: Tim Johnson.



Center, l to r, Claire Inbody, BTSD, Dallas Hayes, District 1, and Shelley Schulte, BTSD, with Donahoo and Schneweis.



Center, l to r, Claire Inbody, BTSD, Kyle Liebig, Project Development, and Chris Wiebke, with Donahoo and Schneweis.



Challenging Business Practices

NDOT Forges Ahead through the Pandemic

By Linda Wilson
Communications & Public Policy Division

With the arrival of the COVID-19 pandemic earlier this year, the world changed in ways that most of us could never have imagined. Everyday activities that once were taken for granted, such as a friendly handshake greeting, in-person meetings and business lunches went by the wayside for the foreseeable future as we faced the harsh realities of this pandemic. Both our personal and business lives were upended as we were asked to adapt and carry on through the disruption.

Our “new normal” involved wearing masks, using hand sanitizer, practicing social distancing with at least 6 feet between each other, and avoiding both large and small gatherings to help slow the spread of the coronavirus. Working remotely, at first a short-term solution, extended into several months and in-person work meetings were replaced with online meetings using video-conferencing software such as WebEx and Zoom.

With the health and safety of NDOT teammates a top priority, our leaders closely followed the latest Directed Health Measures (DHM), adjusting work arrangements accordingly, depending on the percentage of positive cases, hospitalizations and deaths. We eventually switched from remote-only to in-person/remote work arrangements that varied with the guidelines of each district and division.

Through it all, we have pushed forward and remained positive in challenging our business practices and improving our processes. Here are examples of some of those improvements over the past year.

Online Business Meetings

While an initial adjustment period was required to adapt to the required technology, the use of WebEx became the standard protocol for both in-office work group meetings as well as meetings outside the office. This would not have been possible without network connectivity, the digital devices that we interface with, and the software that powers them. Thankfully, the

“We’ve received positive feedback from our external customers and plan to continue streaming lettings as a standard business practice.”
- Kendall Stege, NDOT Contract Lettings Mgr.

groundwork for these developments was already laid years in advance of the pandemic, allowing NDOT employees to remain connected and productive. Significant savings of time and money were realized by many when a physical commute to meetings was no longer required.

Nebraska State Highway Commission Meetings –

A virtual meeting of the State Highway Commission was held via WebEx on May 15, 2020. This was the first such meeting in the history of the Commission, which was created in 1953 by the Legislature as an advisory group to ensure citizen input in the planning, design and operation of the state highway system. Several hybrid in-person/WebEx meetings have been held since. While state laws are in place that require an in-person option outside of COVID, NDOT External Affairs Manager Sarah Soula noted that they are planning to continue offering a virtual component for people to attend upcoming meetings.

“We’ve actually seen an increase in attendance since the virtual component was introduced in May and are told regularly how beneficial this has been on people’s schedules. I think going forward adding a virtual option will be beneficial as it allows for more flexibility.”

Business Practices

Roadway Design’s All-Electronic Submittal of Plans –

Due to the COVID-19 pandemic and switch to remote work, NDOT’s Roadway Design Division teams completed their first-ever all-electronic submittal of plans for letting in April. The submittals included two partial/hybrid electronic submittals. They also had two concurrent official full electronic plan submittals. According to Kevin Krolikowski, Roadway Design Unit Head, a number



of divisions were involved in the complex process and each was responsible for their own individual part of the overall project delivery submittal package for letting. “Since initiating remote work, each division now provides their computations, documents and other information electronically,” Krolkowski said. “This has made gathering, tracking and compiling information more efficient for Roadway Design.”

Lettings – According to NDOT Contract Lettings Manager Kendall Stege, while Construction and Roadway Design divisions had laid the groundwork for electronic plan and specification submittal prior to COVID, working remotely expedited the implementation of complete submittal and review of all plans, specifications and estimates (P.S.&E.) packages electronically. In addition, due to COVID-related restrictions, NDOT began holding lettings online.

Stege noted, “Our external customers, including contractors and suppliers, have attended online lettings in dramatically higher numbers than previously attended in-person. We’ve received positive feedback from these groups, and plan to continue streaming lettings as a standard business practice.”

New Divisional Performance Measures – These performance measures were created during COVID-19 by divisional leaders, Korey Donahoo, Performance Management Engineer in Strategic Planning Division, Dustin Poskochil and Padma Chinnachellappan, in BTSD.

To accomplish this, Donahoo researched divisional leaders’ goals, and met with them to identify Key Performance Indicators (KPIs) that would help them. He then worked with BTSD to help automatically report the data to help provide the visualizations of those KPIs.

“This work was important because these performance

measures help leadership understand if they are on track to reaching their goals, whether their actions and strategies are having the intended consequences,” said Donahoo. “This performance structure is new to the department in this format.”

Funding Adjustments

Lynn Heaton, NDOT’s Controller, noted several adjustments by Controller Division due to COVID-19, including **revenue estimating** and cash flow forecasting. “The pandemic has had a significant impact on NDOT’s revenue as it relates to motor fuel consumption and motor vehicle sales tax,” Heaton said. “As a result, considerable research was required as well as conferring with state agencies that collect NDOT’s revenue to provide revenue estimates based on the analysis performed.”

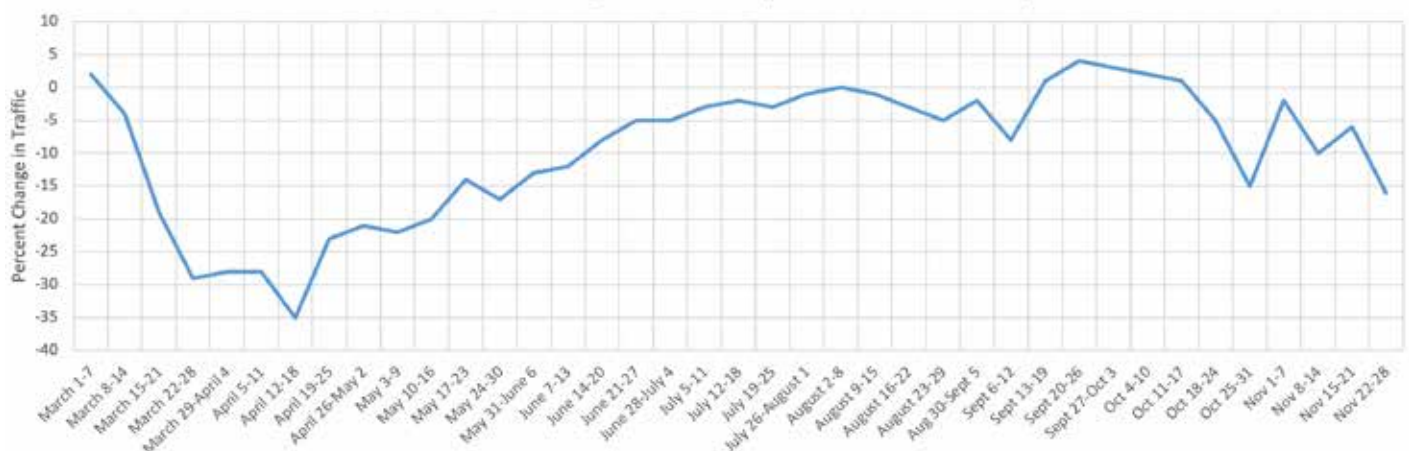


In regard to **cash flow forecasting**, extraordinary events in 2019 and 2020, including the 2019 flooding, Lincoln South Beltway (the largest construction project in NDOT’s history with its innovative funding structure) and COVID-19 pandemic, have all had a significant impact on cash flow. Heaton noted that adjustments were made to processes and that partnership with other NDOT divisions was necessary so that Controller Division could provide leadership with cash flow forecasting information to inform critical decision-making regarding NDOT’s construction program and operations.

