

WAYFINDER

2021, Issue 2



WAYFINDER

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NEBRASKA

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION

ABOUT THE COVER:

U.S. Highway 275 (US-275) at the Elkhorn River north of Scribner. NDOT held a groundbreaking ceremony on July 14 to celebrate the start of construction to expand approximately 18.5 miles of US-275 from a two-lane highway to a four-lane divided expressway from Scribner to West Point.

Once the construction of this segment is complete in 2024, 91 of the 115 miles, nearly 80 percent of the US-275 Norfolk to Omaha Expressway, will be constructed as a four-lane divided expressway.

(See Expressway story on pages 8-10.)

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FROM THE DIRECTOR

If you're like me, summer is going much too quickly. Summer is a time of many activities, and, hopefully, you have had the opportunity to spend time with your family and connect with friends. It also is a time of visible activity for the department, namely construction projects on many of our highways. I know the public appreciates this effort, but they can also get weary of the state's unofficial flower, the "orange cone."

We can blame or thank this annual construction cycle on Nicolas Carnot, who is known for the second law of thermodynamics. The second law of thermodynamics basically asserts that systems go from a state of higher order to one of less order. Thus, our transportation system is destined to decay. Addressing this "decay" is a core function of the department as we develop strategies to slow this process of deteriorating infrastructure.

While construction projects are an obvious representation of our efforts, they are just the tip of the iceberg. Considerable talent and work were required to get us to this point. Many teammates with various skills were needed for us to be successful in areas such as:

- Transportation/Modal Planning
- Material Sciences
- Pavement/Bridge Design
- Highway Design
- Environmental Sciences
- Traffic Engineering/TSMO
- Public Relations/Communication

There is no way to list all the talents needed to be successful in this short article. My point is that we are an incredible organization that makes it appear seamless in serving the citizens of Nebraska. I constantly marvel at and am humbled to be part of this team.

Additionally, with all this activity on our transportation system, please reflect on your safety and that of the travelers. As travelers negotiate our work zones, let's always look for ways to minimize confusion/surprises and reduce inconvenience. I desire that we all make it home safely and remember "Buckle Up Phone Down."



John R. Selmer

Two Nebraska Scenic Byways Become National Scenic Byways

"From the first time I ever drove along it, I've been in love with Highway 2. From Grand Island to Alliance, Highway 2 takes you through the Nebraska Sandhills, the largest area of sand dunes in the western hemisphere. Writers inevitably use a metaphor of the sea to describe the hundreds of thousands of acres of grass – and hundreds of thousands of acres of sky. Like the sea, the emptiness of the Sandhills gives the travelers a strange sense of comfort, there's a feeling that as long as these two things are in order, the earth and the sky, all the rest can be forgotten until tomorrow. Highway 2 is not just another highway that goes somewhere, Highway 2 is somewhere."

Charles Kuralt, "On the Road," CBS TV Network

By Bev Kellison
Communications & Public Policy Division

On February 16, 2021, the Federal Highway Administration (FHWA) designated the Sandhills Journey Scenic Byway and the Lincoln Highway Scenic and Historic Byway as the first of Nebraska's nine State Scenic Byways to receive National Scenic Byway designation. These two byways, representing areas of historic and scenic significance in Nebraska, will now have a new prominence that includes national promotion to potential visitors. The announcement was issued following development and submission of extensive nomination materials justifying why each of these byways should receive the national designation. The two byways are featured in FHWA's 2021 Designations Booklet (Federal Highway Administration National Scenic Byway 2021 Designation Booklet (dot.gov)) and the routes are outlined on the map on page 7.

Nomination Process

On September 22, 2019, President Trump signed the "Reviving America's Scenic Byways Act of 2019." This bill revived the National Scenic Byways Program, which had been dormant since 2012. In early 2020, the FHWA announced a one-time opportunity for states to nominate State Scenic Byways within their borders to become National Scenic Byways. At the time, Nebraska had nine State Scenic Byways, highlighting the many beautiful and historic places within the vast area of the state, but was one of only three states that had no designated National Scenic Byways.

Although Nebraska's Scenic Byways are overseen at the state level by the Nebraska Tourism Commission, federal law required that the state Department of Transportation designate a state coordinator to oversee preparation of the nominations, assure NDOT's approval of the nomination materials, and formally submit the nominations to FHWA for consideration.

Two Nebraska State Scenic Byway organizations developed the extensive nomination materials required for submission to the FHWA for consideration to receive the National Scenic Byway designation. "The Lincoln Highway Scenic and Historic



Byway" organization is led by Sarah Focke, of Kearney, and the "Sandhills Journey Scenic Byway" organization is led by Terri Licking, of Thedford.

Lincoln Highway Scenic and Historic Byway

The Nebraska Lincoln Highway Scenic and Historic Byway encompasses all of US Highway 30, border to border across Nebraska. From east to west, it begins at the Missouri River Bridge in Blair, Nebraska, and continues for more than 450 miles west across Nebraska to the Wyoming border just east of Pine Bluff, Wyoming. The route goes through 13 counties and 49 communities, including Blair, Fremont, Columbus, Grand Island, Kearney, North Platte, Ogallala, Sidney and Kimball.

