



SPRING 2024

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 Lindsay Francis , KS LTAP



Dear Kansas LTAP Community,

As we embark on yet another quarter of service to Kansas, I am filled with gratitude for the opportunity to lead the collective efforts of the Kansas Local Technical Assistance Program. Community and collaboration are the driving forces toward the continued impact, innovation, and everything we aim to do here at KS LTAP. We recognize that by bringing people together to discuss challenges, share insights, and celebrate achievements, we can achieve far more than we ever could by ourselves.

With this philosophy in mind, I am thrilled about several initiatives that have already kicked off this year that exemplify our commitment to fostering collaboration and recognizing excellence. In January, we introduced a new open feedback feature on our website, to more actively solicit feedback from our customers and stakeholders. In February, we launched our Local Field Liaison's new webinar series entitled "The Roundabout" to facilitate dialogue, share ideas, foster a stronger sense of community, and empower individuals to drive positive change in their communities. In March, in

partnership with KDOT, we kicked off a new community led Road Safety Assessment (RSA) training series. This initiative will empower locals with diverse backgrounds, knowledge, and skills to work collaboratively to identify and address safety concerns in their communities, ultimately contributing to safer conditions for all users. Innovation is the lifeblood of progress and in the second quarter of each year, we host the "Kansas Build a Better Mousetrap" competition, inviting agencies to submit their innovative solutions to common challenges and providing a platform to showcase and celebrate the remarkable creativity and ingenuity across the state of Kansas.

Speaking of remarkable Kansans, the team here at KS LTAP would like to celebrate the achievements of the 2023 Kansas Road Scholar graduates. These individuals have demonstrated exceptional dedication and commitment to their professional development in the transportation industry. Through their hard work and perseverance, they have not only enhanced their own knowledge and skills but also contributed to the advancement of the field. It is an honor to recognize their accomplishments, and we wish them continued success in their careers.

2023 Kansas Road Scholar Graduates:

Level 1 Graduates

Tanner Whiting, City of Blue Rapids
Bill DeWitt, Coffey County
Kasey Holveck, Coffey County
James Iseman, Coffey County
Jon Jordan, Cowley County
Kaitlyn Keller, Coffey County
Adam Sowder, Coffey County
Benjamin Weltha, Coffey County
Dylan Wonser, Coffey County

Daniel Smith, Greeley County
Chris McCammon, Morton County
Sheldon Pippin, Morton County
Terry (Matt) Nichols, Osborne County
Jordan Powell, City of Ottawa
Jason Alderson, Saline County
Emmett Howg, Saline County
Rex Loughridge, Saline County
Levi Richardson, Saline County

Cody Showers, Saline County
Ethan Vinson, Saline County
Trent Harman, Stafford County
Jon Shoemaker, Stanton County
Kyle Raney, City of Valley Center

CONTINUED ON NEXT PAGE

Level 2 Graduates

Chris McCammon, Morton County

Sheldon Pippin, Morton County

In closing, I would like to express my sincere gratitude to our entire community for the ongoing support, feedback, collaboration, and engagement. You play a vital role in helping KS LTAP make a meaningful impact. I look forward to the quarter ahead, filled with new innovative ideas, partnerships, and opportunities for growth.

Thank you all for being an integral part of the Kansas LTAP Community!



2024 BUILD A BETTER MOUSETRAP

NOW ACCEPTING APPLICATIONS THROUGH MAY 1, 2024!

[HTTPS://KUTC.KU.EDU/BUILD-BETTER-MOUSETRAP](https://kutc.ku.edu/build-better-mousetrap)

INTRODUCING "THE ROUNDABOUT": A NEW LTAP WEBINAR SERIES

By Kara Cox, KS LTAP

In the bustling world of city and county infrastructure, where roads and bridges serve as the arteries of transportation, there exists a constant need for dialogue, collaboration, and innovation. Recognizing this essential requirement, a new webinar series, aptly named "The Roundabout," emerges as a beacon of knowledge-sharing and open discussion for professionals in the road and bridge industry.

