

THE ROADRUNNER

Nebraska Department of Transportation

Summer-Fall 2019



Reconstruction of Highway 15, south of Schuyler, after March flooding severely damaged the roadway and bridge. Work was completed and the highway opened to traffic on June 20.

Photo by Jake Daniels

Mobility after the Flood



Kyle Schneweis

We have come a long way over the past seven months since the historic flooding that caused devastation across much of eastern Nebraska. Our communities, volunteers and transportation partners came together with determination and dedication to restore homes, businesses and infrastructure after the mid-March flood. We've returned to normal operating procedures here at NDOT and are progressing into the reimbursement phase.

I continue to hear stories concerning the courage and grit shown by folks in these hard-hit communities as they pitched in to help their friends and neighbors through this difficult time. Residents witnessed dramatic rescues and extensive damage from failed dams and rushing water that carried huge slabs of ice. This occurred when the Spencer Dam in Holt County was breached, resulting in loss of the US-281 bridge and approach. In another case, the city of Fremont literally became an island when flood waters converged. Residents and first responders worked together to save their community. The stories go on and on.

The story and photos on pages 8-12 provide more details on the traumatic events in the immediate aftermath of the flooding and the amazing efforts involved to repair the damage. They are emblematic of the selfless, caring nature of Nebraskans coming together in times of need. It is why I am so proud to call Nebraska my home.

Words can't fully express the gratitude and appreciation I feel toward employees at NDOT and our consulting and contracting partners who moved as quickly as possible to repair the highways and bridges that were severely damaged by the flooding to restore mobility to the traveling public. In many cases it is nothing short of a miracle that the repairs could be completed and the roads opened in such a short window of time.

As a result of their exceptional team effort, I am happy to say there is only a half a mile of highway that remains closed of the 3,300 miles that were closed in mid-March due to blizzard conditions or flooding. While most of the bridge repairs are temporary, a full recovery is expected by the fall of 2020.

We have seen much progress. Yet, as we know, there is still a long road to recovery. After observing how far we have come *together*, I have great faith in the final outcome. **#NebraskaStrong** ■

the Roadrunner

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Districts

District 1 Thomas Goodbarn
District 2 Timothy W. Weander
District 3 Kevin Domogalla
District 4 Wesley Wahlgren
District 5 Doug Hoevet
District 6 Gary Thayer
District 7 Kurt Vosburg
District 8 Mark Kovar

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NEBRASKA

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION

Huff Leads Strategic Planning Division with Data Driven Solutions

By Linda Wilson
Communications & Public Policy Division



Ryan Huff

As the Chief Strategy Officer (CSO) and head of the Strategic Planning Division, Ryan Huff has the dual opportunities of serving in a new position and leading a new division at the department. Prior to this, he served as head of the Intermodal Planning Division, which was recently dissolved into two new divisions.

In May 2018, executive leadership announced its intention to form the Strategic Planning Division and change Huff's title to the Chief Strategy Officer. The motivation for this change was to place a greater emphasis on the importance of smart, data-driven decision making within the agency. Turning to data has become increasingly important as DOTs find themselves competing for limited financial resources. Factors that influence this competition for funds involve the rapidly changing global and domestic trends related to economic, environmental, political, safety, social, and technological events. Huff noted that these events and financial issues are complicating the preservation, operation and improvement of transportation system elements at an accelerating rate.

In response to these concerns, and with increased public scrutiny, NDOT leadership believes that NDOT must adapt its practices and find new ways of studying and communicating the implication of historic, current and future performance with data.

Huff's educational background includes bachelor's and master's degrees in civil engineering from the University of Nebraska-Lincoln. After graduating, Huff spent seven years in the private sector as a traffic engineer and transportation planner before

transitioning to NDOT in 2009. Once at NDOT, he worked in the Traffic Engineering Division for four years. In early 2014, he was selected to lead the Rail and Public Transportation Division. Through several organizational changes, the Division was renamed to Intermodal Planning.

In his new position as CSO, Huff has the overall responsibility to accelerate agency performance through cohesive, agile strategy planning and execution, leading business intelligence-driven decision making, driving continuous improvement and validating agency performance with meaningful measurement.

Efficient, Customer-Centered

"NDOT's planning section has historically played a role in guiding transportation policy decisions by connecting stakeholders and data to shape our value system. In addition, the NDOT recently added the Lean Six Sigma team to study front line practices and the application of process improvement techniques to our everyday work. In each case, planning and LSS serve to inform what we do in order to provide efficient and customer centric transportation services and infrastructure," Huff said.

At the same time, he added, managers in between the executive level and the front line must make decisions that contribute to the achievement of agency goals and priorities, and the extent to which they succeed or fail is informed by performance data. In many cases, this data is not always timely, reliable or delivered in an actionable format. Managers also struggle to find the time to dedicate resources to communicating performance trends.

"To aid this effort, the NDOT has created a new Performance Management Engineer position. Its purpose is to provide managers with support for numerous performance management activities, including SMART Goal development, performance measure development, performance visualization, data analytics, and other business intelligence activities. In this way, NDOT will be able to more closely link policy to goal achievement and goal achievement to front line actions," Huff said.

"Exposure to Lean Six Sigma methods has completely changed my perspective on what is possible for our everyday work."

- Ryan Huff, Chief Strategy Officer

“By moving rail and transit teams to another division, our leadership saw an opportunity to augment planning and LSS activities by adding a performance management element to the division. Korey Donahoo is leading our new performance management group.”

Huff added that “the combination of planning, LSS and performance management into one division will serve to support transformative changes and successfully address the complex issues facing state DOTs.”

Challenge Business Practices

Huff said his philosophy toward management is to challenge thinking about how things are done, usually through asking many questions. “Exposure to Lean Six Sigma methods has completely changed my perspective on what is possible for our everyday work. Once I challenge people, I generally try to empower them to challenge our business practices and implement new solutions. Overall, I try to stay

flexible, consider the team’s makeup, and make use of our collective experiences to push the boundaries of what we do.”

The strategies and goals for the planning and LSS teams won’t change significantly, he noted. “As for the new Performance Management Section, the short-term strategy is to build on what we have and focus on supporting the performance management activities that are currently in place.

“In addition, I would like to create new avenues to communicate our performance internally and with the public. Eventually, I’d like to add staff to help with analytics and visuals. Beyond this, the long-term goal is to create a culture that is constantly improving its collection, use and reporting of data to create greater efficiencies and transparency in decision making.”

Ryan and his wife, Julie, have two children, Hudson, age 5, Evelyn, age 3, and a Boxer dog, Penny. In his spare time, he enjoys exercising, spending time with his family, cooking and video games. ■

Recent Floods Bring Role of New Local Assistance Division to Forefront



Jodi Gibson

The past few months have underscored the important role the new Local Assistance Division plays in serving the transportation needs of local government, non-profits and other NDOT partners. According to Jodi Gibson, the new Division Manager, her team has worked closely with transportation partners at the federal, state and local levels to efficiently expedite

the process of providing funding to counties and local governments for repair/replacement of roads and bridges in the aftermath of the March 2019 flooding in Nebraska.

