

# Data integration and visualisation: Prototyping QuakeCoRE data platform for diverse needs

Project Leader (PI): Dr John Vargo, Resilient Organisations

Associate Investigators:

Dr. Joanne Stevenson, Resilient Organisations

Dr. Tracy Hatton, Resilient Organisations

Project Abstract:

The QuakeCoRE Technology Platform is intended to support a diverse range of needs from simulation and laboratory requirements to decision support, covering the needs of all the Flagship programmes as well as interfacing with external databases and research programmes. The work programme proposed here will develop the foundations of a technical platform to support sharing and integrating data from disparate sources into accessible, aligned and quality information. The project will be facilitated by Resilient Organisations in collaboration with QuakeCoRE's technology development professionals, national and regional database managers such as StatsNZ, LINZ, CERA, councils, etc., and in coordination with research programmes such as Resilience to Nature's Challenges (National Science Challenge 10, RNC-NSC).

The work programme will develop the basis for a data integration platform using a prototyping approach to identify and find solutions for diverse user needs, data storage, data sharing, federation and visualisation requirements. This platform is intended to provide an interface for social scientists through to geotechnical researchers.

In the first year data integration within the platform will initially focus on data relating to Flagship 5 while interacting with Flagship 3 and the QuakeCoRE's technology development team to future proof the platform. In year two work will expand to more explicitly include Flagships 3 and 6 as well as connecting to the RNC-NSC research and data.

## Associate Investigators