New tool: For decades, KDOT has used sand, salt and salt brine in its snow fighting efforts, but crews in northwest Kansas have added a new tool to their arsenal recently: beet juice. As a standalone product, beet juice has little to no melting properties, but when mixed with salt brine, it will help the brine continue to work at lower temperatures to treat icy and snow-packed surfaces. Regular salt brine begins to lose effectiveness at around 15 degrees Fahrenheit. When beet juice is added, the freezing point can be lowered by another 15 to 20 degrees. Colby Subarea Supervisor Brad Reeh says his crew has been using the product for about five years and has had success with it. “We have been mixing it at a 10 percent ratio with brine and only using it when the temps are going to be below 15 degrees.” Reeh said. “When combining it with brine and salt and sand, it seems to stick to the snow-pack better and keep the product working on the road longer.” That stickiness and staying power is important in allowing KDOT crews more time to work on other routes if needed. But don’t expect to see the roads turning red or purple. The solution is actually brown in color and can be easily washed off vehicles. While beet juice is still relatively new to Kansas, it has been used in the Northeast and Upper Midwest since the early 2000s. It is among a handful of alternative products including molasses, beer waste, pickle brine and cheese brine that other DOTs are experimenting with to reduce salt usage.

Chief of Staff

Chief of Staff: Maggie Doll has extensive experience leading transportation planning, policy, communication and outreach initiatives across the country and brings more than 15 years of experience in the transportation industry working in both the public and private sectors. KDOT is not new to Doll, as she spent nearly eight years here before leaving in 2012. While at KDOT, Doll served as Chief of Public Involvement and led the implementation of the successful “Local Consult” process following the passage of the T-WORKS legislation. For the past seven years Doll has worked as a consultant in the transportation industry, spending the last nearly five years at Burns & McDonnell in Kansas City. In her role as Chief of Staff, Doll will manage strategic initiatives and assist with communication and coordination with KDOT’s executive staff. Doll lives in Topeka with her husband Ken and their 4-year old daughter, Harper.
Trivia!

1. How tall is the coal mining shovel called “Big Brutus”? How much does it weigh?
2. How many railroad cars were needed to ship it? How long did it take to build once it arrived?
3. The shovel started digging coal in southeast Kansas in 1963. How much coal could it move in one grab?
4. How much electricity did it take to start Big Brutus?
5. By 1973, most of the coal was gone. What happened to Big Brutus?
6. A non-profit corporation and volunteers restored Big Brutus as a museum – what is its current claim to fame?

Trivia Answers

1. It is 15 stories high and weighs 11 million pounds.
2. It took 150 railroad cars to move and a year to build.
3. With its 90-cubic yard shovel, it could move 150 tons of coal at a time.
4. It required 6,900 volts of electricity.
5. It was considered too big to move and too expensive to dismantle, so it was left there.
6. They say it is the largest existing electric shovel in the world.

Traffic Safety

Stressing safety: Butler County resident Brenda Granger retweeted District Five on Twitter after she saw a KDOT-produced video about seven people who died last month in six crashes over four days on Kansas highways - all were not wearing seat belts. Public Affairs Manager Deb Gruver quickly reached out the same day to interview Granger about her experience in a 2015 rollover crash in Elk County. She realized going into a curve that she was driving too fast to make it. She waited until a small truck driving in the opposite direction passed her before slamming on her brakes.

“I didn’t want to have a head-on collision with him,” she said.

Her vehicle slid across the highway and slipped into the ditch. “When the wheels dropped down into the ditch, it made just enough of an angle and there was just enough centrifugal force to make it just start rolling and bouncing,” she said.

Granger suffered fractured ribs, a cut tendon on her right hand, whiplash and many bruises and Scrapes. But she lived through it. She lived through it because she was wearing a seat belt.

“I would have been ejected” had she not been buckled up, Granger said.

Her vehicle bounced three to four times side to side and end to end, landing in a field. Items in her car were strewn everywhere.

“If all that stuff was all over the field, I could have been all over the field,” Granger said.

To watch the safety video - click here.
Give them room: “Just tag along with them and see what they face out there,” said Salina Supervisor Scott Allen. “It’ll make the hair on the back of a person’s neck stand up.”

District Two Public Affairs Manager Ashley Tammen went along and took photos of the guardrail repair work on I-135 on Feb. 1. Several KDOT workers said while it may seem like a simple job, it’s not, and explained why.

“Doing the actual repair isn’t what takes the most time,” says Rocky Lindgren, Equipment Operator at Salina. “Setting up traffic control to ensure our safety and hoping cars give us enough room - that’s what takes the longest.”

