

# TRANSLINES EXPRESS

Jan. 6, 2021

## Why that KDOT plow truck is not going faster

By Tim Potter  
District Five

If you are a motorist wanting to pass a KDOT truck plowing snow or putting down salt or brine to fight ice, you might not realize why it is moving so slowly.

It comes down to physics and performance.

Fact, the physics: A KDOT plow truck weighs around 26,300 pounds – and that's unloaded – while the average vehicle weighs about 4,000 pounds.

The KDOT operator is trying to keep all that weight under control in slippery conditions while pushing snow with a plow in front and maybe a wing plow on the side. That's a lot of force exerting from different directions to keep under control.

So the operating speed for the plow truck in those conditions is well under normal highway speeds -- and may be as low as 10 mph when a blizzard cuts visibility. Just because the truck is so heavy doesn't mean it won't lose control on ice or packed snow.

One reason KDOT wants motorists to keep a distance behind snow-and-ice treatment trucks is this: beet juice and brine.

KDOT sometimes uses 10% beet juice with brine. The beet juice helps brine stick to pavement so the brine can melt ice or prevent it from forming, especially on elevated or exposed areas prone to freezing.

The beet-brine mix also can spray back on vehicles, especially if they are close enough to the KDOT truck applying the mix. It's why KDOT recommends that motorists stay back 100 feet if possible.

District Five Engineer Brent Terstriep explains: "Depending on the storm, we may be pre-treating the



entire road section, or we may only treat structures, like culverts or bridges. When we spot treat, especially over a culvert, that is not extremely apparent to the motorist - that they are crossing a structure. They may get a surprise when the liquid is turned on."

In addition, if the truck goes much over 30 mph when dropping salt, much of it can bounce off the roadway.

This is why KDOT asks the public to please be patient and keep a distance behind KDOT plow trucks, and, if possible, wait until the plow truck turns around before passing.

If you pass, please do so carefully – and remember that you might not see a wing plow jutting out 7 feet from the side of the plow truck because of blowing snow or limited visibility.

"The most important thing to us is that everyone gets home safely – the traveling public and our people," said KDOT Wichita Area Superintendent David Lechner. "So we ask that you be alert and understand the speeds at which we have to work."

# First snow of 2021



While KDOT crews have battled several storms across the state this winter, crews in central and eastern Kansas started off the new year clearing several inches of snow on Jan. 1. Above, a KDOT truck travels eastbound on K-32 at Turner Diagonal while below, a KDOT truck is southbound on U.S. 73 south of K-192 in Leavenworth County. Photos by Albert Horn, District One



A few thank you posts on Facebook from the public on the Jan. 1 snow event -

- ◆ Thank you for all you do to keep drivers safe during winter weather events.
- ◆ Be safe in your appointed rounds, need you around for the continuing care of our highways. Your efforts are greatly appreciated.
- ◆ Thanks for keeping the highways safe.
- ◆ Thanks for keeping our roads clear so that we can travel safe.

## **TRANSLINES EXPRESS**

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# Team members step in to make needed repairs

Congratulations to the District Two, Area Two, Storm Water Control Team for being selected as the Example of Excellence for the third quarter of 2020.

The team was recognized on Dec. 18 by Secretary Julie Lorenz, State Transportation Engineer Burt Morey and others during a virtual ceremony.

Team members from the Beloit and Concordia Subareas, along with the District Crew, all worked together to reinstall and repair the erosion control that was washed out and destroyed earlier in the year on the banks of Asher Creek under U.S. 24.



