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

Inside

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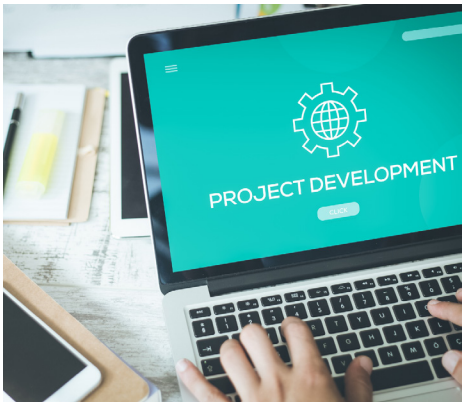
Project Development for Off-System Bridge Program Projects

(KDOT Concerned Some Counties Not Meeting Development Schedules)

By Keith Browning, Kansas Association of Counties, and Lisa Harris-Frydman, Kansas LTAP

Note: This article also appeared in KAC's September 2021 County Comment. It covers an important issue we believe would benefit from extra coverage.

During a recent KDOT-KCHA Liaison Committee Meeting, Michael Stringer and Tod Salfrank, Chief and Assistant Chief, respectively, KDOT Bureau of Local Projects, expressed concern that some counties are not meeting project development schedules for Off-System Bridge Program projects. Counties not meeting the project development schedule could result in KDOT not meeting its FHWA requirements for the program and the eventual loss of the program for all Kansas counties.



The FHWA requires KDOT to let $6.75 million worth of off-system bridge projects each year. KDOT attempts to program $8 million worth of such projects each year to ensure it meets its $6.75 million threshold. Even with this overprogramming, KDOT struggles to meet its federal programming requirement. The problem is mostly with counties not completing plans in conformance with the project development schedule that KDOT prepares to ensure the project can be let in the appropriate federal fiscal year.

It is extremely important that counties get plans prepared according to the project development schedule. The Off-System

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Entry-Level Driver Training Requirements are Gearing Up

By Connor Mountford, Kansas LTAP

Kansas LTAP released an article in our winter 2021 newsletter titled "CDL Regulations and Training Related to Public Works Agencies in Kansas" that provided general guidance on the CDL process in the State of Kansas. This fact sheet supplements that article with information on entry-level drivers. The Federal Motor Carrier Safety Administration's (FMCSA) "Minimum Training Requirements for Entry-Level Commercial Motor Vehicle Operators" will go into effect on February 7th, 2022. The information in this fact sheet is intended for mangers who routinely hire CDL drivers or have drivers in need of license upgrades to CDL or another class of CDL. Additional resources, including the full

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Entry-Level Driver Training Requirements are Gearing Up Continued from page 1

text of the regulations, can be found at the conclusion of this article.

What are the Entry Level Driver Training Regulations?

In 2016, the FMCSA published a final rule establishing "Minimum Training Requirements for Entry-Level Commercial Motor Vehicle Operators" (Federal Register, 2021). In general, this rule does two things: 1) establishes minimum training requirements for those obtaining a class A, B, S, or H CDL license for the first time; and 2) creates a training provider registry. These regulations were intended to take effect in February 2020 but were granted an extension to February 7th, 2022. From that date going forward, all new applicants for CDL licenses will be required to complete an Entry-Level Commercial Driver Training (ELDT) course from a provider listed on the training provider directory.

What Do These Regulations Mean for My Agency?

These regulations set the minimum training requirements that State driver's license agencies must adopt to provide CDLs. If your agency has a driver that is either getting a CDL for the first time or upgrading an existing license, they will need to complete the ELDT training before they are eligible to sit for State required knowledge and skills tests (Register, 2021). The ELDT training can only be completed using a certified provider from the FMCSA Training Provider Directory. Training providers have not been made public as of this publication. Once a driver has completed the ELDT, the training provider will submit their information to the FMCSA. State driver licensing agencies will then verify that a driver has completed their training prior to administering the knowledge and skills tests.

Next Steps to Prepare for Entry-Level Driver Training (ELDT)

The FMCSA has put together a robust website to help agencies and drivers prepare for the new ELDT regulations, including recorded webinars, FAQs, and fact sheets. Kansas LTAP recommends visiting the site and reviewing CFR 49 Part 380 to gain a better understanding of your obligations under ELDT.