“By working together to facilitate the funding process, we are working to ensure that \$47 Million of funding (federal) is received to repair/replace around 179 local roads sites throughout the State of Nebraska as a result of damage sustained from the March

flooding. This is a reflection of the unified effort of NDOT, along with our transportation partners and stakeholders,” said Gibson.

“Local Assistance Division has been responsible for all site assessments, completing the Detailed Damaged Inspection Report (DDIR) for funding approval and getting money back in the hands of our counties and municipalities. By mid-July, we were completing DDIR’s and moving toward the reimbursement process for the March event. We started site assessments for the May and June flooding events in August and will be completed by mid-November.”

Partnering Crucial

Gibson noted that partnering was crucial as they worked closely with the FHWA to get assessments and DDIR’s approved in a timely manner. The reimbursement process involves counties and municipalities submitting Certifications and final time/equipment/material paperwork and NDOT completing the processing to get federal funds reimbursed for Local Public Agencies (LPA) with federal-aid routes.

Gibson has been the division manager since March 2019, the month the flooding occurred. She has witnessed firsthand the challenges involved in providing funding to counties and local governments for repair/replacement of roads and bridges in the aftermath.

In her new role as Local Assistance Division Manager, Gibson has overall responsibility for four sections: Local Projects and Liaison Services, which were relocated in the Materials and Research Division, and Rail and Transit, which were relocated from the Intermodal Planning Division. According to Gibson, the reasons for these changes were two-fold: 1) Sections were combined within the department that provided services related to local government, non-profits and other NDOT partners; and 2) This provides one recognizable area for all partners to contact.

"This has been a positive change, not only internally, but for our external partners, as it reaffirms the importance of local governments' transportation needs to NDOT."

- Jodi Gibson
Local Assistance Division Manager

Gibson believes the biggest challenge or opportunity for Local Assistance is to continue to reach all of NDOT's local partners and find ways to assist them with all transportation needs. "I am very excited for the direction of the new division. I have a very hard working group who share the common goal of providing assistance to our Locals. It is exciting to watch as the division structure is starting to develop and energy is forming within our team."

Positive Change

"This has been a positive change, not only internally, but for our external partners, as it reaffirms the importance of local governments' transportation needs to NDOT," Gibson noted. "For many years, the sections that are now a part of the division have worked very closely, and bringing these groups together under one division increases the success of delivery of products for all areas of project delivery and funding assistance for locals."

Gibson said she will focus on the big picture and long-term vision in leading the division forward. "I will always seek feedback and buy-in from managers, staff and consumers. I want to set the vision for the team, give clear direction and allow the team to go to work."

"My number one goal is to create a division where employee morale is high and we continue to increase division accountability while developing a culture where we are making sure our local partners' needs are being met," Gibson stressed that "to achieve these goals, I will make sure that employees are trained and will look for ways to streamline and create efficiencies. Developing a strong communication plan is also crucial to ensure information is being funneled to our transportation partners."

Jodi is the mother of two high school girls. Halie is a senior and Lexie is a freshman. Both are on competitive dance teams and play select softball and high school softball. In her spare time, she loves being outside in the warm weather or spending time cooking. ■

Airports Benefit from U.S. DOT's Infrastructure Grants

On September 23, U.S. Department of Transportation Secretary Elaine L. Chao announced that the Department will award \$986 million in infrastructure grants to 354 airports spanning 44 states, Puerto Rico and Micronesia. Nebraska airports received 27 of the supplemental discretionary grants. The grants are the fifth round of distribution from the FAA's Airport Improvement Program (AIP) funding. In total, the AIP funding allotment is \$3.18 billion for airports across the U.S.

The grants will support multiple infrastructure projects, including runway reconstruction and rehabilitation, noise mitigation, emissions reduction, building of firefighting

facilities, and maintenance of terminals, taxiways and aprons. "Infrastructure projects funded by these grants will advance safety, improve travel, generate jobs and provide other economic benefits for local communities," said Secretary Chao.

"Our members thank Secretary Chao for her continued dedication to improving airport infrastructure. Enhanced airport infrastructure across the nation improves quality of life and has a direct, positive, impact on the economic well-being of the U.S.," said Shelly Simi, President & CEO of the National Association of State Aviation Officials (NASAO).

Historic Flooding Galvanizes Transportation Partners, Communities



Photos by Jake Daniels

Flood waters overtop Highway 15, south of Schuyler.

By Linda Wilson
Communications & Public Policy Division

After wreaking havoc in the heartland, the 2019 spring flooding is destined to stand the test of time in the record books. Despite Nebraska's unpredictable weather patterns, most folks are hopeful it remains there for a long, long time.

"This was truly historic flooding. At every location I visited, longtime local residents commented that they 'have never seen flooding this bad' or 'we've never had water over the road here before.'" Those words by NDOT District 8 Engineer Mark Kovar rang true for locations across a large part of north, central and eastern Nebraska impacted by the 2019 spring flooding in mid-March.

More than six months later, after a Herculean effort by NDOT and its transportation partners, the light at the end of the tunnel is getting brighter. During the aftermath, first responders and NDOT maintenance crews toiled around the clock to help clear the way and begin the recovery process. NDOT worked closely with its consulting and contracting partners to expedite the design and construction process to repair flood-damaged roads and bridges and restore mobility to the traveling public. Countless community organizations and volunteers pitched in to help with the massive recovery effort.

As of this writing, only one highway mile remained closed after 3,300 highway miles were closed due to blizzard conditions or flooding. Eighty-six flood-related projects are underway on state highways. Total estimated cost of the damage is \$153 million. The U.S. Department of Transportation's (USDOT) Federal Highway Administration (FHWA) has authorized \$93 million in Emergency Relief (ER) funds.

Five of Nebraska's eight highway districts were most impacted by the flooding— Districts 1, 2, 3, 4, and 8, with District 6 receiving less significant damage. District 3, comprised of 15 counties in northeast Nebraska, and neighboring District 8, encompassing nine counties stretching across the north-central part of the state, bore the brunt of the flooding.

"Everybody came together to help those affected by the flooding."

- Mark Kovar
District 8 Engineer

Community Support

Kovar noted that District 8's biggest challenge was the closure of US-281 between O'Neill and Spencer where approximately 1,400 feet of US-281 was washed out when the Spencer Dam collapsed. His personnel responded by setting up road closures and detour routes, then worked with NDOT's Bridge and Construction divisions to hire a design consultant and expedite the hiring of a contractor to make repairs to



Left - The US-281 bridge over the Niobrara River was washed out when Spencer Dam collapsed.

Top - A section of Highway 39 south of Genoa and north of the Loup River sustained major damage during flooding.

the roadway and construct a temporary bridge, which opened on July 26, with a permanent bridge scheduled for completion in November 2020.

