KANSAS LTAP NEWSLETTER

LTAP
KANSAS LOCAL TECHNICAL ASSISTANCE PROGRAM

SPRING 2026

IN THIS EDITION:

DIRECTOR'S MESSAGE

By Rebecca Bilderback, KS LTAP

Hello KS LTAP community!

I hope you're enjoying warmer weather and sunny skies!

As the spring training schedule continues in full swing, one goal of KS LTAP is to continue to further our reach across Kansas. We hope to host trainings in new locations across the state, while expanding and updating our course curriculum. We'd love to hear from you on locations that would benefit from LTAPs services, as well as what trainings you would like to see offered. Please don't hesitate to reach out if you have any suggestions.

In the spirit of sharing ideas, we are currently accepting applications for the "Build a Better Mousetrap" competition. This is a nationwide competition sponsored by the FHWA and KS LTAP is proud to host it. We want to hear about your innovative and cost-effective ideas that benefit your communities. Share with us your inventions, small or large! It doesn't take a grand idea to make meaningful impact. Please submit your inventions by May 8th. To learn more about the BABM program or to submit your idea, please refer to this link https://kutc.ku.edu/build-better-mousetrap

As always, thank you for being part of the LTAP community. Happy Spring!

ROAD SAFETY ASSESSMENT TRAINING - FIELD TRAINING

Registration is now open for Round 3 Road Safety Assessment (RSA) Field Training!

This hands-on training gives participants the opportunity to learn how to conduct a Road Safety Assessment through a combination of classroom instruction and a real-world field review.

Two training opportunities are available:
Ottawa, KS
April 28, 2026

Salina, KS
April 30, 2026

Great Bend, KS
Coming Soon!

Each training is limited to 25 participants, so early registration is strongly encouraged.

During the training, participants will:
- Learn the fundamentals of the RSA process
- Participate in a field review of a real roadway location
- Identify potential safety concerns
- Discuss practical safety improvement strategies

Whether you are an engineer, planner, public works professional, or safety partner, this training provides valuable experience in identifying and addressing roadway safety issues.

REGISTER TODAY!

FUNDING BREAKDOWN FOR COUNTY AND MUNICIPAL STREETS IN KANSAS

By Randy Leonard, KS LTAP

County and municipal streets in Kansas are funded through a combination of local, state, and federal revenue sources. Funding varies annually based on legislative appropriations, fuel tax collections, federal transportation authorizations, and local matching requirements. This fact sheet summarizes the primary funding mechanisms and typical distribution structure.

LOCAL GOVERNMENT FUNDING

Local governments (counties and municipalities) provide substantial direct funding for roads and streets through property taxes, local general funds, bond proceeds, special assessments, and dedicated road levies. Local governments also provide required matching funds for many state and federal transportation grant programs.

Local contributions vary significantly by jurisdiction but represent a core and ongoing funding source for maintenance, operations, and capital improvements.

STATE GOVERNMENT FUNDING

The State of Kansas distributes transportation funding to local governments primarily through the Special City and County Highway Fund (SCCHF). Approximately 33.63% of state motor fuel tax revenues are statutorily directed to the SCCHF.

Funds distributed through the SCCHF are allocated approximately 57% to counties and 43% to cities. Recent annual distributions to local governments have averaged approximately $153 million statewide.

Additional state funding is provided through competitive grant programs such as the Cost Share Program, City

Connecting Link improvements and Local Bridge programs, which typically require local matching contributions.

WHAT FEDERAL GOVERNMENT FUNDING NEW RULE REQUIRES

Federal funding supports county and municipal streets through formula allocations and competitive grant programs administered by the Kansas Department of Transportation or awarded directly to local governments.

Major federal funding sources include the Surface Transportation Block Grant Program, Highway Safety Improvement Program, Safe Streets and Roads for All (SS4A), and High Risk Rural Roads programs. Federal funding often requires state or local matching funds.

Recent federal awards to Kansas communities for local road and safety improvements have totaled tens of millions of dollars in individual funding rounds.