Additional Resources

Training Provider Website
Curricula Summary
Training Provider's Guide to ELDT
FAQ
Code of Federal Regulations (actual text of regulations)

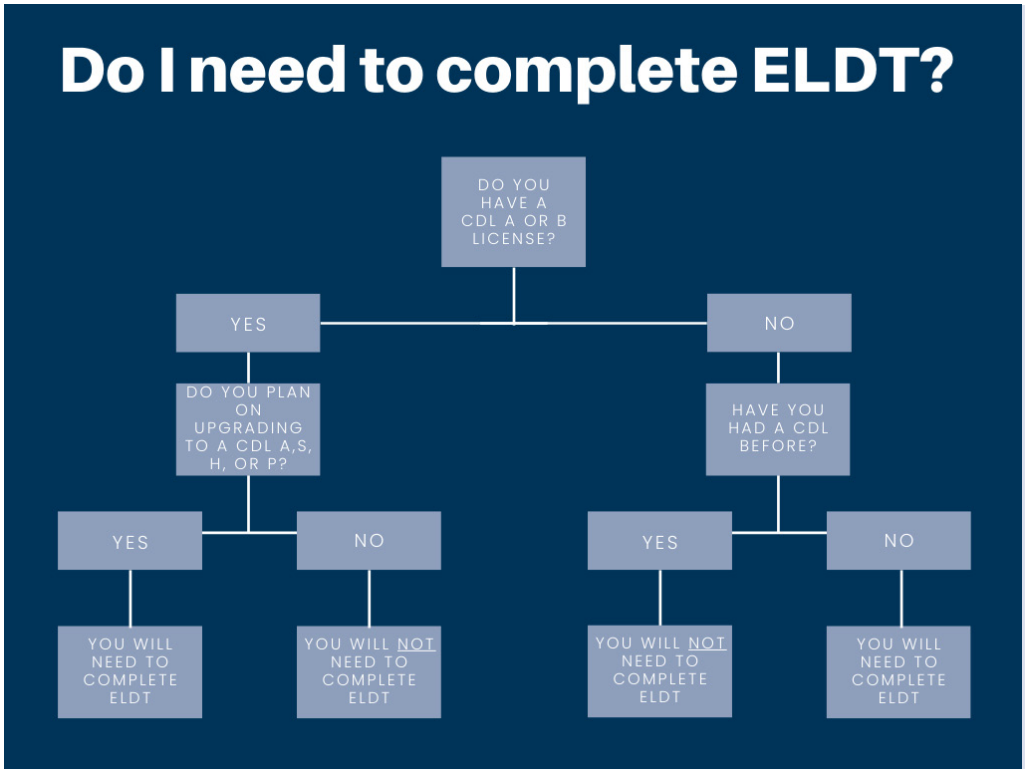

Figure 1. Flow chart to determine if ELDT needs to be completed.

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2021. "Electonic Code of Federal Regulations." Title 49: Transportation, PART 380 - Special Trainings Requirements. August 6. https://www.ecfr.gov/cgi-bin/text-idx?SID=bc50d63a30c7ce38d8ee31f6e70edc52&mc=true&node=pt49.5.380&rgn=div5.

Federal Motor Safety Carrier Administration. n.d. "Federal Motor Safety Carrier Administration." Training Provider Registry. Accessed August 10, 2021. https://tpr.fmcsa.dot.gov/.

Project Development for Off-System Bridge Program Projects Continued from page 1

Bridge Program is a competitive program. Counties that are awarded projects for the program, but do not complete plans in accordance with the project development schedule, effectively rob other counties of the opportunity to use these federal funds.

There are various reasons for counties not adhering to their project development schedule. Some counties have experienced significant road department head turnover with the off-system bridge program project getting lost in the shuffle. Some counties rely on their consultants to meet the plan development schedule, but do not keep on top of the consultants to ensure their compliance with the schedule. Once plans are ready, counties must adhere to the schedule for acquiring right-of-way and relocating utilities. Some counties simply procrastinate because they are not concerned (or maybe don't understand all the consequences) if their project letting slips to a later year. Whatever the reason, not meeting project development schedules threatens the program for all Kansas counties.

In the past, KDOT has attempted to work with counties who have not met project development schedules. They have been willing to delay project lettings to a later year, for example, to accommodate counties. However, this flexibility is proving problematic for KDOT meeting its federal requirements. They are looking for solutions.