Hosted by LTAP's Local Field Liaison, Nelda Buckley, a veteran in the field with a wealth of experience and insights to offer, "The Roundabout" promises to be a dynamic platform where city and county workers converge to tackle pressing issues, share best practices, and explore solutions that drive progress in the realm of transportation infrastructure.

Scheduled to take place on the second Friday of every other month at 11 a.m. via Zoom, "The Roundabout" offers participants the opportunity to engage in lively roundtable discussions on a myriad of topics pertinent to the road and bridge industry. From maintenance.

challenges and safety concerns to technological advancements and sustainability initiatives, each webinar will delve into critical areas that shape the landscape of transportation infrastructure management.

What sets "The Roundabout" apart is its inclusive nature, welcoming voices from various corners of the industry. Whether you're a seasoned engineer, a frontline worker, or an administrator overseeing infrastructure projects, your perspective is valued, and your contributions are essential to the collective learning experience. Moreover, recognizing the demands of busy schedules, "The Roundabout" ensures accessibility by recording each webinar session and uploading them to YouTube for later viewing. This feature not only enables participants to revisit key discussions but also extends the reach of valuable insights to a broader audience, fostering continuous learning and knowledge dissemination.

As we navigate the complexities of modern-day transportation challenges, "The Roundabout" stands as source of collaboration, fostering a community of passionate professionals committed to driving positive change in the road and bridge industry. Join us on this exciting journey as we pave the way for a safer, more resilient, and sustainable future for our roads and bridges.

Be sure to subscribe to our biweekly emails and social platforms to stay in the know on upcoming webinars!



[**SUBSCRIBE**](#)

ROAD SAFETY ASSESSMENT (RSA) TRAININGS

By Lindsay Francis, KS LTAP

Vulnerable road users (VRUs), including pedestrians, cyclists, and others using non-motorized modes of transportation, are killed, or seriously injured on Kansas roads every year at a rate higher than other road users. This Road Safety Assessment (RSA) training, focused on pedestrian and cyclist concerns, is being delivered in partnership with KDOT to continue a concerted effort to eliminate or “Drive to Zero” death and serious injuries from traffic crashes in Kansas. This training is designed to empower safety-minded locals with the diverse backgrounds, knowledge, and skills to work collaboratively to identify and address concerns in their communities, ultimately contributing to safer conditions for all users. Participants can look forward to learning about the principles of VRU safety, how to conduct a local RSA and to exploring safety, accessibility, comfort, and convenience during an RSA field experience.

Registration is free but spots are limited. There are 6 more opportunities to join us in 2024! Get registered today!



Kansas Active Transportation

ROAD SAFETY ASSESSMENTS TRAININGS



PURPOSE OF TRAINING

Join us for an all-day training on conducting local Road Safety Assessments focused on pedestrian and cyclist concerns, exploring safety, accessibility, comfort and convenience.

This training is designed for city and county representatives, transportation professionals, advocates, and community members.



TRAINING LOCATIONS

- Topeka - 3/13/24
- Kansas City - 3/19/24
- Hutchison - 3/28/24
- Garden City - 4/2/24
- Wichita/Sedgwick Co - 4/10/24
- Salina - 4/25/24
- Pittsburg - 5/1/24
- Hays - 5/7/24



Registration is FREE. Lunch will be provided. For more information and to register, visit:

Register Today!



TECHNOLOGY FOR MANAGING INVENTORIES

By Megan Tester, KS LTAP

Managing your inventories is important in keeping costs down, correctly using your budget, and justifying any additional budget requests. It is important to know where your assets are and how many you have, but it is also important to keep track of the cost and usage. Asset management technologies like Cartegraph, AgileAssets, and ASAPSystems are able to do all of this for you in one place, making the process simple.

Cartegraph is an asset management technology offered through OpenGov. On their website, you are able to find information about their technology and request a demo. According to the OpenGov website, this tech is used nationwide in cities, counties, and even schools to “improve infrastructure management, track work, distribute resources, and capture data. Along with tracking the where and quantities of an asset, their software also tracks things like asset condition, cost, and history (Government Asset Management Software). This can help you stay organized in tracking your assets and creating better budgets, justifying budget requests, and sharing data if needed.