A total of 11 highways were impacted in District 8 with estimated damages of \$39 million.

“Recovery will take years, Kovar said. “We hadn’t been able to assess some of the damage to roadways until recently, because they were still under water.”

Kovar appreciated the support of the communities. “Virtually everybody came together to help those affected by the flooding. One effort of note, the radio station in O’Neill (KBRX) organized a ‘Bridge the Gap’ raffle to benefit Boyd County Flood Relief. The winner was the first person to drive over the temporary bridge on Hwy. 281 south of Spencer.”

Long Hours

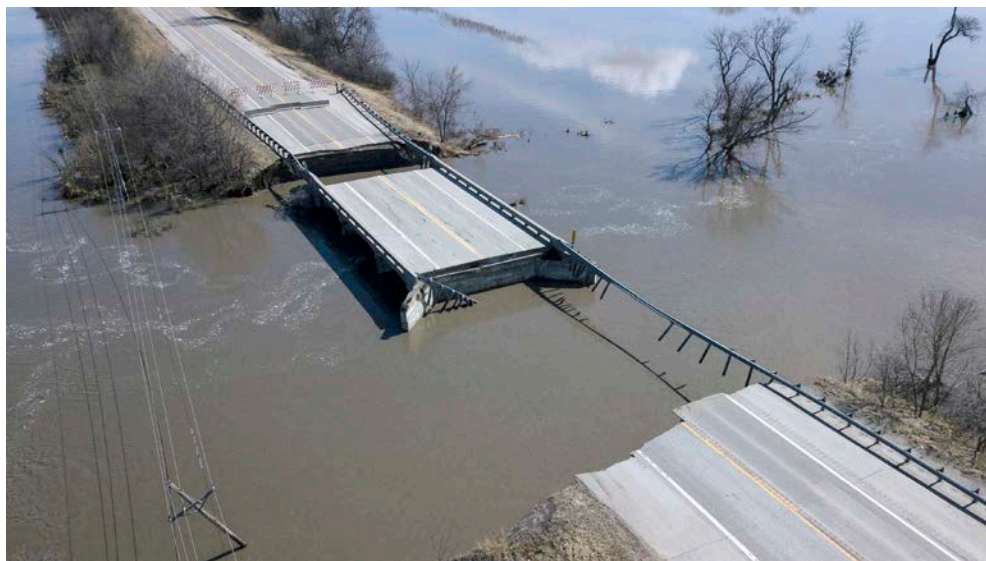
District 3 Engineer Kevin Domogalla said their biggest challenge was the widespread effect of the flooding on the district and their main priority was to reopen all of the highway routes to the public. His district responded by putting all of their resources together to construct or repair the damaged sites. These resources included maintenance, construction, design, electronic, and clerical staffs.

“All of District 3 put in long hours for weeks on end to restore as much as we could, as quickly as possible,” Domogalla said. “Our district is blessed to have such a hardworking and committed workforce that allows us to endure even the worst that Mother Nature can throw at us.”

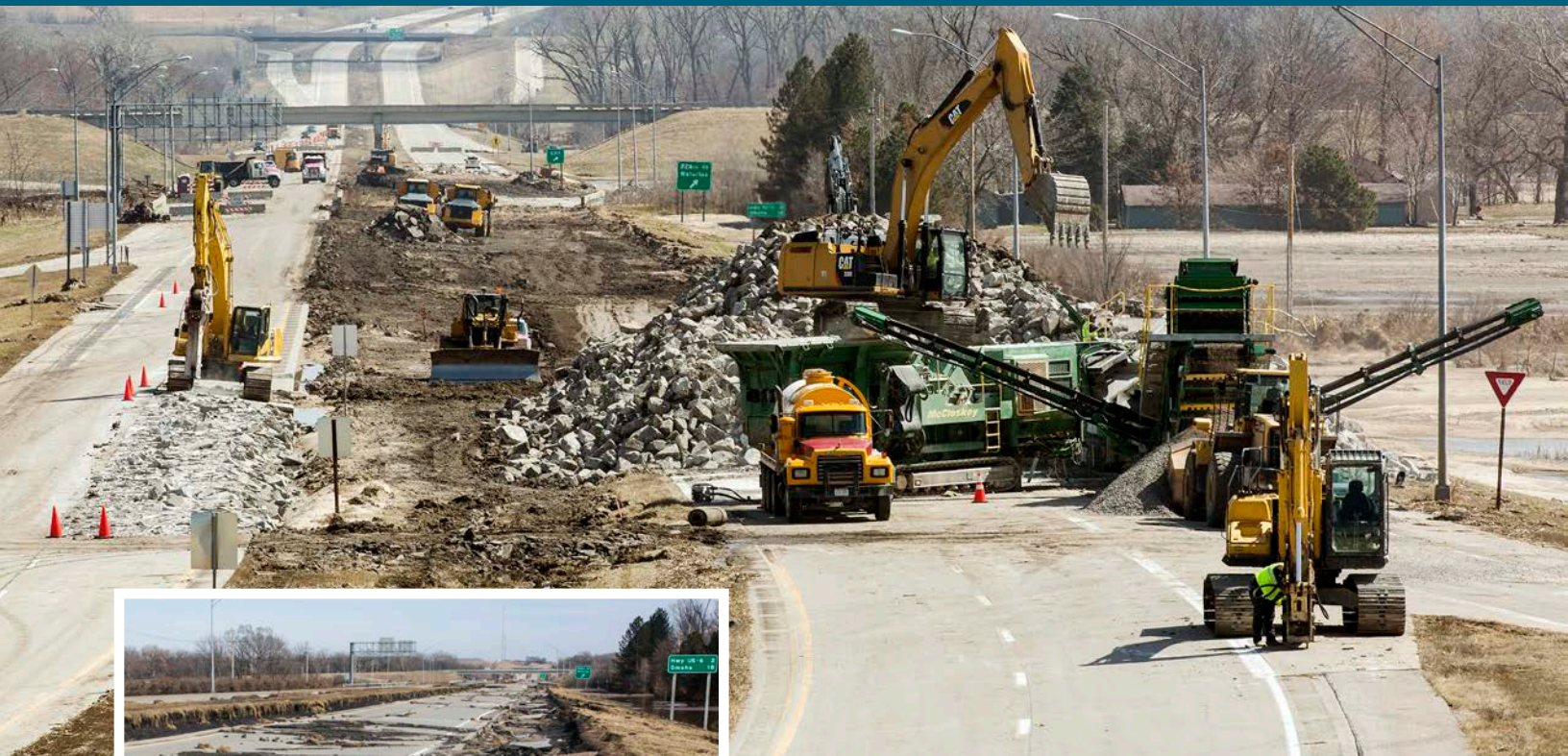
According to Domogalla, during the

2019 flooding, District 3 received damage at 56 individual sites, located on 22 highways, with estimated damages of \$60 million. Some of the hardest hit areas in District 3 included Highways 12, 13, 57, 94 and 121 – all closed due to ongoing bridge repairs/replacements. Of those five, traffic was restored to Highway 12 over the Niobrara River on August 13, with the opening of the temporary bridge over the Mormon Canal, which was completely washed out, and repairs made to the bridge over the Niobrara River, which sustained significant damage to the approach and girders.