The Lincoln Highway was America's first trans-continental highway, and followed closely the historic transportation route of the "Great Platte River Road" that began with the early Native Americans, fur trappers and traders, westward migration routes, Pony Express and the Union Pacific Railroad. Driving across this roadway today is a reminder of what the road was like during the era of transportation development in America.

Sandhills Journey Scenic Byway

The largest area of stabilized sand dunes in the Western Hemisphere, the Nebraska Sandhills, occupies nearly 20,000 square miles across north central and western parts of the state. In this timeless, windblown ocean of undulating dunes, native grass and vivid blue lakes, nature is still master of the land. Nebraska Highway 2, the Sandhills Journey Scenic Byway, bisects this ancient ground, leading travelers to treasures that cannot be found anywhere else.

At the byway's eastern end near Grand Island, an ancient rite of nature occurs. The largest gathering of cranes on Earth descends on the shallow Platte River in a stopover on their annual spring migration northward. Hundreds of thousands of Sandhill Cranes make brilliant morning eruptions into the sky as they leave their nighttime river roost to feed.

The Nebraska sky itself is another natural phenomenon visible from this byway. The sunrises are a kaleidoscope of color in a sky of blue, and with the lazy travel of cotton candy clouds or the ominous ones of an approaching storm, the sky is everchanging. The sunsets provide a firestorm of color on the western horizon. Remote areas of the byway, away from artificial light, are some of the best places to experience dark skies, perfect for star gazing and astronomy of the best kind.

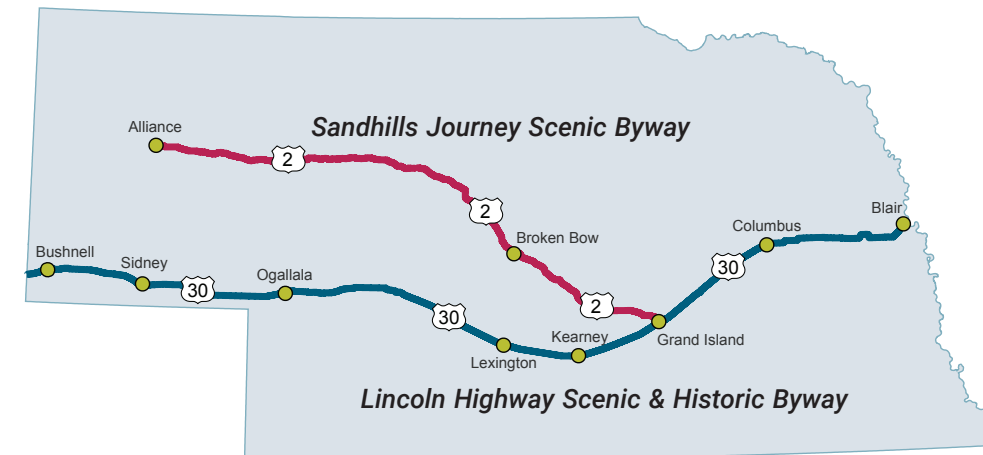
Corridor Management Plans

Nomination documents prepared by the byway organizations are each nearly 200 pages long, not counting photos. The heart of the nomination document is the Corridor Management Plan. These detailed plans address very specific federal regulatory requirements that assure National Scenic Byways meet high standards of safety, services, and amenities, along with access to extraordinary scenic and historic features that visitors want to see. Draft Corridor Management Plans for both byways were carefully reviewed by division heads and staff of several NDOT divisions, including Materials and Research, Traffic Engineering, Right of Way, Project Development, Roadway Design, Strategic Planning, Legal, and Communications and Public Policy, as well as executive leadership. NDOT staff reviewed and edited nominations materials and provided other support and assistance to the byway organizations to assure that all of the many nomination requirements were met.

Next Steps

NDOT and the byway organizations are awaiting publication in the Federal Register of a Notice of Funding Opportunity (NOFO) that will announce the availability of one-time federal funding to assist with signage and other enhancements to the newly designated National Scenic Byways. This will require preparation of another set of application materials to compete for a portion of the one-time \$16 million disbursement. Legislation is under consideration in Congress that would revive ongoing funding availability to National Scenic Byways. ▲

Two Nebraska Scenic Byways Receive National Scenic Byway Designation



"To travel along Nebraska's Lincoln Highway Scenic and Historic Byway is to travel through America's transportation history. Previously known as the "Great Platte River Road," the Lincoln Highway Scenic and Historic Byway was traversed by Native Americans and the fur traders who first began exploring the west. The route was then used in America's great westward migration, first by Oregon and Mormon trail pioneers, then by the Union Pacific Railroad, and finally by America's first transcontinental highway – the Lincoln Highway. Modern travelers, driving the route from Blair to Kimball, will experience the small rural towns that developed along the route every six to twelve miles across the entire byway."