One solution that KDOT will be using for the selection to be announced soon, will be the "use it or lose it" approach. In other words, if a county does not meet the project development schedule, the project would be removed from the program. In this case, the county would need to apply for the project all over again rather than KDOT simply re-scheduling the project letting. Unless other solutions are found and agreed on, this will be their approach in the future as well.

KDOT is also considering increasing the local match requirement for counties that don't meet the schedule. Another option is to require development of field check plans before a county could apply for an off-system bridge program project, or at least to award extra points to those applicants who have developed field check plans. None of those measures would be welcomed by counties, but may be necessary to ensure continuing the program.

The bottom line is counties need to adhere to the project development schedule. If you've hired a consultant to prepare plans for the project, closely monitor their progress to ensure they meet the schedule and also be sure to do your part in the project development, such as starting right-of-way acquisition in a timely manner. Perhaps stipulate in the consultant's contract that the schedule will be met or fees will be withheld. Do not hire consultants who have previously not met schedules.

In the selection about to be announced, there were 87 applications requesting $47M in federal funds, and only an average of 16 projects are awarded each funding cycle. If those counties that are awarded projects do not follow through on project development on schedule, it keeps other Kansas counties from using these federal funds. And, if KDOT cannot meet its federal requirements for this program, the opportunity to receive these federal funds may be lost for all Kansas counties.

If you have any questions about the program, contact Tod Salfrank, Assistant Bureau Chief, KDOT Bureau of Local Projects, Tod's email address and phone number are Tod.Salfrank@ks.gov and (785) 368-7396.

Concrete Pavement and Flatwork Surface Textures

By Todd M. LaTorella, American Concrete Pavement Association

Surface texture is an important aspect of concrete pavement and flatwork construction and can have a significant impact on final product performance and owner and user satisfaction. Many surface textures are available to owners and specifiers for concrete pavement and flatwork applications. All concrete pavement and flatwork surface textures offer their own benefits and need to be paired with the appropriate application, function, and desired surface characteristics. Concrete pavement and flatwork provide long-term sustainable solutions for municipal, residential, and highway infrastructure applications. In addition to the traditional benefits of concrete pavement and flatwork which include:

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- Long-life performance and low maintenance (resulting in low "cost of ownership")
- The ability to carry significant numbers of heavy loads
- A smooth riding surface
- Ease of construction and fast-track construction options when required
- Lower surface and surrounding air temperatures
- Desirable safety characteristics (cross-slope & profile maintained and enhanced lighting/reflectivity)

Concrete pavement and flatwork also offer beneficial characteristics resulting from the applied surface texture during construction. These beneficial characteristics include limited surface tire splash & spray, sustainable skid resistance, low tire/pavement noise (quiet), and the ability to have a customized appearance (desired aesthetics).

Typically, the type of exterior concrete pavement surface texture chosen is a function of the specific application (highway, arterial/collector street, residential street, parking lot, driveway, sidewalk, or patio, etc.), traffic type (trucks, cars, bike/ped, etc.), speed limit if applicable, and the desired surface characteristics referenced previously. Typical surface textures include tined, turf dragged, burlap dragged, broomed (with or without picture framing), stamped and/or colored, diamond ground and/or grooved, and even exposed aggregate.

Mismatching or choosing the wrong surface texture for an application can result in unintended issues and dissatisfied owners and users. As an example, concrete pavement was once labeled the "noisy pavement" for a time. When this issue was investigated and the cause of the higher tire/pavement noise was identified, it was determined that the "transverse" tining that was being specified, and required by federal agencies, for almost all highway and higher speed municipal application produced the highest tire/pavement "noise" of any texture. Once realized, the industry and agencies got together and came up with "longitudinal" tining and other textures which produced a safe, more uniform, and quieter pavement surface.

No matter the surface texture being constructed, the process and operations of establishing the texture needs to be in accordance with state of the practice industry recommended standards (ACI Flatwork Finisher Training/Certification, agency specifications, etc.). If not, surface texture operations can result in detrimental effects to the pavement surface and short and long-term performance issues. These are mainly due to "over-finishing," adding water to the surface, and delaying and inadequate curing which can often lead to surface scaling, mortar flaking, surface crazing, delamination, and lower surface durability and resistance to freeze-thaw damage.

While appearing rather simple and often inconsequential concrete pavement and flatwork surface texture is critical to product performance and durability, and owner and user satisfaction. In follow-up articles we will focus on the more technical aspects of the individual textures themselves and their construction.