SUMMARY OF FUNDING ROLES

Funding Source	Primary Role in Local Road Funding
Local Government	Primary funding for maintenance and operations; provides matching funds for state and federal grants.
State Government	Distributes motor fuel tax revenue via SCCHF (~$153M/year avg.); provides competitive grant funding.
Federal Government	Provides formula and competitive grants for construction, safety, and infrastructure improvements.

KEY POINTS

- Local governments are foundational funders of county and municipal streets.
- The Special City and County Highway Fund is the primary state revenue-sharing mechanism.
- Federal funds are significant but typically project-based and require matching contributions.
- Total funding levels fluctuate annually based on revenue collections and appropriations.

RESOURCES

Kansas Legislative Research Department. Special City and County Highway Fund distributions.

Kansas Department of Transportation. Transportation program and local funding reports.

Federal Highway Administration. Highway funding and formula programs. Office of the Governor of Kansas. Federal transportation grant announcements.

LANE CLOSURES ON THE NEAR SIDE OF AN INTERSECTION - GETTING THE MERGE RIGHT

By Steven Schrock, KS LTAP

From 2017 to 2022 I participated on a project team that helped the Federal Highway Administration (FHWA) develop guidance on work zone traffic control. My part of that effort looked at work zone traffic control placed at or near an intersection. Ever since then I've looked a lot closer at work zone setups to see if they are following the best practices, and I have noticed one specific setup is consistently incorrect - the merge taper layout when a middle lane is closed in advance of an intersection.

Imagine that you have a multilane street or highway with work needed just prior to or just after an intersection. Figure 1 shows this in detail, and it is intended in this case that drivers can move either to the left OR the right of the activity area. The figure is taken from the 11th Edition of the Manual on Uniform Traffic Control Devices (MUTCD, 2023). Figure 2 is a zoomed-in version of the same figure focusing on the merge taper. The middle of the three approach lanes is closed, with the hatched area representing where work is being performed. If you look closely, you can see that the merge taper is skewed so that one side is straight, and the other is tapered, what one might call 'chisel shaped.' This is the correct form for this, and it is intended to help a driver understand that if they are still in the lane when they reach this point they need to move in one direction only - in the case of Figure 1 and Figure 2 they are directed to move left. This is important for surrounding traffic, as it helps everyone understand that the driver is moving in one direction only. Figure 3 shows a real-world example of this done correctly.