Muriel Clark, Byway Volunteer



Highway 2 near Loup River



Present day Glurs Tavern in Columbus. Inset photo: Original Glurs Tavern along Lincoln Highway in Columbus.

Nebraska Expressway System Finds Foothold into Future

By Linda Wilson
Communications & Public Policy Division

In 1988, the Legislature placed into law (LB 632) the creation of an Expressway System. The first needs analysis presented by NDOT in December 1988 identified the highways to be included. The Nebraska Expressway System was expanded to encompass 16 corridors of approximately 600 miles, based on: socioeconomic data, connecting urban centers to the Interstate (population over 15,000), serving commercial traffic, and continuity between expressway segments.

One of the first expressway projects, a segment of the Heartland Expressway from Kimball to Scottsbluff, was completed in November 1995. According to Doug Hoevet, District 5 Engineer, the Heartland Expressway was envisioned to be a four-lane highway connecting Denver, Colorado to Rapid City, South Dakota. This segment gave the project a jump start, but progress beyond that was hampered in part by limited funds.

In addition to continued work on the Heartland, several other expressway projects completed in the mid-90s and early 2000s included: US-77 through Cortland; US-81 south of York to McCool Junction; US-275, L28B, and US-6, Omaha to Fremont; US-30, Columbus to Schuyler; US-275 to N-57, Norfolk East; and N-370, I-80 to Bellevue.

Motorists traveling throughout the state of Nebraska have come to appreciate the benefits of the Expressway System, including reduced congestion, greater mobility, safety, comfort, and convenience. Expressways also provide increased opportunities for economic development in the communities and surrounding areas where they are located. With all these benefits, it is good to know how Nebraska's Expressway System came about, the progress that has been made and plans for completion of the System.

Build Nebraska Act

Recognizing surface transportation needs in Nebraska and the insufficient funding available to meet those needs, funding was provided as part of the Build Nebraska Act (BNA) in 2011 (LB 84). This law earmarks ¼ cent of the state's sales tax receipts to highway widening projects and expressways. Revenue became available in the fall of 2013.

In November 2011, NDOT announced approximately \$600 million in investments to expand 17 expressway, Interstate, or national high priority corridors. To date, 14 of these 17 locations are complete, approximately 70 percent of the Expressway System expansion, or 442 miles. The remaining are under construction or funded for construction and on track for completion.

Transportation Innovation Act

In April 2016, the Transportation Innovation Act (TIA) was enacted, providing NDOT with new revenue to accelerate highway capital improvement, including fast-tracking completion of the Expressway System by 2033. This legislation also authorized the use of alternative contracting methods never before allowed in Nebraska, such as the Design-Build process to help expedite the delivery process of the state's largest capital improvement projects.

Among projects included for the next 10 years of the BNA, the Lincoln South Beltway is the largest and one of the most complex projects the NDOT has undertaken. Construction began in May 2020 on the \$352 million project to connect US-77 and N-2. The NDOT had been working towards delivery of the South Beltway for decades, and following passage of the BNA and TIA, 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.

Investments from the BNA and TIA have been critical to jump-starting NDOT's ability to deliver important capital improvement projects. This has allowed the state to make progress towards building a 21st century transportation system that improves mobility and supports economic development.

BNA PROJECTS COMPLETED 2011 to 2021

- N-133, Blair to Omaha
- US-6, Hastings Southeast
- N-10 Kearney East Bypass
- US-385, South of Alliance
- Heartland Expressway
- US-77 Near Wahoo
- I-80 Lincoln, NW 56th to US-77
- I-80 Eastbound, Omaha: 126th St. to 96th St.
- I-80 Westbound, Omaha: I-480 to 60th St.
- I-680 Northbound, Omaha: North of Center thru Pacific St.
- US-75, I-80, 24th to 13th St. Interchange, Omaha
- US-75, Plattsmouth to Bellevue
- US-30, Rogers to North Bend, Schuyler to Rogers
- US-75, Nebraska City Southeast

US-30, Rogers to North Bend

BNA/TIA Projects

Twenty-two new BNA/TIA funded projects are either under construction, in design or in planning stages. The projects currently under construction include: N-7, Bassett to Springview; US-26, Minatare to US-385; US-77, Fremont Southeast Beltway; US-83, McCook to North Platte (Super 2); and soon to be under construction US-275, Scribner (Bypass) to West Point (No Bypass).

More good news: In the fall of 2020, two Federal Competitive Discretionary Grants – BUILD and INFRA – were awarded to expressway projects in the Panhandle and eastern Nebraska, that will complement the BNA and TIA funding. These transportation discretionary grants require a demonstration of project readiness and the ability to meet match requirements of each grant.

The first grant awarded \$20 million to NDOT through the Federal BUILD grant for the expansion of US-75, Murray to Plattsmouth. The \$55.1 million project includes expanding approximately 6.8 miles of US-75/34 to a four-lane expressway, replaces an existing bridge and improves the condition of the existing roadway. The project is scheduled to begin July 2021 with completion in fall 2023.