If you have any comments or questions, please contact me at Todd@moksacpa.com or 913-381-2251 (o) / 816-392-9196 (c)

Saline County's Leggo Block Boxes Win Kansas BABM Competition

By Hemin Mohammed, Kansas LTAP

Figure 1. Saline County Road and Bridge Team (Left to right: Robert Gluckman, Ted Sears, and Jerry Peters) won first place of 2021 BABM.

Kansas LTAP hosts an annual Build a Better Mousetrap (BABM) Competition as a platform for local agencies who have produced creative ideas to enhance the efficiency of their work. Local agencies in Kansas are encouraged to share their creative work with others through a friendly competitive atmosphere that rewards the winners based on cost and savings, benefits to the community and the environment, transferability, ingenuity, and effectiveness. All the candidates' entries are sent to a national competition, and winning entries are shared in a national electronic booklet disseminated to all LTAP/TTAP Centers.

For the Kansas BABM 2021, the Saline County Road and Bridge team won first place (see Figure 1) for their Leggo Block Boxes. Saline County Road and Bridge noticed that many old wooden box culverts (see Figure 2 and 3) less than bridge length were coming to the end of their service life. A low-cost alternative was needed. Therefore, they purchased blocks from a concrete supplier

(the "Leggo" blocks), and bought and salvaged bridge beams. They also purchased decking from auctions and suppliers. With these materials they have built a dozen or so replacement boxes (see Figure 4 and 5) over the last ten years and have experienced no issues. They only needed a creative idea, some simple materials and one week per box to convert their idea to reality (see Figure 6). Each box costs them $5,000 to $8,000, which is much cheaper than a cast-in place-box and can be constructed in less time. The box supports different vehicle sizes and weights such as heavy farm and construction equipment, school buses, garbage trucks and propane trucks.

Figure 2. Safety Issues with the Old Wooden Boxes.

Figure 3. Old Wooden Boxes Needed Replacement

Figure 4. Constructing a Leggo Block Box in Saline County.

Figure 5. Using Corrugated Sheet for a Leggo Block Box in Saline County

Figure 6. A Sample of a Completed Leggo Block Box.

All road agencies in the state are invited to join the annual Build A Better Mousetrap (BABM) competition hosted by Kansas LTAP. Joining the competition is SIMPLE. All you have to do is tell us about an innovative gadget that you or your employees have already designed and built, an equipment modification, or any creative solution that you or your agency has already developed to overcome everyday problems that your crews encounter. Kansas LTAP website (Build A Better Mousetrap page) provides an online application to upload information, pictures, and videos of your creative ideas by May 31 of each year.

Your participation in this competition will be considered at the state level and national level representing the state of Kansas and compete with other states for prizes such as hard hats, safety vests, and a framed certification. We would love to see your innovative ideas get recognition.

If you have any questions or need more information, please do not hesitate to contact Kansas LTAP at hemin@ku.edu.
We would be more than happy to help you.

Leading Pedestrian Interval (LPI) Effectively Enhances Pedestrian Safety at Signalized Intersections

By Sumon Mojumder, Kansas LTAP

Pedestrian-vehicle crashes are important concern for road safety engineers and policymakers. In 2019 in the USA, 6205 pedestrians were killed due to collisions with motor vehicles (17% of total fatalities), 25% of which occurred at intersections and 82% occurred in urban areas (1). Consequently, communities are looking to increase pedestrian safety on streets and intersections. One such a technique is Leading Pedestrian Interval (LPI) used at signalized intersections. In the USA, LPIs have been in use for several decades. Therefore, this article is a step to introduce LPIs to road users especially pedestrians, and concerning the road safety authority of Kansas.

What is an LPI?

At signalized intersections, pedestrians can be vulnerable to right- and left-turning vehicles during the WALK interval. Separating the pedestrian and motor vehicles in time can be one of the most effective ways to decrease crashes that involve motor vehicles and pedestrians. One practical and effective alternative way is to program traffic signals to allow the pedestrian to start crossing the intersection before the vehicle traffic on the parallel street is given the green light. This process is commonly known as an LPI (2).

