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Local Technical Assistance Program Support on Computer-based FDOT Intersection Control Evaluation (ICE) Training

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Current Situation

The Florida Strategic Highway Safety Plan (SHSP) identified intersection safety as one of the state's most important emphasis areas.

A part of that emphasis area is the Intersection Control Evaluation (ICE) process, which evaluates several intersection control alternatives and ranks them based on their operational and safety performance. The Florida Department of Transportation (FDOT) has developed an ICE manual and conducted in-classroom ICE trainings to promote the intersection safety evaluation process.

While in-classroom training has its advantages, there are also several disadvantages, including limited venue capacity, pre-determined delivery schedules and locations, and associated travel and lodging cost to attendees. Computer-based trainings (CBTs) overcome these limitations and offer an efficient self-paced professional training approach.

There is a strong interest from FDOT to develop CBT for FDOT ICE training to meet educational needs statewide and better promote the implementation of the ICE process.



In a recent research project, FDOT explored computer based training for its intersection control program.

Research Objectives

This project provided technical support through the Florida Local Technical Assistance Program (LTAP) to develop the ICE CBT.

Project Activities

The University of South Florida Center for Urban Transportation Research team developed an Instructional Media Design Package (IMDP) based on the ICE manual and existing in-person training materials, highlighting essential modules for the ICE CBT. The team then developed slide decks and a video script for each training module and lesson. The team developed two main CBT sections, including an Engineer/Manager Section, which provides an understanding of the foundational ICE concepts, and an Analyst Section, which offers the details of the ICE analysis procedure.

Project Conclusions and Benefits

Alongside circumventing the challenges associated with in-person training, the final product of this project offers a self-paced workforce development approach to teaching the ICE process to statewide transportation professionals.

For more information, please see fdot.gov/research.