

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): [California Department of Transportation \(Caltrans\)](#)

**INSTRUCTIONS:**

*Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.*

<b>Transportation Pooled Fund Program Project #</b> <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i>  TPF-5(357)		<b>Transportation Pooled Fund Program - Report Period:</b> <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input checked="" type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>Project Title:</b> Connecting the DOTs: Implementing ShakeCast Across Multiple State Departments of Transportation for Rapid Post-Earthquake Response			
<b>Name of Project Manager(s):</b> Yue Wang	<b>Phone Number:</b> 916-227-8349	<b>E-Mail</b> Yue.Wang@dot.ca.gov	
<b>Lead Agency Project ID:</b> Task ID 2949, Project ID P1132	<b>Other Project ID (i.e., contract #):</b> Contract # 65A0658	<b>Project Start Date:</b> 1/18/17	
<b>Original Project End Date:</b> 6/30/20	<b>Current Project End Date:</b> 9/30/22	<b>Number of Extensions:</b> 1	

Project schedule status:

- On schedule     
  On revised schedule     
  Ahead of schedule     
  Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
\$450,000	\$284,031.17	55%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$0	\$87317.28	55%

**Project Description:**

The California Department of Transportation (Caltrans) is organizing and leading the TPF project, "Connecting the DOTs: Implementing ShakeCast Across Multiple State Departments of Transportation for Rapid Post-Earthquake Response," study number TPF-5(357) (<http://www.pooledfund.org/Details/Study/609>). Ten State Departments of Transportation (DOT) have committed funds and are key partners on this multi-state DOT project.

ShakeCast is a web-based tool that delivers an assessment of potential impacts to highway structures within minutes of an earthquake, raising situational awareness and improving emergency response for executive decision makers, traffic management center operators, and maintenance staff.

This TPF project seeks to achieve two primary objectives. First, it will bring participating DOTs into full ShakeCast operation for post-earthquake assessment of state and local bridge inventories. Second, the project will provide a mechanism to actively engage representatives from state DOTs with common interests in implementing and expanding the application of ShakeCast technologies to improve emergency response capabilities.

**Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):****Contract Status**

The California Department of Transportation (Caltrans) organized the Annual Project Meeting for all participating DOTs. The representatives for the participating state Department of Transportation (DOT) on the Technical Advisory Committee were invited to attend the project meeting. The two-day meeting was held on November 18-19, 2019 in Sacramento, California at Caltrans Headquarters. The meeting focused on the advancement of 2nd generation fragilities currently under development by Caltrans and other researchers.

- USGS continued the effort in providing technical support and assistance to participating DOT partners.
- USGS continued the effort to work on providing ShakeCast cloud hosting to participating DOTs.
  - USGS and Caltrans continued the effort in migrating Caltrans in-house ShakeCast installation to USGS.
  - ShakeCast team continued communications with other DOTs about ShakeCast and to join the TPF.
  - ShakeCast team continued the development of new features and improvements to the current ShakeCast system.

**Anticipated work next quarter:**

The following work is anticipated for next quarter:

- - USGS to continue the effort in providing technical support and assistance to participating DOT partners.
- - USGS to continue the effort to work on providing ShakeCast cloud hosting to participating DOTs.
- - USGS and Caltrans to continue the effort in migrating Caltrans in-house ShakeCast installation to USGS.
- - ShakeCast team to continue communications with other DOTs about ShakeCast and to join the TPF.

**Significant Results:**

Nothing to report at this time.

**Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).**

**Potential Implementation:**

Nothing to report at this time.