SUMMER 2025

KANSAS LTAP NEWSLETTER

LTAP
KANSAS LOCAL TECHNICAL ASSISTANCE PROGRAM

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

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By Lindsay Francis , KS LTAP

Hello LTAP Community!

As we move into the heart of summer, I want to take a moment to reflect on the spring—it was great for us to reconnect with many of you at the KDOT District meetings, APWA spring, and KCHA spring conferences. These face-to-face conversations are invaluable and help us stay connected to the real work happening every day across the state. We're grateful to have KDOT, APWA, and KCHA as key partners in supporting and connecting with Kansas local agencies.

I also want to thank you for making our spring trainings such a success! It was energizing to see strong participation across the board, and we are already looking forward to seeing many of you again at our fall trainings, which will begin in late August. We remain committed to supporting you in every way we can—through training, technical assistance, equipment loans, helpful resources, this newsletter, and webinars that offer opportunities to learn, network, and share ideas.

This year continues to bring its share of change and complexity. But we believe—as we hope you do too—that some of the best solutions and most meaningful innovations are born out of challenging times. Your work on the ground keeps our state moving, quite literally. Like the heart pumping blood through the body, you keep people and goods flowing safely and efficiently through Kansas—and into the communities you live in and serve.

We see the dedication you bring to your work, and we're here to match that commitment with the tools, training, and support you deserve. Whether you're tackling new responsibilities, adjusting to internal shifts, or just trying to do more with less, please know that you're not alone—KS LTAP is here for you. Let's keep building together. If there's anything we can do to assist, don't hesitate to reach out.

Here's to a safe, productive, and connected summer.

With the conference taking place right in our backyard, we encourage cities and counties across Kansas to take advantage of this incredible opportunity. Mark your calendars and plan to join us in Kansas City from July 20-24, 2025! Stay tuned for more details on registration and session topics.

National LTAP & TTAP Association Register at https://nltapa.org/conferences/

GOING THE EXTRA MILE: HOW LOCAL COLLABORATION IS KEEPING KANSAS ROADS SAFE

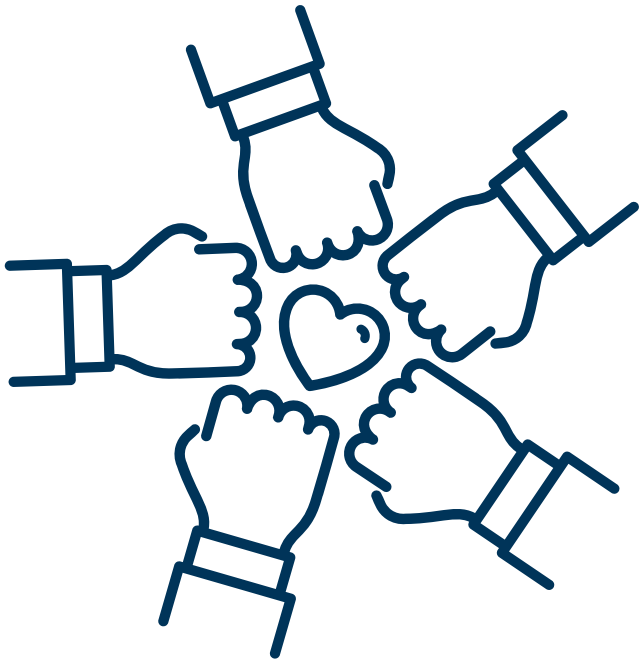
By Lindsay Francis, KS LTAP

There is a saying that somewhere along the way just stuck with me! "You can do anything with the right tools and attitude!" At Kansas LTAP, we believe that the right tools—paired with the right partnerships and a can-do attitude—can make a big difference in how local agencies serve their communities. The Kansas LTAP Equipment Loan Program (ELP) was designed to provide local agencies with access to valuable tools and resources, but what's unfolded goes beyond just data collection—it's sparked real collaboration between agencies across the state.