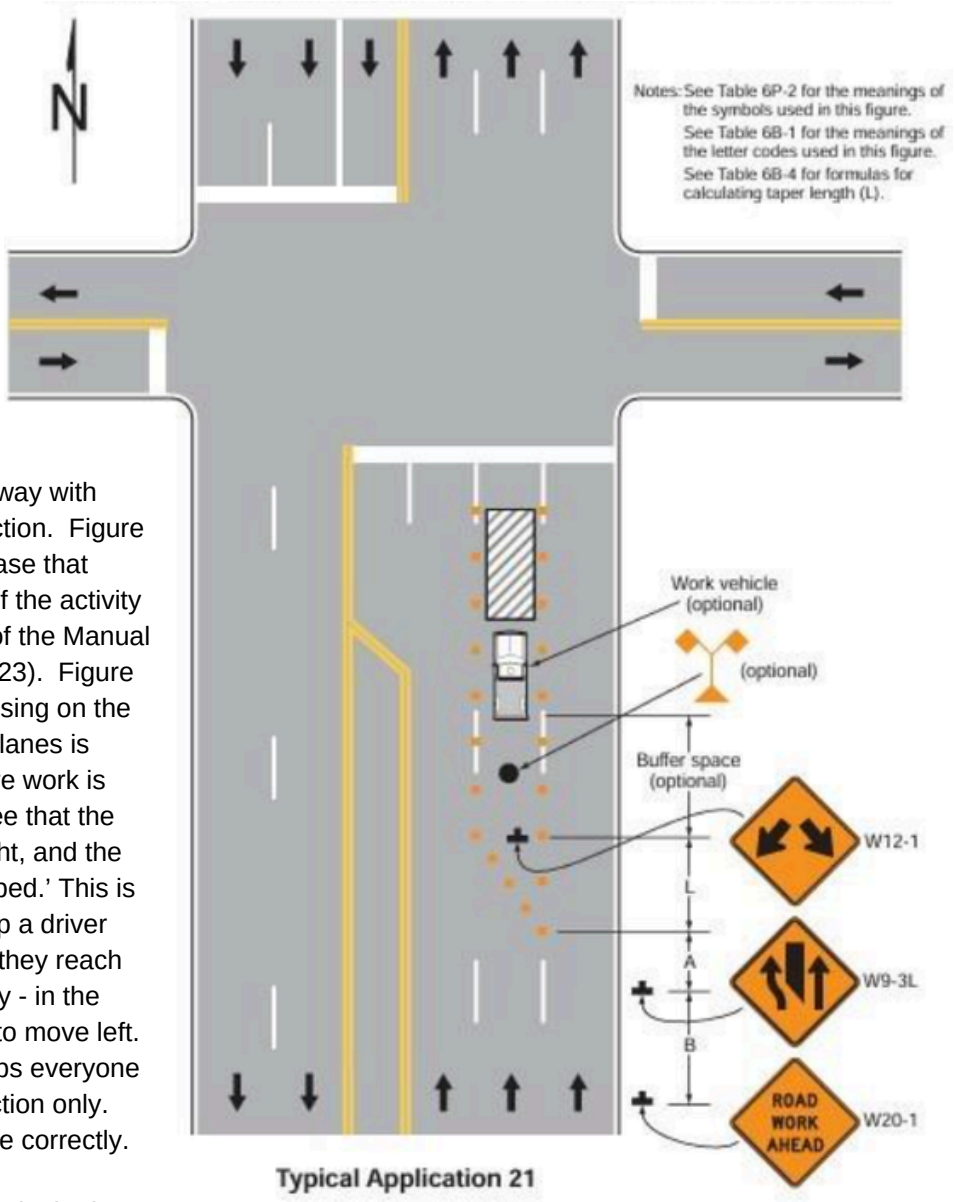

Figure 1. Typical lane closure on the near side of an intersection. (FHWA, 2023)

You might be asking yourself, what if someone is in the lane that is being closed, but they want to move right? What do they do then? Simple; that driver would need to change lanes farther upstream of the merge taper just like a normal lane change. However, this would need to happen before they reach the taper. If a driver is still in the lane when they reach the taper they will be directed to the left, and to the left only. It is clear for everyone what will happen at that situation, and so driver understanding is improved. To quote the MUTCD, "The merging taper shall direct vehicular traffic into either the right-hand or left-hand lane, but not both (underline added for emphasis)."

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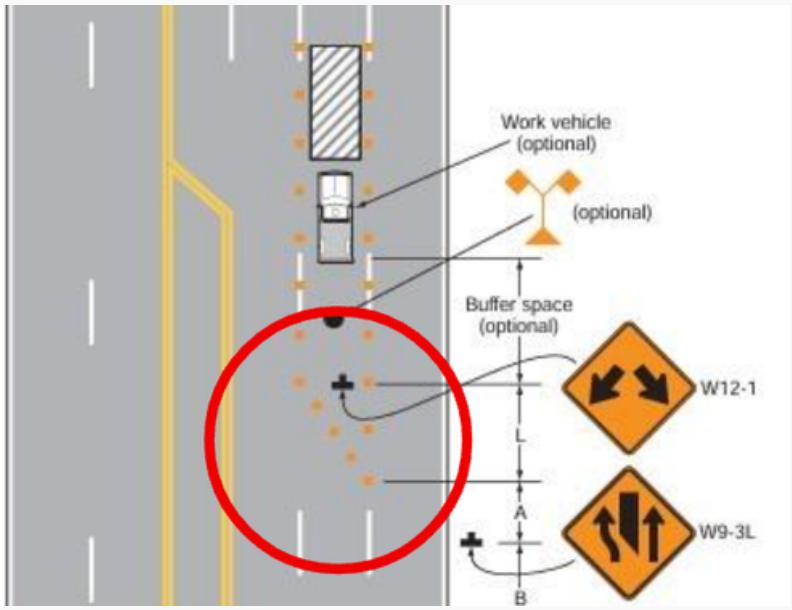

