



WINTER 2025

# KANSAS LTAP NEWSLETTER

A Service of The University of Kansas Transportation Center for Road, Street, & Bridge Agencies

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# A MESSAGE FROM THE DIRECTOR

By Rebecca Bilderback , KS LTAP



Hello KS LTAP Community!

It really is true that time flies when you're having fun! It's been five months since I started as the KS LTAP Director and I strived to hit the ground running. Connection and outreach are important to me and it's been great getting to meet so many of you already. Between MINK, KAUTC, and the KDOT Local Consult Meetings, I've been starting to see familiar faces and that has been rewarding. I look forward to continue making new connections!

On the topic of connections, one thing that was apparent to me when starting in this role was how well connected the community is. Each agency and community I have interacted with have been supportive and collaborative. I've seen how much people care about communities across Kansas and take pride in advocating for their residents. I'm grateful to be in this role, working with you all, leading this impactful program.

As 2025 comes to an end, I'm excited to see what's in store for 2026. My goal is to continue on with the momentum we've built and further our reach across Kansas. I appreciate all of you and your efforts to make Kansas safe and well connected.

Wishing you and your families a wonderful holiday season, stay warm!

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## WELCOME RANDY LEONARD!

Kansas LTAP is excited to welcome Randy Leonard as the new Local Engineer Liaison for the program. With decades of experience in bridge engineering, inspection, and public service, Randy brings a deep understanding of Kansas infrastructure and a strong commitment to supporting local agencies across the state.

Randy Leonard has lived in Kansas for more than 45 years, first arriving in 1980 when he was assigned to Ft. Riley by the U.S. Army. A native of north Georgia, he earned his bachelor's degree in political science with a minor in military science from the University of Georgia before commissioning as a field artillery officer. After completing training at Ft. Sill, he served in the 1st Infantry Division Artillery for three years. When his military service concluded, Randy attended Kansas State University to pursue a civil engineering degree, building on his artillery background in math, trigonometry, and surveying. In 1986 he joined the Kansas Department of Transportation as a bridge engineer, later becoming the Bridge Team Lead for the Bureau of Local Projects. Following the I-35W



bridge collapse, he played a key role in strengthening Kansas' local bridge inspection program through improvements to scour evaluations, load ratings, and fracture-critical inspections.

In 2011, Randy became the Oklahoma Bridge Engineer for the Federal Highway Administration and later earned certification as an instructor with the National Highway Institute. After retiring in 2018, he spent eight years teaching NHI safety inspection courses nationwide before joining LTAP and KUTC in a part-time role. A licensed

Professional Engineer with nearly 40 years of experience, Randy looks forward to providing engineering assistance to cities and counties across Kansas. He and his wife now live in Elk County on her family's historic land and enjoy spending time with their two children and granddaughter.

Welcome to the team, Randy!

# KANSAS LOCAL BRIDGE FACTS

By Randy Leonard, KS LTAP

Bridge data is essential for evaluating infrastructure needs, supporting policy decisions, and responding to public safety concerns. The importance of accurate bridge information became especially clear in August 2007, when the I-35W bridge over the Mississippi River in the Twin Cities failed. Following this event, Kansas faced rapid, high-level inquiries about bridge conditions, ownership, age, materials, and design types.

At that time, Kansas had more than 25,000 bridges statewide, with over 20,000 owned by cities and counties. The demand for immediate, accurate data highlighted the need for clear and well-maintained bridge inventories. Below are some of the numbers from the 2025 National Bridge Inventory for local Kansas bridges.

	Number	Percentage
Total Kansas Bridges	24,891	100%
Local Kansas Bridges	19,221	77%
Good Condition (Local)	8762	46%
Fair Condition (Local)	9244	48%
Poor Condition (Local)	1215	6%



**Chicken Creek Bridge, located in Lone Star, KS. Built in 1913.**

Bridge Age (Years)*		
Less than or equal to 50	9508	49.47%
Great than 50 and less than 100	8938	46.50%
Greater than 100	775	4.03%
Greater than 125	6	0.03%
Greater than 150	1	0.01%

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\*The oldest bridge in Kansas is a stone arch bridge built in 1870 in Pottawatomie County over a tributary to the Vermillion River.