Traffic Volumes

Walter Moy, Traffic Monitoring System Coordinator in the Traffic Analysis Unit of NDOT’s Strategic Planning Division, noted that by mid-March his unit had already

Statewide Total Change in Traffic Compared to 2016-18 Average





received requests from the FHWA, other NDOT divisions and the public concerning how much traffic volumes had decreased on the state highway system due to COVID-19. To address these needs, they reviewed the data received each week from the 67 continuous traffic counters on the state's highways and compared it to historical 2016-2018 data (2019 data could not be used, due to extensive flooding in Nebraska) to see how much traffic had changed compared to the average.

"Data results showed that as a state, Nebraska hit its lowest traffic levels the week of April 12-18, with traffic approximately 35% below normal," said Moy. "Since then, Nebraska has been on a slow increase in traffic each week with traffic peaking at near normal levels in late-September, early-October and is now on a slow decrease. Also worth noting, while total traffic was near normal, the distribution of that change in traffic has changed. Urban areas were down 5-10% while rural areas were near normal or above."

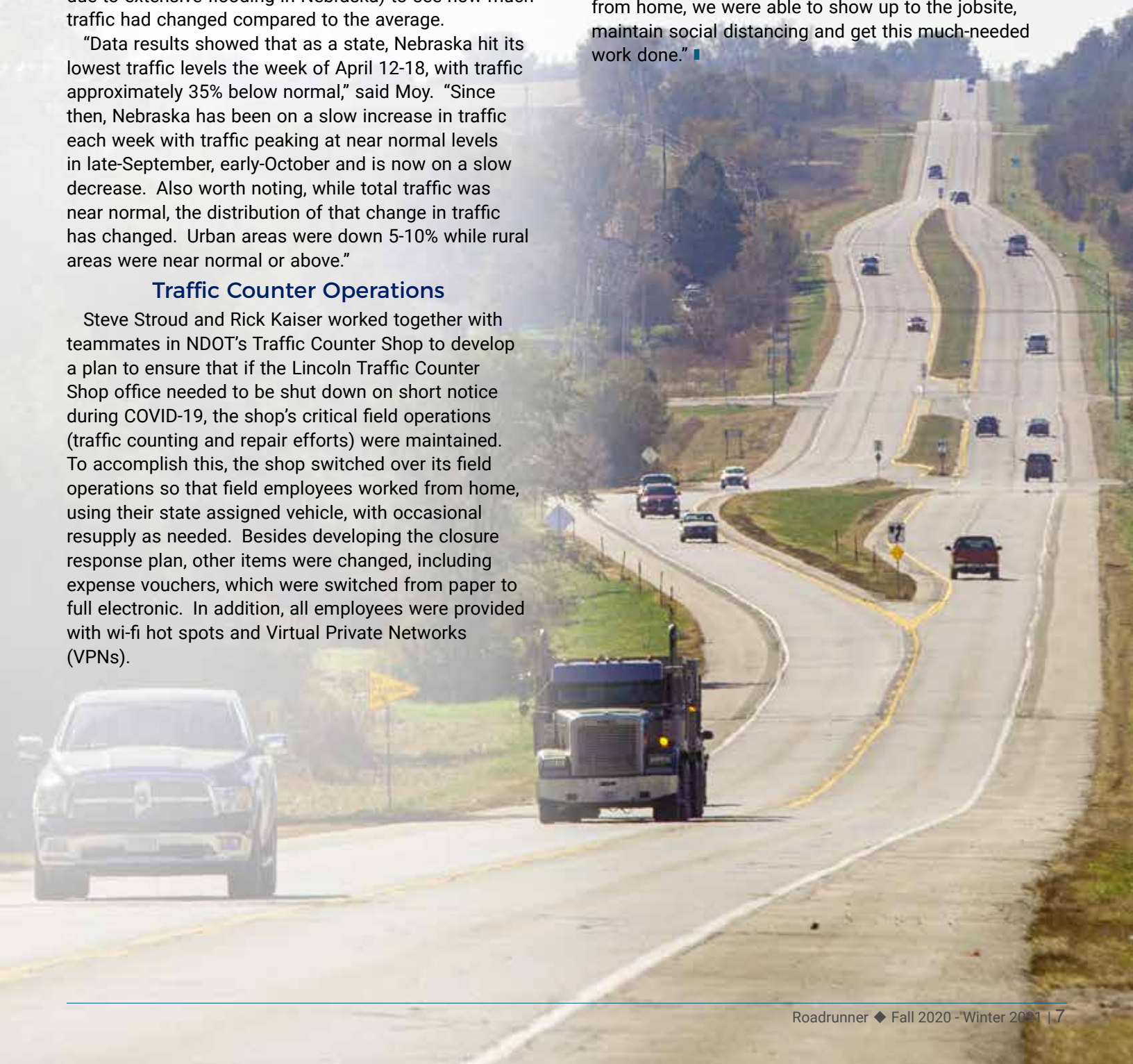
Traffic Counter Operations

Steve Stroud and Rick Kaiser worked together with teammates in NDOT's Traffic Counter Shop to develop a plan to ensure that if the Lincoln Traffic Counter Shop office needed to be shut down on short notice during COVID-19, the shop's critical field operations (traffic counting and repair efforts) were maintained. To accomplish this, the shop switched over its field operations so that field employees worked from home, using their state assigned vehicle, with occasional resupply as needed. Besides developing the closure response plan, other items were changed, including expense vouchers, which were switched from paper to full electronic. In addition, all employees were provided with wi-fi hot spots and Virtual Private Networks (VPNs).

Business as Usual

District 8 Engineer Mark Kovar noted that during COVID-19, his district completed several miles of preventive maintenance armor coat and chip seal work. This work is important in extending pavement life, saving taxpayers' money in the long run.

"Because our work doesn't lend itself well to working from home, we were able to show up to the jobsite, maintain social distancing and get this much-needed work done." ■



Buckle Up Phone Down Safety Initiative Takes A Front Seat

By Linda Wilson

Communications & Public Policy Division

When it comes to safety, the Nebraska Department of Transportation (NDOT) has a front seat view of what can happen when safe driving habits aren't practiced.

Over the past 10 years, about 70% of vehicle fatalities were unbuckled. In Nebraska, there are nearly 4,500 distracted driving crashes annually.

In an effort to increase awareness surrounding seat belt usage and curbing distracted driving in the State of Nebraska, the NDOT launched the Buckle Up Phone Down (BUPD) safety initiative in October 2020. The BUPD initiative reminds individuals, businesses, and schools that two of the most impactful decisions that drivers can make are to buckle up and put their phone down. At the heart of this initiative is the safety and wellbeing of all Nebraskans, with safer drivers and safer roads the desired outcome.

"The Buckle Up Phone Down initiative is a very simple message," said NDOT Interim Director Moe Jamshidi. "Wear your seat belt and put your phone down while driving. For most of us, driving is the most dangerous thing we do all day. Our chances of survival are greatly increased in major crashes if we are wearing our seat belts, and we are less likely to be involved in a crash if we resist the urge to pick up the phone and text or answer a call while driving."

