

Resilient

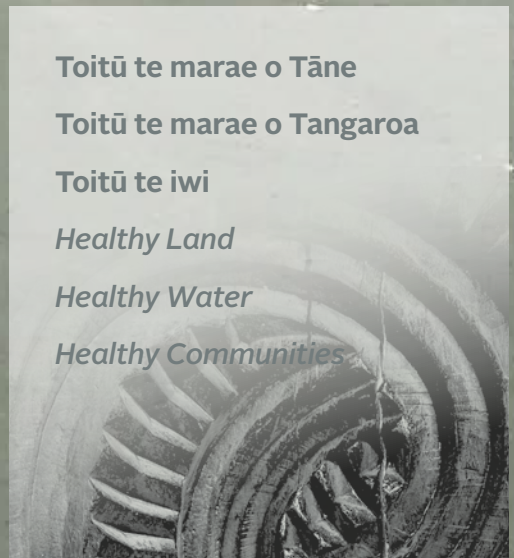
GREATERT CHRISTCHURCH



PIONEERED BY THE
ROCKEFELLER FOUNDATION

100 RESILIENT CITIES

Toitū te marae o Tāne
Toitū te marae o Tangaroa
Toitū te iwi
Healthy Land
Healthy Water
Healthy Communities








“There is no ultimate or end state of resilience. But, by working together to build resilience to the greatest degree possible, we can reduce our reliance on crisis as a driver of change and, instead, deliberately take the future into our own hands – for the well-being of our families, our communities, our cities, and indeed, the planet we all share.”

From *The Resilience Dividend* by
DR. JUDITH RODIN
President of The Rockefeller Foundation



An aerial photograph of the South Island of New Zealand, showing the rugged terrain of the Southern Alps and the fertile Canterbury Plain. The Greater Christchurch area is highlighted in a dark brown color. The surrounding ocean is a deep blue, and the sky is a lighter blue with some white clouds.

Greater Christchurch is a defined geographical area surrounding Christchurch, New Zealand's second largest city and the largest settlement in the South Island. Greater Christchurch contains a population of 428,000 residents as at 2013. Greater Christchurch sits within the Canterbury region, New Zealand's largest region by area, which is characterised by the wide alluvial Canterbury Plain that is used extensively for agricultural production.

Just under 80% of the Canterbury regional population (and 40% of the South Island population) live in Greater Christchurch, emphasising its importance as a strategic regional centre and the primary economic hub of the South Island. Administratively Greater Christchurch is made up from parts of three territorial authorities. This plan is a product of our Urban Development Strategy Partnership – a collaborative sub-regional governance group that includes our councils, local Māori leadership (Ngāi Tahu), health board and government agencies. Together we have seen that shocks and stresses are not constrained by boundaries and that resilience building is an ongoing activity on our journey into an uncertain future.



David Ayers, Kelvin Coe, Lianne Dalziel and Mark Solomon

Lianne Dalziel
Mayor
Christchurch City Council

Dame Margaret Bazley
Chair
Canterbury Regional Council

Kelvin Coe
Mayor
Selwyn District Council

David Ayers
Mayor
Waimakiriri District Council

Tā Mark Solomon
Kaiwhakahaere
Te Rūnanga o Ngāi Tahu

RESILIENCE is a word we have heard a lot in Greater Christchurch over the past five years. No matter what extent to which we are familiar with this word in our day-to-day lives, it is important that we collectively understand the concept of resilience. We know that we will encounter future challenges. This is not simply about preparing our infrastructure or our built environment and it's not about bouncing back to the way things used to be. For us, resilience will be about understanding the risks and challenges we face and developing ways to adapt and co-create a new normal. The strength of our resilience lies in us, not just as individuals, but as communities and whānau.

This Resilient Greater Christchurch Plan enables us as city and district leaders to work together to enable and empower our communities to face the future with confidence.

As a group of leaders we were already working together before the earthquakes struck. The Urban Development Strategy (UDS) has as its vision:

By the year 2041, Greater Christchurch has a vibrant inner city, and suburban centres surrounded by thriving rural communities and towns connected by efficient and sustainable infrastructure. There are a wealth of public spaces ranging from bustling inner city streets to expansive open spaces and parks, which embrace natural systems, landscape and heritage.

Innovative businesses are welcome and can thrive supported by a wide range of attractive facilities and opportunities.

Prosperous communities can enjoy a variety of lifestyles in good health and safety, enriched by the diversity of cultures and the beautiful environment of Greater Christchurch.

We see this resilience plan as enabling the review of the strategy to occur with a resilience lens and an ongoing commitment from each of us to visible collaborative leadership. As we shift from recovery to regeneration, we can restate the importance of collaboration; between the city, the districts and the region, Central Government, the Canterbury District Health Board and most importantly with the many and varied communities that make up this special part of New Zealand.



MIHI • WELCOME



E topa atu rā taku manu taki i te tihi o Aoraki Matatū, ko tōna reo mihi ka tuku atu i te hau ki ngā manawa tītī o Waitaha nei.

Tēnā tātou i runga i tēnei kaupapa whakahirahira; mā te mahi tahi, mā te whirika o te taura takata, mā te taukaea o te aroha ka whakapakaritia a Ōtautahi. Nā, i runga i tērā kai te mihi, kai te mihi, tēnā rā koutou katoa.