“Our district is blessed to have such a hardworking and committed workforce that allows us to endure even the worst that Mother Nature can throw at us.”
- Kevin Domogalla
District 3 Engineer



The bridge on West Center Road/Highway 92, west of Omaha, was severely damaged by Elkhorn River floodwaters.



Top - Reconstruction work to repair flood damage on West Dodge Road/US-275.
Left - Damage caused by Elkhorn River flooding on West Dodge Road/US-275.



Safety Top Priority

District 2, which includes the Omaha metro area and several surrounding counties, was directly affected by flooding of the Elkhorn, Platte and Missouri Rivers. According to District Engineer Tim Weander, his district had a unique situation, with the community of Fremont literally becoming an island, as flood waters converged from all directions. Weander noted the priority was to provide delivery trucks access in order to bring in provisions to the grocery store for those stranded and cut off from supplies. Resource drops into Fremont were provided by Nebraska Air National Guard helicopters. Hay bales were also dropped for cattle throughout the surrounding area. Because of these heroic efforts, the community was able to pull together and move forward.

Weander said one key priority was identifying/designating alternate routes to provide the traveling

"Immediate actions to close affected highways saved lives."
 - Tim Weander, District 2 Engineer

public as much access and mobility as possible. Keeping staff and the public safe was a top priority as well, since many drivers ignored signs and chose to enter flooded road segments.

During the flood, more than 30 percent of District 2's highway miles were closed, with seven major highways closed and total estimated damages of \$20 million.

The challenge for most workers in the district was remaining committed to the department's mission during flood recovery. "The 2018-2019 winter operations needs were incredibly demanding on time and energy before flooding occurred," Weander said. "The levels of dedication and sacrifice made by Nebraskans/NDOT staff cannot be overstated. These people cannot be recognized and rewarded enough for their efforts."

"In another epic flooding event, with the last one in 2011, the District 2 team stepped up and committed their efforts, working across their areas of responsibility to achieve seamless coordination and traffic flow throughout the district, adjacent districts, and states," Weander said. "Their immediate

actions to close affected highways saved lives. Their immediate rapid recovery actions to open highways minimized countless private/public expenses and opened national economic lanes of commerce to continue to provide a first class transportation system for the movement of people and commerce."

Restoring Mobility

District 4, which includes 17 counties in central Nebraska, had challenges of its own, dealing with the magnitude and number of highways affected, according to District Engineer Wes Wahlgren.

“Almost everything north of I-80 and a couple of highways south of I-80 were impacted, Wahlgren noted.

“Maintenance put in many days of long hours watching closures to keep the traveling public safe. After the water receded, we looked for contractors willing to do the repair work and prioritized the repairs in a logical sequence that made the most sense.”

N-39 south of Genoa sustained major damage during the flooding, including washout of a large section of the highway north of the Loup River and significant damage to the overflow bridge south of the Loup River on N-39. Wahlgren noted that NDOT partnered with contractors and subcontractors to reopen the roadway 13 days ahead of schedule and restore mobility.

Communities played a key role in process as well. “Fullerton signed a temporary detour on their city streets to get highway traffic around the north

“NDOT partnered with contractors and subcontractors to reopen roadways and restore mobility.”

*- Wes Wahlgren
District 4 Engineer*

washout on N-14, Wahlgren said. “Their fire department also distributed water and food to our maintenance yard.”

Wahlgren’s key takeaway from the flooding was how

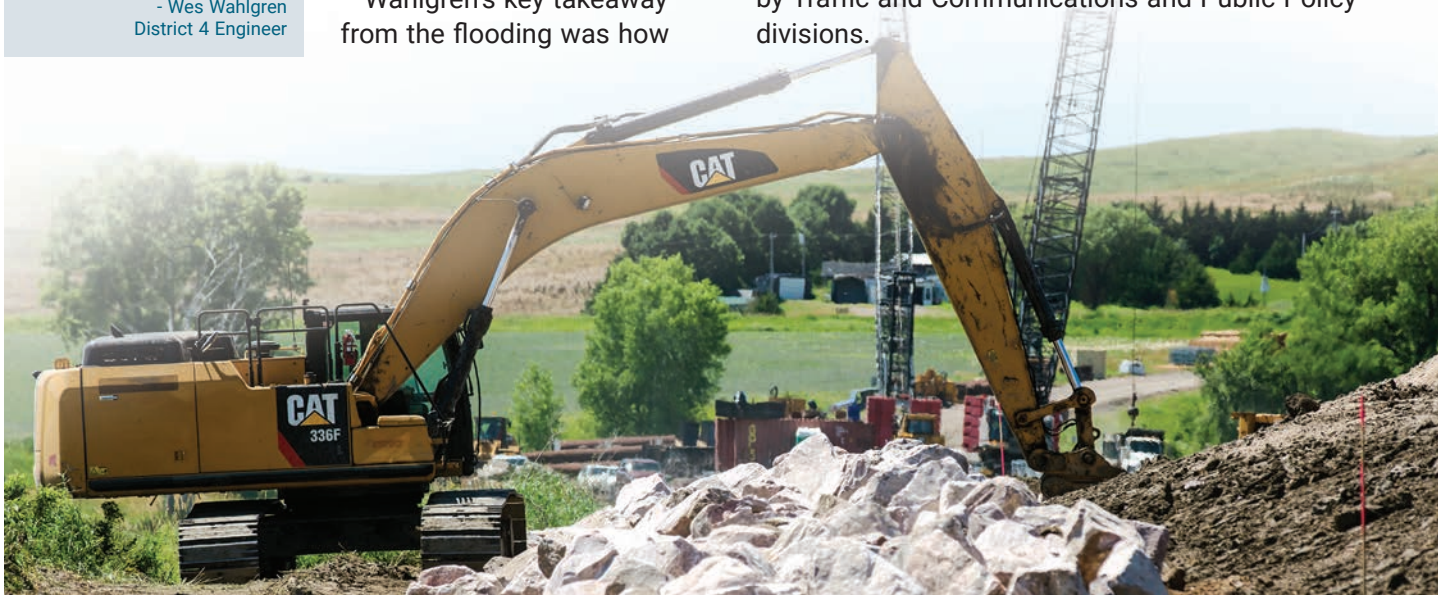


Reconstruction of Highway 39 at the Loup River overflow south of Genoa.

everyone came together to meet the challenge. I’m very proud of our maintenance forces who dealt with the flooding and construction forces that inspected and worked with the contractors on making repairs. I can’t say enough good things about our contractors who really did and continue to do outstanding work.”

