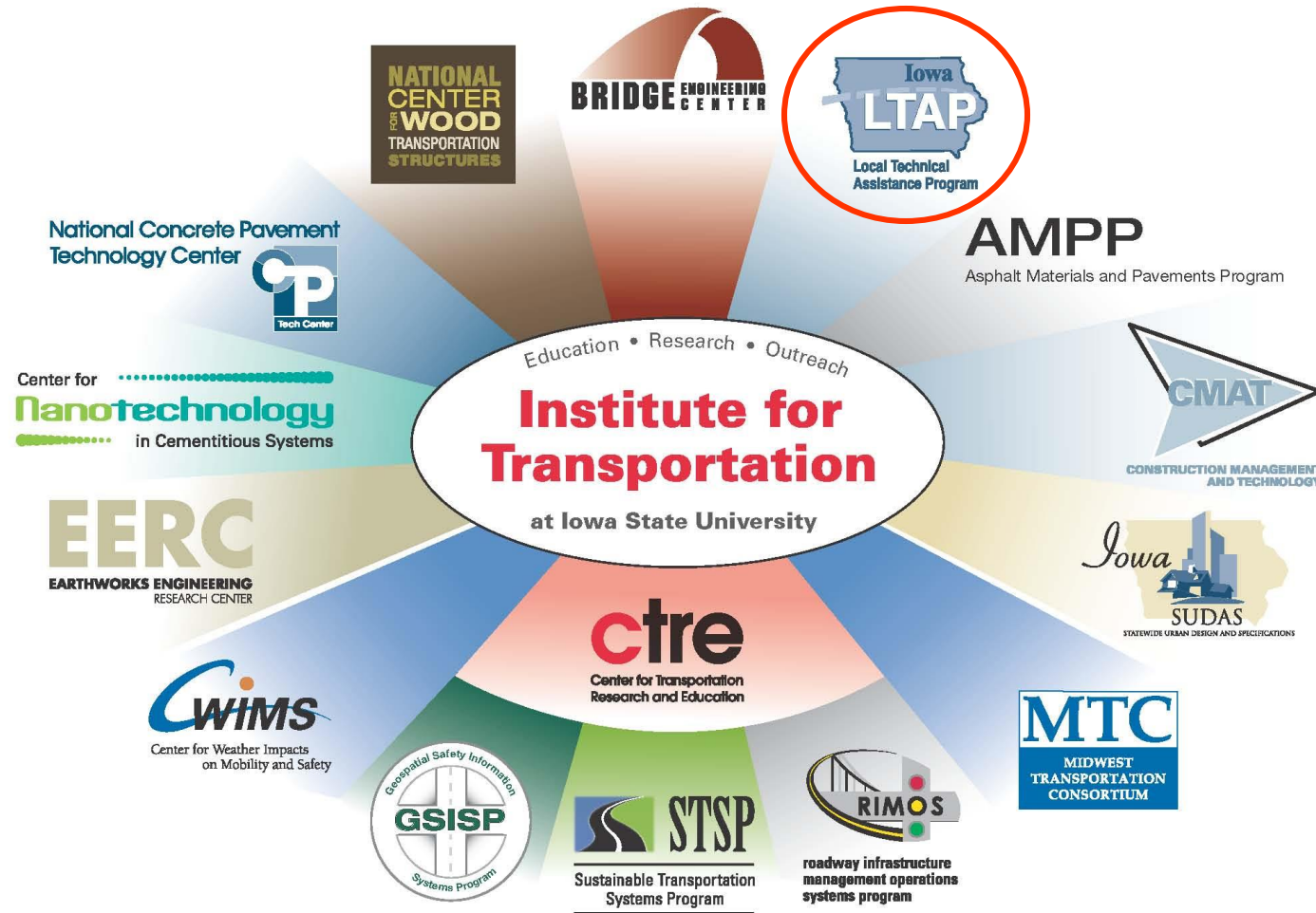


**iowa**  
**Local Technical**  
**Assistance Program**  
**(LTAP)**

**Keith Knapp, Director**  
**September 8, 2017**





# MISSION/OBJECTIVE

**The Mission: foster a safe, efficient, and environmentally sound transportation system by improving the skills and knowledge of local transportation providers through training, technical assistance, and technology transfer**