*Greg Albert  
Beloit*



*Phillip Eller  
Beloit*



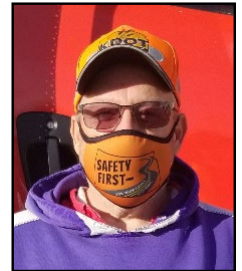
*Mike Jones  
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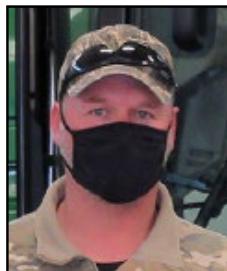
*Erik Duenas  
Concordia*



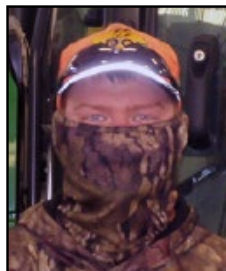
*Brentin Hake  
Concordia*



*James Joyner  
Concordia*



*Dannie Kearn  
Concordia*



*Garrett Lawrence  
Concordia*



*Donnie Burkholder  
District*



*Shannon Clarkson  
District*



*Leonard Fishburn  
District*



*Steve Schmidt  
District*



*Doug Newquist  
Mankato*

Team members not pictured include Chip Diers, Beloit; Bruce Sicard, Concordia; and Jeff Noland, Belleville. Team member Ryan Peltier, Concordia, passed away on Nov. 14.

## Thank you for your service

### Retirees

The following employees retired from KDOT on Jan. 1.

#### Headquarters

**Charles Rutherford**, Engineering Technician Specialist, Construction & Materials

**Martha Kolich**, Management Analyst II, Fiscal & Asset Management

#### District Five

**Kenton DeBuhr**, Equipment Operator, Wellington

**Roger Brown**, Equipment Operator, Wichita

The following employees will retire from KDOT on Feb. 1.

#### Headquarters

**Stephen Woodbury**, Technology Support Consultant II, Information Technology

#### District Four

**Ronald Pillar**, Equipment Operator, Columbus

#### District Five

**Ron Putman**, Equipment Operator, Wichita

### In Memory

Condolences to the family and friends of retiree Carl Hinds, who passed away on Dec. 14 in Tulsa, Oklahoma. Hinds was an Equipment Mechanic Specialist at the Independence office for more than 12 years, retiring in 2011.

Condolences to the family and friends of retiree Bob Trosper, who passed away Nov. 30 in Garden City. Trosper began his career as a Utility Worker in the Garden City Subarea in 2004. He retired as an Engineering Technician in the Garden City Construction Office in 2014.

## New Smith Center Subarea building



*After the former Smith Center Subarea building was torn down (above), the Smith Center Subarea crew moved into their new building last month (below).*



*The structure, which replaces the original building that was constructed in 1959, features heated drive-through bays, KDOT and KHP office spaces, new restrooms, a break area and new crew lockers. Photos by Chris Hrabe, District Three*





Preparations took place on Dec. 30 and 31 for the New Year's storm. Photos 1/2. Salt was loaded into the brine maker. Photo 3. Brian Hearn, Equipment Operator Midpoint, makes brine in Junction City. Photo 4. The brine salt dilution was checked. Photo 5. Then the 20,000 gallon tank was filled with brine. The team constantly works to make brine during storms as one truck uses an estimation of up to 4,000 gallons an hour while pretreating, says Kenny Cohen, Highway Maintenance Supervisor in Junction City. Photo 6. Equipment Operator Nicholas Kleiber hooks up hydraulic hoses for the brine applicator and salt spreader while Equipment Operator Andrew Ellsworth tightens bolts on a plow in Marion. Photos by Ashley Perez

## Preparing for the storm



# Near misses - learn from them, share with others

**By Troy Whitworth, Director of Safety**

Have you ever been working and had something happen, and you knew that you had just been very lucky? Maybe what happened could have hurt you or someone else, or it could have even gotten someone killed.

I don't know about you, but over my career, I have experienced many near misses or close calls. And there are two things to do afterwards – learn from the incident so it doesn't happen again, and share with others so they don't have to learn the hard way. The outcome for someone else may not end as well as it did for you. With this thought, I'd like to share a story with you about a close call.

Let me take you back many years ago when I was an Equipment Operator. I spent a great deal of time on a track loader doing dirt work. I also spent a lot of time hauling the track loader from location to location using a Landoll trailer.