Mark Solomon

Ngāi Tahu are a resilient, entrepreneurial people who made our home in Te Waipounamu (the South Island of New Zealand) over 800 years ago. Our ancestors were the first long distance seafarers, navigating by stars on voyaging waka from Hawaiki Nui. We learnt to adapt quickly to the formidable environment of the South Pacific, growing our communities and culture around mahinga kai and with strong adherence to values such as whānaungatanga (family) and kaitiakitanga (stewardship).

Following the earthquakes, our marae opened their doors to all who needed support and our tribal organisations fell in behind to co-ordinate further support. Individual iwi and Māori collectives from throughout the country extended their immense aroha by fundraising and sending us resources. I remember the day after the fatal earthquake of February 22 when Ngāi Tahu and other Māori community leaders in Christchurch met at Rehua Marae. The Chairman of Te Rūnanga o Ngā Mātāwaka, Norm Dewes, approached me and said quietly, “Mark, there’s no you, no me, just we?” I smiled. He was right; that’s how we moved, and that’s how we built our strength. We continued our work in the months and years that followed. This extended to being firm advocates for the importance of our environment and today we consistently advocate for greater recognition and provision for the wellbeing of land and water resources across all forums. Our health depends on the health of these resources.

I want to acknowledge the great strides that have been taken by our city, region and nation following the earthquakes in respect of working collaboratively together with iwi at the table. It hasn’t always been an easy union, and it has often taken us more time to make decisions. But perhaps it has also been easier than some of us might have expected and we have discovered a lot about each other. We are on a new pathway of civic leadership in New Zealand that is visionary and will lead to more enduring outcomes. I am reminded of one of our ancestor’s assessment of the Treaty of Waitangi agreement and vision for our future. Matiaha Tiramorehu’s words (quoted below) in a petition to Queen Victoria are inscribed on the south wall of Christchurch’s Civic Centre, Te Hononga, a joint development by the Christchurch City Council and Ngāi Tahu, a home for civic leadership.

This was the command thy love laid upon these Governors. That the law be made one. That the commandments be made one. That the nation be made one. That the white skin be made just equal with the dark skin, and to lay down the love of thy graciousness to the Māori that they dwell happily and that all men might enjoy a peaceful life, and the Māori remember the power of thy name.

Tā Mark Solomon
Kaiwhakahaere, Te Rūnanga o Ngāi Tahu



CONTENTS

CONTENTS

Resilient Greater Christchurch journey	8
The Canterbury Earthquakes – a shock that tested our resilience	10
A call to action	12
Greater Christchurch in context	13
History of settlement in Greater Christchurch	14
Greater Christchurch today	15
Our shocks and stresses	18
Building Resilient Greater Christchurch	20
The dividend of resilient infrastructure	21
Resilient Greater Christchurch – the story so far	22
How we developed this plan	24
Key influencers in shaping this Plan	27
Ngāi Tahu	27
Greater Christchurch Urban Development Strategy Partnership	28
Resilience Advisory Group	28
100 Resilient Cities	29
Our links to the 100RC Network	30
Our resilience challenges	32
Our approach	35
What does it mean to be resilient in Greater Christchurch	36
Our plan	38
Our guiding principles	40

GOAL 1 : CONNECT	42
Why this goal is important to resilience in Greater Christchurch	45
PROGRAMME 1 Connect people	46
PROGRAMME 2 Create adaptable places	48
PROGRAMME 3 Improve the quality, choice and affordability of housing	50
Goal 1 call-outs	52
GOAL 2 : PARTICIPATE	56
Why this goal is important to resilience in Greater Christchurch	59
PROGRAMME 4 Build participation and trust in decision making	60
PROGRAMME 5 Support community organisations and leaders	62
Goal 2 call-outs	64
GOAL 3 : PROSPER	66
Why this goal is important to resilience in Greater Christchurch	69
PROGRAMME 6 Connect internationally	70
PROGRAMME 7 Foster a culture of innovation	72
PROGRAMME 8 Sustain the vitality of the natural environment	74
Goal 3 call-outs	76
GOAL 4 : UNDERSTAND	80
Why this goal is important to resilience in Greater Christchurch	83
PROGRAMME 9 Improve community understanding and acceptance of risk	84
PROGRAMME 10 Manage the risks we face	86
PROGRAMME 11 Securing our future in the eastern parts of Christchurch	89
Goal 4 call-outs	94
KI TE HOE – LET’S GET TO WORK!	96
Implementation	100
<i>Acknowledgements</i>	114
<i>Abbreviations</i>	116
<i>Glossary</i>	116
<i>Bibliography</i>	117
<i>Photo credits</i>	120

A close-up photograph of a plant with long, green, blade-like leaves. The focus is on a dark stem with several clusters of small, vibrant red flowers. The background is a soft-focus green, suggesting a natural outdoor setting.

Resilient
GREATER
CHRISTCHURCH
Journey



**Hutia te rito o te harakeke, kei hea te kōmko e kō?
Whakatairangatia, rere ki uta, rere ki tai.
Kī mai ki ahau, he aha te mea nui o te ao,
māku e kī atu:
He tāngata, he tāngata, he tāngata.**

*If we were to pull out the center shoot of the flax plant,
where would the bell-bird sing from?*

It would fly aimlessly inland and out to sea.

*Ask me what is the most important thing in our world?
I will reply:*

It is people, it is people, it is people.