The second grant awarded \$18.26 million to NDOT through the Federal INFRA grant to fund construction of the next Heartland Expressway segment. Construction began in March 2021 on this \$32 million project that will connect the US-385/L62A junction with the existing expressway segment south of Alliance.



Hwy. 75, Nebraska City Southeast Interchange

Fulfilling the Vision

Another Heartland Expressway project funded through the BNA, US-26 from Minatare to L62A, will be starting the design and plan development phases, with construction to follow later. The current estimate is \$60 million project for this segment and may be divided into smaller project segments.

Hoebet said that he is encouraged by these recent developments with the Heartland Expressway. He and other state District Engineers are optimistic for the future of the remaining expressway projects. With additional BNA and TIA funding mechanisms in place, these investments in the state's transportation infrastructure will improve safety on our highways, promote economic growth throughout the state and fulfill the 1988 vision to expand Nebraska's Expressway System.

"The Department remains committed to completing these long-awaited expressway projects," Hoebet said. "We appreciate the support and patience we continue to receive from the citizens across Nebraska." ▲



Hwy. 385, South of Alliance



Hwy. 133, Blair South

Nebraska's First Super 2 Highway on US-83 North of McCook Opens with Favorable Reviews



Work was recently completed on the first segment of Nebraska's first Super 2 Highway on US-83 by Frazier Creek in Frontier County. Photo by Seth Vlieger, District 7

Super 2 highways are located in more rural areas and provide access control with a limited number of driveways and roads directly connected to the highway.

Key benefits:

- improved traffic operations with more convenient passing opportunities;
- improved cost effectiveness, providing an alternate solution at a reduced cost compared to a four-lane highway.

Work on the first 10-mile segment of the first Super 2 Highway in Nebraska is complete, according to Drew Wilson, NDOT District 7 Construction Engineer. With the final seeding and erosion control work completed, US-83 between mile markers 35 and 45 by Frazier Creek in Frontier County was opened to traffic in early June.

The signature feature of the Super 2 is the addition of passing lanes spread out along the project. The segment just completed added four passing lanes, two in the southbound direction and two in the northbound direction.

"We have had numerous people not only tell us how nice the passing lanes are, but how nice the project looks in general, said Wilson. "It was exciting for those involved to finally see what a portion of the Super 2 looks like."

Work began in the spring of 2020 on the recently completed project, the first of six projects that will be part of the US-83 Super 2. The next project, Lake Maloney South, a 15-mile segment between mile markers 61.82 and 77.03 in Lincoln County, is projected to be built in the 2023 construction season but is subject to change, according to Cameron Craig, District 6 Construction Engineer.

The entire 12-year project stretches over 60 miles from McCook to North Platte. US-83 will continue to be a two-lane highway but will have 16 passing lanes – eight in each direction – to facilitate traffic flow. The project also includes resurfacing, restoration, and rehabilitation of the existing roadway in six phases.

The funding for the passing lanes on this project results from the Build Nebraska Act. Enacted by the state legislature in 2011, the law reassigned one-fourth of one cent of general state sales tax receipts over a 20-year period to road and street construction. ▲



“Moving The Metro” Construction Underway in Omaha Metro Area

In April, the Nebraska Department of Transportation (NDOT) launched this year’s “Moving the Metro,” an interactive map of ongoing and upcoming highway and interstate construction projects in the Omaha metropolitan area. NDOT District 2 Engineer, Tim Weander, shared the map and an update of projects planned by NDOT and other local agencies that will be underway throughout the 2021 construction season. Following is a brief overview of some of the significant projects and anticipated impacts to the traveling public.

I-80, N-66 to N-50

Work started this spring and is scheduled for completion this fall on the Highway 66 Interchange, which is the Mahoney Interchange on the west side of the Platte River continuing to the Highway 50 Interchange. This pavement repair and joint sealing project is 16.5 miles in length and worth \$4.3 million in improvements for the traveling public. Work will be done at night with limited lane closures.

I-680, I-80 to Fort Street

A similar project is located on I-680 beginning at I-80 and traveling north to Fort Street. This pavement repair and joint sealing project is 5.8 miles in length and worth \$5.6 million. Work started this spring and will be completed this fall. This is also a night-work project.

Eastbound I-80 Bridges in Omaha

In Omaha, bridge repair and guard rail replacement will be occurring on I-80 at 50th Street, 42nd Street, 34th Street, and on the bridge on the I-480 north and south on-ramp. Most of the work was completed last year except two segments involving asphalt overlay on 50th Street and the 42nd Street Bridge, which are expected to be completed this summer. This work will require intermittent lane, on-ramp and loop closures, and alternate routes are recommended. This project will be completed in the near future.

I-80 Bridges at 84th Street, Big Papio Creek & Little Papio Creek

This 2-mile, \$10.2 million project from 84th Street to the Little Papio Creek will affect the most traffic of any project this year. Work will involve bridge repairs to three sets of bridges, replacement of guardrails and overhead dynamic message signs, and permanent pavement markings. Work began this summer, with construction scheduled in four phases, and is expected to be completed by November 2021. During the work, there will be closures of traffic lanes, with three lanes of traffic maintained at all times. Motorists are asked to consider alternate routes via I-680 and city streets.