This Landoll trailer had hydraulics and the rolling axles similar to what is currently used. One day I hauled the track loader to where I was repairing a washout. I unhooked from the trailer so I could haul a few loads of dirt. My Supervisor stopped by as I was finishing, and he helped me back the truck up to the trailer.

As I backed under the trailer hitch, I got out of the truck to assist him with hooking the trailer hydraulic lines to the truck. Once they were hooked up, I moved to the controls so I could lower the trailer hitch onto the pintle. Once the hitch was lowered, my Supervisor finished hooking up the trailer air lines, towing chains and light connections. I moved the axles into the forward position so I could lower the end of the trailer to the ground. Then I loaded the track loader on the trailer, boomed it

down, raised the deck and finished by stowing the trailer wheels in the transport mode. I hopped in the truck cab, fastened my seat belt and moved on to the next location.

My Supervisor followed me to help unload the track loader from the trailer. I started moving the wheels forward on the trailer to begin the unloading process, which caused the weight to shift on the load. At that moment, the trailer hitch came off the pintle and was floating in the air. It had come unhooked! I looked at my supervisor and asked: didn't you latch the trailer?

Three words came out of his mouth that still ring in my ears; it was "NOT MY JOB" to make sure the hitch was latched. For a split second, I was angry with him for not

latching the hitch. How could he have let me down; he was right there hooking everything else up, air lines, towing chains and lighting connection. How could he miss the hitch? Had this trailer come off the truck it could have cost me my life.

I think back on this close call as a defining moment for me. It really was not my Supervisor's responsibility to check that the

hitch was latched on the truck. Each person who pulls a trailer down the road has a great responsibility – it is their job to make sure that the load is secure on the trailer. It is their job to make sure that the connection between the trailer and the truck are secure.

I have trained many new employees to get their CDL and have explained this story to all of them. I feel this is my responsibility – I learned from the incident and I want to share with others.

Keep that in mind as you are hooking up to a trailer. You have a responsibility for your safety and the safety of others traveling down the highway by making sure the connections are secure; for your family and mine.





# U.S. 75 expansion project open south of Caney



The new four-lane section of U.S. 75 from Caney south to the Oklahoma border opened in early December. Photo by Priscilla Petersen, District Four

By Priscilla Petersen  
District Four

The recently completed expansion of U.S. 75 to four lanes from Caney south to the Kansas-Oklahoma border is “absolutely wonderful,” according to Caney City Manager Fred Gress.

“First of all, the project was beautifully orchestrated by KDOT,” he said, adding, “The road is gorgeous.”

Work on the \$6.2 million previously delayed T-WORKS project started in March 2020. The mile-long section was opened to four-lane traffic in early December. Emery Sapp & Sons, Inc., of Kansas City, Mo., was the primary contractor, with Engineering Technician Senior

Steve Gibson of the Independence office serving as project inspector for KDOT. Kris Norton’s road squad and Paul Kulseth’s bridge squad designed the project.

Gress took pride in noting that Caney is now the only town in Montgomery County that has direct access to the Tulsa, Okla., metropolitan area on a continuous four-lane highway.

Future plans for the expanded highway section include creating a green space with native grasses on east side. In addition, Gress said that streetlights will be installed at several locations along the stretch.

KDOT, Caney and Montgomery County officials and citizens will celebrate the expansion with a ribbon-cutting ceremony this spring.

**HAPPY  
NEW  
YEAR!**

## Start the New Year off right

A couple things to check on:

- Make sure both your office and cell phone voice mail reflect current work information.
- Check your signature block and make sure it does not refer to the 2020 Census. If you need help changing it, [click here](#).
- With many people working remotely, make sure your calendar is kept up-to-date to help in scheduling meetings.