LPIs provide pedestrians with an opportunity to enter an intersection 3-7 seconds before vehicles are shown a green signal. This head-start enables pedestrians to establish their presence in the crosswalk before vehicles have priority to turn left. FHWA has identified LPI as a low-cost proven countermeasure to increase pedestrian safety at signalized intersections. In general, LPI reduces crashes, increases the visibility of crossing pedestrians, and increases the probability of motorists yielding to pedestrians (3).

Pros and Cons of LPIs

LPIs are successful in reducing pedestrian-vehicle crashes and increasing the number of motorists' behavior yielding to a pedestrian. A 2021 before-after study showed that a 13% reduction in vehicle-pedestrian crashes was achieved in North American cities due to the installation of LPIs (4).

In 2010, Aaron C. Fayish and Frank Gross evaluated the safety effectiveness of LPIs installed in State College, Pennsylvania. Site characteristics, traffic volumes, pedestrian volumes, and crash data were collected for 10 signalized intersections where LPIs were implemented. Similar data were collected for 14 stop-controlled intersections within the State College area. A before-after study with a comparison group design method was applied to evaluate the safety effectiveness. The results showed a 58.7% reduction in pedestrian-vehicle crashes at treated intersections, which was statistically significant (5). Similar types of other studies also show evidence of LPI success in reducing vehicle-pedestrian crashes in other US cities.

However, there are some possible disadvantages associated with LPIs. LPIs increase vehicular delays because LPIs tend to increase signal cycle length (6). Other potential impacts can be:

- Increased delays for pedestrians if driver propensity to yield is low.
- Initially, the atypical signal operation may raise confusion for both motorists and pedestrians.
- If there are no traffic surges to audibly mark the beginning of the crossing interval, accessible pedestrian signals may have to be installed, thereby increasing the cost.
- Drivers may complain about the LPI if pedestrian crossings are infrequent, or no pedestrian is present when LPI is on.

Selecting Suitable Sites for LPIs

In general, LPI is considered when there is a history of traffic crashes at an intersection, there is evidence of potential pedestrian-vehicle conflicts, when there are vulnerable road users (e.g., school children, older road users) crossing the intersections, there is a need to increase yielding to pedestrians in the crosswalks and when crosswalk visibility is restricted or limited.

The Manual on Uniform Traffic Control Devices (MUTCD

2009) Section 4E includes guidelines for LPI installation. Besides this, many state DOTs have their own guidelines. For example, Florida DOT (FDOT) (6). FDOT's guidelines enlist eight warrants to be considered for LPI installation. For example, Warrant 1 (Approach Crash Frequency) suggests that "If vehicle-pedestrian crash is major considerations for LPI, then it should met: "Average Crash Frequency between turning vehicles on green and pedestrians legally crossing the street on the associated crosswalk with the pedestrian "Walk" signal indication on the approach of the intersection ≥1 per year (in last 3 years)." However, FDOT guideline has mentioned that "An LPI should not be implemented if it will significantly increase traffic congestion and travel delay based on engineering judgment."

VHB

Intersections with Heavy Right Turning Traffic

LPI can be helpful at intersections with heavy right turning volumes which can create consistent conflicts and safety concerns between vehicles and pedestrians. Usually, an LPI causes all drivers longer wait times for a green indication on an approach, except those turning right on red. Consequently, conflicts with right-turning motorists are tough to control where right turns on red (RTOR) are permitted. A 2008 study in suburban California showed the evidence that the reported benefit of an LPI in an urban area may not be completely transferable to intersections in a suburban environment unless a restriction on right turn on red is given (7). In such cases, FDOT suggested to install static or blank-out "NO TURN ON RED" signs or "TURNING VEHICLES YIELD TO PEDESTRIANS" signs along with an LPI implementation to improve the safety of pedestrians crossing at signalized intersections (6).

LPI Interval duration

The MUTCD recommends that if used, an LPI "should be at least 3 seconds in duration, and should be timed to allow pedestrians to cross at least one lane of traffic or, in the case of a large corner radius, to travel far enough for pedestrians to establish their position ahead of the turning traffic before the turning traffic is released." (8). To estimate this time, MUTCD assumes the pedestrian speed to be 3.5 ft per seconds and for pedestrians slower than 3.5 ft per seconds, this duration can be longer. The Urban Street Design Guide by National Association of City Transportation Officials (NACTO) recommends a minimum duration of 3 to 7 seconds which can be increased to as long as 10 seconds "where pedestrian volumes are high or the crossing distance is long" (9). In addition, there are other formulas developed to estimate the LPI duration and these formulas result in longer LPI (10).