Companies like AgileAssets offer a mobile option to make use of any tablets or smartphones you may have. This allows you to collect and report information from anywhere. Specifically, their Materials Manager mobile application allows you to check inventory and availability of assets (Transportation Asset Lifecycle Management). It also allows you to update information about the assets, such as quantity, and any new purchases. This application can also record costs to help with budgeting. Unfortunately, this Materials Manager app is only available on Apple devices (Transportation Asset Lifecycle Management).

ASAPSystems also offers an inventory management system. Their website offers a free trial of the system (Inventory System), According to their website, they are a barcode-based inventory system and help a variety of government transportation departments across the United States. Their website also contains a video offering a brief overview of their “Government Inventory System” that meets inventory control requirements (Inventory System).



Cartegraph, AgileAssets, and ASAPSystems are only three of numerous systems that make managing inventories quick and easy. Keeping track of your inventory can be easy and can help reduce costs, help keep track of your budget, and help with creating new budgets.

RESOURCES

“Government Asset Management Software.” OpenGov, 28 Feb. 2024, opengov.com/products/asset-management/. Accessed March 11, 2024.

“Inventory System: Voted Best Inventory System for 5 Years Straight.” Inventory System and Asset Tracking Solution, 27 Oct. 2023, asapsystems.com/products/inventory-system/. Accessed March 11, 2024.

“Transportation Asset Lifecycle Management.” Trimble, 2024, assetlifecycle.trimble.com/en/products/software/agileassets. Accessed March 11, 2024.

RAPID STRENGTH CONCRETE FOR REPAIRS

By Mark Shelton, MO/KS Chapter ACPA

Wouldn't it be nice if concrete repairs were only necessary when the weather was "sunny and 75"? Wouldn't it be nice if repairs could be "one and done," rather than a temporary repair in the winter and coming back in the spring and performing a permanent repair? What if our "permanent" repairs done in the winter lasted their full intended life? What if when a repair is done, opening strength is achieved faster and traffic disruption is limited? The purpose of this article is to provide information about concrete using ASTM C1600 Rapid Hardening Hydraulic Cement and to consider if its use can positively answer the questions above when performing concrete pavement repairs.

So, what are the reasons to consider rapid strength concrete? We will consider four reasons in this brief article: time to strength gain, shrinkage, efficiency, and safety.

When considering time to strength gain, its importance is directly related to traffic volume. The higher the traffic volume the more critical it is for the concrete to gain the required minimum strength as quickly as possible thereby reducing the impact on the traveling public. Another consideration regarding strength gain is durability. While there is certainly debate about what is the proper opening strength and if opening strength can be lowered, (it probably can be), opening too early will affect the life of the repair. We have all seen the patch that needs repair shortly after placement because it is breaking up. Achieving opening strength quickly is a plus for travelers and the life of the repair.

Shrinkage is another consideration. This ties in with durability and strength gain as well. Concrete is at its largest volume when it is placed. The aggregates do not change in size, but the cement and water mixture will. So, what happens when there is a desire for faster strength gain using conventional concrete for patching? Often the answer is to add cement because more cement should provide faster strength gain. However, additional cement

in the concrete mix means the concrete will shrink more. More shrinkage leads to the potential for more cracking, lower durability, and less life of the concrete repair. Concrete using rapid set cement does not require additional cement to quickly achieve opening strength and there are strict limits to the amount of shrinkage allowed in the cement.

Efficiency and safety must also be considered. These are related to temporary repairs made with asphalt. Often, when a spall or pop out appears in a concrete pavement in the winter, an agency's maintenance forces will use a temporary patching material to fill the hole and then come back in the spring or maybe even again in the winter and perform a more permanent partial depth concrete patch (sometimes even another temporary repair if the first one doesn't hold). This is certainly not efficient with taxpayer dollars and exposes highway workers and the traveling

public to additional work zones. Patching once, with a quick setting concrete mixture is safer and more efficient.