Traffic Control

District 1, with 13 counties in southeast Nebraska, had a major challenge with management of traffic detoured by the closure of the Missouri River bridges, according to District Engineer Tom Goodbarn. As a result, highways 75, 136, and 159 had higher traffic volumes. He gave the credit to maintenance shops in Falls City, Auburn, Nebraska City, Greenwood, Wahoo and David City for a great job working with cities and counties to keep traffic moving, as well as coordination by Traffic and Communications and Public Policy divisions.



Flood damage repairs on Highway 12, west of Niobrara.

The district was impacted by the initial flood event with water topping most roads on the north and east side of the district. Since that time, two subsequent events led to local flooding in different parts of the district.

“Highway 15 lost pavement and an overflow structure between David City and Schuyler, resulting in a two-month closure,” Goodbarn said. “While the collapsed approaches and pavement washout on Highway 15 were immediately evident, culverts in other areas have taken time to reveal the damage from washouts under the pavement.” Goodbarn noted shoulder washouts on various spurs and highways. Culvert washouts requiring replacement were reported on eight highways. Heavy traffic on other highways reduced the life of sections of those roads.

Goodbarn’s takeaway on the flooding: “Snow, Rain, Drought, Flood. Welcome to Nebraska. All in a day’s work. I’m very thankful for our people.”

“I’m very thankful for our people.”

- Tom Goodbarn
District 1 Engineer

Feeling Fortunate

District 6 Engineer Gary Thayer feels fortunate that his district, with 11 counties located in the west central

part of the state, did not sustain significant damage from the flooding. He noted that they had water over seven highways and only one bridge damaged, the Comstock Spur Bridge on S21C, with damage to bridge and pavement approaches. All other roadways had little to no damage.

Sharing his thoughts on the recent turbulent weather, Thayer observed, “It has been a very unusual weather year beginning with 32 winter storm events ending May 6th and turning over to spring rain events. We have water standing in areas and over highways that still persist. We have again been made aware of the ever changing mood of Mother Nature and the cycle of change in our lives.” He added, “Pray for a dry fall and a mild winter.”

While each district faced unique challenges during the historic 2019 flooding, a common theme was the spirit of collaboration and teamwork exhibited by everyone involved in restoring mobility to communities, including first responders, maintenance and construction crews, consulting and contracting partners, community organizations and volunteers. These efforts exemplified the caring, generous nature of Nebraskans in reaching out to help their neighbors during this time of great need. **#NebraskaStrong**



Governor Pete Ricketts joined the NDOT and others on July 29 to celebrate the opening of a temporary bridge on US-281 over the Niobrara River. The roadway was destroyed when the river broke the levee and dam south of Spencer in March.

Statewide TIM Safety Coalition Discusses Key Policy Issues

On June 19, emergency responder representatives from across the state of Nebraska met to discuss issues that carry serious implications in terms of responder safety, public safety, the movement of people and goods, and the environment. NDOT, which has been a national leader in TIM (Traffic Incident Management) training for first responders, partnered with HDR in coordinating the meeting.

Guest speaker, Paul Jodoin, Federal Highway Administration (FHWA) TIM Program Manager, provided an update regarding the national TIM program and described how the program includes efforts in all 50 states. He reported good news that Nebraska has exceeded the FHWA's goal of 45% of responders TIM trained by 9.5%—that's 54.5% of responders trained, or a ranking of 11th in the United States.

Following discussions about TIM issues, a Memorandum of Understanding was presented as an agreement among the Nebraska TIM partners to improve safety and quick clearance when responding to roadway incidents, as well as a commitment to achieving an unprecedented level of communication and collaboration. ■



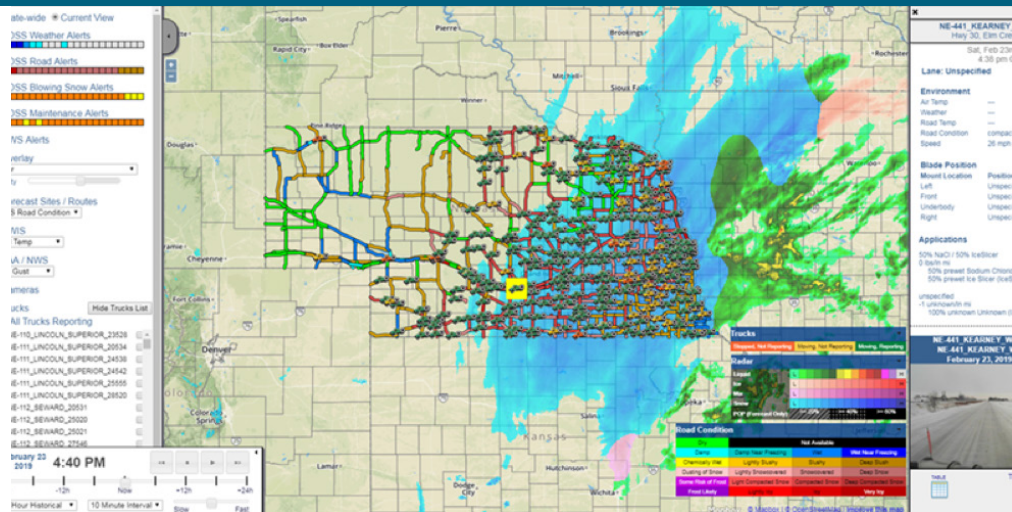
Traffic Incident Management groups work together to quickly clear traffic-related incidents.

NATIONAL TRAFFIC INCIDENT
RESPONSE AWARENESS WEEK
NOVEMBER 10-16, 2019
TRAFFIC EMERGENCY ACTIONS MATTER!
SAFETY IS A TEAM EFFORT.

Key TIM Issues Discussed at the Safety Coalition

- **Authority Removal:** Liability concerns impact first responders' ability to respond when it comes to vehicle removals when an incident occurs. The Nebraska Department of Transportation (NDOT) is working on ways to clear roadway obstructions prior to the arrival of law enforcement.
- **Driver Removal:** NDOT is looking at ways to encourage quick clearance by requiring immediate lane clearance in minor crashes prior to the arrival of law enforcement. Effective outreach and education to motorists and stakeholders will be the key to the success of any change in driver removal.
- **Insurance Liability Coverage Clarification:** Towing partners are frequently not appropriately compensated for crash clean up and abandoned vehicles. Further discussion with stakeholders within the insurance and trucking industries will be needed to identify possible solutions.
- **Emergency Responder Safety Requires Drivers to Move Over or Slow Down:** Several items were discussed, including: 1) If not possible to move over, reduce speed to 20 mph below the speed limit; 2) Defining an education component; and 3) Enforcement restrictions.
- **Designating Tow and Recovery Equipment as Emergency Vehicles:** Classifying tow and recovery equipment with certain exceptions was discussed in lieu of designating tow and recovery equipment as emergency vehicles to eliminate existing liabilities when responding to incidents. The use of lights other than amber will be further reviewed.

