## Scoping tourism dynamics post-quake: A module for MERIT

Project Leader (PI):

Dr. Caroline Orchiston, Centre for Sustainability, University of Otago (Co-PI)

Dr. Nicola Smith, Market Economics (Co-PI)

Association Investigators:

Dr. Garry McDonald, Market Economics

Dr. Charlotte Brown, Resilient Organisations

Dr. Emily Harvey, Market Economics

Prof. Dave Simmons, Department of Sport, Tourism, and Recreation, Lincoln University

Ms. Caroline Blanchfield, Convention Bureau Manager, Christchurch and Canterbury Tourism

Mrs. Rowan Worner, General Manager Marketing, Christchurch and Canterbury Tourism

## Project Abstract

This proposal addresses a significant knowledge gap in our understanding of tourist behaviour following major seismic events, using the Canterbury earthquakes (2010-2011) as a case study. We will draw on existing, but presently untapped Big Data (e.g. eftpos, credit card, port of arrival) to model post-quake tourist behaviours, including changes in itinerary and visitor expenditure, and the cascading (flow-on) impacts throughout New Zealand. We are partnering with Christchurch Canterbury Tourism to develop the story of tourism response and recovery given the recovery marketing and communication initiatives that were employed by key stakeholders. Presently, the characteristics of tourism-related behaviour under the influence of a disruptive event are a significant source of uncertainty in economic impact modelling, including with MERIT (Measuring the Economics of Infrastructure Tool). Our findings will serve as an evidence-base for developing scalable and transferable causal systems models of tourist market dynamics following a seismic event, applicable to a broad range of tourism markets and hazard scenarios. Our research aligns with the Economics of Resilient Infrastructure and Resilience National Science Challenge research programmes, in which the MERIT economic model is being applied. A dynamic model of tourism recovery will be a valuable tool for policy makers and practitioners, in New Zealand and internationally, to better prepare for and recover from disruptive events.