The question of cost certainly comes to mind and should be considered. Will the cost per unit of concrete be more with a mixture using ASTM C1600 cement? Probably yes. Will quicker opening to traffic times, overall, longer lasting patches, more efficient operations and less worker exposure compensate for the higher costs? Each agency would be encouraged to include all the costs

from the bigger picture in their decision-making process.

For more information contact
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CURVE TREATMENTS

By Nelda Buckley, KS LTAP

When considering improving safety on roads, curves are critical. Why is that? Although there are more crashes along straight sections, when considering the crashes per mile, curves have a much higher crash rate. So, for a big safety impact – low-cost curve treatments should be high on your list.

SOME STATISTICS

Fatal and serious injury crashes have been increasing on curves on Kansas roadways (32% - from 231 in 2016 to 306 in 2020), especially on locally owned roads (62% - from 104 in 2016 to 169 in 2020). For those same horizontal curves over that five-year period: 365 fatal crashes resulting in 410 deaths; and 800 serious injury crashes resulting in 996 people with serious injuries. Just on curves!

WHAT CAN BE DONE?

Here are some relatively low-cost treatments that have been proven to reduce crashes:

- Shoulder, edge line, and/or centerline rumble strips. Let's face it – some people can be distracted by phones, passengers, traffic, etc., so an alert that they might be leaving the travel lane can be beneficial.



- High-visibility warning signs including Curve/Turn signs, Advisory Speed plaques, and Chevron Alignment signs. The new 11th Edition of the MUTCD (not yet adopted by Kansas, but coming soon) requires certain traffic control devices in various situations.
 - The criteria shown in Chart A (MUTCD, 2023) shall be used to determine the need for devices for changes in horizontal alignment:

A - Determination of the Need for Devices for Changes in Horizontal Alignment¹

Roadway Type	AADT			
	Less than 1,000	1,000-2,999	3,000-3,999	Greater than 3,999
Freeways and Expressways	Required	Required	Required	Required
Arterial or Collector without Pavement Markings	Optional	Recommended	Required	Required
Arterial or Collector with Pavement Markings ²	Optional	Recommended	Recommended	Required
All other roadways	Optional	Optional	Optional	Optional

¹ If devices are determined to be needed, the selection of the device(s) is based on Chart B below.
² An arterial or collector is considered to have pavement markings when either a center line, edge lines, or both are present.

- If the use of a device or devices is indicated by Chart A, then Chart B (MUTCD, 2023) shall be used to specify the type(s) of devices to be used

B - Selection of Devices for Changes in Horizontal Alignment

Speed Differential ³	Devices for Change in Horizontal Alignment ³
5 mph	Pavement markings or advance horizontal alignment warning sign on paved roadways. Advance horizontal alignment warning sign on unpaved roadways. ⁴
10 mph	Advance horizontal alignment warning sign
15 mph	Delineators ⁵ and advance horizontal alignment warning sign
20 mph or more	Chevrons ⁵ and advance horizontal alignment warning sign

³ The provisions for the use of Horizontal Alignment warning signs and devices are contained in Section 2C.06. The need for devices is determined by Chart A above.
⁴ A roadway is considered to have pavement markings when either a center line, edge lines, or both are present.
⁵ Section 2C.06 contains information about the use of a One Direction Large Arrow (W1-6) sign in place of or to supplement delineators and chevrons.

- Although many locations in Kansas would be "Optional", Chart B could be helpful when deciding which devices to consider. For example, for a roadway with a speed limit of 55 mph and an advisory speed of 35 mph (a 20 mph speed differential), Chevrons and advance horizontal alignment warning sign(s) are noted. NOTE: if you need to determine the appropriate advisory speed for your curves, Kansas LTAP has traditional and digital ball bank indicators for free use through the Equipment Loan Program.