Placing cones is the trickiest part, Lindgren said, “Because that’s when you have to actually be out in the lane and hope that people are paying attention.”

“When we are working, I notice several drivers fly by who aren’t even paying attention to the road, but are either looking at their phone or what we are doing,” says Terry Shank, Equipment Operator Senior at Salina.

“You can be doing your job just fine but the safety while doing it is the hardest because people don’t pay attention or move over,” says Tim Frederiksen, Equipment Operator Senior in Salina.

“I’m always looking in two different places while I’m working because I’m also looking out for my coworker and making sure he doesn’t step too far into traffic,” Frederiksen said. “We all look out for one another out here.”

“It made me nervous watching the cars fly by us and seeing several of the drivers not paying attention to the road,” Tamman said. “So I can’t even imagine the nerves of the crew as they stood only feet away from the traffic hoping drivers are paying attention so they can make it home safe.”
Future City: A total of 50 teams from 25 schools in Kansas and the Kansas City metro area competed in the 2019 Great Plains Regional Future City Competition on Jan. 26 at Kansas State University. Future City is an international competition that focuses on improving students’ math, engineering, and science skills, with students in sixth to eighth grades participating. Students take what they learn from a virtual city design and then conduct research for an essay and city models that are created for their presentations. This year’s topic was the powering our future.

“It’s a learning experience,” said Kevin Koester, KDOT Engineering Associate III and Great Plains Regional Coordinator. “Even the kids who don’t win an award still get the experience of making a presentation and seeing a college campus that they might not otherwise get to see.”

More than 70 judges from KDOT and other transportation organizations donated their time to assist with the competition. The Great Plains Regional Planning Committee organized the event.

Above, Kaguya team members, from Southwest Middle School in Lawrence, won the regional event and will go on to compete in the national competition from Feb. 17-19 in Washington, D.C. At left, city models were on display before the teams made presentations at the Jan. 26 competition in Manhattan.

KTA Design Contest

The KTA announced its fourth annual design contest as part of National Work Zone Awareness Week activities that will take place in Kansas. This contest is open to students across the state in grades 8-12 to create a design about work zone safety. The winning submission will be featured in VYPE Magazine and the winner will receive a $200 gift certificate. Full rules and more details are online at www.ksturnpike.com/contests.
In Memory

Condolences to the family and friends of retiree Russell Willbourn who passed away on Jan. 23 in Topeka. Willbourn retired from KDOT in 1995 as a Program Consultant in the Bureau of Local Projects. He worked for the agency for more than 35 years.

Condolences to the family and friends of retiree Suzanne Domme who passed away on Jan. 16 in Topeka. Domme worked for KDOT for more than 40 years, retiring in 2010 as an Administrative Assistant in the Bureau of Transportation Safety & Technology.

KDOT Blog

Kansas Transportation

Thursday, Feb. 7

#IAMKDOT - Bonnie Hirsh

Stop by KDOT’s Dodge City Area Office and you’ll be greeted by Administrative Specialist Bonnie Hirsh. According to her co-workers, she’s always there with a smile and a desire to help. Hirsh has served as the Administrative Specialist in the Dodge City Area Office for just more than five years and fondly refers to her co-workers and the Subarea crews she works with every day as her family. Most days, Hirsh is busy processing payments, ordering parts and helping the crews with time card entries and other issues that need to be handled so the crews can do their work. She’s always willing to go the extra mile for those around her, whether it’s bringing treats for a celebration, or answering calls and updating road conditions during snow events.

In fact, her most memorable moment at KDOT has been the guys bringing her a sleeping bag one night, so she could catch a nap on the office floor during a snow event. She says the best part of her job is her KDOT family and KDOT celebrations, like the summer barbecue and the Christmas party.

Hirsh graduated from Kinsley High School and attended Dodge City Community College. She enjoys spending time with her family, especially her granddaughter, Haddie. She also teaches religion classes at her church and enjoys reading mysteries, playing cards and cooking.

Do you know a KDOT worker that deserves recognition? Nominations are open - email Mallory.goekel@ks.gov today to get started.

See more stories on the Kansas Transportation blog at http://kansastransportation.blogspot.com/
A farmer's workplace: For several KDOT employees, operating equipment at KDOT is not the only place they operate equipment. Several of the KDOT employees in District Two have taken up farming as a side job or hobby - they either farm on the side or help a fellow farmer during the busy seasons. Several supervisors said their experience and work ethic from farming is a benefit to the agency. A few of these farmers are highlighted below.