## I-70 project wraps up



*The final piece of the multi-phase I-70 reconstruction project in Gove County wrapped up in December with the installation of shoulder rumble strips. The project began in August 2018 and included a total pavement replacement on both the east and westbound lanes on a 9-mile portion from Grainfield to near Park. Debbie Tanking's road squad and Brad Rognlie's bridge squad designed the project. Photos by Clinton Capps, District Three*

## Kudos

Mr. Albert Horn, Superintendent  
Mr. Jason Van Nice, Metro Engineer

My wife and I live off of K-32, just west of Linwood, and were directly in the path of the May 2019 tornado. I am contacting you to commend the KDOT employees who work out of the Edwardsville shop for their efforts immediately following the storm and continuing through this fall.

In the aftermath of the tornado, the crew under Cody Hilt's direction cleared trees and debris from along the K-32 right of way. Local residents were directed by Leavenworth County to push debris down to the K-32 right of way for pick up. Cody and his crew picked up 7 dump truck loads. I don't know how we would have ever gotten rid of all that debris without that help.

There were a number of trees located on the right of way that blew over onto our fencing and pasture in the southeast corner of our property. Due to the amount of work yet to be completed by your crews along K-32, Cody and I agreed that removal of those trees could wait until KDOT's work schedule would permit.

Shortly after the first of 2020, I was contacted by Keith

Snyder, who replaced Cody, about coming out and removing the trees. Keith came out that afternoon and we discussed the work to be done. He let me know they would come out when their schedule permitted. He called me later in the spring just to let me know that he still had it on his list and hadn't forgotten.

This fall, Keith, Ron Young, Denny Close and Jeremy Shomaker spent several days here, removing the trees and cleaning the right of way along the east end of our property. They also removed a number of dead trees and debris from the right of way hills on the west end.

While the devastation of the storm is still readily apparent, the efforts of the local fire department, law enforcement, utility crews, your KDOT personnel, particularly these individuals, and literally hundreds of volunteers who came to help clean up for weeks, helped us through the process. We just wanted to let you know that we believe these guys and the other employees from the Edwardsville Shop went above and beyond and we wanted to express our appreciation.

Sincerely,  
Joe Perry



# Using drones improves quarry inspections

By Kyle Halverson  
KDOT Chief Geologist

KDOT Geology Section has stepped up its game in improving safety as it has made a concerted effort to reduce risk while conducting quarry inspections across the state. This effort reaches across bureau lines and includes coordination with contractors.

Historically, a quarry inspection involved a KDOT Geologist and a District Quarry Monitor going into an active quarry, describing the characteristics of the rock and collecting samples to be tested for quality. However, when going into an active quarry, there are a number of things to consider - truck traffic, stockpile integrity and falling rocks, to name a few.

These risks are an inherent part of the job but can be reduced by having lightbars flashing and building



*Getting images of the ledge face in a quarry using a drone was accomplished on Dec. 8. Photos by Kyle Halverson, Headquarters*

smaller sample piles to sample from. The one risk that has been unavoidable up until this point is falling rocks when characterizing the rock ledge face. This risk has been identified by KDOT as well the Kansas Aggregate Producers Association (KAPA) as the greatest risk to personnel when conducting quarry inspections. As a result, KDOT Geology began to look at alternative ways to get near the ledge face without putting a person in danger.

Using a drone/Unmanned Aerial Vehicle (UAV) for the inspections was tested for the first time on Dec. 8 in coordination with Hamm Louisburg Quarry and KDOT's Survey, Aviation and Geology Section. The result was an overwhelming success. The drone flew close to the ledge face to collect the images while Light Detection and Ranging (LIDAR) scans measured the bed thickness.

The results from this joint effort met every safety goal while providing a high level of accuracy. The KDOT Geology Section will continue to use drones for quarry inspections and also will look to capitalize on this technology when performing geologic investigations for road designs, bridge deck surveys and bridge foundation investigations.



*UAV pilots Mike Orth and Kristin Stein get ready to fly the drone that took images and allowed for high level description of the ledge.*

# Trivia!

## K-State Research and Extension Kansas weather information recorded from 1895 to 2015.

1. In July 1936, what two communities in Kansas had record high temperatures of 121 degrees?
2. When did 9.1 inches of rain fall in 24 hours in Kansas?
3. What month has the most frequent record 24-hour snowfall events?
4. In 2009, how many inches of snow fell in Pratt in a 24-hour time period?
5. What was both the hottest and coldest year recorded in Kansas?
6. Five of the 10 hottest years recorded occurred in which decade?
7. What were two of the wettest years in the state?

