March-May 2004

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Acronyms in this issue

AASHTO American Association of State Highway and Transportation Officials

APWA American Public Works Association

CTRE Center for Transportation Research and Education (at Iowa State University)

FHWA Federal Highway Administration

Iowa DOT Iowa Department of Transportation

ISU Iowa State University

MUTCD Manual on Uniform Traffic Control Devices

NACE National Association of County Engineers

Local Technical Assistance Program

You say "camino," I say "road"

LTAP

Iowa's paving contractors and local agencies can take advantage of two new training resources for Spanish-speaking workers:

- English as a Second Language (ESL) Survival Course (Survival Course)
- Stepping Up to Supervisor for Hispanic Construction Workers (Supervisor Course)

These courses were developed by a team of researchers at ISU led by Ed Jaselskis, associate professor of construction engineering, with funding from the Iowa DOT. Augusto Canales, PhD candidate in ISU's Department of Civil, Construction and Environmental Engineering, was a valuable contributor.

Background

According to the U.S. Census Bureau, Hispanics make up 18.8 percent of employees in the construction industry (or 1.8 million workers), and the U.S. Hispanic population continues to grow at a fast clip.

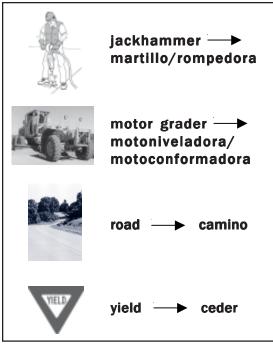
This phenomenon is reflected in many road crews across Iowa.

Sometimes language and cultural differences between Spanish-speaking and English-speaking workers can interfere with good communication, affecting worker safety and efficiency. The two new courses help bridge the communication gap by teaching English language and job skills to Hispanic workers.

Keeping workers safe

A combination of language barriers, varying educational levels, and other factors has resulted in a disproportionate number of job-related injuries and fatalities for Spanish-speaking construction workers. The Survival Course was developed to help reduce the number of accidents and improve overall work efficiency.

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Examples from vocabulary section of the Survival Course

Preparation of this newsletter was financed through LTAP, a nationwide effort financed jointly in Iowa by the FHWA and the Iowa DOT. Iowa's LTAP is housed and administered at ISU's Center for Transportation Research and Education (CTRE).

The mission of Iowa's LTAP:

To foster a safe, efficient, environmentally sound transportation system by improving skills and knowledge of local transportation providers through training, technical assistance, and technology transfer, thus improving the quality of life for Iowans.

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The Survival Course teaches an English vocabulary of construction-related terms in a culturally meaningful format. The course also helps participants span the cultural divide by

- explaining why safety is important and illustrating how cultural differences can play an important role in safety issues.
- incorporating teaching methods found in Hispanic countries to make it easier for employees to learn and retain the information.
- encouraging supervisors to hire instructors with multicultural experience in the construction sector.
- encouraging supervisors to combine course content with on-the-job practice to improve language skills and safety practices.

Preparing future supervisors

Moving from performing job functions to delegating them requires a new set of skills. The Supervisor Course helps prepare Hispanic employees transitioning into supervisory roles.

The supervisor training course focuses on three areas: self-management, managing individuals, and teamwork.

Reciprocal training

The ISU team is now developing a training program that teaches basic Spanish to English-speaking supervisors, focusing on job-related vocabulary and situations.

For more information

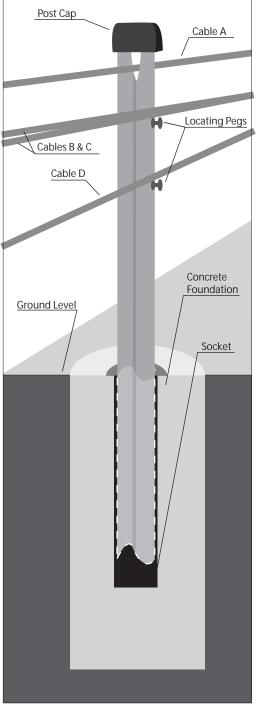
To bring English as a Second Language (ESL) Survival Course or Stepping Up to Supervisor for Hispanic Construction Workers to your road workers, contact Augusto Canales, 515-294-7531, acanales@iastate.edu.

For additional information, contact Ed Jaselskis, associate professor of civil engineering, ISU, 515-294-0250, ejaselsk@iastate.edu, or Charles Jahren, associate professor of civil engineering, ISU, 515-294-3829, cjahren@iastate.edu.

New guardrail system should save lives

A New Type of median cable barrier has recently been installed along a 3.5-mile stretch of I-35 between Des Moines and Ankeny at a cost of \$330,000.

Cables continued on following page



This cutaway installation view of the median cable barrier is not necessarily to scale.