A shining example of this is the shared use of our radar speed trailer, a high-demand item in our equipment inventory. Because the trailer cannot be shipped or delivered, it must be picked up in person and transported on a trailer. While that might seem like a logistical challenge, it's created opportunities for local agencies to connect, coordinate, and support one another.

For most of 2024, the speed trailer was temporarily out of service due to a malfunction, creating a backlog of loan requests. Once we got the trailer back into working order, we reached out to everyone who had expressed interest during the downtime. Montgomery County Sheriff's Office was first in line—they made the trip to Lawrence to pick up the trailer in late 2024. Rather than returning it to us when they were done, they went above and beyond by personally handing it off to their neighbors to the south, the Coffeyville Police Department, giving them a quick run-through on how to set it up and use it effectively. When Coffeyville PD finished, they did the same for Soldier Township, which is located nearly 170 miles away. That's not a small favor—it's a real investment in shared public safety.

This kind of collaboration wasn't something we planned—but we love to see it. It's a powerful reminder of how partnerships can develop organically when agencies are given the tools and space to connect. What started as a logistics workaround turned into a relay of goodwill,



shared knowledge, and mutual support.

To the folks at Montgomery County, Coffeyville, and Soldier Township: thank you for literally going the extra mile—this is exactly the kind of cooperation we hope to see more of across Kansas. These moments of connection reflect the very best of what the mission of Kansas LTAP is all about: not just sharing equipment, but also sharing ideas, solutions, and a commitment to improving our local roads together.

LESSONS LEARNED, WHAT HASN'T WORKED AND HOW WE FIXED IT

By Mark Shelton, MO/KS Chapter ACPA

In a world where everything is rapidly changing, it is easy to ask the question, if something hasn't changed in 100 years is it still reasonable to continue doing it? Concrete testing hasn't changed much over the years. Concrete mixtures have changed. The concrete we use today is very different from what our grandparents used 50 years ago. However, much of the testing hasn't changed. We still measure slump, entrained air content, and compressive strength. There is work being done to update concrete testing to more performance-related tests, and agencies are moving in that direction. However, the old tried and true tests are still the norm.

In this article we will discuss the slump test, ASTM C143. The slump test for evaluating fresh concrete has been around since the 1920's. At that time and for many years thereafter concrete consisted of rock, sand, cement, water and maybe an air-entraining admixture. With these ingredients measuring the slump could identify consistency and workability of the concrete mix. With water being the ingredient that would change consistency and workability, the slump would also give an indication of water cement ratio and strength. For example, a higher slump might enhance workability but with additional water being the ingredient that gives the higher slump and workability, strength of the concrete would trend down due to a higher water cement ratio.

But what about with today's concrete mixtures where chemical admixtures are used to address workability and not water, where supplemental cementitious materials, i.e. fly ash, slag, etc. are used, and where aggregate gradations are designed to create a denser aggregate structure? What does the slump test tell us about today's concrete? The answer would be consistency and workability, however, water cement ratio and strength wouldn't apply any longer since the workability is produced/affected from chemical admixtures and aggregate gradations rather than water.

So, is the slump test still worth doing? For consistency, yes. The importance of consistency to quality construction cannot be over emphasized. Consistency equals good quality control resulting in uniform and consistent quality materials and construction. Changes in slump say from 4 inches to 9 inches or from 6 inches to 2 inches between loads let us know that something has changed. Is the change due to water? Maybe. Maybe the wash water wasn't completely removed from a truck, maybe the aggregate moisture content has changed, maybe there is inconsistency in aggregate gradations, maybe inconsistency in the fly ash, has there been a change in the admixtures, maybe a dosage rate changed for some reason, maybe the concrete in this truck has been in the truck longer than previous truck loads. Our point is, although a change in slump cannot be pinpointed to excessive water. It certainly lets us know something has changed, and it is time to begin asking questions to figure out what is different.