## Wichita North Junction Project moves into second phase

By Tracy Crockett  
District Five

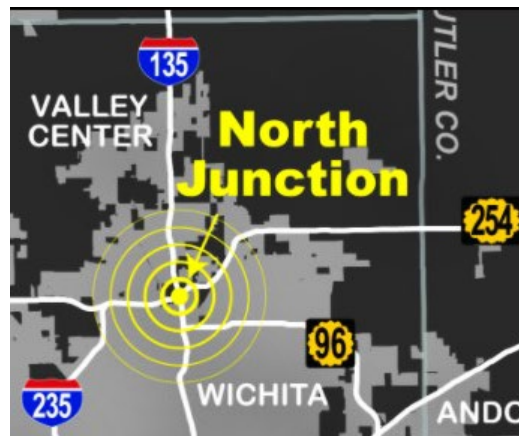
The Wichita North Junction Project is going gold. The construction letting will be in February for the first part of the Gold Project, which is the second phase of the overall project.

The North Junction Project, where I-135, I-235, K-96 and K-254 meet in north Wichita, began in 2015 with a concept study. The study resulted in a phased plan to address needs that include safety features, improved traffic flow, replacement of aging pavement and replacement of existing bridges. The improvements are expected to accommodate traffic through 2050.

The project is divided into three phases - green, gold and purple.

The current Green Project sets up I-235 to function with future phases of the project. It's expected to be completed this November.

Work is slated to begin on Gold Project Phase 2A in April. This phase will construct a new southbound I-135 ramp to southbound I-235 plus replace the existing loop



ramp from northbound I-135 to southbound I-235 with a flyover direct connection to southbound I-235. The \$30.2 million project is included in the KDOT Cost Share Program and relies on supplemental funding from the City of Wichita and Sedgwick County. This phase is expected to be complete by the end of 2023.

Gold Project Phase 2B is anticipated to follow with the letting of bids in late 2022. This phase will provide a two-lane

direct connection from northbound I-235 to eastbound K-96. A new two-lane flyover will connect westbound K-96 to southbound I-135 and a new ramp will be provided from westbound K-96 to northbound I-135.

The Purple Project completes the major infrastructure improvements and a preliminary design has been completed.

I-135, I-235, and K-254 were constructed in the 60s and early 70s. K-96 was finished in the 90s. Each day, 97,000 vehicles use the North Junction, with more than 9,700 being trucks. The study found that by 2050, the total vehicle count is expected to increase to 160,000 vehicles a day.

## Trivia answers

1. Fredonia and Alton.
2. August 2005.
3. March.
4. 30 inches.
5. 1912.
6. 1930s.
7. 1951 and 1993.



# K-14 realignment in Reno, Rice counties to move forward

By Tim Potter  
District Five

Starting around two years from now, K-14 motorists will be able to travel a more direct route between Hutchinson and Sterling.

It will be a 15-mile northwesterly realignment of highway that dates to 1919. District Engineer Brent Terstriep noted some of the history of the existing highway as well as the importance of the new project.

Some of the existing highway connected what were known as the New and Old Santa Fe roads. "It was brick, 18-foot-wide," Terstriep said of the original road.

"We are glad to see the IKE program delivering this T-Works project and look forward to the safety improvements that this freeway project will provide for the traveling public in both Reno and Rice counties," he said.

The current project is a two-lane roadway on an alignment that could be expanded to four lanes in future years.

The new alignment will arc around the east side of Nickerson and bend around the northeast side of Sterling.

A previous construction estimate has been placed at roughly \$80 million.

That massive project – there's a 7.3-mile Reno County segment and an 8.1-mile Rice County segment – is about to be let in February, with construction expected to begin around April.