Elongated LPI

An elongated LPI is not right for every signalized intersection, but elongated LPI can be considered at intersections with the following characteristics, often seen at the pedestrian crossings of wide suburban arterials (11):

- Pedestrians conflict with a permissive left-turn movement.
- Vehicular through movements parallel to the crosswalk do not exist or are low volume.
- The pedestrian phase is actuated.
- A pedestrian crossing takes more time than vehicular demand.

A study showed that elongated LPIs (20 seconds) installed at six suburban intersections in Northern Virginia have not been found to generate operational problems or any complaints (11).

Cost of LPI Installation

LPIs are low-cost proven safety countermeasures. When only signal timing needs to be programmed, the process is easy and inexpensive that can be incorporated into pedestrian safety action plans or policies, and can become routine agency practice. The cost to alter the signal timing of a pedestrian signal can range from $0 to $3,500 depending on the site specifications and the size of the city. Installing a new signal can range from $40,000-$100,000 (12).

When & Where Not to Use LPI

There are certain situations when LPI can raise concerns about possible negative impacts on vehicular progression. In such cases, LPI may not serve the intended purpose. The following situations need to be considered (6):

- Concerns about driver complaints if there is no pedestrian when LPI is on
- Concerns that some locations cannot afford lost vehicle time
- Concerns about false starts and non-yielding, especially at skewed intersections
- Concerns about LPI effectiveness if there is no "RIGHT TURN ON RED" restrictions

Conclusion

Previous studies have confirmed the effectiveness of LPI in reducing vehicle-pedestrian crashes. In the USA many states are installing LPI in more numbers and have developed their own state guidelines for LPI installation. Normally LPIs duration is three to seven seconds, but elongated LPI can be used for vulnerable and slower pedestrians. LPI performance can be further increased by adding proper signage (e.g. "TURNING VEHICLES YIELD TO PEDESTRIANS" at intersections with heavy right turning traffic).

Continued on page 8

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Kansas LTAP Fall 2021Training Update

By Megan Hazelwood, Kansas LTAP

Like every public service organization, in 2020 Kansas LTAP had to adjust and adapt to the cards dealt to us. Instead of in-person classes, we offered virtual classes and pre-recorded courses that were available free of charge and accessible at any time. While there are positives to hosting on-line classes, Kansas LTAP is thrilled to offer in-person classes this Fall. Participants will have the opportunity to learn about Snow and Ice Control, Bridge Maintenance, Foundations in Customer Service, and so much more. Instructors and course attendees will be required to adhere to federal, state, local, and venue COVID-19 mandates in order to foster a safe and comfortable learning environment for everyone.

Kansas LTAP has already successfully hosted in-person courses this year for Welding and Gravel Road Maintenance. Anthony Stampe, Welding Instructor, said that it "felt great" to get back to teaching classes in person. Stampe believes that attendees

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get more out of in-person classes because, "they can ask questions more easily and hear the questions others have."

Gravel Road Maintenance Instructor, Dale Dorsch, reiterated that belief, stating that, "being able to mingle and converse with people face to face gives a better participation feeling to students and instructors alike." By following federal, state, local, and venue Covid-19 protocols, instructors and students have felt comfortable getting back to in-person training. Dorsch stated that, "I am comfortable with helping people gain a better understanding of the job ahead of them while they do what they can to alleviate some of the problems the traveling public encounters every day regardless!"

Kansas LTAP will continue to teach in-person courses for the remainder of Fall. If you missed any of our course offerings in September, you still have the opportunity to attend any of the below courses:

Figure 1. Kansas LTAP Fall 2021 Course Schedule

As a reminder, Kansas LTAP has a new Learning Management System (LMS) that attendees will use to register for courses. The new LMS allows users to create accounts for themselves and others, view past and present enrollments, and register multiple people for multiple classes. We hosted a webinar about the new system that is now posted on our YouTube here. This webinar can be used as an introduction to the LMS or as a refresher.

We hope you are as excited as we are to be back in person! With information provided above, the next step is to hit that registration button to receive valuable knowledge from an LTAP training event nearest you! If you don't see a class you're interested in being offered, do not hesitate to reach out to us to see about hosting an on-demand course at your location. If an in-person training doesn't work for you or your agency at this time, don't forget that we still offer asynchronous online courses that can be found on our website. To contact us about hosting an on-demand course or for questions regarding the LMS, please email kutc_training@ku.edu or call Megan Hazelwood at 785-864-1344.

