Iowa LTAP Work Zone Sign Package Program: 2024–2025

tech transfer summary

This program, started in 2017, provides an avenue for Iowa cities with populations under 10,000 to obtain a basic package of work zone signs and personal protection vests. From a total of 156 applicants, 10 cities were awarded packages in 2024–2025.

May 2025

RESEARCH PROJECT TITLE
2024–2025 Iowa Work Zone Safety Sign Package Program

SPONSOR
Iowa Department of Transportation (InTrans Project 24-911)

PRINCIPAL INVESTIGATOR
Keith Knapp, Director
Iowa Local Technical Assistance Program
Institute for Transportation
Iowa State University
kknapp@iastate.edu / 515-294-8817
(orcid.org/0000-0002-8790-7304)

CO-PRINCIPAL INVESTIGATOR
Paul Albritton
Iowa LTAP Technical Training Coordinator
Institute for Transportation
Iowa State University
(orcid.org/0000-0002-2415-7884)

MORE INFORMATION
intrans.iastate.edu

Iowa Local Technical Assistance Program, Iowa State University
2711 S. Loop Drive, Suite 4700
Ames, IA 50010-8664
515-294-8103

The Iowa Local Technical Assistance Program (LTAP) is dedicated to providing technical and management assistance to Iowa's local governments through a variety of programs and resources.

The mission of the Institute for Transportation (InTrans) at Iowa State University is to save lives and improve economic vitality through discovery, research innovation, outreach, and the implementation of bold ideas.

The sponsors of this research are not responsible for the accuracy of the information presented herein. The conclusions expressed in this publication are not necessarily those of the sponsors.

IOWA STATE UNIVERSITY
Institute for Transportation

Goal

The goal of this Iowa Department of Transportation (DOT)-funded project was to provide an avenue for small cities to obtain a basic package of work zone signs and personal protection vests that could help them improve the safety of their work zone setups and increase the safety of their workers and the traveling public.

Problem Statement

The ability to acquire and set up work zone-related devices that are in compliance with the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD) can sometimes be difficult for smaller cities. The smaller budgets for these cities can result in a lack of inventory and/or the use of signs that are in poor condition.

Background

Although city budgets are limited, particularly for cities with populations under 10,000, those smaller cities' public works departmental staff members have demonstrated a commitment to work zone safety by attending or planning to attend related workshops and training events in Iowa.

The Iowa Local Technical Assistance Program (LTAP) led a pilot program in 2017 to assist those smaller cities by providing acceptable work zone temporary traffic control devices or replacing their outdated equipment. This project is a continuation of the program.

Work zone sign package in 2017

Project Description

A technical advisory committee guided the design, creation, and implementation of the small city work zone sign package program. The project tasks included the following:

1. Develop the content of the work zone sign package. The package distributed consisted of four ROAD WORK AHEAD signs and four CLOSED overlays, two ONE LANE ROAD AHEAD signs, two BE PREPARED TO STOP signs, two Type III barricades, sixteen 28-in. traffic cones, six Class 2 safety vests, eight sign stands, and ten 42-in. channelizer cones.

2. Define the eligibility rules to apply and compete for the sign package. These rules included having a city population of 10,000 or fewer. This year, the program was open to all cities that met the population criteria, and extra points were given to those cities that had at least one staff person who had completed work zone or other related training in the last three years.

3. Develop an application and advertise the program through various avenues including consultants, the Iowa Association of Municipal Utilities, Iowa DOT, American Public Works Association – Iowa Chapter listserv, Iowa LTAP Facebook page, and Iowa League of Cities. The application consisted of 12 questions designed to determine the need that each eligible city had for the work zone sign package.

4. Define and apply an evaluation and ranking process that assigns points to the answers for each question for each applicant.

Key Findings

- The work zone sign package appears to contain many or most of the devices needed by smaller cities within Iowa.
- Many respondents demonstrated a desire to make work zones safer for their workers and the residents of their cities.
- The answers to the application questions appeared to measure the need for the work zone sign package relatively well.
- The answers to the open-ended questions showed that the majority of the cities that responded had a lack of work zone-related inventory or had inventory that was out of compliance.
- The recipient cities with staff who had not attended work zone safety training in the past were open to staff attending training in the near future.
- The population range for the applicant cities in 2025 ranged from 85 (Zwingle, Iowa) to 9,564 (Grinnell, Iowa) residents, and the average applicant population was 1,732.

2025 Recipient Cities

- Bancroft
- Cantril
- Glidden
- Jefferson
- Manly
- Rock Valley
- Sac City
- Saint Ansgar
- Sioux Rapids
- Wyoming

"Thank you for selecting the City of Bancroft to receive the 2025 Small City Work Zone Sign Package Program. We appreciate the program's goal of helping small communities like ours be safer." City of Bancroft

"What a wonderful way to start the week! We will happily put the sign package to work." City of Cantril

"That's great news!! Thank you so much for selecting Glidden as a recipient! We're very thankful!" City of Glidden

"Thank you so much, this will be a great help for our public works department!!!! It is very much appreciated!!!!" City of Sioux Rapids

Recommendations

- Advertisement of the program should continue to be broadened to raise awareness of the program to encourage more participation.
- The application value of participation in a work zone safety training class may need to be increased. For more information on work zone training, please visit https://iowaltap.iastate.edu/iowa-work-zone-safety-workshops/.
- Priority should be given to first-time applicants and previous applicants that have not been awarded a package over previous recipients of the work zone sign packages.
- The importance of the narrative sections in the application should continue to be emphasized to encourage more city representatives to elaborate on their viewpoints of roadway worker safety and their need for work zone safety devices.
- Since many smaller cities are not familiar with LTAP, the initial contact email message needs to contain language such as that it is funded by the Iowa DOT, Iowa State University, etc.
- The application should continue to contain a "release" that allows quotes and photographs from it to be used to advertise the program.
- This program should be continued given the need still exists to assist smaller cities with their acquisition and application of work zone-related devices.

Implementation Readiness and Benefits

This year, the program provided basic work zone signs, equipment, and personal protection vests to 10 smaller cities that otherwise would not likely be able to afford to purchase new or replacement work zone equipment. This will better ensure the safety of their workers and the traveling public.