Moving The Metro

These are just a few of the many improvements planned for the Omaha metro area this construction season. Additional information about efforts to build and maintain an efficient, long-lasting transportation system within the Omaha metro area can be found at ["Moving the Metro."](#)

Throughout the busy construction season, NDOT reminds motorists to drive cautiously in and near work zones, pay attention to the work zone signs and flaggers, to slow down, follow detours and Buckle Up, Phone Down.

I-480 Bridges, 20th St.- Missouri River

Work on this 1.2-mile, \$43.9 million project began in March 2021 and is scheduled for completion in spring 2023. On I-480, from 20th Street to the Missouri River, bridges will be repaired, new asphalt will be installed, guide signs and guardrail will be replaced. Throughout the construction activities, some eastbound and westbound I-480 lanes will be closed at separate times for approximately 30 calendar days. During closures, motorists should plan to use I-80 and I-29 as an alternate route. Parking lots under I-480 from 15th St. to 27th St will also be closed at various times.

US-75 Creighton Area Bridges

Work on this \$3.8 million project began in July and is anticipated to be completed this fall. Work involves bridge repairs, new asphalt and permanent pavement markings on 11 bridges on the US-75 and I-480 Interchange and the Burt Street and Cuming Street Bridges. Extensive phasing is required, with much of the work to be done at night. While there will be lane restrictions and overnight closure of on-ramps throughout construction, all I-480 and US-75 traffic lanes and ramps will remain open during rush hours.

US-275, 25th Street to 23rd Street

Work on this \$1.2 million project began this spring and is scheduled for completion this fall. Work involves widening US-275/L Street from 25th Street to 23rd Street to construct dual left-turn lanes at 24th Street. Traffic will be maintained with lane closures.

Elkhorn River Approaches on West Dodge Road (L28B)

Work in the Omaha metro area on West Dodge Road includes a project on L28B, called the Elkhorn River approaches. Construction on this 1-mile, \$3.4 million project began this summer and will be completed this fall. Work consists of new pavement at the Elkhorn River and at Skyline Road, new bridge approaches over the Elkhorn River, repair of the bridge and an asphalt overlay.

NDOT Recognizes Work Zone Safety Awareness Week, Go Orange Day



On April 26, Governor Pete Ricketts signed a proclamation declaring April 26-30, 2021 as Work Zone Safety Awareness Week in Nebraska. He was joined by NDOT Director John Selmer, Fremont Mayor Joey Spellerberg, local business leaders, and project construction partners, who were also celebrating progress on the Fremont Southeast Beltway.



Orange in the front, orange in the back, and safe all over! This crew in District 6 is rocking their #GoOrange day shirts in hopes that you'll help get us home safe every night. Slow down in work zones, and stay off your phone!

The Director's Office holds work zone safety in the highest regard. Deputy Director-Operations Moe Jamshidi, Director John Selmer, and Deputy Director-Engineering Khalil Jaber, left to right, ask you to keep our people safe!



This crew member is working in the field today near Beatrice and wants you to look out for him, just like he looks out for you.

If you're looking for a sign, the Pawnee City crew have a choice selection. But read past the obvious: all of these people have loved ones looking forward to a future with them in it. You can help make sure that happens: *Slow Down, Phone Down!*

The Governor's proclamation was in conjunction with National Work Zone Awareness Week, an annual spring campaign held at the start of construction season to emphasize the need for awareness and caution when driving through highway work zones. This year's theme is *"Slow Down Phone Down."*

The designated week marked the kick-off of reminders that will continue throughout the year urging drivers to slow down, put their phones down, and pay attention when they see orange work zone signs. As part of the week's activities, NDOT participated in "Go Orange Day" on Wednesday, April 28th. NDOT teammates joined safety professionals across the country in wearing orange to create awareness for workers on the front lines in construction zones and in support of families of victims who lost their lives in work zones.



NDOT has teamed up again this year with their transportation partners, Associated General Contractors Nebraska Chapter, to launch billboards across the state. Billboards are located near construction projects in Ogallala, Columbus, Omaha, and west of Lincoln on I-80. The billboards help to create awareness for our people and our contractor partners as construction season gets underway.

Another safety initiative, Buckle Up Phone Down, encourages drivers to take the pledge to keep their eyes on the road and to wear their seatbelts. Thirteen schools and 23 business partners have joined in the effort to spread the message of heightened awareness for distracted driving and of increased seat belt use.

Throughout the busy construction season, motorists are reminded to "Slow Down Phone Down," to be alert, and to buckle up. ▲



39,100 WORK ZONE INJURIES AND **135** WORKER FATALITIES
— OCCURRED IN 2019 —

Safety Spotlight

THANK YOU TO OUR BUSINESS PARTNERS

For saying "YES" to the #BUPD Challenge!

Safety Spotlight

THANK YOU TO OUR SCHOOL PARTNERS

For saying "YES" to the #BUPD Challenge!