It will take a lot of earth work: District Five Construction and Materials Engineer Nick Squires estimates that the Reno County portion alone will involve moving around 2.5 million cubic yards of dirt. The Rice County segment

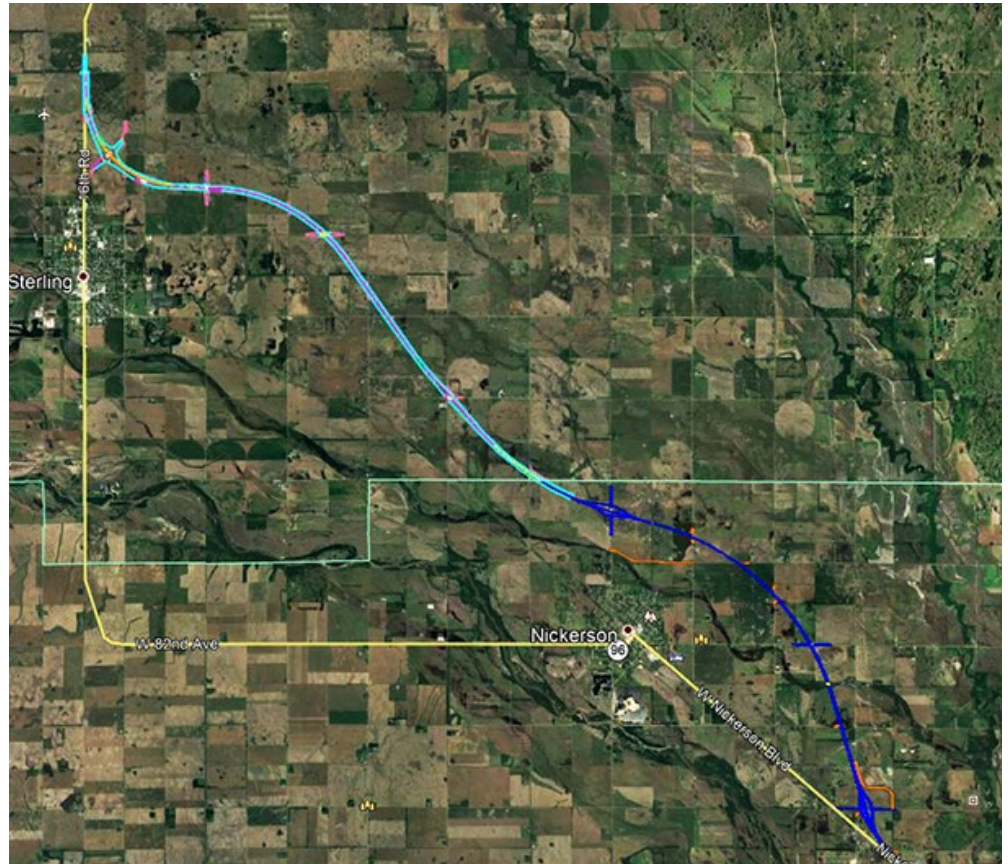


Diagram shows upcoming K-14 realignment in Reno and Rice counties.

will involve an estimated 2.1 million cubic yards of dirt.

Why all that dirt? Because the new path requires cutting in drainage, building up embankments.

The new roadway will be crossing drainage areas and side roads. Some of these will need to be left open for local access, some will be permanently closed.

"It's kind of complicated," Squires said.

Squires estimates it will take approximately two years to do all the dirt work and build the necessary bridges and drainage structures and around three to four months for laying all the asphalt.

The new highway through the two counties will include building 10 span bridges and installing 34 box culverts.

# U.S. 83 light tower removed

By Lisa Knoll  
District Six

The Garden City Subarea assisted Kansas Electric and Ladd Welding & Machine Service in removing a 100-foot light tower on the U.S. 83 exit ramp on U.S. 50 the last week of December. According to Area Engineer Gary Bennett, the light tower was installed in 2009 when this section of U.S. 50 was expanded from two lanes to four lanes.