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Moderate-cost curve treatments include:

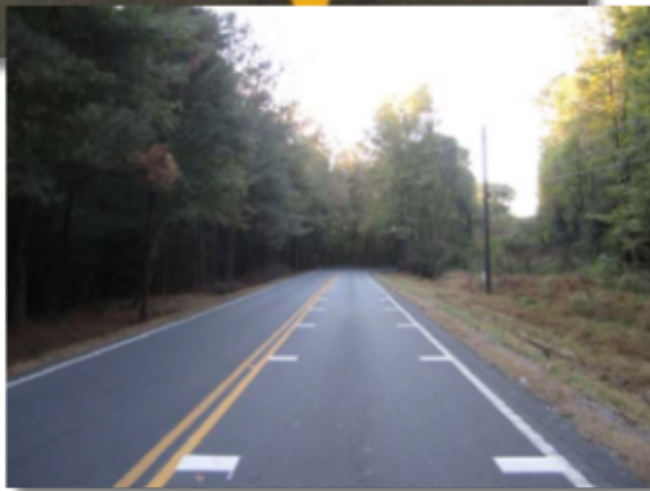
- Speed feedback signs



- Supplemental in-lane pavement markings:



- High friction surface treatment



Whatever treatment is appropriate for your circumstances, be encouraged that you are reducing the risk of fatalities or serious injuries occurring on your curves – good work!

RESOURCES

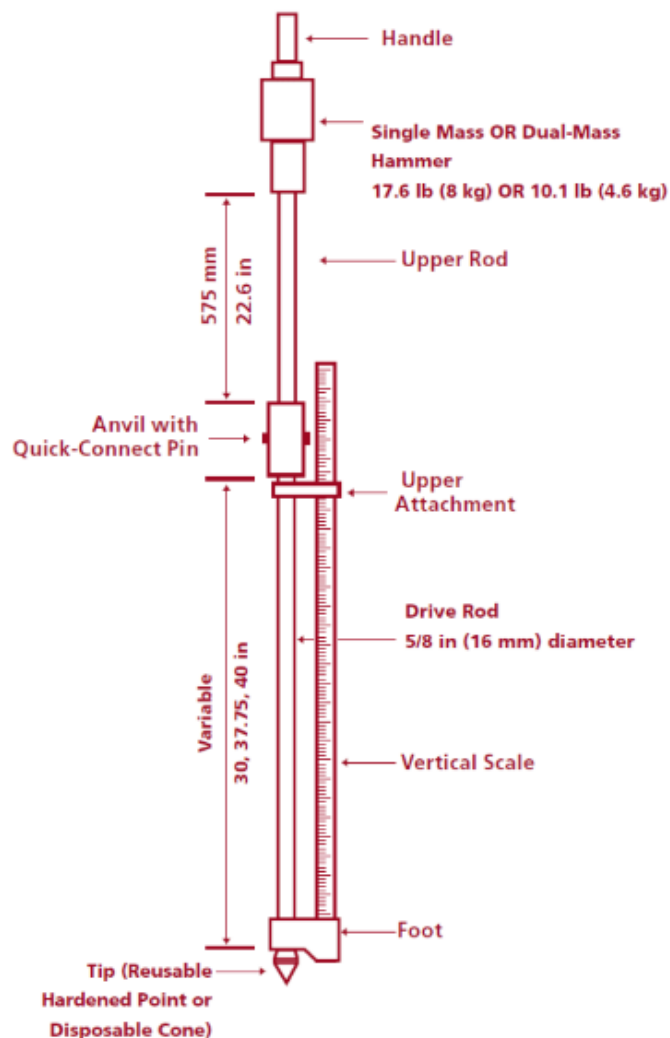
Chapter 2C. Warning Signs and Object ..., 2023, mutcd.fhwa.dot.gov/pdfs/11th_Edition/Chapter2c.pdf.

INNOVATION INSIGHT - DYNAMIC CONE PENETROMETER

By Nelda Buckley, KS LTAP

“Innovative” does not always mean “new.” In fact, I think I first heard of a Dynamic Cone Penetrometer (DCP) around 40 years ago when I was a college student. However, I recently heard of using a DCP for designing or improving gravel roads. My understanding is that by specifying surfacing based on DCP results, a variety of materials can be used. This is different than specifying the material and hoping it produces the necessary results.