One other thing to touch on. Often asking questions is seen as negative and leads to finger pointing. It shouldn't be that way. The best quality projects are achieved when the owner, contractor and concrete supplier representatives have had preconstruction meetings, huddles prior to pour day and frequent communication. Building good relationships and having clear expectations leads to quality construction. It also breaks down the barriers when/if the need arises to determine what has changed.

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SETTING SPEED LIMITS ON COUNTY AND TOWNSHIP ROADS: GUIDANCE FOR KANSAS LOCAL AGENCIES BASED ON K.S.A. 8-1560 (5)(H)

By Francis, KS LTAP

Why Does Reviewing Speed Limits Matter?

Setting appropriate speed limits is essential for safety, consistency, and public trust.
Here's why it's important:

- Reduces risky behavior: When most drivers are traveling at similar speeds, there's less sudden braking, passing, or tailgating.
- Lowers crash severity: The faster a vehicle goes, the harder it hits. Lower speeds can mean fewer and less severe injuries if a crash happens.
- Improves safety for everyone: Especially near curves, intersections, and where people are walking, biking or rolling; slower speeds give drivers more time to react.
- Builds public trust: When speed limits feel fair and match the road environment, drivers are more likely to follow them—improving safety without heavy enforcement.

WHAT THE LAW SAYS:

Per K.S.A. 8-1560.(5)(h), Kansas law allows local authorities with jurisdiction over county or township highways to establish speed limits with or without a formal engineering and traffic investigation. These limits must be reasonable and safe, and may be higher or lower than state defaults, but may not exceed 65 mph under any circumstances.

K.S.A. 8-1560.(5)(h): Local authorities who have jurisdiction over county or township highways may determine based on an engineering and traffic investigation or without an engineering and traffic investigation the proper maximum speed for such county or township highways and shall declare a reasonable and safe maximum limit thereon which may be greater or less than the maximum speed permitted under this act, except that in no event shall any local authority establish any such maximum limit in excess of 65 miles per hour.

TIPS FOR SETTING REASONABLE AND SAFE SPEED LIMITS:

Even when a formal engineering study is not required, data and judgment should guide the process. Here are some practical tips:

- **Use Traffic Data to Understand Driver Behavior**
  - **Speed Studies:** Use traffic counters and classifiers to gather actual travel speeds. Devices like pneumatic tubes and radar counters help identify the 50th or 85th percentile speed—common benchmarks for setting limits that reflect what most drivers consider safe.
  - **Volume & Classification:** Understanding traffic mix (e.g., percentage of heavy vehicles) can help determine whether current speeds are appropriate for road design and use.

- **Evaluate Curves with Ball Bank Indicators**
  - For horizontal curves, use ball bank indicators to determine safe operating speeds.
  - Ball banking helps measure the lateral acceleration experienced by drivers around curves. A common threshold is 14° of ball bank at the advisory speed.

- **Consider the Roadway Context**
  - Are you in a residential area, near a school, or along a rural connector?
  - Review crash history to identify speeding-related trends or safety concerns.
  - Review road geometry to determine if narrow lanes, shoulder condition, or limited sight distance may justify lower limits.
- **Keep Documentation, Even Without a Formal Study**
  - Even if you don't conduct a formal traffic engineering study, keeping records of:
    - Data collected
    - Observations made
    - Tools used
    - Rationale for your final speed decision

…these can help support your case if questions arise.

- **Need Equipment? Borrow It Free Through KS LTAP**
  - Our Equipment Loan Program (ELP) includes:
    - Pneumatic tube counters
    - Radar speed recorders
    - Ball bank indicators
    - Distance measuring wheels
    - …and more!

SETTING SPEED LIMITS TOO LOW:

While it's important to manage speed, setting a speed limit unreasonably low can backfire. If drivers feel a limit doesn't match the road conditions, they're more likely to ignore it—not just there, but everywhere. To maintain driver respect for speed limits, it's critical that limits feel fair and reflect actual driving behavior and roadway context.