— IN 2019 —
SPEEDING WAS A FACTOR IN
31% OF FATAL CRASHES IN WORK ZONES.



RIDE FOR LIFE

On your motorcycle, there's more to the ride than going from one place to the next. Your ride is your freedom and infinite thrilling adventures. It's your history and the accumulation of years learning from your family as you rode with them. Your heritage speaks of greatness, riding through generations. Don't let that legacy end with you.

TAKE A MOTORCYCLE SAFETY COURSE.

"Here at NDOT, we have a 'Ride for Life' motorcycle safety campaign that is underway throughout the year to encourage motorcycle riders to take a motorcycle safety course to decrease crashes and injuries."

Bill Kovarik
Highway Safety Office Administrator

NDOT Promotes Motorcycle Safety Awareness Year-Round

During the warmer months of summer, as motorcyclists are out on the roads in full force, motorists are reminded to be on the alert and to share the road. Riders are also reminded to use extra caution and to consider taking a motorcycle safety course. That reminder extends beyond summer and into fall.

"Motorcycle safety is year-round," said Bill Kovarik, NDOT's Highway Safety Office Administrator. "Here at NDOT, we have a "Ride for Life" motorcycle safety campaign that is underway throughout the year to encourage motorcycle riders to take a motorcycle safety course to decrease crashes and injuries."

According to the National Highway Traffic Safety Administration (NHTSA), in 2019, there were 5,014 motorcyclists killed in traffic crashes, a decrease from 2018 (5,038). But those deaths accounted for 14% of the total highway fatalities that year. Per vehicle mile traveled in 2019,

motorcyclists were about 29 times more likely than passenger vehicle occupants to die in a motor vehicle crash and were 4 times more likely to be injured.

Kovarik emphasized that both motorcyclists and motorists need to be aware of their surroundings. Checking blind spots, mirrors and using turn signals are necessary when changing lanes and when passing.

Also, with distracted driving on the rise, this could mean the difference between seeing a motorcyclist or not when preparing to change lanes. Don't let one text change anyone's life forever! Remember: Buckle Up. Phone Down.

Riders need to take precautions as well. "In addition to taking a defensive driving course, wear protective gear, including a DOT-compliant motorcycle helmet, make yourself visible, and

always ride sober," Kovarik said. "Keep your bike in its best working condition and be aware of any road hazards and dangerous weather conditions."

Don Butler, NDOT Highway Safety Engineer and motorcycle safety course instructor noted, "Motorcycle riders are a community brought together by the thrill and freedom of riding a motorcycle. Like any adventure sport, safe motorcycle riding is about matching risk with skill. A motorcycle safety course is a great way to jumpstart the development of your physical and mental motorcycle skills on your way to a lifetime of skills refinement."

Additional information about the Motorcycle Safety Foundation Basic Rider Course (BRC) is available at dot.nebraska.gov/safety/driving/motorcycle/. ▲

NDOT's INNOVATION CHALLENGE

Celebrates Fifth Year of Competition

Calling all NDOT Innovation Challenge aficionados: The countdown is on! Which one of this year's employee entries will be named as the next Innovation of the Year?

This has been the burning question during each of the past five competitions at NDOT. The Innovation Challenge, has become synonymous with the intensity and ingenuity of competition, the intrigue of figuring out who will make it to the final four, and the excitement of finally hearing the announcement during the Showcase that everyone has been waiting for: Innovation of the Year, which comes with cash prizes – and bragging rights.

But even more importantly, these employees are recognized for going above and beyond in their jobs to improve the department and make a positive impact on their communities.

According to Korey Donahoo, Performance Management Engineer, Innovation Challenge Team Lead, "Overall, the quality and number of innovations submitted has remained high, which is good news. It reflects really well on our team at NDOT."

In addition to recognition of top innovations, the runners-up and four additional winners, members of the "Elite Eight" are recognized. The NDOT Director's Office also selects innovations to be recognized and awarded at the Innovation Showcase.

In years past, the voting has been close. In 2017, the first year of the Showcase, there were six votes between first and second place. In 2018, it was an even closer race with just two votes between first and second place. While the final voting tally was not quite as close in the following two years, it was an extremely tight competition in 2021, with first and second place separated by just one vote.

The number of employees voting remained steady for four years, with 325 votes in 2017, 345 in 2018, 303 in 2019, and 337 in 2020. In 2021, the vote total increased by 88 to 425. The Showcase took place as planned in 2020 during the COVID-19 pandemic, with attendees following required protocols. Look for final details regarding the 2021 Innovation Challenge in the next issue of the Wayfinder.

"From the beginning, we had hoped that the Innovation Challenge and Showcase would do three things," Donahoo said. "First, reward employees who are going above and beyond in their jobs to improve the department and make a positive impact on their communities; second, spread those ideas to other employees who might be able to use them, and third, help all employees learn more about what we do here at NDOT. I think we have succeeded on all three counts."

