Research Implementation Support

Providing funding for training, equipment, and technical support to accelerate the implementation of research results.

Research Support

MAY 2024

Project Title:
Research Implementation Accelerator

Task Number: 4199

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Completion Date: April 30, 2025

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WHAT IS THE NEED?

The California Department of Transportation (Caltrans) through its Division of Research, Innovation, and System Information (DRISI) funds Research and Development (R&D) projects to provide solutions to the needs of its internal customers. The level of implementation and utilization of these R&D projects varies depending on the Technology Readiness Level (TRL) of the results as well as training and readiness of the internal customers for their implementations. Furthermore, the scope of some of the research conducted may not include consideration of customer's workflows. These shortcomings result in underutilization of some of the completed research and therefore do not provide full benefits to the customers.

Caltrans needs to identify completed research projects that are underutilized and have the potential to bring the department greater efficiency, saving time, money and resources that can be used to deliver more projects.

WHAT ARE WE DOING?

We are using virtual platforms to conduct two research workshops identifying projects that can impact Caltrans operations through proper implementations aided with the receipt of seed funding to kick-start such implementations. The seed money can pay for training, equipment, and consultant support. The seed money provided through Advanced Highway Maintenance and Construction Technology (AHMCT) cannot pay for software licensing or Caltrans employees.

WHAT IS OUR GOAL?

Identify underutilized research projects and use seed funding to accelerate implementation of such projects by Caltrans. The aim

DRISI provides solutions and knowledge that improves California's transportation system

is to work with Caltrans stakeholders to determine the needs and then use the seed funding to work out the workflows necessary for proper integration and adaptation of the research results of such underutilized research projects.

WHAT IS THE BENEFIT?

The results of this project will accelerate the implementation of research results and would benefit Caltrans in achieving its goals of efficiency, safety, and stewardship in enhancing mobility in California.

WHAT IS THE PROGRESS TO DATE?

The research team at UC Davis supported the development of an implementation project proposal on Research and Development of the Caltrans' Geospatial Technology Proving Ground for consideration. The project will be submitted to the Research and Deployment Advisory Committee (RDAC) for approval. The team continued project funding for implementation of Evaluation of heavy equipment simulators: The team provided on-site troubleshooting for issues with the simulators. The research team organized a training for Caltrans staff on 2/22/24. The upgrade of the computer in the John Deere simulator, its rebranding as a CM-Labs simulator, and two more years of warranty and maintenance have been ordered by UC Davis on Feb 21, 2024. The delivery is expected in June.