LEASING VS. PURCHASING: CHOOSING THE BEST OPTION FOR GOVERNMENT FLEET AND MACHINERY PROCUREMENT

By Nelda Buckley, KS LTAP

When local governments need new fleet vehicles or heavy machinery, they often face a critical choice: lease with a full warranty or purchase through a government incentives program. Both options offer advantages and drawbacks depending on operational needs, financial strategy, and long-term goals.

LEASING WITH FULL WARRANTY

A government lease with full warranty allows municipalities to use vehicles and equipment over a fixed term, with repairs and maintenance typically covered under the warranty for the duration of the lease.

PROS:

- Predictable Costs: Leasing provides consistent, fixed payments, making budgeting easier and reducing unexpected repair expenses.
- Access to Newer Equipment: Leases allow regular equipment updates, ensuring access to the latest technology, better fuel efficiency, and improved safety features.

- Lower Maintenance Burden: Since leased equipment is newer and under warranty, repair costs are minimal, and downtime is reduced.

- Capital Preservation: Leasing minimizes upfront costs, allowing governments to allocate funds to other critical projects.

- Flexibility: At the end of the lease, municipalities can choose to return, renew, or sometimes purchase the equipment at a reduced price.

- **CONS:**

- No Ownership: After the lease ends, there is no asset ownership or resale value.

- Higher Long-Term Costs: Over time, leasing multiple cycles of equipment may cost more than outright purchasing.

- Usage Restrictions: Leases often impose limits on mileage or hours of use, which can lead to extra fees.

- Contract Complexity: Lease agreements may contain detailed terms that require careful management to avoid penalties.

PURCHASING THROUGH GOVERNMENT INCENTIVES

Purchasing involves buying equipment outright, often using cooperative purchasing agreements, state contracts, or competitive bids to secure favorable pricing.

PROS:

- Ownership: Purchased equipment becomes a government asset, contributing to the municipality's overall value.

- Lower Lifetime Cost: Properly maintained equipment can serve for many years, often making ownership more economical in the long run.

- No Usage Limits: Ownership allows unrestricted use without concerns about mileage, hours, or wear-and-tear penalties.

- Resale Value: At the end of the asset's useful life, it can often be sold to recoup part of the initial investment.

- Customization: Purchasing allows governments to tailor equipment to specific operational needs without lease restrictions.

CONS:

- High Upfront Costs: Purchasing requires significant capital, which may strain budgets.

- Maintenance Responsibilities: After warranties expire, all maintenance and repair costs fall on the municipality.

- Risk of Obsolescence: Rapid technological advances can make equipment outdated before the end of its usable life.

- Storage and Disposal Needs: Ownership also requires proper storage, management, and eventual resale or disposal planning.

CONCLUSION

Both leasing and purchasing have clear benefits and limitations. Leasing offers flexibility, predictable costs, and access to newer equipment, making it ideal for governments with tight short-term budgets or evolving operational needs. Purchasing provides asset ownership, long-term savings, and greater operational control, better suited for municipalities with stable usage patterns and available capital.

Many municipalities find a hybrid approach — leasing certain vehicles while purchasing critical heavy machinery — delivers the best balance between cost efficiency and operational readiness. A thoughtful analysis of budget structure, maintenance capacity, and long-term plans is essential to making the right decision for taxpayers and community services.

If you would like additional information regarding the analysis that Leavenworth County used to determine that leasing was appropriate for their agency, please contact Bill Noll at bill.noll@leavenworthcounty.gov.

KDOT UPDATES

By Lindsay Francis, KS LTAP

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

BUREAU OF LOCAL PROJECT UPDATES

- KDOT has a new website. The Bureau of Local Projects can be found here: KDOT Bureau of Local Projects
- KDOT Local Projects LPA Project Development Manual has been updated. You can find the updated manual on the KART website (https://kart.ksdot.gov/).
- KDOT BLP is emphasizing the importance of cities and counties meeting project schedules. It is advantageous to balance the number of projects in any month's bid letting. Meeting project schedules will help maintain a balanced bidding process and keep costs down.