— SIR JAMES HENARE, Ngāti Whatua, Ngā Puhi nui tonu

This saying centres around the ubiquitous New Zealand flax plant (pā harakeke), a metaphor in Māori culture for the whānau (extended family group). Each plant consists of many sword-like blades growing like a fan. Fans do not grow singly, but together in clumps, their roots are so intertwined that they are very difficult to extract. New shoots (rito) emerge from between the two centre blades of the fan, and are likened to a child protected by her/his parents. If the centre shoot is pulled out, the bush will stop growing, depriving the bellbird of the plant's sweet nectar that causes it to sing so beautifully. The saying concludes with the strongest possible affirmation of the value of tāngata (people). However, it is clear from the whakataukī as a whole that people are not divorced from their environment, and it is only when our most vulnerable are surrounded by their whānau that they will grow.

THE CANTERBURY EARTHQUAKES – A SHOCK THAT TESTED OUR RESILIENCE

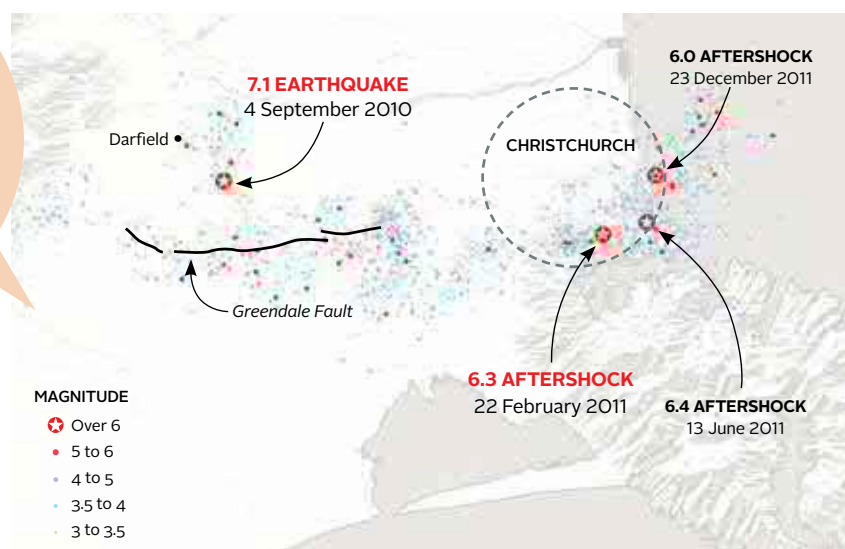
In October 2013 the City of Christchurch applied to The Rockefeller Foundation to take part in their 100 Resilient Cities Centennial Challenge. The letter of application was one of the first official acts by the incoming Mayor. The application envisioned an internal network within New Zealand, so that not only could Christchurch learn from what it had been through, but so it could also share its experiences with the rest of the world. Our application was based on a desire to increase our social capital and bring about real change by embracing participatory planning and collaborative decision-making. Our membership would be an enduring legacy to the city and the nation.

The Canterbury Earthquake Sequence that began on 4 September 2010 contained four main earthquakes and thousands of aftershocks. The initial 7.0 magnitude event at Darfield, 40 kilometres west of Christchurch resulted in widespread, although localised, damage. The second 6.3 magnitude earthquake of 22 February 2011 – centred just east of the city – was one of New Zealand's worst natural disasters. One hundred and eighty five people died. A state of national emergency, the first in New Zealand's history, was declared on 23 February and stayed in place until 30 April. The unusual aspect of this earthquake (and the June and December events that followed) was their very strong shaking relative to the size of the earthquake. The 22 February event produced the highest vertical and horizontal ground accelerations (how hard the earth shakes) ever recorded in New Zealand.

Alongside the tragic loss of life, more than 8000 households were permanently displaced by land damage, 90% of residential properties were damaged in some way and 80% of buildings in the Central Business District have had to be demolished.

I felt the aftershocks were like a home invasion – you close your curtains and you lock your door when you go to bed at night and they enter into your house without an invite.

LOUISE SWATTON
QuakeStories.govt.nz



DAMAGE OVERVIEW



1,628,429 square metres

of road were damaged and needed to be repaired or replaced across large parts of Greater Christchurch



659 kilometres

of sewer pipes and 69 kilometres of water mains were damaged



About 168,000 dwellings

in Greater Christchurch (over 90%) had a dwelling claim



1,100 Buildings

Needed to be demolished in the city centre

OVERALL INFRASTRUCTURE REPAIR STATISTICS



Waste water

583km of pipe (88%) *repaired/replaced*
73 pump stations (90%) *repaired/replaced*

98%

of total design work is complete



Storm water

59km of pipe (83%) *repaired/replaced*
4 pump stations (74%) *repaired/replaced*

93%

of total construction is complete



Fresh water

96km of pipe (98%) *repaired/replaced*
22 pump stations and reservoirs (81%) *repaired/replaced*

97%

of central city work is complete



Roading

1,300,000sqm of road (94%) *repaired/replaced*
142 bridges/culverts (99%) *repaired/replaced*
158 retaining walls (87%) *repaired/replaced*

94%

of the whole SCIRT programme is complete

Stronger Christchurch Infrastructure Rebuild Team performance dashboard July 2016

LESSONS LEARNT

We are interdependent and need to remain connected

Water is fundamental to our survival

Planning for other shocks or stresses benefited our preparedness – pandemic preparation helped to ensure that there was no outbreak of disease

A CALL TO ACTION



Dr John Vargo

It is now nearly six years since the beginning of the Canterbury Earthquake Sequence. A time filled with loss: of life, heritage, communities and many other things. Also a time of strength. Strength found in a neighbour's helping hand, in emergent community organisations like the Student Volunteer Army, CANCERN and the Farmy Army; and renewed hope for our communities' thriving future together. Although some are still battling with the aftermath of our shared trauma, and we must stand with them in compassion and solidarity, it is also an important time for us to continue building our shared future. This Resilient Greater Christchurch Plan is a key part of that future. Earthquakes may have been our disrupted past, but our bright future will still hold surprises for us. Building a truly resilient Greater Christchurch will create a future where we and our children and their children can thrive in spite of multiple hazards and significant uncertainty. Christchurch, before the earthquakes, was one of the world's truly great small cities and the gateway to the Greater Christchurch and Canterbury region. I believe the Christchurch we are co-creating will be at least twice as good as the old Christchurch! It will be different, as we see the rebuild of our region taking shape, but a 'different' that is filled with potential, engagement and shared vibrancy.