Figure 2. The same work zone figure as Figure 1, zoomed in to highlight the merge taper. (Adapted from FHWA, 2023)

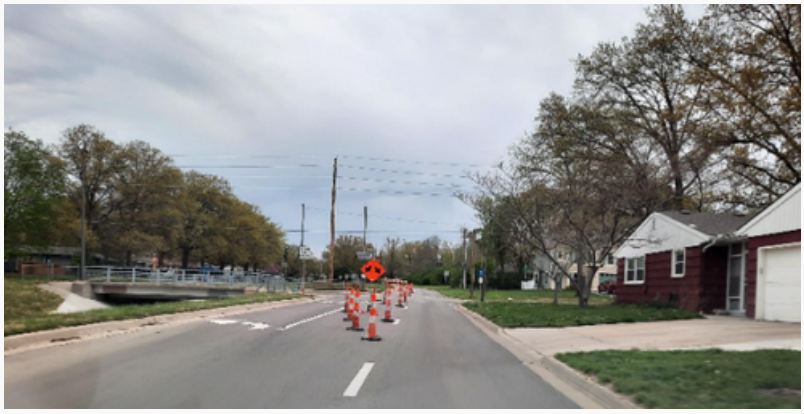

Figure 3. This merge taper was done correctly. Photo by Steven Schrock (2022).

Now look at the example in Figure 4, an all-too-common incorrect variation. In this case, you can see that the merge taper is shaped more like the point of a pencil and seems to give drivers permission to move left OR right once they reach the merge taper. Other nearby drivers must guess which way the merging vehicle is going if its driver waits until the last minute to leave the closed lane. The traffic control creates ambiguity and can lead to side-swipe crashes if people misunderstand where the merging vehicle is moving. Installing a merge taper in the correct manner will help everyone understand what is expected and will reduce 'same direction sideswipe' and 'rear end' crashes at these types of work zone.

Once I became aware of this nuance it became easy to spot incorrect layouts, and now you will notice it too. If you see this in one of your work zones, correct it to help improve driver understanding of your temporary traffic control.

Figure 4. An incorrectly placed merge taper. This can confuse drivers and increase crashes. Photo by Athena Schnorr (2022).

ADDITIONAL READING

If you want to learn more about intersection traffic control in work zones, I suggest reviewing the following documents and training modules:

A Guide to Work Zone Temporary Traffic Control Near Signalized/Unsignalized Intersections, by Schrock, S.D., A. Kondyli, H. Mohammed, and A. Asgharzadeh. University of Kansas Transportation Center, Lawrence, KS, December 2022.

https://workzonesafety-media.s3.amazonaws.com/workzonesafety/files/documents/training/fhwa_wz_grant/ku_guide_wztc_signalized_unsignalized_intersections-508.pdf.
Accessed February 23, 2026.

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Work Near Signalized and Unsignalized Intersections.

A series of six online training modules developed to help agencies manage and evaluate intersection-related work zone activities in areas such as:

- MUTCD information related to work zones near intersections;
- Work zones at or near innovative intersections;
- A practical checklist for work zone-related intersections; and
- Work zone signal retiming opportunities.

https://sites.google.com/view/fhwatrainingprogram/training-programs/work-near-signalized-and-unsignalized-intersections.

Accessed February 23, 2026.

RESOURCES

Federal Highway Administration. Manual on Uniform Traffic Control Devices, 2023. https://mutcd.fhwa.dot.gov/. Accessed February 23, 2026.

ADAPTED FROM THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 11TH EDITION; PART 6; TYPICAL APPLICATION 21

LANE CLOSURE ON THE NEAR SIDE OF AN INTERSECTION

When a lane is closed in advance of an intersection, and traffic can pass on either side of the closed lane, the following standards, guidance, and options are provided for the temporary traffic control plan shown in Figure 1 (underlining and bolding added for emphasis):

Standards

- The merging taper shall direct vehicular traffic into either the right-hand or left-hand lane, but not both.
- Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Guidance

- In this typical application, a left taper should be used so that right-turn movements will not impede through motor vehicle traffic. However, the reverse should be true for left-turn movements.
- If the work space extends across a crosswalk, the crosswalk should be closed.