“When the tower was inspected last year, a nine-inch crack was found just above the base of the unit,” said Bennett.

Crews lowered the light ring and removed the lights for safe keeping before disconnecting the power. A crane then lowered the pole to the ground where it was cut into pieces so it could be removed.

*Right: Daniel Estrada from the Garden City Subarea works to remove the junction box from the lightpole. Far right and below: Crews and a crane work to remove the pole and lower it to the ground.*



*This photo shows the light ring and how large the lights are. Photos by Lisa Knoll, District Six*





## KTA briefs

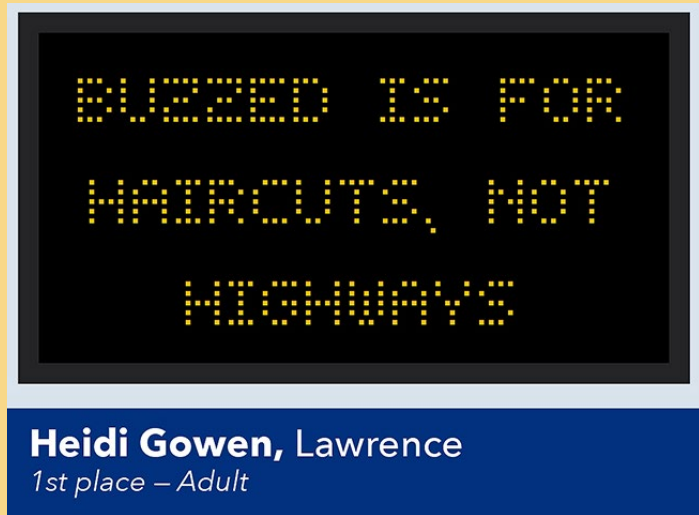
◆Despite challenges related to the ongoing pandemic, the Kansas Turnpike Authority has maintained its solid financial position, customer feedback remains positive and operational plans are moving forward as scheduled. Later this month, KTA also plans to open its first cashless tolling exit. Read more in the latest news release [here](#).

◆The winners of KTA's digital message safety contest has been announced. Congratulations to these winners:

### Adult division winners:

1. Heidi Gowen, Lawrence: Buzzed is for / haircuts, not / highways
2. Owen Bolan, Wichita area: Rudolph Alert / spotted nearby / Be alert!!!
3. Jennifer Sumrell, Wichita: Leave flying / to Rudolph / Slow down

### Youth division winners:



1. Grace Jowers, Topeka: Santa wears a / belt, so should / you. Buckle up
2. Rylee Hoffer, Topeka: Holiday cheers / should never / bring tears
3. Seth Madron, McPherson: Alcohol / will make / you stall

## KDOT kicks off active transportation plan

KDOT is developing the state's first Active Transportation Plan (ATP) in 25 years.

Active transportation refers to human-powered modes of transportation such as walking or cycling. The Kansas ATP will serve as a guide for KDOT on how to include active transportation infrastructure when planning roads and bridges.

"Providing access to safe, direct, continuous and pleasant routes whether driving, walking or cycling is essential for a healthy multi-modal transportation system," said Matt Messina, KDOT Comprehensive Planning Unit Manager.

KDOT is conducting an ongoing opinion survey through Jan. 31 at [www.surveymonkey.com/r/KansasATP](http://www.surveymonkey.com/r/KansasATP). Persons with active transportation stories can share at [www.surveymonkey.com/r/KansasATPStories](http://www.surveymonkey.com/r/KansasATPStories). Additional information and video are available at [www.ksdot.org/KansasATP.asp](http://www.ksdot.org/KansasATP.asp).

The planning process for the Kansas ATP will continue through 2021 and will involve national and local experts in planning, design and safety.



*KDOT is focusing on biking and walking as part of the new Active Transportation Plan. File photo*

Follow ATP activity on Facebook at [www.facebook.com/KansasATP](http://www.facebook.com/KansasATP), using #KansasATP. KDOT contacts are Messina and Jenny Kramer, Bicycle and Pedestrian Coordinator.