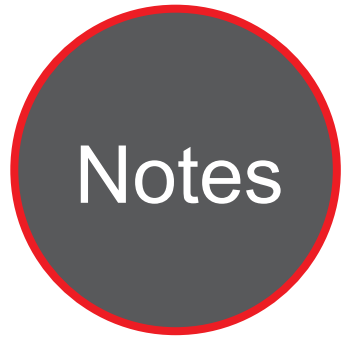




Caltrans Division of Research,
Innovation and System Information

Research



Notes

Pavement

SEPTEMBER 2019

Project Title:
Improving the Quality of Pavement
Surface Distress and Transverse
Profile Data Collection and Analysis,
TPF-5(299)

Task Number: 2650

Start Date: March 4, 2016

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Improving the Quality of Pavement Surface Distress and Transverse Profile Data Collection and Analysis

Improve the accuracy and repeatability of the data collection and analysis systems and promote the knowledge of PSDATP measurements.

WHAT IS THE NEED?

The objective of this research is to improve the accuracy and repeatability of the data collection and analysis systems and promote the knowledge of pavement surface distress and transverse profile (PSDATP) measurements.

The collection of quality PSDATP is critical for pavement management and design.

The technical capabilities of systems to collect and analyze PSDATP have increased dramatically in the last 5-10 years. Many state highway agencies (SHAs) are in the process of assessing the procurement of equipment/systems or procuring vendor services for network and project level assessments.

Additionally, the SHAs are constantly trying to determine the cost of data collection to help support pavement decisions.

WHAT ARE WE DOING?

The research goals will be accomplished through the following sub-tasks:

1. Assemble a Technical Working Group
2. Identify, prioritize, and select issues and needs to develop projects
3. Suggest approaches to address identified issues
4. Initiate and monitor projects intended to address identified issues
5. Disseminate results and assist in solution deployment
6. Support other efforts related to improving PSDATP data collection and analysis



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knowledge that improves
California's transportation system

WHAT IS OUR GOAL?

The goals of this project are to:

1. Provide direction and funding that will unify the strategies
2. Address implementation efforts
3. Promote practices that improve the accuracy and repeatability of the data collection and analysis systems of the PSDATP measurements

WHAT IS THE BENEFIT?

The collection of quality PSDATP is critical for pavement management and design. The current national and State efforts to develop and refine pavement performance measures highlight the high value provided by quality PSDATP.

The implementation of new project delivery methods with medium- to long-term maintenance agreements (Design Build Maintain, Design Build Operate, etc.) and performance measures directing maintenance and rehabilitation strategies, justify a high level of quality PSDATP for proper planning and the allocation of funding.

WHAT IS THE PROGRESS TO DATE?

The research team focused on reviewing existing field data collected to develop appropriate statistically-based sampling and evaluation criteria for reference sections. Obtained state DOT Data Quality Management Plans were submitted to Federal Highway Administration.