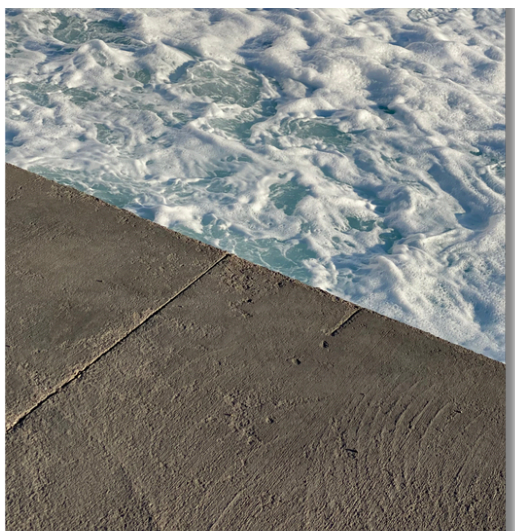
Kansas still has many old bridges, but the good news is that the vast majority are in at least fair condition. Overall, Kansas ranks number 4 in the country for the number of bridges. This is due to the large number of road miles resulting from our section line roads. We rank 9th out of 50 states for best condition.

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## CONCRETE SCALING

By Mark Shelton, MO/KS ACPA

One of the more unsightly distresses in a concrete driveway or residential or city street is scaling. Scaling is the flaking or peeling of the surface layer of hardened concrete. By surface layer we are talking about an approximate one eighth, plus or minus, inch layer of mortar, exposing the coarse aggregate. The primary mechanism for causing scaling is moisture penetrating the surface and freeze-thaw cycles. Deicing salts, especially calcium chloride and magnesium chloride, in combination with the freeze-thaw cycles can accelerate scaling. When concrete is placed where it will experience wet freeze cycles, and deicing salts, to clear snow and ice, it is imperative best practices in mix design, placing, finishing and curing are followed prevent scaling. This article will describe some best practices to help concrete resist scaling.



All things concrete begin with the mix design. All concrete that will be exposed to wet freeze must be air entrained. Generally, 4.5 to 7.5 percent entrained air in concrete will provide a network of closely spaced air bubbles to provide room for expansion for any water that is in the concrete when it freezes. In addition, designing the mix with a water to cementitious ratio not exceeding 0.45, or even as low as 0.40 would be better, to resist scaling.

After the proper mix design is batched, delivered and placed in the forms it must be finished properly to resist scaling. Finishing and when to finish is critical. The proper time to finish the concrete is just after any bleed water has evaporated and then only use the finishing tools on the concrete to create the desired surface. Over finishing can work out the air void system in the top surface of the concrete and eliminate its ability to resist freeze thaw. Finishing too soon, prior to the bleed water reaching the surface can seal the surface creating a high-water cement ratio at the surface susceptible to scaling. Finishing the bleed water into the surface, prior to it evaporating, again leaves a high-water cement ratio at the surface. Finishing too late, and the finishers will be tempted to put additional water on the surface that may have begun to set, again, weakening the surface.

Placing additional water on the surface should never be allowed to aid in finishing. Colloidal silica-based finishing aid products can be used in accordance with the manufacturer's recommendations.

Finally proper curing is essential. Curing holds the moisture in the concrete not allowing the surface to dry out. If the surface dries out and the cement in the top surface isn't allowed to hydrate, a weak surface susceptible to flaking or scaling is created.

A word about Portland limestone cement, PLC, before we end. PLC has higher water demand and can bleed slower than Type I cement. With these characteristics, best practices would necessitate a compatible water reducer, not more water, be used in the mix design to maintain an acceptable water cement ratio. Then finishing at the right time is essential. PLC cement is a good material. It is just different from Type I cement and the adjustments just mentioned are essential to producing durable concrete.

For more information contact  
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# KDOT LOCAL CONSULT MEETINGS

By Rebecca Bilderback, KS LTAP

The Kansas Department of Transportation hosts Local Consult Meetings across Kansas every other year, engaging local communities, stakeholders, and regional partners in the project-selection process. These discussions help identify priority transportation needs and evaluate proposed projects statewide. This factsheet breaks down what these meetings look like and how projects are evaluated.

