

BIWEEKLY RESOURCE PAGES

(All Times Central, 2/16/2021)

Iowa LTAP & Guest Speaker Webinars

Planning & Design Accommodation for Oversize & Overweight Freight in Work Zones (with WI LTAP).

Friday, 2/19 at 12:00 PM. Guest speaker: Bill Bremer, University of Wisconsin. Oversize and overweight (OS/OW) freight movement is among the fastest growing segments in the truck freight industry. Work zone transportation management planning (TMP) is appropriate for considering how OS/OW freight should be dealt with to ensure state economies are not severely impacted. Suggestions and strategies for dealing with OS/OW in work zones will be offered. For more information and to register, please go to <https://iowaltap.iastate.edu/events/freight-work-zone-accommodation/>

Composite Press-Brake Formed Modular Steel Tub Girders for County Bridges: Development, Experimental Validation, and Case Studies.

Friday, 2/26 at 12:00 PM. Guest speakers: Karl Barth, West Virginia University, and Guy Nelson, Valmont Industries, Inc. This presentation is focused on the development of modular shallow trapezoidal boxes fabricated from cold-bent structural steel plate using standard mill plate widths and thicknesses. Presented is the methodology used for the design of this system along with experimental validation of the modular composite girder's flexural capacity and recently develop standards. A case study will also be presented to showcase the use of this system within a local county. For more information and to register, please go to <https://iowaltap.iastate.edu/events/steel-tub-girders/>

2020 "Build a Better Mousetrap" Innovations (State and National).

Friday, 3/5 at 12:00 PM. Speaker: Keith Knapp, Iowa LTAP, with 2020 Iowa competition winners (Page County, City of Des Moines, and Marion County). The Build a Better Mousetrap highlights innovative solutions to everyday challenges that local and tribal transportation professionals encounter. This presentation is focused on information about the local agency innovations that won the 2020 Build a Better Mousetrap (BABM) competition in Iowa and nationally. Those that were given an honorable mention nationally may also be presented. National results for the BABM competition can be found at <https://iowaltap.iastate.edu/build-a-better-mousetrap-competition/>. For more information and to register for this webinar, please go to <https://iowaltap.iastate.edu/events/2020-babm-webinar/>

Keep Your Pavements Zipped-Up! Best Practices for Long-Lasting Longitudinal Joints.

Friday, 3/12 at 12:00 PM. Guest speaker: Greg Duncan, Applied Pavement Technology, Inc. & NV LTAP. Longitudinal joint distress is often a driver in the need to rehabilitate a roadway. This webinar will address causes for the distress along with innovative construction options that can mitigate longitudinal joint distress and repair methods to correct the distress and prolong the need for rehabilitation. The intended audience includes people working in the pavement maintenance, specification development, and construction inspection roles. For more information and to register for this webinar, please go to <https://iowaltap.iastate.edu/events/keep-your-pavements-zipped-up/>

Work Zone Driveway Assistance Devices (DADs): Past Research & Evaluation of Display Strategies.

Friday, 3/19 at 12:00 PM. Guest speaker: Tim Gates, Michigan State University. The Driveway Assistance Device (DAD) is an experimental device used to direct traffic onto a bi-directional, single-lane work zone from a driveway or side street. This device uses alternating flashing arrows to indicate the traffic flow direction along the work zone segment in order to reduce wrong-way driving. Although several states have experimented with DADs in various work zone settings, there remains a lack of consensus regarding the design aspects and the general effectiveness. To help address these issues, research was

performed to evaluate various aspects of the DAD design, including auxiliary sign messages, signal configuration, and arrow color. For more information and to register for this webinar, please go to <https://iowaltap.iastate.edu/events/wz-driveway-assistance-devices/>

Safety and Operational Effectiveness of Traffic Signs. *Friday, 3/26 at 12:00 PM.* Speaker: David Veneziano, Iowa LTAP. Traffic signing provides critical regulatory and warning information to motorists for safety and operational purposes. This webinar will discuss the state-of-knowledge on the effectiveness and impacts of different regulatory and warning signs, as well as discussion on the installation, maintenance, and removal of signs. For more information and to register for this webinar, please go to <https://iowaltap.iastate.edu/events/safety-and-operational-effectiveness-of-traffic-signs/>

Iowa Work Zone Safety Workshops

Iowa Work Zone Safety Workshops. *Monday, 2/22 to Monday, 3/1 at 8:00 AM.* *General Session on 2/22 followed by Audience Specific Sessions on 2/23, 2/24, 2/25, and 3/1.* During the week of February 22–25 and Monday, March 1, work zone traffic control and safety training will be offered virtually so that workers across the state can participate conveniently. The workshop will cover current revisions in the 2009 Manual on Uniform Traffic Control Devices (MUTCD), particularly Part 6. The workshops consist of a general session for all participants, plus breakout sessions that will be scheduled throughout the week tailored to specific categories of work zone activities: city, county, utility, Iowa DOT construction and contractors, and Iowa DOT maintenance. The cost for this training is \$25/person. For more information and to register, please go to <https://iowaltap.iastate.edu/events/2021-iowa-work-zone-safety-workshops-virtual/>