**The objective: provide quality training events and technical transportation-related information that is useful to local transportation agencies**



# WHAT WE DO

- **Develop and/or Assist w/ Technical Training and Outreach Events**
  - **90 to 100 “Events”**
  - **About 4,000 Attendees**
- **Technical Information Exchange**
  - **Newsletter**
  - **Loan Library (Materials/Equipment)**
  - **Resource Website**  
**([www.iowaltap.iastate.edu](http://www.iowaltap.iastate.edu))**

# WHAT WE DO (cont.)

- **Personal Technical Assistance**
- **Identify Research Uses and its Local Applications**
- **Needs Outreach and Response**



# Technical Training and Outreach

# TRAINING EXAMPLES

- **Excavation Safety**
- **Flagger and Work Zone Safety**
- **Motor Grader Operator Training**
- **Accessible Sidewalks and Curb Ramps: Design to Installation**
- **Bridge Inspection**
- **Roadside Safety Basics**
- **Tractor Mower Safety**
- **Webinars: USGS StreamStats and OS/OW Permitting**



# EXAMPLES (cont.)

- **Four to Three Lane Roadway Conversions**
- **Culvert/Bridge Backwater Software**
- **Self-Cleaning Multi-Barrel Culverts**
- **Underground Utilities Construction Inspector School (soon)**
- **Cost Savings & Sustainability of Gravel Recycling (soon)**
- **Supervisory Skills and Techniques**





# LEADERSHIP INSTITUTE

- **15 online training to develop local management/leadership**
- **Those aspiring to become leaders”**
- **Course examples: team development, effective communication, and resource management**
- **Updating courses & offering at meetings within Iowa**
- **44 graduates**



# LARGER EFFORTS

- **ICEA Spring, Midyear, Fall, & Annual Conferences**
- **MINK Conference**
- **DOT Work Zone Safety Series**
- **Greater Iowa Asphalt Conference**
- **Streets and Roads Workshop & Conference**
- **Local Roads Safety Series**



# Technical Information Exchange and Assistance

# LIBRARY

- **Materials/equipment loans**
- **Online streaming video service**
- **Mass distributions**
  - **TTC Handbook, 2016 Edition**
  - **Gravel Roads Construction and Maintenance**
  - **Workplace Posters: Sign Retro, Work Zone Flagging, and Gravel Road Maintenance**
- **Website with online materials, videos, webinars, etc.**

# NEWSLETTER

## Technology NEWS

April–June 2017



Providing transportation technology transfer for Iowa's cities and counties

### Inside this issue

- 2 From the director: National strategic planning and its impact on the Iowa LTAP
- 3 New technology for backup alarms: Eliminate noise nuisance complaints and improve safety
- 4 FHWA releases flexible roadway design key to safer streets
- 4 MoGO in Ames
- 5 From the Safety Desk: To pave or not to pave
- 6 Pavement preservation (when, where, and how)
- 7 Iowa LTAP Tech Corner—PaveCool mobile app
- 7 Conference calendar

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IOWA STATE UNIVERSITY  
Institute for Transportation

## Work Zone Safety Sign Package Program winners

### About

The Iowa Work Zone Safety Workshops have provided an opportunity for operations personnel from various cities in Iowa to improve their work zone safety and setups when conducting routine street maintenance. Many of the participants have been from cities with a population of less than 10,000 residents. Small city budgets for this type of work can sometimes lead to diminished funding for temporary traffic control devices and the use of signs, barricades, cones, and vests that are deteriorated and may be out of compliance with the 2009 MUTCD.

This project was developed to assist smaller cities with the introduction or upgrade of their temporary traffic control devices to meet current standards for compliance.

### The process

Each application submitted to the program was reviewed and evaluated. Factors such as the city's population, staff size, demonstrated need, signing condition, and commitment to work zone safety was taken into account, as well as their demonstrated participation in the Iowa Work Zone Safety Workshops.