## MEETING STRUCTURE

- Nine total meetings covering all six KDOT districts
  - In-person: Pittsburg (D4), Wichita (D5), Topeka (D1), Pratt (D5), Liberal (D6), Colby (D3), Kansas City (D1), Salina (D2)
  - Statewide virtual meeting: Focused on systemwide needs and broader themes
- Each meeting presented district-specific proposed projects, with local input used as a key scoring component.

## PROJECT CATEGORIES

Projects submitted for consideration fall into three categories:

- **Urban Expansion** – Increasing roadway capacity in higher-population areas
- **Rural Expansion** – Increasing capacity or improving connectivity in rural regions
- **Modernization** – Improving safety, pavement condition, geometry, and overall corridor performance without adding capacity

## HOW PROJECTS WERE EVALUATED

### **Expansion Projects**

Projects in Urban and Rural Expansion categories were scored using the following weighted criteria:

Factor	Weight	Purpose
Engineering	50 Points	Measures safety issues, congestion levels, pavement condition, freight importance, and traffic performance.
Economic Impact	25 Points	Assesses the project's ability to support economic growth, job creation, freight movement, and regional business activity.
Local Input	25 Points	Captures priorities voiced by local officials, community members, MPOs, and regional stakeholders during the consult meetings.
Other Considerations (not scored)		Includes route continuity, statewide connectivity, and alignment with long-range planning goals.

### **Modernization Projects**

Modernization projects emphasize bringing existing infrastructure up to current standards. Scoring emphasizes engineering needs more heavily than economic benefit.

Factor	Weight	Purpose
Engineering	80 Points	Evaluates deficiencies related to safety, pavement condition, shoulder widths, sight distance, and other operational issues.
Local Input	20 Points	Reflects community-identified safety needs, corridor concerns, and local prioritization.
Other Considerations (not scored)		Includes continuity of improvements, corridor consistency, and long-term maintenance strategy.

## ROLE OF LOCAL INPUT

Local perspectives are a critical component of project scoring. Feedback gathered during the consult meetings:

- Identifies emerging safety or congestion issues
- Confirms community support for priorities
- Helps refine project scopes before final selection
- Ensures regional balance and equitable investment across Kansas

## OUTCOME

The Local Consult process ensures that KDOT's project selection reflects both data-driven engineering evaluation and meaningful local engagement, leading to a balanced and transparent approach to transportation investment statewide.

Let's Connect

## KANSAS LTAP SOCIAL



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@kansas-LTAP



@KU Transportation Center

# 2026 ROAD SAFETY ASSESSMENT TRAINING

Road Safety Assessment (RSA) trainings will begin in January 2026. These trainings are particularly valuable because they provide a structured, proactive approach to identifying roadway safety concerns before they lead to accidents. RSAs help professionals evaluate intersections, corridors, pedestrian areas, and rural roadways with a multidisciplinary safety lens—strengthening project planning, design decisions, and long-term maintenance strategies. By participating in RSA training, local agencies can enhance their ability to prioritize safety improvements, support data-driven decision-making, and ultimately create safer transportation networks for all road users.



**2026 ROAD SAFETY ASSESSMENT TRAINING**

**RSA Online Training**  
Register and complete the self-paced training starting January 15th!

**RSA Applications**  
Apply for a location to be considered for a field visit during Round 4.

**RSA Field training**  
Half-day hands-on training will be conducted at up to six locations to allow participants to assess real-world road safety issues.