Last year, 248 people were killed on Nebraska roadways, an increase of 8% from 2018 when the number was 230. 38 of those killed in 2019

were under the age of 19. No matter the age, safe habits in the car do matter and the examples set by adults are crucial for children to make the choice to buckle up. With this in mind, a key emphasis of the Buckle Up Phone Down initiative is on young people, with a campaign specifically aimed toward schools.

NDOT has asked schools across the state to accept the challenge to become a Buckle Up Phone Down School that prioritizes the safety of faculty, staff and students, specifically while driving. A link is included to the Buckle Up Phone Down toolbox, which includes posters to download, print and hang on walls, as well as Zoom backgrounds, a slideshow, talking points, logos, and a form to submit school information to be included and highlighted on the website. Whenever a school signs up to be a BUPD School, a packet of materials and posters will be shipped to them.

Nebraska businesses are also on board, with 12 business partners already accepting the Buckle Up Phone Down Challenge. These businesses are reaching out to their employees to spread the message of heightened awareness for distracted driving and increased seat belt use to their families and friends.

NDOT wants YOU to join us by accepting the Buckle Up Phone Down Challenge. Whether it's down the street or across the country, we all play a role in preventing crashes and making Nebraska roads safer. Accept the Buckle Up Phone Down Challenge to protect not only yourself, but your family and community, too. ■



SEAT BELTS – Being buckled up during a crash helps keep you safe and secure inside your vehicle; being ejected from a vehicle is almost always deadly.

Fact: Buckling up is the single most effective thing you can do to protect yourself in a crash.

Fact: Among drivers and front-seat passengers, seat belts reduce the risk of death by 45% and cut the risk of serious injury by 50%.

DISTRACTED DRIVING – The act of driving while engaged in any task that takes your focus off the road – texting, talking on the phone, watching videos, reading, even passengers can be a distraction.

Fact: Cell phone use while driving leads to 1.6 million crashes each year. (*National Safety Council*)

Fact: One out of four car crashes in the United States is caused by texting and driving. Each year, almost 390,000 injuries occur from crashes caused while texting and driving. (*National Safety Council*)

State and Local Dignitaries Celebrate Progress on Lincoln South Beltway

The Nebraska Department of Transportation (NDOT), together with Governor Pete Ricketts, Senator Deb Fischer, Congressman Jeff Fortenberry and other state and local dignitaries gathered October 8 to celebrate progress on construction of the Lincoln South Beltway.

Through the collaborative efforts of NDOT and its partners, work is well underway on the \$352 million project to connect US Highway 77 (US-77) and Nebraska Highway 2 (N-2).

Five months into the project, Hawkins Construction Company had moved 2.1 million cubic yards of dirt. For comparison, that's about 280 Goodyear blimps. The project still has 3.2 million cubic yards of dirt to move, 21 bridges to build and just over 61 miles of road to pave.

The NDOT has been working towards delivery of the South Beltway for decades and following passage of the Build Nebraska Act and the Transportation Innovation Act, they were able to partner with the City of Lincoln, Lancaster County and the US Department of Transportation to secure funding and prioritize the project. In spring of 2018, additional funds were available with the awarding of a \$25 million TIGER grant to NDOT.

"The Lincoln South Beltway has been talked about since the late 1960s because of its potential to improve mobility, safety, and help grow Nebraska," said Governor Ricketts.

"The passage of the Transportation Innovation Act, along with continued innovative approaches from the Nebraska Department of Transportation helped move this project forward. These initiatives, along with Senator Fischer's Build Nebraska Act and extensive partnership with our Nebraska Federal Highway Administration officials, helped us reach this point. Thank you to Director

"The project will save potentially tens of millions of dollars and will help benefit citizens for decades to come."

- Senator Mike Hilgers



Pictured, l to r: NDOT Director Kyle Schneweis, State Senator Mike Hilgers, Governor Pete Ricketts, Senator Deb Fischer, Congressman Jeff Fortenberry, Lincoln Mayor Leirion Gaylor Baird, and Chris Hawkins, Chief Operating Officer of Hawkins Construction Company, gathered to celebrate progress on construction of the Lincoln South Beltway.

Schneweis, Chris Hawkins, and their teams who are finally helping turn this vision into reality."

The Lincoln South Beltway is the largest and one of the most complex projects the NDOT has undertaken. Construction of the 11-mile east-west four-lane freeway will reduce congestion on Nebraska Highway 2 through Lincoln and improve regional mobility.

Preliminary work began in February, with construction beginning in earnest in May of 2020. Construction is anticipated to be completed in spring of 2024, a full four years ahead of the original schedule. NDOT announced the use of an innovative financing approach to accelerate construction of the project over three years while still allowing payment over the same eight-year time frame.

The expedited South Beltway will help transform Lincoln and is a testament to Nebraska's ingenuity and energy," said State Senator Mike Hilgers. "The project will save potentially tens of millions of dollars and will help benefit citizens for decades to come."

For Senator Deb Fischer, investment in infrastructure means investment in the future. She was part of the team that passed the Build Nebraska Act in 2011.

"It's exciting to see these projects happen," Fischer said. "We want to be able to build for the future in this state, we want to be able to grow Nebraska. We want to build for generations to come." ■

Nebraska Supply Chain Optimization Model: Identifying Solutions to Reduce Business Transportation Costs

By Ryan Huff
NDOT Chief Strategy Officer

Every day, companies all over the U.S. compete to bring their goods to the market in the most efficient way possible, especially since transportation of raw materials and finished goods can account for up to 50% of a product's total cost.

The active pursuit of efficient transportation operations for a product is referred to as "supply chain optimization." The term "supply chain" simply refers to the network of individuals, organizations, resources, activities and technology involved in the creation and sale of a product. So why does NDOT care about optimizing supply chains?

According to NDOT's Economic and Freight Development Liaison, Jarrod Walker, the department began a project in 2017 called the Nebraska Supply Chain Optimization Model (NESCOM). NESCOM's aim was to use data, and modeling, to identify locations in Nebraska where supply chains might be improved. Wherever these opportunities manifest themselves, the project would also seek to examine the best supply chain "solutions" for the site.

In the end, NDOT would use the data to form partnerships with the private sector around the desired "solution" and to pursue federal grant monies for the site. The construction or expansion of a supply chain site would ultimately drive down supply chain costs for nearby Nebraska businesses and reduce the number of long-haul truck trips.

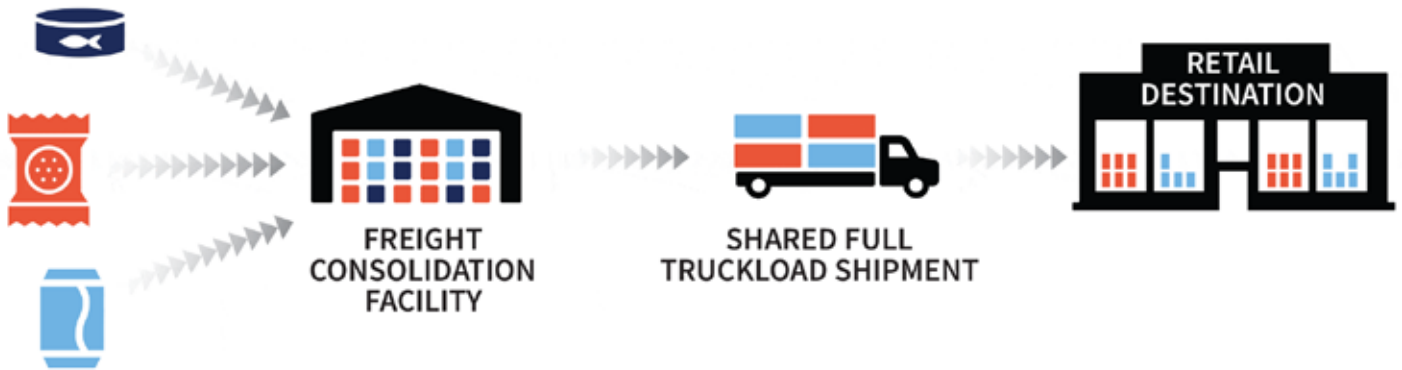
NDOT's decision to pursue the project was influenced by similar efforts at Iowa DOT, which resulted in a \$24 million Federal FASTLANE grant award to build a logistics park in Cedar Rapids. NDOT hired the same consultant as the Iowa DOT for its own effort. The consultant, Quetica, specializes

TRANSLOAD – Transferring bulk goods from one mode to another (e.g., sand, coal, etc.). In Nebraska, bulk goods are generally transferred from truck to rail, and vice versa. In general, the cost of shipping by truck is significantly higher than shipping by rail, which is why companies seek to move their products onto and off of rail as close to their site as possible. Strategically locating a transloading site can serve to benefit many companies by reducing trucking costs.