NDOT's MDSS Wins Regional ATA Recognition at WASHTO



Advanced technology provides resources for drivers in making decisions before traveling during adverse weather conditions.

NDOT was recognized at the Western Association of State Highway and Transportation Officials (WASHTO) Annual Conference as one of six western state DOTs to receive top honors in the regional America's Transportation Awards (ATA) competition. NDOT's Maintenance Decision Support System (MDSS) and Automatic Vehicle Locations (AVL) project won the regional award for Best Use of Technology & Innovation.

While the award was in the "small category," the implementation of the MDSS has been a major effort for the department that spans decades and touches thousands of NDOT employees.

According to NDOT Director, Kyle Schneweis, the initiative is a great representation of NDOT's dedication to challenging business practices and improving customer service.

The ATA application highlighted how NDOT leveraged technology and innovation to help increase efficiency around winter maintenance while also improving the public's customer experience by providing additional



NDOT snowplows are equipped with MDSS and AVL technology.

resources to allow educated decisions on travel during adverse weather conditions. Schneweis noted that NDOT's Communications Team saw close to 30,000 users log on to Plow Tracker in its first 24 hours with close to 35,000 Twitter impressions, allowing for a broadened audience and increased reach, helping improve NDOT's ability to influence public safety.

"The installation and implementation of MDSS/AVL and Plow Tracker was a team effort. I want to thank Tom Sands and Mike Mattison for their leadership and the MDSS Implementation team for seeing this through and working through the kinks to deliver the project," Schneweis said. "They have fought hard and developed the business case for the program and it's to their credit that we are the first state to fully implement MDSS/AVL. I know the technology will help us validate data and make more educated, unified decisions on how we utilize resources."

The project will now move on with the other eight WASHTO transportation projects to compete with other regions to be selected for the Top 12 projects. Those 12 projects will compete for the Grand Prize, selected by an independent panel of industry judges and the People's Choice Award, which is chosen by the general public through online voting.

MDSS Implementation Team: Jeff Oehm, Dale Butler, Warren Racely, Cindy Jelinek, Seth Johnson, Joey Muhr, Matt Radke and Kerry Scott.

Communications and Plow Tracker Team: Jeni Campana, Mackenzie Bartek, Jessica Sherwood and Jesse Schulz. ■

Additional information about the award can be found at: <https://americatransportationawards.org/2019-projects/2019-washto-projects/nebraska-department-of-transportation-maintenance-decision-support-and-automatic-vehicle-location-project/>

NDOT Recognized with Two TransComm Awards

NDOT's Communications & Public Policy Division received two awards during the TransComm Skills Contest 2019, held in conjunction with the meeting of the AASHTO Committee on Transportation Communications-TransComm, July 28-31, 2019 in Indianapolis, Indiana.

The TransComm Skills awards recognize and award top honors to state DOTs in multiple categories. NDOT Director Kyle Schneweis said, "The NDOT has been focused on finding creative ways to effectively promote the Agency's mission. To take home top honors in two categories reflects the expertise and professionalism of our Communications staff."

Category 5(f): Audio Production – NDOT Podcasts

NDOT has been producing the Director's Podcasts since August 2016, after Director Schneweis chose this as way to inform agency personnel and the traveling public on important topics in a friendly and conversational atmosphere. Podcasts are produced in-house with Clint Mangen as the videographer and Jeni Campana coordinating the topics and guests. They are made available on NDOT's Intranet for agency personnel, and are available on Vimeo and YouTube, depending on the intended audience and restricted permission necessary. Each podcast includes photos from when the conversation was recorded.

Guests on the podcasts have included NDOT teammates, transportation industry leaders and even the Governor of Nebraska. Conversations have highlighted current events and topics of importance, from introducing new personnel to discussing new legislation that could affect the industry.

A September 2018 podcast featured an interview with Brandye Hendrickson, who was Acting Director of the



Director Kyle Schneweis presents the TransComm Award for Audio Production to Jeni Campana and Clint Mangen.

FHWA at the time of the recording, and is currently Deputy Administrator. She was in Lincoln for the signing of NDOT's Categorical Exclusion Memorandum of Understanding, a very significant event. During their meeting, Schneweis and Hendrickson discussed the benefits of streamlined processes and strong partnership among different levels of government. Since posting the podcast on September 20, 2018, it has had 294 views and was pushed internally on the agency intranet and via email, as well as externally on LinkedIn and Twitter. The podcast was the 18th of 27 made as of the date of this award.

Category 3(a): Indoor or Outdoor Advertising

To encourage safe travel during winter conditions and to celebrate Nebraska DOT crews, NDOT launched a campaign in December 2018 called "Your Safe Travel Is Our Business." The campaign highlighted Nebraska DOT's efforts to maintain a safe and reliable transportation system by bringing the work done by maintenance staff to the attention of drivers.

Four billboard locations were selected across the state. Each billboard was strategically located along high-traffic corridors on I-80 and US-34 for 12-16 weeks depending on the location. They featured local snowplow drivers with the safety messages "Respect The Plow," "We Are Your Snowfighters," and "Respect The Snowfighters" included on the billboards, along with the campaign tagline "Your Safe Travel Is Our Business." Online responses on Twitter and LinkedIn, were impressive, and many local news stations shared the story.

All photography and design was done in-house by NDOT staff, including Communications and Public Policy Division employees Jake Daniels, Clint Mangen, Mackenzie Bartek, Jim Pester and Diane German.

The TransComm Annual Meeting is an opportunity for transportation communicators from around the United States to build relationships that benefit their state DOTs, highlight successes, share ideas and learn from each other. In addition, much of the committee's business is carried out during the meeting. ■



Director Kyle Schneweis presents the TransComm Award for Indoor or Outdoor Advertising. (l to r) Jake Daniels, Mackenzie Bartek, Jeni Campana and Diane German.



NDOT Innovation Challenge Team members congratulate recipients of “Innovation of the Year” awards.

Photos by Jake Daniels

Third Annual Innovation Showcase Elevates, Engages, Energizes

By Linda Wilson
Communications & Public Policy Division

For the third year in a row, energy levels soared as NDOT employees gathered in the Central Headquarters Auditorium to witness the announcement of the “Innovation of the Year” during the Innovation Showcase held on Friday, July 13.

NDOT Director Kyle Schneweis expressed appreciation to those who participated and welcomed all to the showcase event. He shared his admiration for the talent, ingenuity and resourcefulness of NDOT employees who were being recognized for their achievements.

Korey Donahoo, Innovation Challenge Team Leader, noted that this was a successful third year, with 25 nominations, compared with 24 entries last year and 40 entries the first year. There were 303 votes cast by employees this year, compared with last year’s 345 votes.

“The quality and number of innovations submitted has remained high, which is good news. It reflects really well on our team at NDOT,” Donahoo said.

