A Caltrans Program for Advancing Rural Transportation Technology



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1. Introduction

1.1. New Tech Program

The California Department of Transportation (Caltrans) established a New Technology and Research (New Tech) Program to review opportunities for advanced transportation technologies in California transportation development and to pursue the research, development, testing and demonstration of promising technologies.(1)

The Caltrans New Tech Program focused initial energy and attention on problems plaguing urbanized areas such as traffic congestion, safety, energy use and air pollution. The Caltrans emphasis on big city problems mirrored the national program emphasis by the United States Department of Transportation (U.S. DOT) and the Intelligent Transportation Society of America (ITS America). ITS America was originally titled IVHS America relating to Intelligent Vehicle Highway Systems (IVHS). IVHS has since been changed to Intelligent Transportation Systems (ITS) to reflect the multimodal nature of ITS.

Caltrans, in late 1991, began inquires into rural concerns dealing with advanced transportation technologies. It became apparent that those dealing with Intelligent Transportation Systems (ITS) and other advanced transportation technologies felt that rural areas were not a concern and that technologies and systems developed for large city areas could be easily adapted to a rural setting.

In 1992 Caltrans embarked on a research study titled: "A Caltrans Program for Advancing Rural Transportation Technology" (PARTT). The researchers were Professor Joe Armijo: Department of Civil and Agricultural Engineering, Montana State University, and John West: Program Manager, New Technology and Research, Caltrans.

2. Purpose of Study

2.1. Determine need

To investigate the need for rural transportation technology and determine the applicability of advanced transportation technologies currently under development in rural problems and settings.

2.2. Extent of application

To investigate the extent of rural applications of advanced transportation technology in the United States and abroad.

2.3. Develop research, demonstration, deployment

To develop a rural technology research, demonstration and deployment agenda for Caltrans.

2.4. Implementation

To develop a plan, program and organization for advanced rural transportation technology for Caltrans.