What is a DCP? “The DCP is a simple and portable instrument. It consists of a hardened conical tip, standard diameter steel rod, and a standard weight hammer (8kg), which is dropped from the top of the rod against an anvil to advance the tip into the ground.”



How is the DCP used? By lifting the hammer and dropping it, the rod is driven into the ground. The distance the tip penetrates the material is determined by looking at the vertical scale. Recordings can be taken of either (1) how many blows it takes to achieve a certain penetration or (2) how much penetration is achieved after a prescribed number of blows.

CONTINUED ON NEXT PAGE

How is a DCP used in pavement design? “Correlations have been established between measurements with California Bearing Ratio (CBR) and DCP so that the outcome can be interpreted and compared with CBR specifications for pavement design.” (What is Dynamic Cone Penetrometer, 2020)

Table 6: Suggested Gravel Layer Thickness for New Or Reconstructed Rural Roads.

Estimated Daily Number of Heavy Trucks	Subgrade Support Condition ¹	Suggested Minimum Gravel Layer Thickness,mm (in.)
0 to 5	Low	165 (6.5)
	Medium	140 (5.5)
	High	115 (4.5)
5 to 10	Low	215 (8.5)
	Medium	180 (7.0)
	High	140 (5.5)
10 to 25	Low	290 (11.5)
	Medium	230 (9.0)
	High	180 (7.0)
25 to 50	Low	370 (14.5)
	Medium	290 (11.5)
	High	215 (8.5)

Notes: ¹ Low Subgrade support: CBR ≤3 percent;
 Medium Subgrade support: 3 < CBR ≤ 10 percent;
 High Subgrade support: CBR >10 percent.

The South Dakota Catalog Design Method (Skorseth, 2015, A11)

RESOURCES

Skorseth, Kent, and Ali A. Selim. “Gravel Roads: Maintenance and Design Manual.” *Gravel Roads: Maintenance and Design Manual*, United States Environmental Protection Agency, 3 Nov. 2023, www.epa.gov/sites/default/files/2015-10/documents/2003_07_24_nps_gravelroads_gravelroads.pdf.

“What is dynamic cone penetrometer (DCP)? [PDF].” *The Constructor*, 10 May 2020, theconstructor.org/geotechnical/soils/what-dynamic-cone-penetrometer/40239/.

KDOT UPDATES

By Lindsay Francis, KS LTAP

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

The KDOT Bureau of Local Projects is pleased to welcome Kassiah Martin as their new Senior Administrative Assistant. For all official correspondence, please ensure to include her email (Kassiah.D.Martin@ks.gov) on your mailing lists.

selections are finalized. Once completed, KDOT will make an official announcement.

CITY CONNECTING LINK IMPROVEMENT PROGRAM (CCLIP) AND KDOT COST SHARE PROGRAM RECIPIENTS:

The deadline for CCLIP applications is fast approaching on March 23, 2024. KDOT will soon be scheduling site visits and anticipate the selection process to occur in June. All eligible parties are encouraged to submit their applications promptly.

COST-SHARE PROGRAM:

For those interested in the Spring round of funding, please note that the application period for the Cost-Share program closes on March 21, 2024. Be sure to submit your applications before the deadline to be considered for funding opportunities.

HIGH-RISK RURAL ROADS (HRRR) PROGRAM UPDATES:

The application period for the HRRR program has concluded, and KDOT has already held its first selection meeting on March 14. Stay tuned for further updates as

ADDITIONAL INFORMATION FROM FHWA:

In related news, the Federal Highway Administration (FHWA) has published a Notice of Proposed Rulemaking (NPRM) on Buy America Requirements for Manufactured Products, along with a Request for Information (RFI) on the Use of Manufactured Products in Highway Projects. You can access the NPRM [here](#) and the RFI [here](#).

KDOT encourages your participation in providing comments for both the NPRM and RFI, which must be received by May 13, 2024. It's important to note that this proposed rule would remove all Buy America waivers for manufactured products, so your input is invaluable in shaping future policies.