This plan is not simply about our built and economic environments, but equally about our human and social environments, about our natural and hazard environments. Many of the themes and concepts incorporated in this Resilient Greater Christchurch Plan are captured in core Ngāi Tahu cultural values, including whānaungatanga (close community relationships), kaitiakitanga (stewardship of our natural environment) and tohungatanga (building a learning culture). It is such holistic thinking that will make the difference in building more resilient people, organisations, ecologies and communities.

This Resilient Greater Christchurch Plan is a product of a two year process that has involved hundreds of community members from diverse backgrounds and cultures. They have been from across our region, including key partners: Waimakariri District, Selwyn District and Christchurch City councils, Environment Canterbury, Ngāi Tahu, NZ Transport Agency and Canterbury District Health Board, as well as our tertiary institutions and Crown Research Institutes. We will all benefit from a more resilient city and surrounding towns and districts. In light of this shared benefit and shared future, I invite you to join in a shared endeavour to build a more resilient, thriving and equitable place to live, learn, work and play.

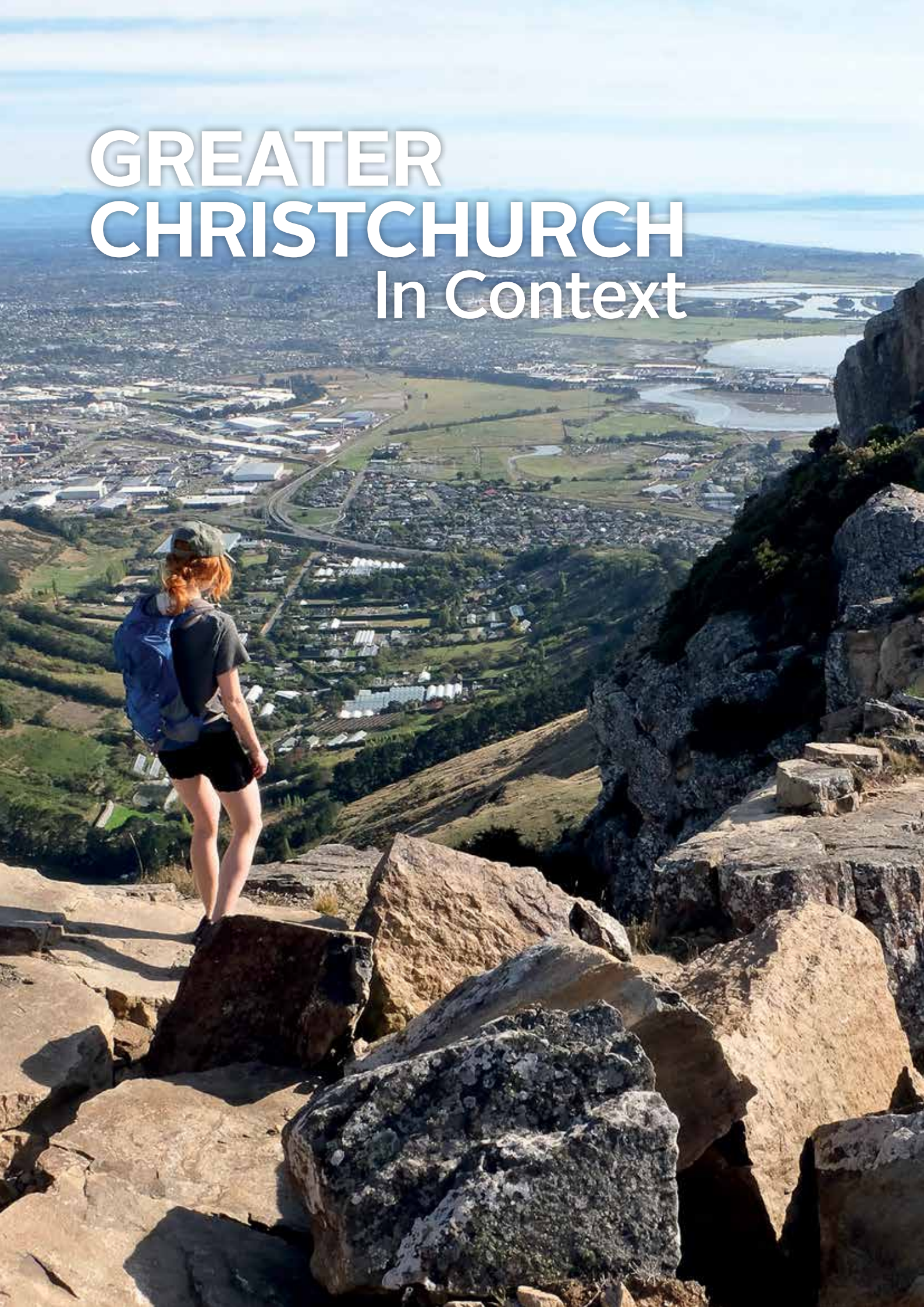
As Chair of the Resilience Plan Advisory Group and with the support of that Advisory Group, I endorse this resilience plan. This is not a static document but part of a shared resilience journey. An uncertain future requires an adaptable plan and process and that is what we have in this resilience plan.

