Date last updated: 3/6/2013

Under Subaward

Proj. #	Title	PI	Inst.	Period	Budget	Caltrans	Others	Description
7BC01	Synthetic near-fault ground motion arrays for PBEE analysis	Armen Der Kiureghian	UCB	1/4/2012 to 6/30/13	$128,144	$128,144	$ -	Project will extend a recently developed procedure for generating synthetic earthquake records to account for near-fault effects such as directivity pulses. The procedure will provide time-histories needed for structural analysis.
3J01	Effects of Liquefaction on Surface Response Spectra	Kramer	UW	10/16/12 to 10/15/13	$63,670	$63,670	$ -	Project will develop period dependent response spectrum adjustment factors to account for the effects of liquefaction on ground motion. Primary focus is on the potential for amplification at long periods.
4E01	Evaluation of collapse and non-collapse of parallel bridges affected by liquefaction and lateral spreading	Brandenberg	UCLA	7/1/12-6/30/13	$93,200	$93,200	$ -	Project investigates the performance of two parallel structures in Baja CA, one which collapsed due to lateral spreading, the other performed well. Results will be used to validate or improve recently completed design guidelines.
9K02	Quantification of Variability in Performance Measures of Ordinary Bridges to Uncertainty in Seismic Loading Directionality and Its Implication in Engineering Practice.	Zarean	UCI	10/15/12 to 10/14/13	$72,949	$72,949	$ -	Project investigates the sensitivity of strucutral performance to the orientation of applied ground motion. Results will be used to generate record selection criteria for time-history analysis.
2T01	Influence of Kinematic SSI on Foundation Input Motions for Bridges on Deep Foundations	Brandenberg/Stewart	UCLA	6/1/2013 to 5/31/15	$202,000	$102,000	$102,000	Project is developing a simplified procedure to modify response spectra to account for the presence of large stiff foundation elements such as drilled shafts.

In Process (Details and budgets subject to change)

Proj. #	Title	PI	Inst.	Period	Budget	Caltrans	Others	Description
	Liquefaction data collection -New Zealand/Japan	TBD		6/1/13-	$400,000	$100,000	$300,000	Project will focus on collection of exisitng liquefaction and ground deformationdata stemming from recent NZ and JN Eqs. Key sites of interest will be investigated with foreign partners.
	Design Ground Motion Library and Record Selection Tool	TBD		7/1/13-6/1/14	$100,000	$50,000	$50,000	Enhancements to the DGML website will be made and the interface improved. Support for creation of synthetic records will be added.
	Subduction Ground-Motion Database	TBD		7/1/13-	$500,000	$75,000	$425,000	Project will begin the development of a database of subduction event earthquake records and supporting metadata. This data will support future efforts to develop GMPE's for subduction events