INTERMODAL – Transportation of freight in sealed ocean containers using multiple modes. Shipping in containers is usually reserved for high-priced, finished goods coming from overseas. Similar to transloading, intermodal sites save companies money if they are able to move containers onto or off of trucks sooner.

CROSS-DOCKING – A logistics strategy where "less than truckloads (LTL)" (i.e., trucks that are only partially filled), converge on site to have their contents re-sorted and consolidated to create a "full truck load." The consolidation of goods, to create more "full truckloads" helps reduce the number of total trucks on the road, reduces warehousing and overall transportation costs for businesses, and provides "Just In Time" goods for consumers.

THE BASICS OF FREIGHT CONSOLIDATION



in supply chain modeling and the use of freight data to identify solutions across industries and modes. In addition, Quetica provides unique value due to their relationships with the private sector.

Data Sharing Partnerships

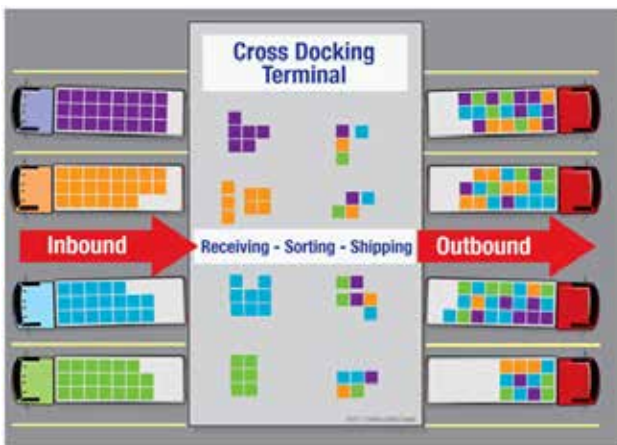
These relationships have translated into data sharing partnerships with the private sector. Through non-disclosure agreements, Quetica is given access to transportation cost data, which is critical to understanding which sites and logistics solutions stand to save companies the most amount of money.

Walker noted that NESCOM was essentially designed to help identify potential sites in Nebraska where freight could either be consolidated sooner or moved from a truck to a train sooner.

mitigate the growing shortage of long-haul truck drivers and truck parking.

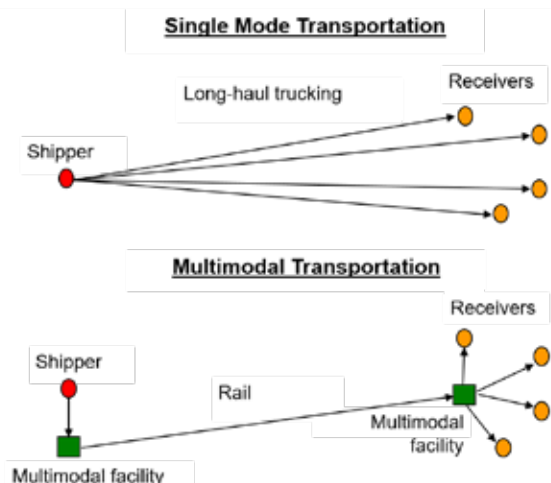
NESCOM identified two opportunities that are currently being studied and explored. The first project, in Grand Island, includes both transloading and cross-docking. The second project, in Fremont, involves a proposed greenfield logistics park that includes intermodal and transloading. In each case, the NDOT, in partnership with the Nebraska Department of Economic Development, are working with local businesses and transportation companies to explore development sites and the potential savings opportunities. As things come together, the NDOT will seek grant awards to support site construction or expansion.

“The NESCOM project provides NDOT with a tool we can use to proactively identify and prioritize efficient public and private investment opportunities, while seeking to further enhance the transport and logistics capabilities of the state,” said Walker. “The real optimization will occur when we, NDOT in coordination with local public and private partners, can leverage the model to secure a substantial federal grant to support the development of one or more of these opportunities.”



Reduced Truck Traffic

The benefit NDOT gains from these solutions is the reduced truck traffic. Moving goods onto rail sooner, or consolidating freight in trucks, helps extend the life of our assets and reduces overall system congestion. Aside from this, these supply chain solutions can help Nebraska businesses obtain a competitive advantage through reduced transportation costs. Lastly, these things serve to



Economic Opportunity Program Boosts Business Connectivity

By Linda Wilson
Communications & Public Policy Division

The Nebraska Department of Transportation's (NDOT) rapid response Economic Opportunity Program (EOP) was one of three programs created by the Transportation Innovation Act, enacted in April 2016 to better support the continued development of a robust statewide transportation system.

The EOP helps attract and sustain economic growth across the State through local grants for strategic transportation improvements. The focus is on funding projects that better connect businesses to Nebraska's statewide, multi-modal transportation network.

According to Jarrod Walker, Freight and Economic Development Liaison in NDOT's Strategic Planning Division, two projects were recently completed that will increase connectivity, create jobs and provide an economic boost within the State: **South Sioux City and Holdrege (Gustin Street)**

"These two projects, along with the first two EOP projects, demonstrate NDOT and NDED's concerted efforts to support economic growth across our state," said Walker. "These projects span from McCook to South Sioux City and have created 83 good-paying, full-time jobs across Nebraska's rural communities.

The state supported these projects with a total of \$1.38 million in grant funds, and in conjunction with a local match of \$2.39 million, nearly \$3.8M of Nebraska infrastructure has been constructed or improved. Additionally, \$139 million of private capital has been invested in the Nebraska economy. NDED projects these developments will result in \$180 million of economic impact for the state within one full year of operations and more than \$1 billion within six years.

"That is a sizable return on investment for Nebraska citizens," Walker noted. "This is just the beginning for the EOP and we are excited to see where we go in the future."

The primary goal of the EOP is to attract or retain jobs and private capital investment in the State. Funding is strictly discretionary with awards made by NDOT based on careful review of the merits of each application as it is received, and in consultation with the Nebraska Department of Economic Development (NDED). ■



South Sioux City and Ingreion Company's completed rail spur.

SOUTH SIOUX CITY

- Rail spur project completed in May 2020 and \$500,000 reimbursement paid through the EOP in June 2020
- 34 jobs created
- \$119 million private capital investment
- Projected 6-year total economic impact of \$672 million

HOLDREGE (GUSTIN STREET)

- Street paving project completed and \$350,000 reimbursement paid through the EOP in October 2020
- 35 jobs created
- \$8 million private capital investment
- Projected 6-year total economic impact of \$230.9 million



NDOT Reminds Motorists: Your Safe Travel is Our Business

By Linda Wilson
Communications & Public Policy Division

Another winter has arrived in Nebraska, and the Department of Transportation's winter operations is prepared for whatever Mother Nature has in store.