KS CHAPTER APWA UPDATES



**2024 APWA KS
SPRING CONFERENCE
Attendee Registration NOW OPEN!
Thursday May 9 - 10, 2024
Oread Hotel
1200 Oread Ave.
Lawrence, KS 66044**

Register online: <https://kansas.apwa.org/event/ks-apwa-spring-conference/>

Description: Join us for the 2024 APWA Kansas Chapter Spring Conference! Our Keynote speaker Lori Blake will present on Enjoy speaker sessions packed with new and innovative ideas for your organization. Network with Public Works professionals from across the state! Visit our vendor booths showcasing products and services for your work teams!

Registration cost: \$150. Conference registration includes the Wednesday evening social, full conference schedule, meals, Thursday evening social, athletic tour, and trivia night.

Hotel Block: A block of rooms has been reserved for attendees at the Oread Hotel. When calling to reserve a room, please reference the **APWA Conference**. To reserve your room online here: <https://www.hilton.com/en/hotels/lwctoup-the-oread-lawrence/>

Parking: Attendees/vendors will self-park in the Oread Hotel parking garage located on the west side of the building, just down the hill. There is an automatic garage door that says, "hotel guest entrance". Park anywhere on the first or second level. Once on the hotel elevator, go to level B1.

Check-In: Guests can check in at the front desk on the lobby (L) level if they are staying at the hotel, or proceed to B1 and take a right to follow signs leading them the Griffith Ballroom where the conference will be located.

Early Bird Price: Register before April 22nd to lock in the early bird registration price!
<https://kansas.apwa.org/event/ks-apwa-spring-conference/>

Registration issues? Email Brandon Bayless at bbayless@lawrenceks.org

See you in Lawrence!

2024 LTAP TRAINING UPDATE

By Megan Hazelwood, KS LTAP

Kansas LTAP has had a fantastic Spring 2024 training season! We have been able to visit new locations such as Osborne, Montezuma, Parsons, and Columbus. We have taught Signing for Low Volume Rural Roads, Asphalt Road & Street Maintenance, Overview of Engineering Functions, and we brought back Intro to GIS. Our classes have also seen a steady attendance of 15 to 20 people per training.

Looking ahead at the Fall 2024 training schedule, Kansans can expect to see Kansas LTAP bringing classes like Snow and Ice Control, Public Works I and II, Culverts and Drainage, and many more to locations such as Leawood, Hays, Salina, and Montezuma.

Below is a snapshot of the Fall 2024 training schedule:

OCTOBER	10/7	Snow and Ice Control	Montezuma	Level 1
	10/8	Snow and Ice Control	Salina	Level 1
	10/9	Snow and Ice Control	Emporia	Level 1
	10/10	Snow and Ice Control	Parsons	Level 1
	10/18	Snow and Ice Control	Leawood	Level 1
	10/15 & 16	Public Works 1 & 2	Hays	Level 2
	10/17	Risk and Liability	Hays	Level 1
	10/22	Culverts & Drainage	Montezuma	Level 1
	10/24	Culverts & Drainage	Leawood	Level 1
	10/23	Signing Low Volume Roads	Hays	

We will be announcing the dates and locations of our Road Scholar Level II soft skills courses in the next month. If you do not see a training or location you'd like us to offer and visit, please reach out to Megan Hazelwood at mhazelwood@ku.edu to get on the Fall 2024 training schedule.

2024 REMINDER: Kansas LTAP will no longer be offering lunches during our trainings. Instead, we will be providing a morning kickstart for our attendees that may consist of coffee, juice, pastries, granola bars, etc. This will decrease the registration fee from \$80 to \$65. We hope that this change will allow more people to attend our trainings who may have been deterred due to the registration price previously.

It's never too early to plan for the future! If you would like to host a training in 2025, please email mhazelwood@ku.edu. Remember, all of our hosts receive one free attendee per hosted training as a "thank you!" Kansas LTAP looks forward to serving you all!

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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