Dr John Vargo

Co-leader, Resilient Organisation Research Programme

Chair, Advisory Group for the Resilient Greater Christchurch Plan

GREATER CHRISTCHURCH In Context



HISTORY OF SETTLEMENT IN GREATER CHRISTCHURCH

Located between the fertile Canterbury Plains and the coast, overlooked by the Port Hills, Greater Christchurch has long been an attractive place to live, work and play.

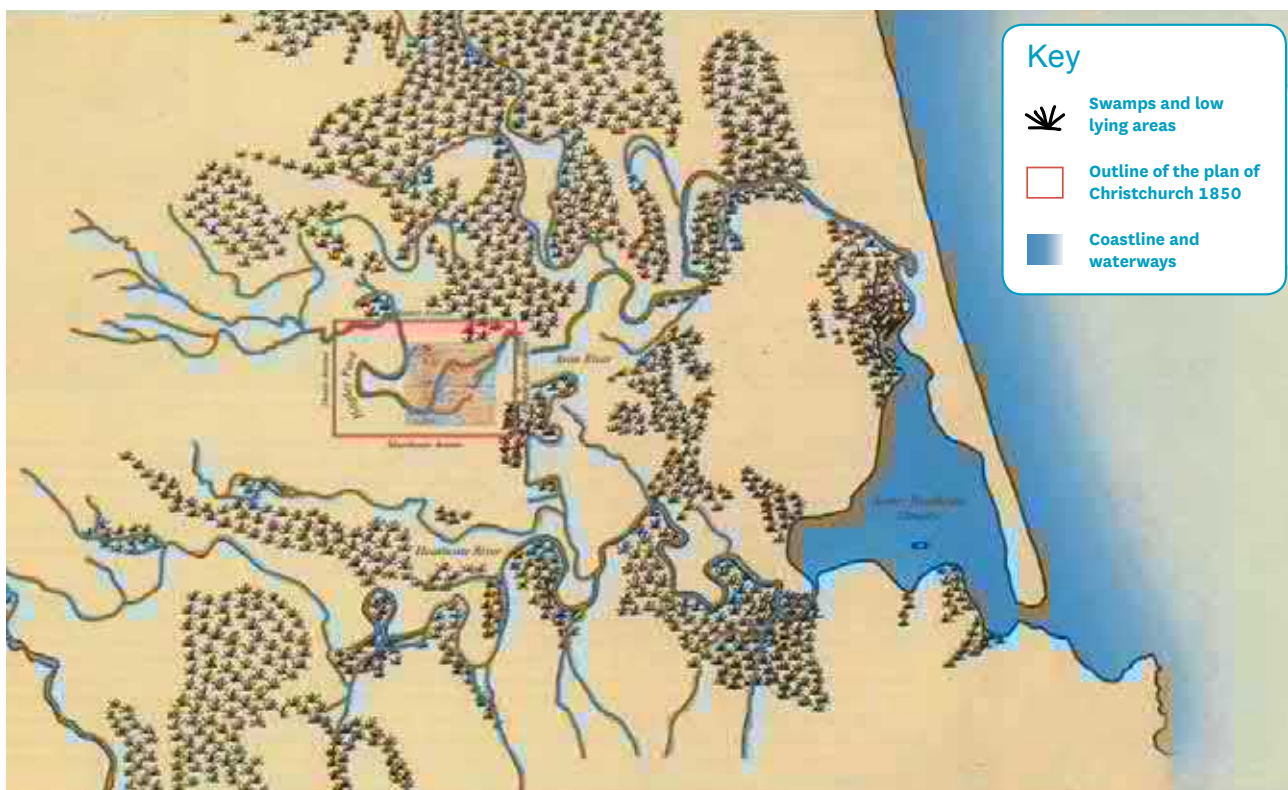
The 'Black Map' – prepared by British Surveyors around 1850 – shows that much of Christchurch was waterways and wetlands covered with harakeke (flax) and raupō.

Māori have inhabited this area for over 40 generations (c. 800–1000 years) attracted by the abundant natural resources. Today, Ngāi Tahu express their resilience through a strong entrepreneurial spirit, a keen sense of whānau, and an ongoing recognition of the essential relationship between land, water and people.