Sources

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Stampe, A. (2021). Welding Instructor, University of Kansas Transportation Center (M. Hazelwood, Interviewer)

Traffic Data Collection in Rush County

By Hemin Mohammed, Kansas LTAP

Rush County submitted an online application to Kansas LTAP's Equipment Loan Program (ELP) to borrow a Law Enforcement radar traffic counter that records traffic counts, speed, direction, and more. They used it on an unpaved rural underpass road on CR360 and K4 in Rush County between Otis and Bison, KS.

The County wanted to get a precise traffic volume in each direction on the roadway to evaluate their improvement options in that area. A power pole on the right-of-way, about 25 feet off centerline, was used to mount two radar units.

The units were installed on July 14, 2021, and remained for ten days to collect traffic data. Afterward, the collected data were reviewed and analyzed by Kansas LTAP and sent to the Rush County Highway Department for their use.

Kansas LTAP has staff who have direct contact with local agencies across the state. Receiving feedback from local agencies about our provided services helps us improve the quality of our services and strengthens our communications with them.

Figure 1. Chad Foust and Brent Seltman stand beside a law enforcement radar mounted on a power pole.

Chad Foust, Rush County Highway Department's Road Supervisor, rated his level of satisfaction with this experience of our Equipment Loan Program as excellent (10 out of 10). He commented, in a brief survey sent out after their request was completed, that our service was "efficient" and "The experience was what we had expected and hoped for."

Hearing such feedback is very encouraging as we look to expand the capacity of our services to meet local agencies' needs.

KUTC presents "Modern Midwest Mobility" Webinar Series

By Nikhila Gunda & Connor Mountford, Kansas LTAP

Transportation professionals in Kansas face a challenge when attempting to keep up with and implement emerging innovations in the field. Information on innovations is typically shared through webinars by their national membership organizations or in journal articles. Case studies, research, and webinars related to the implementation of emerging trends are not always geared to a Midwestern audience. Because of this, it is challenging to determine if an innovation is appropriate for a specific location, if there are identified peers, if the costs are regionally consistent, and if it performs well once implemented.

To address this challenge, the University of Kansas Transportation Center in partnership with MPOs in the state of Kansas requested and received a Kansas State Transportation Innovation Council (STIC) grant from FHWA. The grant provides funding to create a local transportation innovation online seminar series, which will include 10 webinars over the course of a year. These webinars will include FHWA Every Day Counts (EDC) initiative topics, affordable innovations, unique financial partnerships, and other opportunities that local transportation professionals can use to deliver transportation projects using innovative means. We are calling the series **Modern Midwest Mobility**.

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Modern Midwest Mobility's first webinar on the topic "STEP Innovations" was presented by Flint Hills MPO on July 27, 2021. (Safe Transportation for Every Pedestrian (STEP) is an Every Day Counts Initiative that focuses on developing safety measures that reduce pedestrian roadway fatalities at uncontrolled crossing locations, such as midblock areas). This webinar covered how to use inexpensive materials on the road to implement STEP countermeasures to quickly improve safety for bicycles and pedestrians. Lessons learned from projects implemented in Manhattan and Junction City were discussed and some of the resources related to this topic were shared that can guide others in doing similar projects. This webinar was recorded and published on KUTC's YouTube Channel that can be accessed here.

Figure 1. Photo used during the STEP Innovations presentation to demonstrate safety measures to reduce pedestrian roadway fatalities.

On August 24, 2021, David Church, Lead Traffic Engineer at WSP, a consulting firm in Kansas City, presented a webinar on the implementation of traffic calming measures on a recent project located in Hays, Kansas. The recording for this webinar is also available on KUTC's YouTube channel and can be accessed here.

On October 28th at 1 PM the KUTC will be joined by Jim Hubbell, a solution engineering manager at Street Light Data, to discuss the how to leverage big data in transportation analyses to improve decision making. You can register here.

Please make sure to subscribe and follow us on the following media platforms to receive the latest news and updates from the KU Transportation Center:

YouTube: https://www.youtube.com/channel/UCxAwExnlysimmwT4GgtTrw

Email List: http://kutc.ku.edu/email-subscription-form

LinkedIn: https://www.linkedin.com/in/ku-transportation-center-60894520b/

LTAP Instagram: @ksltap

LTAP Facebook: https://www.facebook.com/kansasltap1530

Figure 2. Photo used during the Traffic Calming presentation.