Completing Traffic Studies. *Tuesday, 3/16 at 9:00 AM.* Speaker: David Veneziano, Iowa LTAP. This webinar will provide a basic introduction into the studies and measurements commonly used by local agencies in the course of daily activities. Subjects covered include traffic volume, speed, sight distance, curve speed, and intersection traffic control studies. The workshop should be valuable to new and experienced local agency staff that perform various different aspects of those studies. For more information and to register, please go to <https://iowaltap.iastate.edu/events/completing-traffic-studies-webinar/>

Iowa DOT Culvert and Bridge Backwater Program Workshop. *Wednesday, 4/7 at 8:00 AM.* The workshop will cover the new USGS StreamStats program for estimating design discharges for sizing bridges and culverts. We will also go over the use of the Iowa DOT AEPD spreadsheet for calculating and comparing peak discharges using other methodologies. In addition, we will review the Iowa DOT Culvert program and Bridge Backwater program with example problems. For more information and to register, please go to <https://iowaltap.iastate.edu/events/dot-culvert-and-bridge/>

Design Length of Steel H-Piles and WEAP. *Wednesday, 4/14 at 8:30 AM.* The training class focuses on designing the length of steel H-pile needed for standard bridge designs in Iowa. The class considers a series of subjects as noted at the link below. The class leads participants through four different problems in order to demonstrate the design process. Participants will work at a computer using a spreadsheet setup to facilitate the design process. Since the class will be held virtually, it would be ideal for each student to have two monitors (one monitor to view the presentation and one monitor to view and work on the spreadsheet). The class will receive handouts detailing the examples and spreadsheet entry along with hand calculations. For more information and to register, please go to <https://iowaltap.iastate.edu/events/design-length-of-steel-h-piles-and-weap-equation/>

Workshops and Webinars by Others

Advanced Project Bundling: Overcoming Hurdles. *Wednesday, 2/17 at 1:00 PM.* To access the webinar, please go to <https://connectdot.connectsolutions.com/sr500apb/>

Case Studies of Innovative Low-Cost Work Zone Strategies. *Friday, 2/26 at 1:00 PM.* This webinar is geared toward engineers, technicians, and practitioners working for local and state DOTs who are interested in learning more about innovative low-cost work zone strategies and their applications. The topics covered within this webinar will include: toolbox of low-cost work zone strategies; MUTCD compliance and the FHWA experimentation process; and case studies of innovative low-cost work zone strategies implemented by state DOTs, including driveway assistance devices, preformed reflective tapes, orange work zone pavement markings, painting the pavement surface black as an alternative to grinding pavement markings, and wait-time displays. To register for this webinar, please go to https://msu.zoom.us/webinar/register/WN_HOKaLHUcToyLIAucCupmeQ

FHWA Essential Requirements of the Uniform Act (ND LTAP). *Monday and Tuesday, 3/1 and 3/2 at 9:00 AM.* This comprehensive workshop begins with an introduction to the federal-aid right-of-way process and the fundamentals of complying with the Uniform Act, Federal Highway regulations, and any state laws, regulations, or requirements. Then, participants will test what they have learned with hands-on activities to reinforce key course concepts. To register for Day 1, go to https://ndsu.zoom.us/meeting/register/tJwkd-yrqj4uG9ecZTYIBLdIVPzG_DBAEzbT, and to register for Day 2, go to <https://ndsu.zoom.us/meeting/register/tJcqc--upj8jGtHsbs7dU2G9Y7n3uyaZDnJn>

Common Sense Solutions for Intersection Problems (NJ LTAP). *Tuesday through Thursday, 3/2–3/4 at 4:00 PM.* This course will review basic concepts in probability and statistics and their application in designing traffic control features and regulating traffic. This course provides participants with (1) a basic understanding of intersection safety issues, (2) “how to” information for common safety tasks and low-cost safety improvements that do not require an engineered design, and (3) background information on safety tasks that do not require an engineer. This workshop also outlines areas where non-engineers can assist traffic engineers in the safety process, and help them to understand when an engineer needs to be consulted to make a safety-related change to an intersection. This will be day 3-day (2 hours each session) program. Participants are welcome to join any of the three parts; however, a certificate of attendance will only be issued to those that attend the full session on all days. For more information and to register, please go to <https://cait.rutgers.edu/event/njltap-common-sense-solutions-for-intersection-problems/>