At NDOT, planning and preparations for potential winter storms is a year-round effort and a top priority. Again this year, NDOT's eight highway districts are armed with the latest technology to aid in these efforts, including plowing snow to make the state's roads safe for the traveling public and keeping commerce moving.

As a testament to the pivotal role that snow fighters play in accomplishing this important work, they are featured for a third year in an awareness campaign, reminding motorists: *Your Safe Travel is Our Business*. Three new billboards, placed strategically across the state, spotlight NDOT's mission to keep Nebraska's roadways safe for the traveling public and remind the public of its responsibility to take proper winter-driving precautions. These efforts, along with the latest innovations, equipment and materials make it possible to maintain the safe and reliable transportation system that motorists expect.

The Maintenance Decision Support System (MDSS), Plow Tracker, Statewide Radio System (SRS) and other tools continue to provide improved information to increase efficiency and help make winter travel on roads safer.

"I encourage motorists to check 511 often while traveling in the winter months and to view the roadside and snow plow cameras."

- Chris Ford, District 5 DOMM

MDSS, in its final year of a five-year, \$6 million contract with Parsons Corporation, is a computer application for managing and improving highway maintenance practices during winter weather events. The system provides information to help with weather forecasting, road conditions, the application of materials during storm events, and more, with reports available to supervisors. NDOT districts report utilizing MDSS to its full capabilities, including to gain recommendations on material application rates.

Reliable and Effective

"The MDSS system has proven to be reliable and effective," said Kelly Doyle, District 7 Operations and Maintenance Manager (DOMM). "After each winter event, we review chemical usage versus recommendation to determine if we have any issues with the equipment or operators and address as necessary. We also look at this information to determine if we may need to make any adjustments to our operations."

The Plow Tracker website, another helpful tool for motorists, shows real-time locations of NDOT's snowplows on the Nebraska state highway system and has camera images from each plow of road conditions. The system is available at www.plows.nebraska.gov.

Motorists are reminded that sometimes conditions are worse than what the camera image portrays, and 511, Nebraska's Advanced Traveler Information System, is the best option for assessing whether conditions are safe for travel. The system is available at all times via Nebraska 511's smartphone app, online at www.511.nebraska.gov, or by dialing 511 on your mobile device within the state, or dialing 1-800-906-9069 from a landline or outside Nebraska.



The Statewide Radio System (SRS), in its third year of operation, is available to all NDOT districts. The system makes it easier to coordinate and communicate with NDOT responders and other state agencies, as all operators on the assigned channel are able to hear all communication, allowing for continuous situation awareness.

NDOT and the National Weather Service (NWS) offices serving Nebraska will continue the Pathfinder program this winter across the entire state. The program, sponsored by the Federal Highway Administration (FHWA), is a collaborative strategy to proactively manage the transportation system ahead of and during adverse weather events. Pathfinder translates weather forecasts and road conditions into consistent transportation impact messages to provide safer, smoother travel for motorists. This unique public-private partnership includes a private sector meteorological service, Iteris Corporation, along with the NWS and NDOT.

Expanded Toolbox

In addition to incorporating this new technology, NDOT's eight highway districts continue to expand on items already in their winter toolbox. This includes increased salt storage, experimenting with new liquid deicers and expanding staff to assist with snow removal. This is crucial with this year's COVID-19 pandemic, as all districts have contingency plans in place to cover routes due to potential shortage of staff to serve the traveling public.

Districts have also been calibrating and validating their snowplow spreaders to improve winter weather efficiency. NDOT's districts continue to use tow plows, equipped with the capability to clear two lanes at once, to speed up the process of snow removal, particularly on I-80 and highways with multiple lanes in each direction.

Chris Ford, District 5 DOMM in western Nebraska, plans the continued use of prepositioned message boards for passing the latest information to the

WINTER DRIVING SAFETY TIPS

- PLAN AHEAD - CHECK 511
- STAY ALERT
- AVOID DISTRACTIONS
- SLOW DOWN
- BUCKLE UP
- DON'T CROWD THE PLOW

traveling public, as well as an expanded 511 camera network, which will soon have infrared lighting on all camera sites for 24/7 visibility.

"I encourage motorists to check 511 often while traveling in the winter months and to view the roadside and snow plow cameras," Ford said. "Between the road conditions on 511 and the camera views, you can get a good picture of what is out there and make better driving decisions."

Bridge Anti-Icing

Roger Klasna, District 6 DOMM in west-central Nebraska, noted that again this year, his district has six automated bridge anti-icing systems at three locations on Interstate 80, adding that these systems provide real-time application of anti-icing chemicals when the system senses ice forming or the deck of the bridge becomes slick.

Klasna also shared the implementation of a new emergency notification software system. "CodeRED has been installed and updated for our operators who initiate communication for local media, truck stops, commercial carriers for long-term road closures or closures that may impact their operations in west-central Nebraska. This is another tool to get timely, accurate information to those who need it most."

When winter weather winds its way to Nebraska, travelers can be assured that NDOT is ready. Armed with technology's tools, they can join the chorus, **"Let It Snow!"** ■

New Website Showcases Aviation Industry's Economic Impact on Nebraska

Results of Nebraska Aviation Counts!, a study of the aviation industry's economic impact on Nebraska, are showcased on NDOT's Aeronautics Division's new website, available at <https://www.nebraskaaviationcounts.com/>. The study, funded by the Federal Aviation Administration and the State of Nebraska, at a cost of around \$400,000, analyzes aviation's overall role in the state's economy to help inform state decision-making.

NDOT commissioned GBA, an engineering firm from Lenexa, Kansas, to do the study as a tool for determining how best to support aviation and grow Nebraska's economy. GBA developed an updated economic impact analysis to provide, not just a snapshot in time, but a living document that can be updated as needed by individual airport operators.

"The impacts of this study will resonate for decades to come," said NDOT Director Kyle Schneweis. "As we explore new opportunities to capitalize on our economic investment and expand into emerging areas of growth, this provides the compass to ensure we are headed in the right direction."

While some of the study results were not surprising, others spotlighted areas that aren't always thought of as economic drivers, including aerial firefighting, and use of airports by visiting doctors and medical clinics.

"From a broader perspective, the results confirm what we have known all along," said NDOT Aeronautics Director Ann Richart. "Nebraska airports are a dynamic part of the state's economy. This study digs deeper to identify direct and indirect impacts on Nebraska's businesses and communities. We are excited to share this information with the public and showcase the benefits provided by the state's airport system on our new website."

Others who provided assistance to GBA in the study included Kimley-Horn, Olsson, Marr Arnold Planning, and Dr. Christopher Decker of the University of Nebraska at Omaha. The study was the first of its kind since 2002 and augments information gleaned from an economic snapshot in 2014. ■

- Aviation has an \$8.6B impact on Nebraska's economy annually. Contributors include:
 - Tenant/business activity - \$2B
 - Construction - \$87M
 - Visitor spending - \$4.5B
 - Military spending - \$2.1B
- Aviation creates 90,282 jobs with a \$3.5B payroll.



Nebraska DOT Airport Inspection with Drones



Drone inspection product obtained during UAS operation and evaluation at Creighton Airport earlier this year.