### Winners

A total of 10 cities from across Iowa were chosen as winners, each receiving a package that included \$2,500–3,000 worth of signs, vests, and materials.

"I think it was a success. Now, 10 more Iowa cities are fully outfitted with everything they need to keep their work zones safer," said Paul Albritton, Iowa LTAP technical training coordinator and co-organizer of the program.

Each package included the following materials:

- One Lane Road Ahead signs
- Road Work Ahead signs
- Be Prepared to Stop signs
- Type III barricades
- 28 in. traffic cones
- Class 2 safety vests
- Sign stands
- 42 in. channelizers with bases

### Contact

Paul Albritton, 515-294-1231,  
palbrit@iastate.edu



From left to right: A look inside the package and winners from Dickon, Iowa.

## Technology NEWS

January–March 2017



Providing transportation technology transfer for Iowa's cities and counties

### This issue

- Director: Building a Mousetrap
- Available for checkout
- Payment Loan Program
- How, Iowa LTAP Local Liaison
- Employee base
- With Travis Hostrang
- The National Center for Transportation Structures
- Tech Corner—FEMA
- Calendar

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IOWA STATE UNIVERSITY  
Institute for Transportation

## Iowa LTAP study yields publication on traffic sign effectiveness

The safety and operational impacts of traffic signs can now be found in one publication recently produced by the Iowa LTAP.

The Sign Effectiveness Guide is a compilation and critical review of 48 research documents focusing on potential impacts of 11 static or enhanced signs commonly used by local jurisdictions.

David Veneziano, Iowa LTAP safety circuit rider, and Keith Krapp, Iowa LTAP director, led the research. They said transportation professionals can use the guide, along with the MUTCD, to better understand whether a particular sign can be expected to impact safety or operations.

It also can help agencies to better manage their signing budgets.

"Signing represents a significant investment for all government agencies," said Veneziano, "and it has become even more significant with the requirement to implement an assessment and management plan for the maintenance of minimum sign retroreflectivity."

The researchers collected and reviewed information on sign effectiveness, including the purpose of each sign, relevant information

from the MUTCD, potential safety, operational, and behavioral impacts identified by past research, and alternatives to signage, such as increased enforcement or pavement markings.

Some of the signs studied in the research were Stop, Yield, Speed Limit, Children at Play, Playground, Ice Warning, Deer Crossing, and enhanced signs, such as a stop sign equipped with a flashing beacon. The researchers also looked at some warning systems, including Prepare to Stop When Flashing signs and horizontal alignment signs, such as curve warning, chevrons, and advisory speed plaques.

They assigned reliability ratings of Low, Medium, or High to the research results, focusing on the potential safety or operational impacts of the signs and warning systems. Thirty-three of the results were rated Medium or High.

Veneziano and Krapp learned that few studies of the safety and operational impacts of basic traffic signs exist even though traffic signs are everywhere along America's roadways. "That's why it was important for us to rate the research

Sign effectiveness page 2



Stop and Deer Crossing signs were two of a number of signs investigated by Iowa LTAP researchers.

[www.iowaltap.iastate.edu/resources/technology-news/](http://www.iowaltap.iastate.edu/resources/technology-news/)

# Technical Assistance

- Telephone/email/face-to-face Q&A
- On-call/on-site training (e.g., flagger/work zone)
- On-call/on-site road safety assessments
- Facilitate/assist multidisciplinary safety teams
- Recent projects
  - Sign Effectiveness Guide
  - Work Zone Sign Package Program
  - Evaluation of Pavement Markings on Low-Volume Rural Roadways in Iowa
  - Multidisciplinary Safety Team Factors of Success



# LTAP TEAM

- **Keith Knapp – Director**
- **Paul Albritton – Technical Training Coordinator**
- **David Veneziano – Safety Circuit Rider**
- **John Shaw – Local Roads Safety Liaison**
- **Theresa Litteral – Statewide Multidisciplinary Safety Team Facilitator**
- **Administrative Event Coordinator**



# Questions and Discussion