

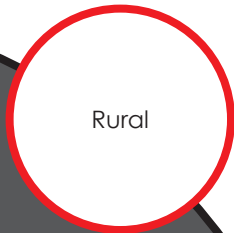


Caltrans Division of Research,
Innovation and System Information

Research



Notes



Rural

MAY 2020

Project Title:
Communication Technologies
for Rural Intelligent Transportation
Systems (ITS) Professionals

Task Number: 1749

Start Date: April 1, 2020

Completion Date: March 31, 2023

Task Manager:
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Professional Capacity Building for Communication Systems Phase V: Intelligent Transportation Systems (ITS)

Develop appropriate courses to update the students' skills for new and constant evolving technologies in ITS.

WHAT IS THE NEED?

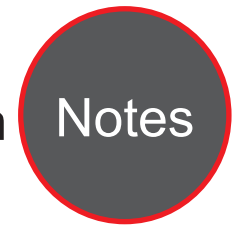
Rural communication engineering remains a mission critical skill that most engineers in the state have limited experience with. Lacking these skills, engineers and technicians have a difficult time designing and maintaining reliable and robust communication networks for rural Intelligent Transportation Systems (ITS) field equipment. As new technologies emerge, engineers and technicians will be required to understand the reality of what is possible to achieve from these technologies versus the unrealistic claims from a vendor. This is phase V of this project and is a continuation of phases I, II, III and IV to provide specific expert training to rural engineers and technicians to enable them to gain the skills necessary to design and maintain robust communication networks for rural ITS field equipment.

WHAT ARE WE DOING?

A panel composed of members from the California Department of Transportation (Caltrans) rural area districts and headquarters was formed in phase I of this project. The panel members identify and decide the skill areas that need to be updated or improved so that the research team can develop the appropriate courses to be taught by subject matter experts. These courses update the students' skills for new and constant evolving technologies in ITS.



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knowledge that improves
California's transportation system



WHAT IS OUR GOAL?

The outcome and end-product from this research will be delivery of courses to Caltrans rural engineers and technicians to train them in the skills they lack, which are necessary for them to design and maintain robust communication networks for rural ITS field equipment. This project will build the professional capacity of rural ITS engineers and technicians through an applied, hands-on educational experience that brings together the latest/most recent information into a comprehensive, one-stop shop for rural ITS communications.

WHAT IS THE BENEFIT?

The benefits of this research will be Caltrans engineers and technicians who will gain the capacity in ITS technologies to successfully design, implement, and maintain reliable and robust communication systems in rural and remote areas for rural ITS field equipment.

WHAT IS THE PROGRESS TO DATE?

The task started on April 1, 2020. The kickoff meeting was held on April 23, 2020.