

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.

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|---|---|--|--|
| Transportation Pooled Fund Program Project # <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> TPF-5(357) | | Transportation Pooled Fund Program - Report Period: <input checked="" 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 type="checkbox"/> Quarter 4 (October 1 – December 31) | |
| Project Title: Connecting the DOTs: Implementing ShakeCast Across Multiple State Departments of Transportation for Rapid Post-Earthquake Response | | | |
| Name of Project Manager(s): Yue Wang | Phone Number: 916-227-8349 | E-Mail Yue.Wang@dot.ca.gov | |
| Lead Agency Project ID: Task ID 2949, Project ID P1132 | Other Project ID (i.e., contract #): Contract # 65A0658 | Project Start Date: 1/18/17 | |
| Original Project End Date: 6/30/20 | Current Project End Date: 9/30/22 | Number of Extensions: none | |

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 | \$89,408.42 | 20% |

Quarterly Project Statistics:

| Total Project Expenses and Percentage This Quarter | Total Amount of Funds Expended This Quarter | Total Percentage of Time Used to Date |
|--|---|---------------------------------------|
| \$89,408.42 (20%) | \$33,106.28 | 20% |

Project Description:

The California Department of Transportation (Caltrans) is organizing and leading the Transportation Pooled Fund (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.):**Progress**

- USGS continues to provide technical support and assistance to participating DOT partners.
- USGS has been working with several DOTs on number configurations, data Q/A, notifications and scenario efforts.
- USGS continues to work on providing ShakeCast cloud hosting to participating DOTs.
- USGS is working with Caltrans to move the internal Caltrans ShakeCast instance to USGS for long-term hosting.
- USGS has been in contact with FHWA about ShakeCast and potentially joining the TPF as the sponsor.

Anticipated work next quarter:

The following work is anticipated for next quarter:

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- 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.
- ShakeCast team to suggest and develop new features and improvements to the current ShakeCast system.

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).

Nothing to report at this time

Potential Implementation:

Nothing to report at this time.