

Urban

Programme Title: Urban - Resilient Cities

Programme Leader: Professor Suzanne Wilkinson (The University of Auckland)

Programme Overview

The Urban Co-Creation Laboratory will integrate, implement and build onto the knowledge and tools created in the Resilience Toolboxes to enable cities in New Zealand to adapt and transform with urban change whilst building their resilience to natural hazards. Resilient cities will be built via:

- Developing a framework for evaluating city resilience to natural hazards in the New Zealand context and building an inter-city expertise collaborative network to advance implementation of resilience tools and measures; and
- Working with the case study of Auckland City to develop an operating Resilient Cities model, focusing particularly on the issues of building resilience to nature's challenges into the rapid growth-plans and growth pains of the city, including major nationally significant investments in transport and housing.

Programme Outcomes

Contribution to Challenge Mission: This research reaches to the centre of the Resilient New Zealand vision by targeting solutions to our increasingly urban population base and lifestyles. Using the inputs from the multiple inter-disciplinary Resilience Toolboxes, this Urban Co-Creation laboratory will provide the tools and strategies for our fast-growing and/or rapidly changing urban areas to thrive in the face of natural hazard, despite changing needs, populations and urban forms. Auckland is the fastest growing urban environment in New Zealand (hosting more than 60% of New Zealand's growth over the next 30 years). It is also prone to a wide range of natural hazards, with a range of frequencies, magnitudes and cascading chains of impact. These impact a diverse range of ethnicities, networks, age-groups and wealth.

Vision Mātauranga ("VM") outcome: The programme will partner with the Mātauranga Māori Programme to decide which communities should be working with the priority programme are. The work will work with the Mātauranga Māori Programme to examine how Māori businesses, communities can be made more resilient and how this contributes to increasing cities resilience.

10-year outcome: Through uptake of the research, Auckland and other New Zealand cities will be viewed internationally as some of the most natural hazard-resilient cities in the world.

5-year outcome: This Cities Programme will have produced a roadmap towards a Resilient Auckland, linking to the other key New Zealand Cities, and be further along the resilience trajectory towards a more resilient City and Country.

Specific Projects within Programme

1. Resilient Cities Network Development: This project aims to develop a consensus of solutions (resilience tools, measures and indicators) that will create a New Zealand city resilient to natural hazard. We will establish a network that includes and links the main cities in New Zealand with the science.

2. Resilient Auckland Planning: This project aims to place the Auckland Council's Strategic Plan under a resilience "lens" to trace future land use under planned scenarios of population and economic growth, including testing longer-term simulated environments in Auckland, and reporting key resilience measures for the different options.

3. Resilient Auckland Communities: This project aims to develop resilient Auckland communities, with a focus on Pacific Island and Asian communities and migrant and refugee groups.

4. Resilient Auckland Businesses: This project aims to identify vulnerabilities in the business sector, and assist with the development and testing of mechanisms to make Auckland businesses resilient. We will develop a baseline for Auckland businesses and work with the more vulnerable businesses to assist with improving their resilience.

5. Resilient Auckland Infrastructure: This project aims to develop and test resilient indicators for infrastructure networks with an initial focus on transport for the Auckland region, then moving onto other infrastructure types (water, electricity, telecommunications).

6. Resilience in Auckland's South East Asian Communities. This project, funded through the Challenge's contestable funding process in 2017, is working to understand how particular South East Asian communities (Cambodian, Indonesian, Malaysian, Philippine, Thai and Vietnamese) identify, conceptualise and prepare for natural hazards in Auckland.
