

## Research Notes

Program Steering Committee (PSC): Pavement

JUNE 2014

Title: PPRC 11 SPE 3.21: Implementation of New Quieter Pavement Research

Task Number: 2601

Start Date: November 1, 2011

Completion Date: June 30, 2014

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### **TITLE:**

Implementation of New Quieter Pavement Research

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### **WHAT IS THE NEED?**

This task is a sister task of the Task 2380, separated to distinguish the additional support funding arranged from the Division of Maintenance in late 2011. All contents of this Research Notes are same to those of Task 2380.

Caltrans began Quieter Pavement Research (QPR) program in year 2007. Since then, it has stored significant information on the various aspects of quieter pavements, such as field noise measurement method, effects of pavement types and materials on the noise performance of the pavement, and so on. This task will address additional work needed to further incorporate these findings into standard Caltrans practice, in terms of specifications and guidelines.

### **WHAT ARE WE DOING?**

This study will focus on the development of specifications, guidelines, standardized laboratory and field test methods and other information needed to incorporate quieter pavement research into standard Caltrans practice. Tasks will be conducted in the following two topics:

1. Quieter Rigid Pavements – Conduct surface characterization tests to measure the change in noise, friction and texture from new concrete pavement surface textures. Seven pilot projects have specified saw-cut longitudinal grooving (aka Next Generation Concrete Surface) on pilot projects in the state.
2. Quieter Flexible Pavements – Conduct HVS tests on newly identified quieter asphalt pavements.

### **WHAT IS OUR GOAL?**

The goal is to continue development of specifications, guidelines, standardized laboratory and field test methods and other information needed to incorporate quieter pavement research into standard Caltrans practice, working under the guidance of the Quieter Pavement Task Group and with Caltrans districts and responsible headquarters units.

Updated: June 2014

**WHAT IS THE BENEFIT?**

The study will provide Caltrans with guidelines for the implementation of specific types of quieter pavements as an option to enhance current standard measures for highway noise abatement. Findings of the study can also be used to improve Caltrans practices for the design and construction of quieter pavements while optimizing safety, durability, and cost.

**WHAT IS THE PROGRESS TO DATE?**

The task is near completion. All work has been completed except the delivery of final report. The research team is working on the revisions of the final report based on Caltrans review, and the final report will be delivered on schedule.