By Jon Starr, BTSD and Dave Lehnert, Aeronautics

Nebraska DOT has been implementing a UAS (Unmanned Aircraft System) program over the past year. In doing so, we are using drones for a variety of tasks, and evaluating how well they increase our efficiency, provide better quality data, and enhance safety; not only for NDOT employees but the public as well.

As a result of the merger of Aeronautics and Roads to create the Nebraska DOT, we've been working together to implement UAS and other technologies into our airport inspection process. The goal of this investigation is to evaluate traditional inspection processes vs. processes using the UAS to determine if we can meet the overarching goals of efficiency, data quality and safety. The airport inspection process includes evaluating runway approaches for obstructions, identifying which obstruction is the controlling obstruction, whether there are any close-in obstructions, and identifying any objects that violate the Primary Surface or the Transition Zone.

We performed UAS missions at the Creighton airport earlier this year to support this effort. This airport was one of a few airports that were considered good sites to perform the initial drone operation and evaluation. It was chosen based on current conditions, and because a recent inspection had been completed using traditional methods with which we could compare results. The operation involved members from the NDOT UAS team (Jon Starr and Shawn Jording), as well as Aeronautics Division team members (Dave Lehnert and Thomas

Jacobson). In addition, the team coordinated with the Creighton Airport Authority, which published a Notice to Airmen (NOTAM) regarding the operations and timelines.

The team utilized a DJI Phantom 4 RTK system to gather data on all four approaches, as well as the entire airport property. We are analyzing the data and looking at different workflows with technologies to produce deliverables that satisfy the inspection requirements. Early analysis has shown that the data acquired via the UAS is proving to be highly accurate, more efficient and more easily understood compared to traditional methods of visual observation. We will continue to work on this proof-of-concept and provide a future update on our findings. ■



Jon Starr, member of NDOT UAS team, performs drone operation at Creighton Airport.

Ernie Voss Retires with 66 Years of NDOT Service

A new milestone was achieved when Ernie Voss retired in October 2020 with 66 years of service at NDOT, capping a career that spanned 14 directors at the Department.

In recognition of Ernie's accomplishment, here are excerpts from an article originally published in the April-May 2014 Roadrunner, as he reflected on 60 years of service.

Voss Reflects on 60 Years at NDOT

Since 2009, Ernie Voss has been at the top of NDOR's "Top Twenty" List – the list that documents employees in the department with the most years of service. His record-setting 60 years of service at Roads is not likely to be surpassed anytime soon.

Voss began permanent employment on March 22, 1954, at what was then called the "Department of Roads and Irrigation" at the age of 19, after completing two years of studies in Electrical Engineering at UNL. Although he had been temporarily employed at the department during the summer months of 1952 and 1953 as a rod man on a survey crew, Voss's first permanent employment came the following year, when he was hired as an Engineering Aide II and paid \$280 a month. Voss worked in the Testing Laboratory of what was then called the Materials & Tests Division in the Materials & Tests Building, the first building of the present three-building complex.

Promotions Begin

During the years 1955 to 1971, Voss was gradually promoted to Engineering Aide II, III, IV, V and Engineering Associate I while still working in the Testing Laboratory, with about 10 years spent in the Bituminous Section and seven years in the Physical Tests Section.

In 1972, Voss transferred to the Contracts and Lettings Section, with a promotion to Highway Contract Technician, where he checked roadway design plans for



Photo by Jay Bailey

Ernie Voss accepts his 60-Year Service Award from NDOR Director Randy Peters.

correct pay items; assembled project information proposals; prequalified bidders; issued bidding proposals; issued addenda and would read bids aloud on letting day.

Lighting Projects

In 1977, Voss transferred to the Lighting Unit in Roadway Design Division with a promotion to Engineering Associate III and has worked there for the past 37 years. At his present position as Lighting Unit Supervisor, he is responsible for providing correctly designed lighting projects for roadways within the state highway system. He was responsible for the majority of I-80 lighting projects in the Omaha area since the start of the I-80 rehabilitation in 1989.

Voss compared those early years working at NDOR in the 1950s with today, noting the many changes that have occurred, including the introduction of the computer. Over the years, he has witnessed the transition from paper to the use of computer software in accomplishing tasks associated with planning and designing roads, including lighting projects.

Happy Employee

Voss said he was happy that he chose to work for the Department of Roads and Irrigation, which is what it was called until 1957, when it was divided into three separate state agencies: Department of Roads, Department of Motor Vehicles and Department of Water Resources. He has enjoyed the opportunity to use his electrical knowledge on the job and to have steady employment even when the economy was suffering and many of his friends were being laid off.

Voss offered this advice for new employees: "There will be times when you will be given a job or jobs that you dislike. Bite the bullet and give the job your best. You and your life will be better for it." ■

Two New District Operations & Maintenance Managers Appointed

Rankin District 1 DOMM



Bob Rankin

Bob Rankin is the new District 1 Operations and Maintenance Manager (DOMM) for the Nebraska Department of Transportation, in Lincoln. District 1 includes Butler, Cass, Gage, Jefferson, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Saline, Seward, and Saunders counties. Rankin succeeds Roger Kalkwarf, who retired August 11, 2020 with

47 years of state service, 22 years as the DOMM.

Originally from Minnesota, followed by 17 years in Kansas, Rankin earned his Bachelor of Science degree in Mechanical Engineering from Wichita State University in 1997. After working for five years as a design engineer at National Crane in Waverly, Nebraska, Rankin began his career with NDOT in 2003 in District 2 as a pool engineer for three years, followed by three years in the Rail and Transit Division. In 2009, he assumed the duties of Assistant Construction Engineer in District 1.

Rankin said he has enjoyed seeing construction/maintenance projects being completed and the improvement and preservation that those projects have on the NDOT assets. Also, he appreciates the work ethic and skills that NDOT employees possess as they are committed to their jobs. He noted that continuing to provide the training needed to develop those skills is one of his top goals in his new position.

"I want to make sure we train and mentor others to assume the leadership and management duties as our aging work force begins to retire," said Rankin. "It is important to plan for succession in order to continue the duties of NDOT in a seamless manner."

Rankin's immediate area of focus is gaining a thorough understanding of what his new duties and responsibilities are, and how he can use them to facilitate the needs of District 1 Maintenance personnel. This dovetails with his philosophy toward management—to support and enable his staff.

Integral to this support is providing an open and transparent workplace at all times. "My office door is always open for team members to stop in and talk with me."

Bob has been married to his wife, LaRae, for 40 years. They have three grown children and seven grandchildren. In his spare time, Bob enjoys gardening, working around the house, spending time with family and following the sports activities of his grandchildren.

Merchant District 4 DOMM



Ben Merchant

Ben Merchant is the new District 4 Operations and Maintenance Manager (DOMM) for the Nebraska Department of Transportation, in Grand Island. District 4 includes Adams, Buffalo, Clay, Custer, Fillmore, Gage, Greeley, Hamilton, Hall, Howard, Merrick, Nance, Nuckolls, Polk, Sherman,

Thayer, and Valley counties. Merchant succeeds Allen Horak, who retired June 2, 2020 with 45 years of state service, 22 years as the DOMM.

Merchant has worked at NDOT for 16 years, all in District 4. The last 10 years he was a Project Manager and prior to that he worked 6 years as a Construction Tech, both in Grand Island.