HIGH RISK RURAL ROAD PROGRAM:

- KDOT selected 11 rural roadway projects to receive a total of $8.1 million in federal funds through the HRRR Program. https://www.governor.ks.gov/Home/Components/News/News/620/56

CITY CONNECTING LINK IMPROVEMENT PROGRAM:

- KDOT has received 48 applications for the CCLIP program. These applications are currently under review and selections are expected to be announced in the next month. More information about the program is available at: https://www.ksdot.gov/programs/local-opportunity-programs/city-connecting-link-improvement-program

COST-SHARE PROGRAM:

- KDOT has received 57 applications for the Cost-Share program. These applications are currently under review and selections are expected to be announced in the next month. More information about the program is available at: https://www.ksdot.gov/programs/economic-development-programs/cost-share-program

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) INTERSECTION PROGRAM:

- KDOT has received 12 applications for the HSIP Intersection Program totaling $18.7M. KDOT will be funding up to $10M over FFY 2027-2028. KDOT is reviewing these applications for eligibility and project scoring. KDOT will notify local agencies when the final selection is determined. More information about the program is available at: https://www.ksdot.gov/programs/safety-programs/highway-safety-improvement-program-intersections

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

- KDOT has received 160 applications for the Off System Bridge (OSB) Program AND the Kansas Local Bridge Improvement Program (KLBIP). More information about the program is available at: https://www.ksdot.gov/programs/bridge-programs

FHWA UPDATES

- The FHWA-Kansas division office FHWA offices has been significantly impacted by recent federal government cutbacks. KDOT advises you to contact Richard Jurey at 785-273-2629 or Javiar Ahumada at 785-273-2649 for assistance.

Thank you for staying engaged with these important updates as we work together to improve Kansas' transportation infrastructure!

FALL 2025 LTAP TRAINING UPDATE

By Megan Hazelwood, KS LTAP

Despite some rearranging due to inclement weather, Kansas LTAP had another record-breaking spring training season! We brought trainings to new locations such as Louisburg, Oberlin, and Abilene. Kansas LTAP also offered more of our Road Scholar Level II soft skill courses like Problem Solving for Effective Supervision, Supervisor's Role in Enhancing Cooperative Working Relationships, and Fundamentals of Supervision.

Below is the finalized Kansas LTAP Fall 2025 schedule!

8/25	**Workplace, Jobsite, Equipment Safety Training**	**Great Bend, KS**
8/26		**Salina, KS**
8/27		**Emporia, KS**
8/28		**Pittsburg, KS**
9/16	**Fundamentals of Supervision**	**Gray County, KS**
9/17	**Supervisor's role in Enhancing Cooperative Work Relationships**	**Gray County, KS**
9/18	**Problem Solving for Effective Supervision**	**Gray County, KS**
10/7	**Snow & Ice Control**	**Wichita, KS**
10/8		**Great Bend, KS**
10/9		**Salina, KS**
10/13		**Louisburg, KS**
10/14		**Pittsburg, KS**
10/29		**Junction City, KS**
10/21	**Foundations of Customer Service**	**Great Bend, KS**
10/22		**Salina, KS**
10/23		**Westmoreland, KS**
10/24		**Pittsburg, KS**

As always, if you don't see a training you need scheduled near you, we can always schedule an on-demand training. Kansas LTAP is already looking ahead to 2026, so if you'd like to get on next year's training calendar, let us know what classes you and your team need.

Kansas LTAP is saying goodbye to our Senior Events Coordinator, Megan Hazelwood. Megan has accepted a new position and her last day with us was Tuesday, May 27th. Moving forward, please contact Lindsay Francis at lfrancis@ku.edu for scheduling questions. For any other general training questions, please email kutc_training@ku.edu.

We hope you have a safe and successful summer season and we look forward to serving you all this fall!

SHARE!

If you know individuals who would like to receive our newsletter, please have them go to: 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.