Option

- Positive protection devices may be used.
- Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
- A shadow vehicle with a truck-mounted attenuator may be used.
- A work vehicle with high-intensity rotating, flashing, oscillating, or strobe lights may be used with the high-level warning device.
- Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

BEST PRACTICES CEMENT AND ADMIXTURE PANEL

By Mark Shelton, MO/KS ACPA

At the 46th Annual MO/KS ACPA Portland Cement Concrete Pavement Conference a panel discussion took place about best practices for Portland Limestone Cement, PLC, and concrete admixtures. Participants included representatives from Missouri and Kansas cement producers as well as a major supplier of concrete admixtures to the region. This article will share some of the highlights of that panel discussion.

First the specifications. ASTM C 150 is the specification that governs Type I/II cement we have been used to getting for years. That specification has allowed the addition of up to 5 percent limestone to be ground into the cement since 2004. ASTM C 595 covers blended cement. PLC is a blended cement, and the specification allows an addition of up to 15 percent ground limestone.

Type I/II cement isn't available in our market any longer. It has all been replaced with PLC. ASTM C 595 incorporated PLC in 2012, from 2017-2021 regional state DOTs began allowing its use and in 2021to 2022 the switch was made in regional cement manufacturing plants. So why the change. The panel pointed out that concrete is the second most consumed product in the world only behind water. To make cement the raw materials are heated to 2500 - 2700 °F. That creates lots of carbon dioxide. So, from a global warming standpoint, grinding in limestone with the clinker reduces the global warming footprint.

What do we see the field using PLC that is different from Type I/II and what actions should we take to be successful with PLC? According to our panel of experts, we are seeing slightly higher water demand from PLC's. We get some particle packing with PLC, it takes a little more water and maybe different admixtures to disperse the cement particles and allow them all to be wetted with the mixing water. The experts also said that concrete made with PLC takes more mixing time to thoroughly wet all the particles making it more difficult to retemper on the job site. The practice of "trimming" water at the Redi mix plant was discussed. Trimming water is the practice holding back water at the batch plant and then having it available at the job site. Since concrete with PLC is harder to retemper and takes more mixing, it was recommended to not trim near as much water at the batch plant. An example was given that if you would typically trim 4 gallons per yard with Type I/II you might only trim 1 gallon per yard with type PLC. Attention to detail is essential to ensure too much water is not added to the mixture. Too much water leads to lower strength, fluctuations in air content, and more susceptibility to scaling. So, paying attention to aggregate moisture, subgrade moisture, evaporation rates and finishing and curing practices are critical. Not that these things weren't always important. It's that we have found concrete mixtures with PLC are not as forgiving as mixes using Type I/II cement.

Finally, good communication is always necessary. Prior to your pour, go ahead and have a pre-pour meeting. Include the concrete supplier, placing and finishing crews, owner, and quality control folks. Discuss the characteristics of the concrete that you want and develop a plan to have that delivered to the job site.

For more information contact:
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KANSAS PUBLIC ROAD SYSTEM: MILEAGE BY OWNERSHIP AND SURFACE TYPE

By Randy Leonard, KS LTAP

The State of Kansas maintains one of the largest public road networks in the United States relative to population. Most of the roadway mileage is under local jurisdiction (county, township, and municipal), with a comparatively small percentage managed by the state highway system. A significant portion of the roadway network consists of unpaved rural roads.