Vote Close

Again this year, the vote was close, with just three votes between the first- and second-place winners. Receiving 33% of the votes, Kevin Schrage, District 3, was announced the winner of the “Innovation of the Year” award for his *Under Carriage Drive Over Wash Bar*. Schrage’s description stated that “washing off

grime and salt saves brake lines and other parts of equipment from rusting. This saves maintenance workers and mechanics time.” The top prize included \$500 and the winner’s name was placed on the plaque for 2019.

Runner-up was the *Spreader Validation Procedure*, from Jim Higel, Brent Rogers, Terry Einspahr and Chris Neel, District 7. Their innovation “helps calibrate the amount of snowmelt being used, preventing waste, and was built using old road signs, making it look like a piece of artwork.”

Leonard Nadrchal, Mark Paprocki, Dave Pokorny and Bryan Mohnsen, District 3, won third place for their *Hot Mix Easy Striker*, described as a “simple concept, but very effective and built by hand.” Greg Munderloh, District 1, won fourth place for his *Road Builder to*

The Director’s Office also selected innovations to be recognized and awarded at the Innovation Showcase, each receiving \$125 per person:

Nebraska Electronic Driver’s Reporting System, Traffic – “External Customer Focused” - Sean Owings, Shirley Danahy, Trevor Sindelar, Luke Burtwistle
Outfall Collector App, Project Development – “leveraged technology in a difficult program to implement” - Claire Inbody, Blayne Renner, Gabe Robertson

Automatic Crash Diagramming Software, Traffic – “Creating visual software is hard to program” - James Scott, Suma Poda, Sean Owings



Kevin Schrage, District 3, was announced the winner of the “Innovation of the Year” award for his *Under Carriage Drive Over Wash Bar*.

Grader Adapter Plate. He noted that “when the skid steer wasn’t available for shoulder work, this quick attach adapter allowed them to use other available equipment.” Second, third, and fourth-place winners each took home \$250, \$150 and \$100, respectively.

The process was the same as in previous years, with more than a month of voting by NDOT employees as contestants’ names were 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.

Elite Eight

The other half of the “Elite Eight” innovations earning their opportunity to display at the showcase included **GIS Flood Damage Application & Dashboard**, BTSD – Claire Inbody, Chris Wiebke, Shelley Schulte, Tylia Penner, Cole Davison and Dustin Poskochil.; **ROW Greenhouse App**, ROW – Dan Foreman, Claire Inbody, Shelley Schulte and Travis Zwickle; **Interactive map of Posted and Closed Bridges**, Bridge – Kent Miller, Babrak Niazi, Wayne Patras, Chris Wiebke, Claire Inbody and Mike Munson; and **Mile Marker Hole Alignment Jig**, District 4 – Keith Poss and Bob Bennett. Each winner received \$100 and four commemorative coasters.

Again this year, all of the “Elite Eight” innovators were on hand to explain their innovations and answer any questions prior to the announcement of the winner and three runners-up. The Director’s Office selected additional innovations to be recognized and awarded at the Innovation Showcase, each receiving \$125 per person.

New this year, a raffle drawing was held at the showcase to award someone who voted every week during the Innovation Challenge. Patrick Knight, District 2 – Omaha, won a set of four Innovation Challenge coasters. ■



NDOT employees view “Elite Eight” innovations on display in the NDOT Headquarters Auditorium.

KAIZEN

Invitation to Simplification

By Shayne Daughenbaugh
Process Improvement Coordinator

Helpful, thorough, revealing, collaboration, fun...

just a few words from the Permit Review Team, a Kaizen team facilitated by Shayne Daughenbaugh, Process Improvement Coordinator, to describe their experience after a recent three-day Kaizen event.

A Kaizen is becoming a staple for the Lean Six Sigma team at NDOT. The event is a series of high-energy meetings, typically covering three days, where a team of six to eight people work together to simplify a process. A process can be defined as the steps taken to complete work. Issuing a permit is a process. Ordering a cell phone is a process. Testing samples in the chemistry lab is a process. The results of a Kaizen are often an impressive reduction in process time, process steps or annual savings.

As the Kaizen team challenged the current way of doing things, they examined a detailed picture of the whole process, explored problem areas, and found several hours of rework. The benefit of having the Kaizen compacted into three days is each day builds



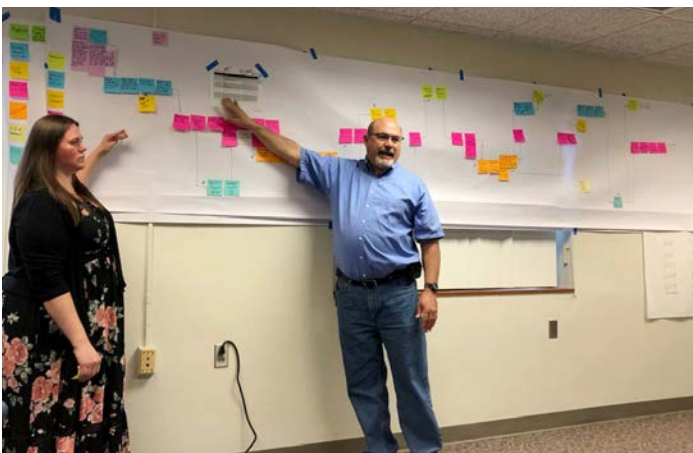
on the momentum of the previous. After a day of mapping the current process and analyzing root causes for the issues found, the team built on the progress of the previous day. Armed with permission to think unconventionally, they quickly identified more than 30 new ideas to simplify the process.

Team Ownership

One of the many benefits of a Kaizen is team ownership of the changes to be made to the process. The Kaizen team was given direction for improvement from the sponsor and voice of the customer interviews, then empowered to explore ways to improve the process. Not every idea or suggestion made the cut. As a team they created a new process which included improvements that made the most sense and had the best impact. At the end of the Kaizen, the team presented the process redesign to the sponsor and division head in order to gain authority to proceed to a pilot.

A crucial step to a Kaizen is to see how the new process “does in the wild.” A pilot is a limited and controlled trial of the redesigned process. Data is collected throughout to validate the improvements and show where additional redesigns may be needed before the new process goes wide scale. All this ensures that the hours and labor invested by the Kaizen team result in a demonstrated beneficial return for NDOT.