According to Merchant, aspects of his job that have brought the most enjoyment include working on a variety of construction projects, building professional relationships throughout the industry and having an influence on the quality of highways for the people of Nebraska. More recently, he said he has enjoyed getting to know the District 4 maintenance staff, adding, "I am impressed with the quality and professionalism of our people and their work,"

As far as goals he wants to achieve in his new position, Merchant focused on several key areas. "My immediate goals would be to continue to build on what we already do well, to focus on increasing our efficiency and effectiveness whenever possible, and to look for ways to show the people of Nebraska what a great job our people are doing."

Merchant's philosophy toward management includes giving team members the tools they need to succeed in their jobs and then allowing them to do what they do best.

"Everyone comes to the table with a point of view that they have developed from life experience," Merchant said. "It is important to listen and learn where people are coming from before making managerial decisions."

Ben has been married to his wife, Amy, for 21 years. They have two sons, Truitt, 16, and Zander 14. In his spare time, Ben enjoys fishing, golf, church and attending his sons' sports and other activities.

EMPLOYEE SPOTLIGHT

Lally Receives Great Gifts of Gratitude Award

By Maryanne Jacobs
District 5 Project Manager

On September 9, Melissa Lally, District 5 Permit Officer, was honored with a Great Gifts of Gratitude Award. This program, sponsored through Great Western Bank, is to recognize outstanding community members who tirelessly give back to their communities, especially during the COVID-19 pandemic. Out of 600 nominations in seven states, Melissa was chosen as one of the winners. She was rewarded with a large Yeti cooler with many accessories for camping.

Always helpful and positive, Melissa has been employed in District 5 at NDOT for eight years. She started working as a Construction Technician and has been the District 5 Permit Officer for five years. She and her husband Chris make their home in Minatare along with their two dogs, Ziggy and Josie. Melissa's mother, Marcella Kreiling, served as an excellent role model, retiring this past January after 32 years with the Department as a Senior Maintenance Worker.

Melissa volunteers for many community events throughout the year. She is a member of the Minatare Action Committee, which helps with Tabor Days, Minatare's annual village celebration. This committee also gives to the children of the community with parades, Halloween treats and school activities. She and her sister play Taps on their trumpets annually at the Minatare East Lawn Cemetery. Although with smaller attendance this year due to the pandemic, they both played on Memorial Day.

Great Western Bank employees Karen Wickard, Business Manager, left, and Kathy Holten, Branch Manager of the Scottsbluff location, right, present Yeti cooler to Melissa Lally, Great Gifts of Gratitude Award recipient.



Melissa has assisted with the Old West Hot Air Balloon races in Mitchell for several years. She volunteers at the polling stations in Scotts Bluff county for elections. She and her husband participated in the local program to "Sponsor a Senior" this year for our graduating high school seniors. Melissa also coordinates blood drives several times per year at the NDOT District 5 Headquarters at Gering, inviting both Department staff and Scotts Bluff County staff to donate. She ensures homemade treats are provided for donors' recovery purposes.

Melissa has a close family and she and her husband are very involved in their nieces' and nephew's lives. Melissa is always willing to help her coworkers and community members whether in daily activities or emergencies.

Congratulations, Melissa, on your award recognizing all your selfless giving to make our community better! We are proud to have you on our NDOT team! ■



Photos by Mindy Whiteley and Brandy Robinson, District 5



A REMOTE LEARNING OPPORTUNITY

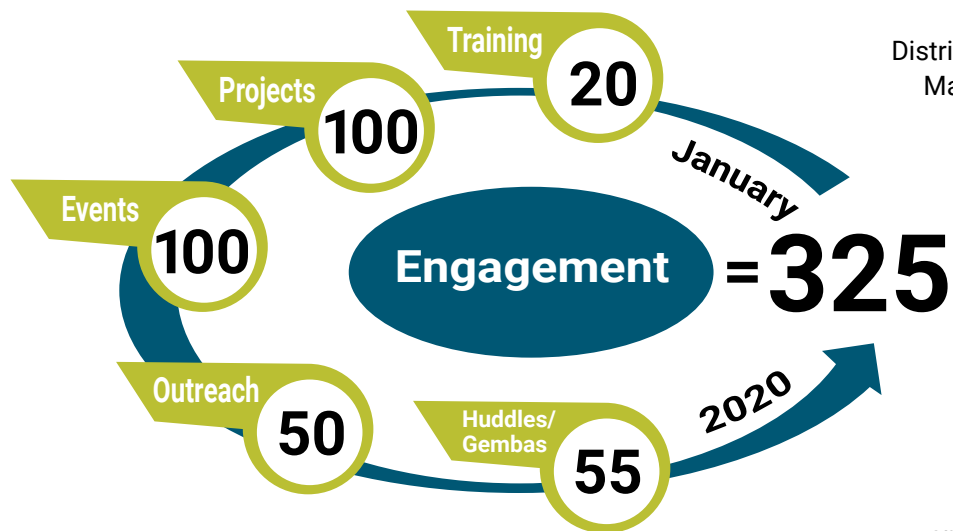
By **Jessie Sampson and Maria Bartak**
NDOT Communications Division

Due to the pandemic, the shift to remote learning became prevalent in the lives of families and educational institutions across the United States. That shift to remote learning led the Department of Transportation (NDOT) to create the Knowledge Nook, an educational series that gives students of various educational levels the opportunity to learn more about different areas within the department from the comfort of their own home. The feature is available on NDOT's social media site.

Each Knowledge Nook edition has a specific theme with content that follows suit in the form of either worksheets, games, experiment activities or videos. This year we had the opportunity to feature several areas of NDOT, including highway archeology, environmental, operations, materials and research, aeronautics, rail and others.

Thank you to all who have viewed and supported the Knowledge Nook series and to all the employees who took the time to share their stories and give insight into the many different areas of NDOT. Remember to stay tuned! We are looking forward to sharing next year's features starting again in January.

Continuous Process Improvement Achievements Celebrated



During Center of Operational Excellence (COE) Month, celebrated in October, a number of teammate success stories and continuous process improvement achievements were highlighted.

Here at the Nebraska Department of Transportation, we're dedicated to serving Nebraskans the best that we can. We work together with teammates and partners to streamline processes, challenge our business practices, and ultimately provide the best possible statewide transportation system.

Here is a sampling of these stories that showcase NDOT teammates consistently going above and beyond to save time, money, and energy, increase safety, and think outside the box, all while serving Nebraska.

District 2 – 5S Success at 108th Street Mechanic's Shop

District 2 found success this year by utilizing the 5S process: sort, set in order, shine, standardize, and sustain. These steps involve going through items in a work space, deciding what is necessary, organizing items, cleaning and inspecting equipment, setting up procedures for performing these tasks, and developing a plan for leadership/management to drive sustainability in the process.

District 2 District Operations Maintenance Manager, Tom Renninger, helped identify the S. 108th St. Mechanics' Shop as an area that needed improvement. During the 5S process, all items were sorted to determine if they were needed. Once sorted, the back wall was cleaned and painted. A new work bench was constructed and a shadow board was built. Tools were laid out in an optimal position and a painted outline shadow was created around the tools as visual management. Labeled bins and additional shelving was purchased to accommodate other supplies and parts. Once everything was sorted, cleaned, put into place, and labeled, the team developed a "shine" daily and weekly checklist to ensure the upkeep of the improved area.

The newly organized work space will ensure shop mechanics can perform maintenance work on State of Nebraska vehicles in a timelier fashion, keeping more vehicles on the road. A pre-audit of the area scored a "poor" rating of 30%. Post-event auditing revealed an "excellent" score of 80%, an increase of 166%.