Five years later, the tradition of excellence continued as the stage was set for yet another showdown at the Showcase. After the votes were tallied and the Innovation of the Year award was presented, plans had already begun for another year of recognizing NDOT employees for their creativity and ingenuity in the workplace... *See you next year at the Showcase!*

HOW THE CHALLENGE WORKS

- Innovators submit their nominations.
- After innovations have been nominated and placed into brackets, all NDOT employees will have a chance to vote for their favorite innovations in head to head battles. Voting will be in a March Madness bracket style, up until the final four. Those top four innovations will then go into a pool, and each employee will get to vote for their favorite.
- The top eight innovations will be invited to set up a display at the Innovation Showcase. At this event, each innovation and its innovators will have a chance to show off their innovation in an open house setting.
- At the end of the Innovation Showcase, the Innovation Challenge awards will be presented, including approximately \$750 to each member of the Innovation of the Year team (awards above \$500 are supplemented from WASHTO Quality Awards).

INNOVATIONS OF THE YEAR

2021

6-Foot Hot Asphalt Mix Rut Box

submitted by

Travis Martenson, Chuck Polka, Mark Klingelhofer, Stewart Kurtzhals & Jesse Hilton, District 4

2020

Delaminated Concrete Drag

submitted by

Nick Smets, Bill Wright & Harvey Winslow, District 4

2019

Under Carriage Drive Over Wash Bar

submitted by

Kevin Schrage, District 3

2018

Blade Changer

submitted by

Jim McDonald, District 1

2017

Guardrail Post Driver

submitted by

Rich McKenney, James Hansen & Keith Jarvis, District 8

NDOT Chemistry Lab Showcases Lean Tools Applications

NDOT's Chemistry Lab has experienced positive reactions since their implementation of Lean Tools several years ago. Highway Chemical Tests Manager Jasmine Dondlinger and Chemist Maria Olomi, both Certified Lean Leaders, recently showcased the implementation process to their Materials & Research lab colleagues, sharing some of the tools and highlighting the benefits. They also gave an overview of several process improvement projects that utilized these tools to accomplish tasks more efficiently and effectively.

"We have found that this has worked really well for us in the Chemistry Lab since we started using these tools several years ago," said Dondlinger. "We have the ability to choose what we measure, so there's a lot of freedom and flexibility, as well as methods in place to keep everyone informed."

She shared several basic tools that they both learned in Lean Leader training and have applied in the Chemistry Lab, including identifying the "5 Whys", which involves asking questions until finally arriving at the root cause of a problem, then moving forward to start working on the solution. Information on additional tools discussed may be obtained by contacting NDOT's Process Improvement Team.

QDIP Board and Swimlanes

Olomi shared information about two major tools that were instrumental during the Chemistry Lab's implementation of Lean Tools, the **QDIP Board** and **Swimlanes**, with a brief description of what each does and why it has been beneficial in their lab.

"**QDIP**" is an acronym that stands for **Quality, Delivery, Inventory and Productivity**. Olomi noted that this is a simple way to track daily activity and progress in the lab and encouraged those seeking more in-depth information to reach out to Process Improvement Coordinator Davey Jones, who leads sessions in Yellow Belt Training.

"Basically, quality involves the number of samples that pass or fail in our lab and whether that meets the goal that we have set. Delivery is where we keep track of how fast or how quickly we can finish a test. This changes from summer when the state contract allows 10 days for paint testing for lane stripes to winter when state contract allows 15 days for deicer testing. Inventory involves the

materials we have in the lab that need to be tested, and productivity goes side by side with how quickly we finish our testing within the individual test specifications."

Olomi emphasized that the QDIP Board is very flexible in its application to different work scenarios, noting, "The QDIP Board works for everybody, regardless of the number of team members in your lab. The huddles can be short, just 5 to 10 minutes. It keeps everyone informed, involved and appreciated."

During the presentation, Olomi described how the second tool, **Swimlanes**, is used in managing projects. She noted that as she is assigned a project, such as a research sample, the start date is documented and she continues to enter dates throughout the process.

"The Swimlane keeps track of the activity that you do on your projects and you just move through the process, through each step," Olomi said. "And when you're done with the project, it's done."

Process Improvement Projects

Dondlinger and Olomi described several Process Improvement Projects and shared how Lean Tools were used in their successful completion.

Dondlinger shared a couple of projects, including the **Materials Final Review** project that involved changing a process that had been in place for many years, particularly the written report that often had missing or incorrect documents. The team used several Lean Tools, including the Affinity Diagram with sticky notes that identified four main issues; the Impact Matrix that identified low impact to high impact and low control to high control; then the team developed an A3 Report to document the information. The project is now in the Implementation and Assessment Stage of transitioning from a paper format to an electronic format.

The **Deicer Spreadsheet** project addressed the issue of work that was being duplicated during a deicer testing process that had been in place since 2011. After identifying the problem statement, a Fishbone Diagram was used to identify several main themes: Processes, Equipment and Systems. Then, a Time Study was completed, and results showed that time could be significantly reduced using an automated process instead of the current process

or a manual process. An A3 Report was submitted to document the information and the project is still in process.