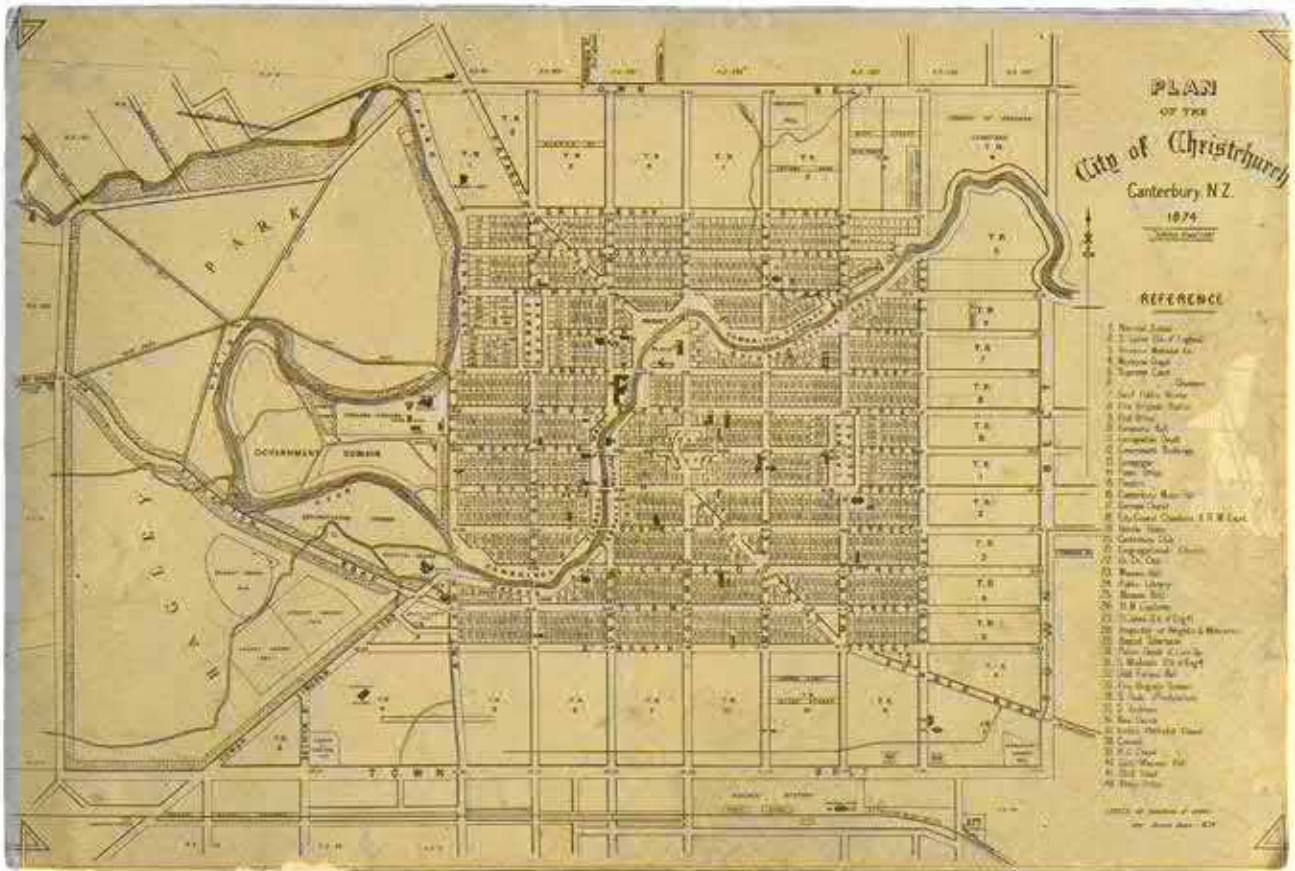
The 'Black Map' – prepared by British Surveyors around 1850 – shows that much of Christchurch was waterways and wetlands covered with harakeke (flax) and raupō. Since 1850, most of the wetlands have been drained and cleared as Christchurch City has grown.

European settlement in Canterbury dates from the 1830s with whaling stations being established on Banks Peninsula/Te Pataka o Rakaihautū. In the mid-1800s, the Canterbury Association commenced formal colonisation including the founding of Christchurch/Otāutahi as the primary settlement.

Christchurch and surrounding towns have grown over the past 150 years primarily on the back of the agricultural use of the Canterbury Plains.



Land Drainage Circa 1855. Source: Lands and Survey "Black Maps" 1850-1860.



Plan of the City of Christchurch, Canterbury, NZ. 1874.

Greater Christchurch today

Christchurch is the largest urban area in Greater Christchurch surrounded by several smaller settlements which also serve rural areas.

Today, agriculture, food processing and associated engineering remain core to the local economy. Engineering, technology and research-based industries have grown in their importance to the economy in the past few decades, drawing on the strength of tertiary education opportunities provided through the University of Canterbury, Lincoln University and the Ara Institute of Canterbury.

International connections and trade remain important, underlined by the fact that tourism has recently eclipsed agriculture as our largest source of overseas income. Advances in commercial aviation since the 1960s dramatically reduced Greater Christchurch's geographical isolation and allowed it to emerge as an international tourism destination and gateway to the scenic attractions of the South Island.

GREATER CHRISTCHURCH In Context










PEOPLE

KEY

Population (2013) 428,000

Māori population 23,565

Māori population living in Greater Christchurch, 52% belonging to Ngāi Tahu.

-  Greater Christchurch
-  Urban areas
-  Christchurch Airport
-  Port of Lyttelton
-  Marae (Māori meetinghouse)
-  Flat land Residential Red Zone
-  Port Hills Residential Red Zone
-  Māori Reserve Land
-  Boundary line

ECONOMY

Economy top 5 industries by number of employees

2006

- 1 Manufacturing (30,400)
- 2 Retail trade (22,900)
- 3 Health/social care (22,500)
- 4 Professional, scientific and technical services (13,400)
- 5 Construction (13,100)

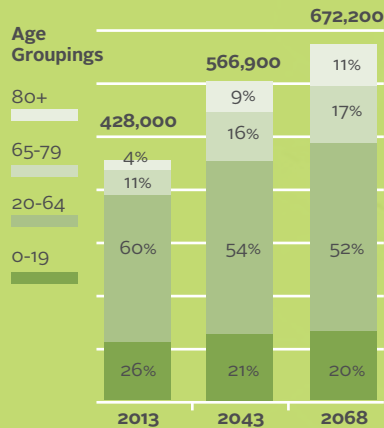
2015

- 1 Construction (26,800)
- 2 Health/social care (25,900)
- 3 Manufacturing (25,400)
- 4 Retail trade (23,100)
- 5 Professional, scientific and technical services (18,700)

Source: Statistics New Zealand

Population growth and demographic change

Source: Adapted from StatsNZ (2015)



NB: 2063 data includes sparsely populated rural areas of Selwyn, Waimakariri Districts and the Banks Peninsula area of Christchurch.