TOTAL PUBLIC ROAD MILEAGE (ALL JURISDICTIONS)

Category	Miles (Approx.)
Total Public Roads	138,993

ROAD MILEAGE BY OWNERSHIP (JURISDICTION)

Ownership Category	Miles (Approx.)
State Highway System (total)	10,295
Kansas Turnpike (subset of state system)	239
County & Township Roads	112,406
Municipal (City) Streets	16,053
Total (All Jurisdictions)	138,993

ROAD MILEAGE BY SURFACE TYPE (STATEWIDE ESTIMATE)

Surface Type	Miles (Approx.)	Percentage (Approx.)
Unpaved (Gravel/Dirt)	98,000	~70%
Paved (Asphalt/Concrete)	40,000	~30%
Total	138,993	100%

KEY FINDINGS

- Approximately 139,000 miles of public roads exist in Kansas.
  - The approximate total vehicle miles traveled per day is 86.6 million.
- Approximately 93% of roadway mileage is under local control.
  - The approximate vehicles traveled per day is 41.3 million.
- Roughly 70% of Kansas local roads are unpaved.
- The state highway system represents less than 8% of total mileage.
  - The approximate vehicle miles traveled per day is 45.3 million.

RESOURCES

Bureau of Transportation Statistics. Highway statistics series: Public road mileage by ownership.
Federal Highway Administration. Highway statistics annual reports.
Kansas Department of Transportation. (2024). Mileage and travel in Kansas annual report.

KDOT UPDATES

By Rebecca Bilderback, KS LTAP

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

HIGH RISK RURAL ROAD PROGRAM (HRRR):

- KDOT received 32 applications, which are currently being reviewed and scored.

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

- KDOT is accepting project applications for the Off System Bridge (OSB) Program AND the Kansas Local Bridge Improvement Program (KLBIP) through February 20, 2026. The application is available at: https://www.ksdot.gov/programs/bridge-programs

- The solicitation for applications in the Off System Bridge Program and the Kansas Local Bridge Improvement Program was advanced this year to provide additional time in the project development schedule. This moved the City Connecting Link Improvement Program (CCLIP) solicitation for applications back one month. It's still coming! Start preparing now and be on the lookout for the announcement.

COST-SHARE PROGRAM:

KDOT is accepting project applications until March 26, 2026. The application is available at: https://www.ksdot.gov/programs/economic-development-programs/cost-share-program

KANSAS CHAPTER APWA UPDATES

MidAMX 2026

Date:
May 13-15

Location:
Overland Park Convention Center
6000 College Boulevard
Overland Park, Kansas

Register at:
https://www.apwa.org/event/midamx-2026/

SPRING 2026 LTAP TRAINING UPDATE

By Donna Doel, Kansas LTAP

Our KS LTAP 2026 Spring Training Schedule is in full swing! We are so excited to offer a variety of classes and even some new classes across the State. We were intentional about reaching out to Western Kansas based on feedback we have received.

Thank you to everyone who gave feedback on what classes to provide and to those who are hosting. As a reminder, if you host a training, you receive one registration for free.

We have started planning for Fall 2026. Please be sure to reach out to me for class suggestions and if you would like to host.

If you have any questions, please do not hesitate to contact me anytime at donnadoel@ku.edu.

LTAP KANSAS LOCAL TECHNICAL ASSISTANCE PROGRAM 2026 TRAINING SCHEDULE

APRIL	4/7	Gravel Road & Street Maintenance	Pittsburg	Level 1
	4/7	Supervisor's Role in Enhancing Cooperative Work Relationships	Louisburg	Level 2 Level 1
	4/8	Chainsaw & Small Tool Handling & Safety	Emporia	Level 1
	4/8	Fundamentals of Supervision	Coffeyville	Level 2
	4/9	Chainsaw & Small Tool Handling & Safety	Concordia	Level 1
	4/9	Problem Solving for Effective Supervision	Coffeyville	Level 2
	4/28	Gravel Road & Street Maintenance	Wichita	Level 1
	4/29	Welding	Westmoreland	
MAY	5/4	Gravel Road & Street Maintenance (Class)	Lakin	Level 1
	5/5	Gravel Road & Street Maintenance (Hands-on)	Tribune	Level 1
	5/6	Gravel Road & Street Maintenance (Hands-on)	Syracuse	Level 1
	5/7	Gravel Road & Street Maintenance (Hands-on)	Montezuma	Level 1
	5/20	Managing Employee Performance	Hays	Level 2

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.

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