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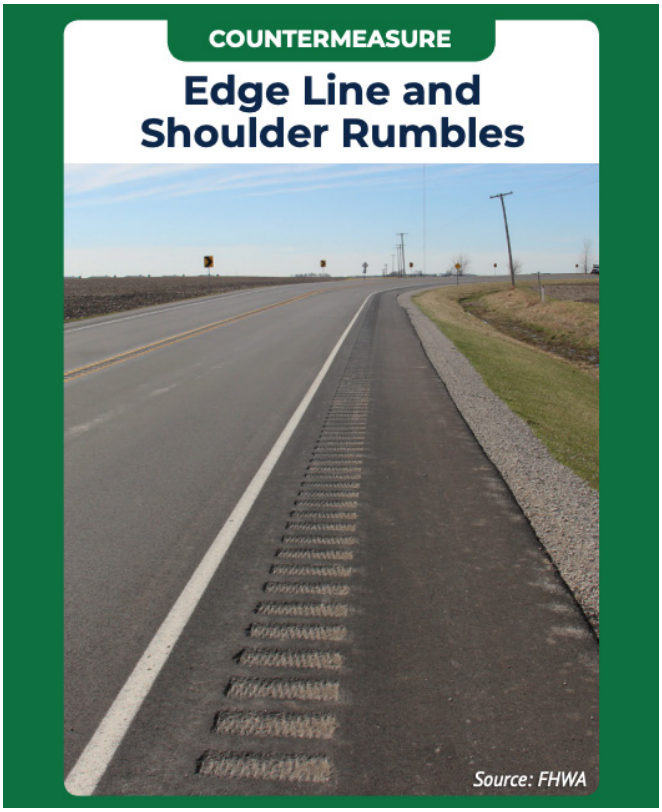
FHWA Road Defects Feature



Edge rumble strips are milled corrugations in pavement to alert inattentive drivers that they are leaving the roadway to reduce:

- **Run-off-road crashes**
- **Fixed object crashes**
- **Rollovers**
- **Distracted/drowsy driver crashes**

https://safety.fhwa.dot.gov/roadway_dept/pavement/rumble_strips

Fatal and Injury Reductions	
Run-Off-Road *(two-lane rural)*	36%
Run-Off-Road *(rural freeways)*	17%

Source: CMF Clearinghouse IDs 3454 and 3447

Director's Update

By Emily Wilder, Kansas LTAP

Fall is the season of homecoming and this year that feels especially true. KUTC staff have returned to the office, regularly scheduled in-person classes have resumed, and the MINK conference was hosted in St. Joseph with great attendance. It's been wonderful to have face-to-face interaction with our partners, instructors, and customers once again!

Although things are beginning to return to a sense of normal here at Kansas LTAP, the transition has been slow. In-person classes have had noticeably lower enrollment than in pre-pandemic years and a brief survey was sent out on September 17th to find out why. Thank you to all who responded to the survey! Results suggest travel distance, being short-staffed, budget cuts, and covid-19 restrictions to be the most common barriers to attending in-person training.

Local public agencies have worked incredibly hard to provide service to their communities through this pandemic and we want to do anything we can to make your jobs easier. We're happy to schedule on-demand training, on any topic, at your location. Please contact Megan Hazelwood, Senior Events Coordinator, at mhazelwood@ku.edu or 785-864-1344 to schedule a class in your area. We also provide many opportunities for virtual training through our website at http://kutc.ku.edu/ltap/training.

If training isn't a current need, we also offer technical resources and assistance that could make your work easier. You can view our current collection of technical resources in our Resource Collection at https://kutcresources.ku.edu/resources/LTAP.

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Additionally, we will be launching an LTAP smartphone application that provides access to our online resource collection, a materials calculator, an interactive work zone calculator, and more. The app is currently being tested by a select group of users before mass launch, please contact me at ewilder@ku.edu if you'd like to become a tester. Lastly, don't forget that you have access to free equipment through our Equipment Loan Program.

The work of public servants is never easy but the past year and a half have been especially difficult. Thank you for all that you do for our communities and Kansas. If there is anything else that Kansas LTAP can provide to make your job easier, please let us know.

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.