Cultural diversity

21% born overseas (2013) increasing from 19.6% in 2006. Three most common countries of birth:

United Kingdom	28%
Australia	8%
China	7%

Source: Statistics New Zealand, 2013

Migration

Origin of migrants to Greater Christchurch since 2011:

United Kingdom	2085
China	1320
Philippines	1080
India	942
Australia	915
Ireland	867

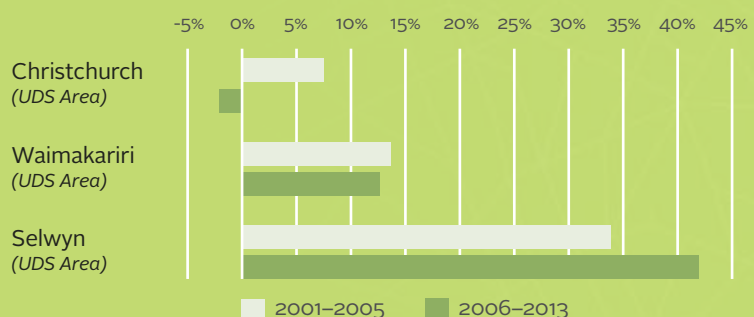
Source: Department of Labour, 2014

AREA

Area of Greater Christchurch
1403km²

Urban areas
279km²
(20% of total area)

Population growth and change in Greater Christchurch





WAIMAKARIRI
DISTRICT COUNCIL

CHRISTCHURCH
CITY COUNCIL

PEGASUS BAY

OUR SHOCKS AND STRESSES

Being resilient relies on understanding, preparing, coping and adapting to the threats we face. There are two broad categories:

- Acute shocks are sudden, sharp events that threaten us. The Canterbury earthquakes represent one of the most significant types of shock any place can endure.
- Chronic stresses weaken the fabric and functioning of a city on a day-to-day or cyclical basis.

Earthquakes, pandemics, flooding, coastal erosion, storm surge, wind and tsunamis are the most significant shocks that are likely to occur in Greater Christchurch.

Chronic stresses for Greater Christchurch include climate change, affordable quality housing, psychosocial wellbeing and an aging population.

SHOCKS

Seismicity

The most recent earthquakes in 2010 and 2011 emerged from a little known and localised series of faults extending along an east-west axis across the South Island. However, the much larger Alpine Fault, which extends down the spine of the South Island, is our primary seismic threat. Experts believe there is roughly a 30% to 65% chance that there could be a magnitude 8.0 earthquake on this fault in the next 50 years.

Flooding

Flooding is the most common hazard to effect our communities. Localised surface water flooding occurs regularly following intense or prolonged rainfall events. Ground subsidence caused by the recent earthquakes has elevated the severity and frequency of flooding events.

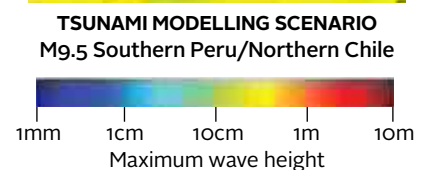
At a larger scale, much of Greater Christchurch sits on a floodplain. Major defences protect communities from catastrophic flooding by the Waimakariri River, but in the future it is likely to be coastal flooding, storm surges and inundation that are the greater threat.

Tsunami

Seismic activity around the fringes of the Pacific represents constant potential to generate tsunami. Our low-lying and flat coastal areas leave us exposed to this threat. Of greatest threat are distant source tsunami, particularly those resulting from underwater mass movement in the deep oceanic trench that runs parallel to the Chilean coast of South America.



**SOUTH ISLAND
ALPINE FAULT**
GNS Science



**TSUNAMI MODELLING SCENARIO
M9.5 Southern Peru/Northern Chile**

1mm 1cm 10cm 1m 10m
Maximum wave height

Modelling by William Power
(Institute of Geological & Nuclear Sciences)

STRESSES

Climate Change

The Canterbury Earthquake Sequence has informed our conversation about resilience, but has not defined it. Preparing for climate change was already underway before 2010 and 2011 and its impacts on our region will be significant. Warmer temperatures year round will extend growing seasons but may bring more frequent droughts and fire risks. Fewer, but more intense rainfall events, will increase flood risks but also limit the amount of groundwater and soil moisture capture. Within our major rivers, lower flows will reduce the amount of sediment carried downstream and deposited along the coast to replace that being eroded by rising sea levels and more frequent storm surges. Beyond these threats, pests and diseases endemic in sub-tropical latitudes may become established in our region requiring new responses.

Globalisation

Just as we are susceptible to powerful forces of nature, we are also susceptible to the forces of global markets. Greater Christchurch's normal economic activity is currently swollen by the NZ\$40 billion (2015) of earthquake reconstruction funding that will extend into the 2020s. Leaving that aside, the externally-facing economy that draws income and prosperity into Greater Christchurch is highly geared towards agriculture and tourism. In both of these areas we have clear strengths (modern efficient farming production with high quality outputs and unrivalled scenic and cultural visitor experiences) but face threats and competition from other parts of the world.