The 5S team stands in front of the newly decluttered, painted and organized mechanic's bay back wall. *Left to right: Chris Williams, Brian Ziska, Ray Caspers and Tim Callahan. Not pictured: Jay Partch.*

District 4 – Executive Savings on District 4 Highway Projects

Earlier this year, NDOT's District 4 staff successfully saved time and money by eliminating or changing components in several highway projects, without jeopardizing the quality and safety of the projects. These projects include: 1) in Ord heading northeast on Highway 70; 2) US-6 and Adams intersection; and 3) I-80 Waco to Utica. Due to these effective and efficient decisions, District 4 will potentially save nearly \$415,000 of state and federal funds that can be reallocated to other NDOT projects.

One of these projects was on a 5.4 mile stretch of I-80 Waco to Utica. The District 4 team decided to shift their plans from doing concrete pavement repairs during the night to working during the day due to the decreased traffic volumes. Shifting this project to day work allowed the staff to eliminate the need to set up and pay for night lighting, saving time and money. It also eliminated additional changes to lane closures, reducing the inconvenience to drivers.

Operations – New Liquid De-Icer Purchasing Process Yields Savings

Keeping Nebraska's roads safe during winter travel is a top priority for NDOT's Operations Division. Each year, NDOT purchases several different products that are applied to the road during winter operations to decrease the driving hazards of ice and snow.

Last year, the process for purchasing liquid de-icers was redesigned. A new, more efficient process with 16 fewer steps, allows staff to get invoices processed faster, resulting in paying vendors sooner.

The changes included switching staff member roles and eliminating the need for printing hard copies by implementing digital approvals. After using the new process for several months, the time to complete these purchases from beginning to end has been gone from 39 days to 12 days, a 69% reduction.

Highway Operations Assistant Division Manager, Ty Barger, has been so pleased with the results, they will now apply the new process to other de-icing products NDOT purchases. "We will build on that success," Barger said. "When vendors get paid promptly, there's greater interest in doing business with Nebraska. More competition means better pricing."

The cost savings resulting from new efficiencies of the liquid de-icer process improvement project will positively impact our customers, the taxpayers of Nebraska, for many years to come.



The liquid de-icer project team identifies issues and brainstorms new solutions to improve timelines to their customers. Team members include Janie Vrtiska, Jasmine Dondlinger, Kurtis Peck, Steve Biltoft (standing), Carrie Olson and Walter Moy.



Walter Moy leads the liquid de-icer project team through the current state process mapping, a way to visually display the process and bring the team together to understand everyone's role. Included in the photo are Kurtis Peck, Janie Vrtiska, and Jasmine Dondlinger.

Flood Matrix Helps Districts Prepare for Flooding

We've learned a lot since the 2019 floods. As part of a new emergency response protocol, NDOT has developed a flood matrix to determine the risk of potential flooding from upcoming storms. The matrix is a simple algorithm, giving districts an indication of what they might expect one to two days before a storm arrives. Prior to the matrix, districts had weather forecasts, but no data that would help them know what to prepare for. This increased the likelihood that there would not be enough response time prior to a potential flood event.

With the new matrix, a NDOT meteorologist monitors the weather; when a storm is predicted, they contact the District Operations and Maintenance Manager (DOMM) of the affected area. Together, they fill out the matrix. The matrix takes into account 2-year, 5-year or 10-year record rainfall amounts for each county and combines that with the probability for water over the road, ground saturation, and ice pack. The final calculations give a risk level and indicate how to proceed. This tool will help the department better prepare for potential flooding, ensuring necessary steps are taken to keep travel open and safe across Nebraska. ■



Flood damage near the Hwy 34/75 intersection at La Platte.



Damage from 2019 flooding in Nebraska.



Damage from 2019 flooding in Nebraska on Highway 30.

Kimball County Transit Center Opens for Business

By Kari Ruse
NDOT Transit Manager

Elected officials and members of the community attended the grand opening of the Kimball County Transit Center on September 24, 2020. The 10,500 square foot building in downtown Kimball was renovated after sitting vacant for 15 years.

The Nebraska Department of Transportation passed through funds from the Federal Transit Administration for the project and provided technical assistance to the project champion, Christy Warner, Kimball County Transit Administrator. The renovated transit center includes offices, a dispatch area, conference rooms and ample vehicle storage with a wash bay.

Darla Anderson Faden, Kimball County Commissioner thinks the project is uplifting for the entire community. "You look at the other building and it was almost depressing," Faden said. "And you look at this one and you say we are going somewhere. This is good!"

Bill Kingsman, Kimball County Commissioner said, "More people have commented they never thought that building could look that good." Another County Commissioner, Larry Engsterom, said, "This is really a good deal for Kimball, Nebraska."



The newly renovated building is no longer a blight on downtown Kimball.
Photo Credit: Olsson Associates

With financial operating support from federal, state and local funding sources, Kimball County Transit vehicles traveled 140,000 miles and provided over 10,000 rural trips in fiscal year 2020.

Kimball County Transit has grown significantly in the last four years and operates in a five-county service area with a fleet of 12 vehicles. In addition to regional transportation across Nebraska's Panhandle region, the service also extends across state lines to Cheyenne and Denver.

Frequent rider, Joan Knapp, is thrilled with the service and the new facility. Ms. Knapp said, "This is the best idea in Kimball. It is the best idea in the whole Panhandle. We've got something really great going here and that's the transit system. It will take us to a doctor's appointment here in town. They will take us to Cheyenne, Scottsbluff or almost anywhere." ■



The facility includes a garage to house 12 federally funded transit vehicles and a wash bay. Photo Credit: Olsson Associates



The building was in disrepair and sustained structural damage due to a leaky roof. Photo Credit: Kimball Co. Transit

NDOT Transit Tech Fair and Managers' Workshop Offers Resources

By Kari Ruse
NDOT Transit Manager

On August 5-6, NDOT Transit partnered with the Nebraska Association of Transportation Providers to co-host a Transit Technology Fair and Managers' Workshop in Kearney. Fifty managers, dispatchers and drivers from across the state attended the two-day event, 24 virtually and 26 in person.

During the Tech Fair, eight software vendors demonstrated their transit technology solutions. The vendors are pre-approved by NDOT Transit and our mobility management consultants. Software will allow transit agencies to automate scheduling, track vehicles in real time, collect data, run reports, collect fares electronically, coordinate trips with other agencies and receive vehicle maintenance reminders. Managers were strongly encouraged to select a solution that works best for their agencies and contract directly with vendors to implement the software.

During the Transit Managers' Workshop, Bill Biven, Nebraska's Statewide Mobility Manager, shared information about coordination projects in the northeast region of the state, the Norfolk flex route study and intercity bus expansion. NDOT Transit Manager, Kari Ruse, updated managers about the \$5 million emergency relief grant from the Federal Transit Administration, COVID-19 resources, and ongoing compliance issues. A salesman from Master's Transportation was also on hand with a 2020 Ford Transit that managers will soon be able to add to the rural transit fleet. ■



Rural transit managers inspected the 2020 Ford Transit and asked questions about options to determine if the vehicle will meet their future needs."

NDOT Transit Awarded \$5 Million Emergency Relief Grant

The NDOT Transit Section received a \$5 million award from the Federal Transit Administration's Emergency Relief Program. The funding will be used to reimburse rural transit agencies for 100 percent of their COVID-19-related expenses.

Eligible projects include paying transit employees for wages lost due to a reduction in service, installing driver and passenger safety barriers in vehicles, purchasing electro-static disinfectant sprayers and hiring local companies to sanitize vehicles.



Kari Ruse, NDOT Transit Manager, discusses data collection with transit managers.