

Construction

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Project Title: Concrete and Asphalt Pavement Smoothness and Asphalt Quality Incentive/Disincentive Analysis [UCPRC23 TO-006]

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Task Manager:

Colman Cronin
Senior TE
colman.cronin@dot.ca.gov

Concrete and Asphalt Pavement Smoothness and Asphalt Quality Incentive/Disincentive Analysis [UCPRC23 TO-006]

To review the status of smoothness in concrete and asphalt pavements. Evaluate asphalt pavement for possible incentive/disincentives.

WHAT IS THE NEED?

Caltrans specifications for pavement smoothness and statistical pay factors include incentive/disincentive pay adjustments. The determination of the pay adjustment requires multiple steps on the part of the contractor and in the Caltrans verification process. It involves the use of complex Microsoft Excel spreadsheets housed in a Caltrans secure file sharing system. These spreadsheets, which Caltrans developed, have built-in formulas and complex macros. However, in this early implementation phase, the pilot program has demonstrated that the spreadsheets, which are critical to the successful implementation of smoothness specifications for ensuring quality pavement, are difficult to use by both the contractor and Caltrans field staff and are challenging to maintain.

WHAT ARE WE DOING?

This project will develop a user-friendly solution with better functionality whereby eliminating the multiple steps and streamlining the current process needed for submitting and verifying the pavement smoothness and AC quality pay adjustment that will save both the contractor and Caltrans valuable time and resources. The solution will be hosted, supported and maintained by the UCPRC.

WHAT IS OUR GOAL?

A web-based user-friendly approach developed by, hosted, and supported by UCPRC for analyzing and processing the incentive/disincentive for concrete and AC pavement smoothness and AC quality.



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WHAT IS THE BENEFIT?

Smoother pavements will reduce greenhouse gases created by vehicle and lead to longer lasting pavements.

WHAT IS THE PROGRESS TO DATE?

This task order was executed on 02/09/2024, and the in-person kick-off meeting was held on 03/01/2024. UCPRC staff and the Caltrans Technical Advisory Committee (TAC) met twice a week to determine the desired functionality and design of the future online user-friendly tool. The design of the smoothness portion of the tool has been completed and some development has begun. The design of the Statistical Pay Factor (SPF) portion of the online tool is almost complete.