

## THE SCIRT LEARNING LEGACY

## LESSONS FROM SCIRT

### Background

The spate of earthquakes that occurred in Christchurch and wider Canterbury during 2010 and 2011, resulted in very significant damage and disruption to the Christchurch horizontal infrastructure networks. In response, Stronger Christchurch Infrastructure Rebuild Team (SCIRT) was formed, and has the responsibility for repairing and replacing Christchurch's three waters, roading and bridge networks as well as some retaining walls and stopbanks.

SCIRT is an alliance between Christchurch City Council, Canterbury Earthquake Recovery Authority (CERA), New Zealand Transport Agency (NZTA), City Care, Downer, Fletcher Construction, Fulton Hogan, and McConnell Dowell.

### Target audience

Governments, local authorities and large public asset owners in other major centres in NZ as well as other parts the world that are located in high earthquake (or other hazard) prone locations will be primary beneficiaries and users of the knowledge that will be available through this learning legacy.

The progressive rebuild of Christchurch's vertical infrastructure such as commercial and industrial buildings, as well as residential and multi-residential will also potentially benefit from a knowledge of the SCIRT alliance approach to asset repair and replacement. Academics and students studying response to natural hazards and subsequent rebuild programmes are also expected to be major users of the legacy information.

### Purpose

The unique opportunity to explore and implement smarter and more effective ways of repairing and replacing Christchurch's horizontal infrastructure is too good an opportunity to miss.

SCIRT has a finite life and in order that all the learnings from its earthquake repair and replacement programme are captured, documented, and disseminated, the SCIRT Learning Legacy project has been initiated.

Access to this information in planning prior to, and following, future high impact disasters will benefit New Zealand Inc. and more generally, other international communities that are located in high hazard zones.

*Project in collaboration with:*

**UC QUAKE CENTRE**

**Resilient ORGANISATIONS**

**UC CEISMIC**  
UNIVERSITY OF  
CANTEMBERG  
VICTIMES OF THE  
Canterbury Earthquake Digital Archive



Further information:

[info@scirtlearninglegacy.org.nz](mailto:info@scirtlearninglegacy.org.nz)

[www.scirtlearninglegacy.org.nz](http://www.scirtlearninglegacy.org.nz)

## Innovation

Alliance contracting is a recognised way of achieving the best results from infrastructure programmes. Where scope is uncertain, risk cannot be clearly defined and speed of repair is critical, relationships between key stakeholders will drive success. SCIRT has been and continues to demonstrate this with its \$2billion+ programme giving rise to many innovations right across the spectrum of its business from staff secondment and HR management protocols to 'competitive-collaborative' rebuild implementation through to product and process technology developments.

Innovation and efficiency is promoted, encouraged and rewarded throughout. SCIRT's considerable achievement to date is being touted by many as a model for the future, not just in the 'pressure-cooker' environment of disaster rebuilding but in the more mundane 'business-as-usual' environment.

A recent indication of SCIRT's achievement was its winning of the Institution of Civil Engineers (ICE) prestigious Brunel Medal, awarded in recognition of excellence in civil engineering.



## Primary deliverable

The SCIRT Learning Legacy will be developed into a comprehensive, easily navigated website that will be available for all to access. Its content will be organised into primary themes that are reflective of the separate areas of innovation that have flowed from SCIRT. The underlying analysis tools and data will be stored on the UC CEISMIC digital archive for prosperity sake.

Other channels of delivery such as workshops, lectures and seminars are anticipated, to provide exposure for the innovations resulting from the SCIRT programme, for the benefit of all.

## Who is involved

The UC Quake Centre has an agreement in place with SCIRT to assist them to prepare and deliver the learning legacy project. Resilient Organisations, UC CEISMIC, Lincoln University and UC Quake Centre is working collaboratively with SCIRT to identify, document and disseminate the innovations flowing from the SCIRT horizontal infrastructure rebuild programme.

## Timeline

SCIRT officially commenced its rebuild programme on 22nd September 2011. At the time of publication (February 2014) the rebuild programme was 43% complete.

The SCIRT Learning Legacy project commenced in January 2014 and will be completed in phases. The learning legacy project work is being prioritised in accordance with anticipated completion dates of the various design and construct work streams of SCIRT. As most of the networks design tasks will be completed during 2014 by SCIRT, the initial priority for the learning legacy project is to capture all relevant information from this stream prior to that component of SCIRT being progressively wound down.

Some aspects of the learning legacy project may continue on until SCIRT has completed its rebuild function, presently scheduled to be December 2016.

**Duncan Gibb**

General Manager  
SCIRT

**Robert Finch**

Director  
UC Quake Centre

**Rod Cameron**

Value Manager  
SCIRT

*Programme funded by*

**Christchurch  
City Council** 

**New Zealand Government**

 **SCIRT**  
Learning Legacy