Tom Wendell in Beloit has experience not only as an Equipment Operator working for KDOT but also raising livestock and farming. Tom has been with KDOT for 42 years and raises cattle, sheep, and goats on his farm. He plants and bales his own hay to feed them in the evenings after getting home from working at KDOT. “Sometimes I have gotten home at 8:30 p.m. after working a 12-hour shift at KDOT and after going out to the barn to check on the lambs, I discover a baby is born so I am out there till 1:30 or 2 a.m. helping take care of the new born lamb,” says Wendell.

Ed Dohl, Equipment Operator in Lincoln, does a little bit of everything when it comes to farming. He has cattle, sheep, wheat, milo, soybeans, a horse and even a mule. Dohl says a typical day for him starts with chores on the farm and putting wood in the wood stove, then heading to KDOT. Dohl says KDOT is a good place for a farmer to work and he likes the early summer hours, so he can get off early and work on the farm.

Rodney Howard grew up on his family farm and started with KDOT in September 1977 as an Equipment Operator in Mankato. He has continued farming while working for KDOT and now supervises the crew in Mankato. Howard farms about 150 acres of wheat and 150 acres of soy beans on his family farm. “KDOT has been very good to me and my family and I have tried to be helpful in return,” says Howard.

Lance Wilton, Equipment Operator Specialist in Lincoln, helps with harvest and planting every year. “I enjoy working for KDOT. There’s great benefits, flexibility to help farm and it’s nice that we’re not always doing the same thing because jobs change from season to season,” says Wilton.
**District Five**

**Improving efficiency:** Subarea crews in Medicine Lodge and Anthony offer two great examples of working smarter to save time and resources.

Medicine Lodge Subarea Supervisor Dewayne Roland, seen below, saves time programming school zone lights on K-2 in Barber County by inputting dates that the school is out into a control box that he then plugs in to identical boxes on the poles. Previously, it took two people to program the lights – one to read out the dates and one to program them.

Anthony Equipment Operator Jason Wolff and Equipment Operator Senior Paul Thompson, seen above, built a storage rack for a new hydraulic hammer out of spare materials. They estimate it would have cost about $5,500 to have an outside company manufacture a similar rack. They used retired guard rails, snow plow backup blades and spare iron to make the rack, which will help crews properly store the hydra hammer.

“We want to be good stewards of KDOT resources,” Anthony Subarea Supervisor Greg Bayless said.

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**KTA**

*New girders for the 30th Street South Bridge crossing over I-35/KTA at mile marker 17. This bridge reconstruction is part of the contract to convert the Southern Terminal toll plaza to open road tolling, like the two toll plazas on I-70/KTA.*
Crews around the state have worked numerous snow and ice storms this winter. District Maintenance Superintendent Chris Collins took this photo of a KDOT truck working the morning of Jan. 19 on the I-235 ramp to southbound I-135 in Wichita.

Celebrating at KDOT: In a pre-celebration of Kansas Day, Chanute fourth-graders arrived at the southeast District KDOT office on Jan. 25 bearing unique gifts. Each student had crafted a small collage of photos showing what he or she loved most about Kansas, ranging from animals to sunflowers to fun places to visit and more.

The clever collages are now displayed in the office window. During the visit the kids also gathered at the front flagpole to switch out the weather-worn official Kansas State Flag with a new state flag. Assisted by District staff, they got to check out a dump truck and then got decked out in KDOT attire, appropriately outfitted with safety vests, hard hats and sign paddles. Although outdoor conditions were chilly, the field trip to KDOT ended on a warm note. Class members enjoyed juice and cookies before heading back to school.

Chanute students visited the KDOT District Four office on Jan. 25.
New transportation maps: Whether you want to find the closest airport, discover new places of interest or travel along a Scenic Byway, the new 2019-2020 Kansas Official State Transportation Map has it all. The map, published by KDOT, highlights numerous tourist and scenic locations, including state parks and lakes, as well as the recreation areas across the state. The cover features the Little Jerusalem Badlands State Park near Scott City. City/county indexes and a distance map allow motorists to pick the best route to their destination. Visitor resources, helpful phone numbers/websites and locations of museums and hospitals are also provided. On the back of the map are inset maps of Kansas City, Wichita, Topeka and 13 other cities. There is also road condition information and details on how to get roadside assistance. Maps are available at travel information centers and KDOT Headquarters and District Offices. They can also be requested at http://www.ksdot.org/maps.asp.

Retirees

The following employee will retire from KDOT in February.

District Five
Greg Clothier, Equipment Operator Senior, El Dorado.

The following employee will retire from KDOT in March.

District Five
Keith Burton, Equipment Operator Senior, Great Bend.

Scenic

KDOT’s Neil Croxton captured this view of Goodman State Fishing Lake, located south of Ness City.