Olomi shared a third project, **Closet 5S**, that was completed in the Chemistry Lab. The 5S steps – Sort, Set in Order, Shine, Standardize and Sustain – were implemented in straightening the storage closet, which had been in disarray for some time. Olomi noted that the key benefits of the project included efficiency, safety and organization. An extra benefit: the space saved now allows for both a new storage area and a new office. Olomi emphasized that this project can be applied in an office, lab or any storage area, and it doesn't have to be a big project.

While Dondlinger and Olomi agree that not all Lean Tools are perfect for everyone, they are impressed with how quickly its implementation has made a significant difference in the efficiency and effectiveness of the NDOT Chemistry Lab.

"While we were a bit skeptical at the beginning, after implementing these tools almost four years ago, we saw immediate positive results in our chemistry lab," Olomi said. "We continue to appreciate the benefits that Lean Tools provides, while providing the freedom and flexibility to make the best choices for our lab. We would encourage others to give this a try." ▲

QDIP Board				
	QUALITY Addresses rework and defects	DELIVERY About timeliness, how quickly can we produce	INVENTORY About addressing backlogs, inventory, and/or waiting	PRODUCTIVITY About the number we produce
Win/Lose Green: Met Goal Yellow: No Activity Red: Missed Goal	CALENDAR	CALENDAR	CALENDAR	CALENDAR
How we doing? Graph the Number	CONTROL CHART	CONTROL CHART	CONTROL CHART	CONTROL CHART
Issues Describe Issues	ISSUES	ISSUES	ISSUES	ISSUES
Action Plan How to Address Issue? Plan Do Check Act (PDCA) Write solution	ACTION PLAN	ACTION PLAN	ACTION PLAN	ACTION PLAN



Highway Chemical Tests Manager Jasmine Dondlinger.



Chemist Maria Olomi uses Lean Tools to track daily activity and progress in her work at the Lab.

- 1 **Materials Final Review**
- 2 **Deicer Spreadsheet**
- 3 **Closet 5S**

EMPLOYEE SPOTLIGHT

Communication, Coordination Keys to Kamarad's Success at NDOT

By Linda Wilson

Communications & Public Policy Division

Jaime Kamarad has enjoyed the opportunity to build her career from the ground up during her 15½ years at NDOT. Along the way, she has gained a wealth of experience and relationships that will serve her well in her recent promotion as Project Scheduling/Programming Manager in the Program Management Division, replacing Kendall Tonjes who retired.

"What I have enjoyed most about working at NDOT is the opportunity to grow with each new position," Kamarad said. "My career began with data entry and grew to materials and testing, contract lettings, and now managing programs."

Kamarad began building the foundation for her career as a Work Study employee from 2005 to 2010 while attending Southeast Community College-Lincoln and the University of Nebraska-Lincoln. She assisted the Data Collection and Mapping Section in what used to be the Planning & Project Development Division, then worked in the Materials & Research Division assisting in various tasks in the office and spending some time working in the field.

After earning a Bachelor's degree in Criminology and Criminal Justice, Kamarad spent a short time in the Local Projects Division as the Administrative Assistant, then joined the Construction Division as a Contracts Project Coordinator for 5 years. She worked in Program Management for the last 4½ years, first as a Project Scheduling/Program

Coordinator and for the past 5 months as the Project Scheduling/Programming Manager.

Dynamic Position

Her new position is very dynamic. "The consistent role is monitoring the Federal Fund balance to ensure NDOT reaches our goal of obligating 100% of our apportionment each fiscal year. My responsibilities also include the development of NDOT's yearly Program Book as well as the annual State Transportation Improvement Program (STIP)."

Communication and coordination are key elements in accomplishing these items. She relies heavily on coordination with others within the department as well as external agencies such as Metropolitan Planning Organizations (MPOs) across Nebraska and the Federal Highway Administration (FHWA).

Kamarad likes the challenges and opportunities of her new position. "This position offers new challenges while still working within the Program Management Division. The most challenging aspect is learning the new expectations and responsibilities as an employee, while also navigating my role as a first-time manager. I look forward to building on my leadership skills while learning more about NDOT."

As far as accomplishments, near the top of the list is getting her Project Management Professional (PMP) Certificate. "It's a lot of coursework, a lot of studying, and a very long test to get certified, but the accomplishment is so rewarding."



While there were some adjustments involved with beginning her new job in the middle of the pandemic, including virtual WebEx meetings, she felt fortunate in many ways.

"I was lucky enough to spend some great quality time with my predecessor; however, 100% of the training was through WebEx. I missed the face-to-face interactions and discussions through in-person training, but I am grateful WebEx allowed us to record those sessions for future reference!"

Great Team Members

Kamarad also feels fortunate to have been surrounded by great team members during her career at NDOT.

"The most satisfying part of my job is being able to work with such a great team every day. In the Program Management Division and throughout the department, someone is always willing to help and share their knowledge."

Looking to the future, Kamarad foresees several changes that would be beneficial. "Since I began working at NDOT in 2005, we've been moving in the direction of paperless and automated workflows. We've come a long way, and I look forward to continuing in that direction and possibly consolidate our many systems into one." ▲