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# KDOT UPDATES

By Rebecca Bilderback, KS LTAP

The following are updates from KDOT on recent developments and ongoing projects:

## ANNOUNCING A NEW PROGRAM: HIGH RISK URBAN ROADS – PHASE I:

- Systemic analysis has shown that most fatal and serious injury crashes at stop-controlled intersections occurred on the local network within urban area boundaries. This new program will supply materials to awarded applicants for selected low-cost countermeasures. Applications were due November 21, 2025 and announcements will be made in December. More information can be found on KDOT's website:  
<https://www.ksdot.gov/programs/safety-programs/highway-safety-improvements-high-risk-urban-roads-hrur>

## HIGH RISK RURAL ROAD PROGRAM (HRRR):

- HRRR is a federal-aid initiative aimed at enhancing safety and reducing crash rates on rural roads. KDOT is accepting applications through December 31, 2025 for federal fiscal year 2027 funds. More information can be found:  
<https://www.ksdot.gov/programs-safety-programs/highway-safety-improvement-program-high-risk-rural-roads-program>.
- Please contact Hugh Bogle ([hugh.bogle@ks.gov](mailto:hugh.bogle@ks.gov)) with any questions

## COST-SHARE PROGRAM:

- KDOT has received 72 applications for the Cost-Share program. These applications are currently under review and selections are expected to be announced early December. More information about the program is available at:  
<https://www.ksdot.gov/programs/economic-development-programs/cost-share-program>

## OFF SYSTEM BRIDGE (OSB) PROGRAM AND THE KANSAS LOCAL BRIDGE IMPROVEMENT PROGRAM (KLBIP):

- KDOT announced 27 local and off-system bridge project receiving a combined \$40.5 million in state and federal funding. The Off System Bridge (OSB) Program AND the Kansas Local Bridge Improvement Program (KLBIP) announcement is available here:  
<https://www.ksdot.gov/Home/Components/News/News/5514/>



KS CHAPTER APWA WILL HOST A ROUNDTABLE IN JANUARY TO DISCUSS CHALLENGES WITH MEETING KDOT PROJECT SCHEDULES ON CCLIP AND TA PROJECTS. BE ON THE LOOK OUT FOR A DATE ANNOUNCEMENT!



# FALL 2025 LTAP TRAINING UPDATE

By Donna Doel, KS LTAP

It has been so nice to be able to talk with so many of you throughout the State of Kansas about your interests in classes for Spring 2026! As 2025 draws to a close, we are working on building our Spring 2026 Training Schedule, and we would like to show you what classes are on the schedule so far. We will send out further communication regarding trainings and dates as the schedule is set!

- Asphalt Road & Street Maintenance
- Culverts & Drainage
- Culvert Inspections
- Chainsaw & Small Tool Handling & Safety
- Problem Solving for Effective Supervision
- Supervisors Role in Enhancing Cooperative Work Relationships
- Communication Skills for Effective Supervision
- Workplace, Jobsite, & Equipment Safety
- Gravel Road Maintenance
- Legal Permitting & Regulatory Processes
- Public Works 1 & 2
- County Government 101
- Maintenance Welding

As we are still finalizing the Spring schedule for 2026, please reach out to me, Donna Doel, at 785-864-3229 or [donnadoel@ku.edu](mailto:donnadoel@ku.edu) if you have suggestions for classes or would like to host a class in 2026. Remember, all our hosts receive one free attendee per hosted training as a "Thank you!" A full schedule will be released soon. I'm looking forward to getting 2026 off to a fresh start!

## SHARE!

If you know individuals who would like to receive our newsletter, please have them go to: [www.kutc.ku.edu/ltap](http://www.kutc.ku.edu/ltap) and sign up for the Kansas LTAP email list. There is a box to check to request electronic notification of each new issue of the LTAP Newsletter. Back issues are available at our website in the newsletter archives section.

# KANSAS LTAP NEWSLETTER

The Kansas Local Technical Assistance Program (LTAP) is an educational, technology transfer and service program of the Kansas University Transportation Center (KUTC). Its purpose is to provide information to local government highway departments and their personnel and contractors by translating into understandable terms the latest technologies in the areas of roads, highways and bridges.

The Kansas LTAP Newsletter is published quarterly and is free to counties, cities, townships, tribal governments, road districts and others with transportation responsibilities. Editorial decisions are made by Kansas LTAP. Engineering practices and procedures set forth in this newsletter shall be implemented by or under the supervision of a licensed professional engineer in accordance with Kansas state statutes dealing with the technical professions.

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