The Kaizen team can also attest to less quantifiable benefits from the event. Benefits include an infusion of energy resulting from powerful teamwork across divisions, a sense of satisfaction making meaningful change, and new techniques to simplify processes in their areas. If you are interested in being a part of a Kaizen event, please contact Linsey, Davey, Lisa or Shayne in the LSS office, as they are always looking for forward-thinking people who ask questions and challenge assumptions. ■

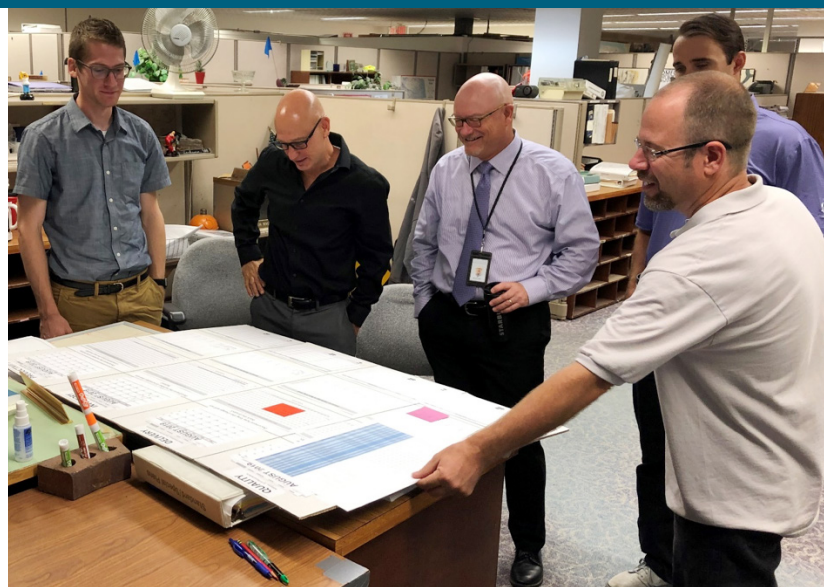


Bob Carnazzo and Katie Acevedo, Roadway Design, explain Permit Review process. (Top right) Bob Carnazzo and Aaron Matzke, Roadway Design, along with Keith Kohel, District 1 Right of Way Permits Officer, discuss the steps to include in the clean sheet redesign, a tool used to help overcome process waste and create an improved process.

GEMBA Walk Offers Support to NDOT Work Teams

Over the last few months the NDOT Lean Six Sigma (LSS) team has been developing a plan to work with Division Heads to begin focusing on GEMBA Walks in their respective work teams. A GEMBA Walk (go to where the work is happening) is an opportunity to reinforce a positive culture around process improvement and supports accountability and sustainability of improvements. It also increases the trust between leaders and front line workers. It is a great opportunity for a leader, or group of leaders, related to the process to get together and visually inspect the process for the purpose of positive cultural impact.

Recently, Shayne Daughenbaugh, NDOT Process Improvement Coordinator, led Mike Owen through the GEMBA Walk process. Mike Owen is the Division Head for the NDOT Roadway Design Team.



Roadway Design team members discuss progress with Division Head Mike Owen. Pictured (l to r) Aaron Matzke, Jeff Johnston, Mike Owen, Whit Thomas, Toby Fierstein.

The GEMBA Walk gave him a front line view of work being done and an opportunity to discuss the QDIP board (Quality, Delivery, Inventory and Productivity) and the obstacles the team was working to overcome. Section head, Toby Fierstein, said it was good for his team to interact with Mike and hear how he was working to resolve some of the issues they were experiencing. ■

NDOT Partners with UtahDOT and WYDOT to Improve Safety and Mobility on I-80

The Nebraska Department of Transportation (NDOT) has partnered with the Utah Department of Transportation (UtahDOT) and the Wyoming Department of Transportation (WYDOT) on a Federal Highway Administration (FHWA) grant for a multi-state integrated corridor management project to improve safety and mobility on Interstate 80. The \$2.75 million Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant was awarded to NDOT in April.

The funds will be used to demonstrate the full-scale application of information and communication management technologies and regional data-sharing to improve safety and mobility on I-80 along more than one thousand miles. This section of I-80 spans three states—Utah, Nebraska and Wyoming.

“The Multi-State Rural Integrated Corridor Manage-

ment (ICM) project will deploy a combination of technology and management strategies to improve safety and mobility for freight and other travelers along I-80 across Nebraska and through Wyoming and Utah,” said Matthew Baker, NDOT’s Transportations Systems Management and Operations (TSMO) Engineer. “The project builds on multiple technology initiatives and will deploy them to scale to achieve significantly improved and coordinated multi-state operations along this critical corridor.”

Baker noted that the solution will demonstrate improved operational response and dissemination of traveler information for weather and other extreme events, reducing the threats to life and property while preserving mobility. It will create a model and applications for replicable deployments in rural settings across the U.S. ■



Articles By Kari Ruse
NDOT Transit Manager

Kimball County Transit Service uses wraps on vehicles to market their service.

Marketing Transit in Rural Nebraska

NDOT supports 57 rural public transportation systems across the state. In many rural areas it is a common misconception that this service is only for the elderly and disabled and not available to the general public. Despite the “Public Transit” logo on every vehicle, potential riders are often reluctant to use the service.

Bus wraps are a popular marketing tool and can grab the attention of people who weren’t aware the service was available in their communities. The colorful designs on the Kimball County Transit

buses get noticed. Manager Christy Warner says, “The ridership and recognition of the transit system definitely has seen a positive impact. When I went to the Cheyenne County Commissioners to request local matching funds, they knew we had been in their county a lot because of the wraps.”

Jeanne Doerneman, Norfolk Transit Manager, believes networking, radio ads and a community-based board of directors are responsible for a 40% increase in ridership since 2015. Local grants subsidizing fares have also boosted ridership. ■

Mobility Management Project Kicks Off

The NDOT Transit Team and Olsson Associates have kicked off Phase 3 of the Statewide Mobility Management Project. The goal of the project is to coordinate and improve transportation options for Nebraskans. Previous phases of the Mobility Management Project began over 10 years ago with preliminary planning and strategies to enhance mobility.

In Phase 3, NDOT and the consultant team will focus on implementing strategies identified in previous phases.

Priority projects include:

- ▶ Establishing intercity bus service to connect Hastings, Kearney and Grand Island
- ▶ Introducing transit technology to rural providers for dispatching, scheduling and data collection
- ▶ Coordinating transportation in northeast Nebraska
- ▶ Increasing intercity bus service between Lincoln and Omaha

To support the project, Bill Biven from the Center for Public Affairs Research at UNO has been named the new Statewide Mobility Manager. He will be working with urban and rural transportation providers across the state to remove barriers to coordination, increase awareness about transit options, and provide travel training.

RYDE Transit Rescues Flood Victims

As the flood waters rose in Kearney on July 9th, RYDE Transit activated their emergency management plan and sprang into action. Their transit buses navigated flooded streets to rescue travelers from all over the world and transport them to safety. Eight vehicles provided 239 passenger trips in one day, almost doubling their average ridership in Kearney.

In addition to local residents, visitors on vacation and business travelers stranded by flood waters gratefully hopped on public transit vehicles to escape the rising water. Drivers reported transporting people from Canada, Qatar, Oregon, Texas and California.

RYDE has an agreement with Buffalo County Emergency Management to provide transportation to evacuate as needed. Charles McGraw, RYDE Transit Manager, says, “We have had drills on coordination. Our role in the evacuation is to get those individuals being evacuated to an emergency shelter and then to some type of temporary housing (hotels, University, etc.)” ■