

## **HR-376 Metric Training for Iowa Highway Industry**

**Key Words: Metrics, Training,**

### **ABSTRACT**

"Metric Training For The Highway Industry", HR-376 was designed to produce training materials for the various divisions of the Iowa DOT, local government and the highway construction industry. The project materials were to be used to introduce the highway industry in Iowa to metric measurements in their daily activities. Five modules were developed and used in training over 1,000 DOT, county, city, consultant and contractor staff in the use of metric measurements.

The training modules developed deal with the planning through operation areas of highway transportation. The materials and selection of modules were developed with the aid of an advisory personnel from the highway industry. Each module is design as a four hour block of instruction and a stand along module for specific types of personnel. Each module is subdivided into four chapters with chapter one and four covering general topics common to all subjects. Chapters two and three are aimed at hands on experience for a specific group and subject. The modules include:

Module 1 - Basic Introduction to the Use of International Units of Measurement. This module is designed for use by all levels of personnel, primarily office staff, and provides a basic background in the use of metric measurements in both written and oral communications.

Module 2 - Construction and Maintenance Operations and Reporting. This module provides hands on examples of applications of metric measurements in the construction and maintenance field operations.

Module 3 - Road and Bridge Design. This module provides hands on examples of how to use metric measurements in the design of roads and structures.

Module 4 - Transportation Planning and Traffic Monitoring. Hands on examples of applications of metric measurements in the development of planning reports and traffic data collection are included in this module.

Module 5 - Motor Vehicle Enforcement. Examples from Iowa and Federal Motor Vehicle Codes are used as examples for hands on training for the vehicle enforcement type personnel using this module.

Each of the modules utilizes visual aids in the form of videotapes and others that can be projected by an overhead projector or through the use of computer aided methods. The course can be self-administered or is best done through the use of a group session and the use of a class leader.