Demographics

Like many developed countries globally, our population and workforce are aging. The large number of people born in the years following the Second World War (baby boomers) are now entering retirement age. This age group represents a growing consumer opportunity but will place pressure on social systems including health, social care and state pensions. The loss of this age group will also see a loss of knowledge and skills in the economy, although this may be harnessed by community level action and participation. Over recent decades natural population replacement has not kept up, relying on inflows of skilled migrant labour to fill particular types of employment.

Health

As summarised in the 2016 Urban Development Strategy Update, life expectancy is increasing across Greater Christchurch. Along with it comes more chronic health conditions including Type Two diabetes, cancer, cardiovascular disease and dementia. Being obese, overweight or inactive is also a cause of chronic conditions. In 2014, New Zealand was second only to the United States in its measures of childhood obesity.

In the aftermath of the Canterbury earthquakes, psychosocial wellbeing has emerged as a significant long-term threat to health. The trauma of the earthquakes combined with social upheavals through moving homes and schools has particularly affected children and young people. More widely, the stress of resolving insurance settlements, being dislocated from family or community networks and the everyday experience of living in a recovering city are all taking their toll on people.

Housing and Social Equity

Loss and damage to homes as a result of the 2011 earthquake drove up rental prices, left people sleeping in garages and cars and contributed to an exodus of people from the region. It took major releases of land and rapid investment in housing over 4 years to resolve these effects.

However, pre-earthquake housing stresses remain. The gap between average incomes and average house prices has steadily grown since the mid 1990s leaving a generation of younger people forced to rent rather than own their homes. Compounding this problem a substantial part of the rental housing stock, including state houses, have seen little improvement with a lack insulation and basic heating being common with consequent cost and health implications for poorer households.

The lack of access to decent affordable housing is symptomatic of a wider social divide we face. Low income households are forced to accept poorer quality housing, are less able to afford healthy nutritious food and in turn endure poorer health. They are also disproportionately affected by sudden shocks and events. Inequality emerges for a range of reasons and so the responses we make must be grounded in equity – tailoring action and support to specific needs and situations.

More information about our Shocks and Stresses and the inter-relationships between them can be explored further in our Focus Area Reports, specifically *Focus Area Report 3: Understanding and Responding to Future Challenges* which can be downloaded from our web page.

Building Resilience in **GREATER CHRISTCHURCH**



THE DIVIDEND OF RESILIENT INFRASTRUCTURE

In 1997, Risks and Realities:

A multi-disciplinary approach to the vulnerability of lifelines to natural hazards in metropolitan Christchurch was developed by the Christchurch Engineering Lifelines Group. This approach was applied to infrastructure planning to provide for risk reduction and reinstatement of infrastructure following natural disasters. Although the Canterbury earthquakes caused widespread damage, our roads, rail, sea ports, airports, water networks, electricity, gas and telecommunications networks have proven to be resilient. This meant that in the hours and days following the earthquakes, most power, water and communication

services as well as air, road and rail travel were able to function, ensuring that the basic needs of residents were met. Within Greater Christchurch there is a high degree of understanding of the resilience of infrastructure to earthquakes, but less understanding of resilience to other shocks like major distant tsunami.

The rebuild of Christchurch's earthquake-damaged roads and underground pipes is being carried out with a view to the future resilience of the network. In addition, the city's grid-style water supply network, which does not rely on one main trunk pipe, adds to infrastructure resilience.

Resilience is also considered in the 30-year strategies that each territorial authority is required to prepare to identify significant infrastructure issues and the principal options for managing them.

The Natural Environment Recovery Programme for Greater Christchurch: Whakaara Taiao (2013) identifies ways to rehabilitate and improve the natural environment through the rebuild, and how opportunities could be taken. The programme aimed to make continuing and incremental improvements to the pre-earthquake state of the natural environment, with no further degradation.

Earthquakes and insurance

New Zealanders generally hold a high level of private insurance which reduces the financial impact of acute shocks.

The Earthquake Commission (EQC) provides coverage for the first tranche of damage. EQC is an entity of the New Zealand Government. Its core functions include providing a natural disaster insurance for residential property, administering a natural disaster fund and funding research and education on natural disasters. All private insurance policies for home and contents include EQC cover for loss and damage from earthquakes, natural landslip, volcanic eruption, tsunami, flood and storm damage. Private insurance covers damage above the EQC legislated threshold.

In Canterbury, there was a high rate of insurance coverage compared with coverage for earthquakes in countries such as Japan, Chile and America. Five years after the earthquakes, some insurance claims are still to be settled. According to the NZ Treasury's February 2016 Bulletin, by 30 September 2015 insurers had paid out \$26 billion.

As a result of the Canterbury earthquakes insurance companies have changed the way they offer residential insurance policies, from full-replacement to sum insured. This has contributed to increased cost of insurance. The EQC Natural Disaster Fund has been almost exhausted in responding to the earthquakes. This may result in a higher cost borne by the government for any future disaster until the fund is replenished.

National conversation on resilience

As a small nation of about 4.6 million people New Zealanders are interdependent economically, socially and culturally. We share a number of challenges as a nation and resilience is a conversation that is going on at a national level. There are a number of initiatives that are currently underway to build resilience at a national level, including:

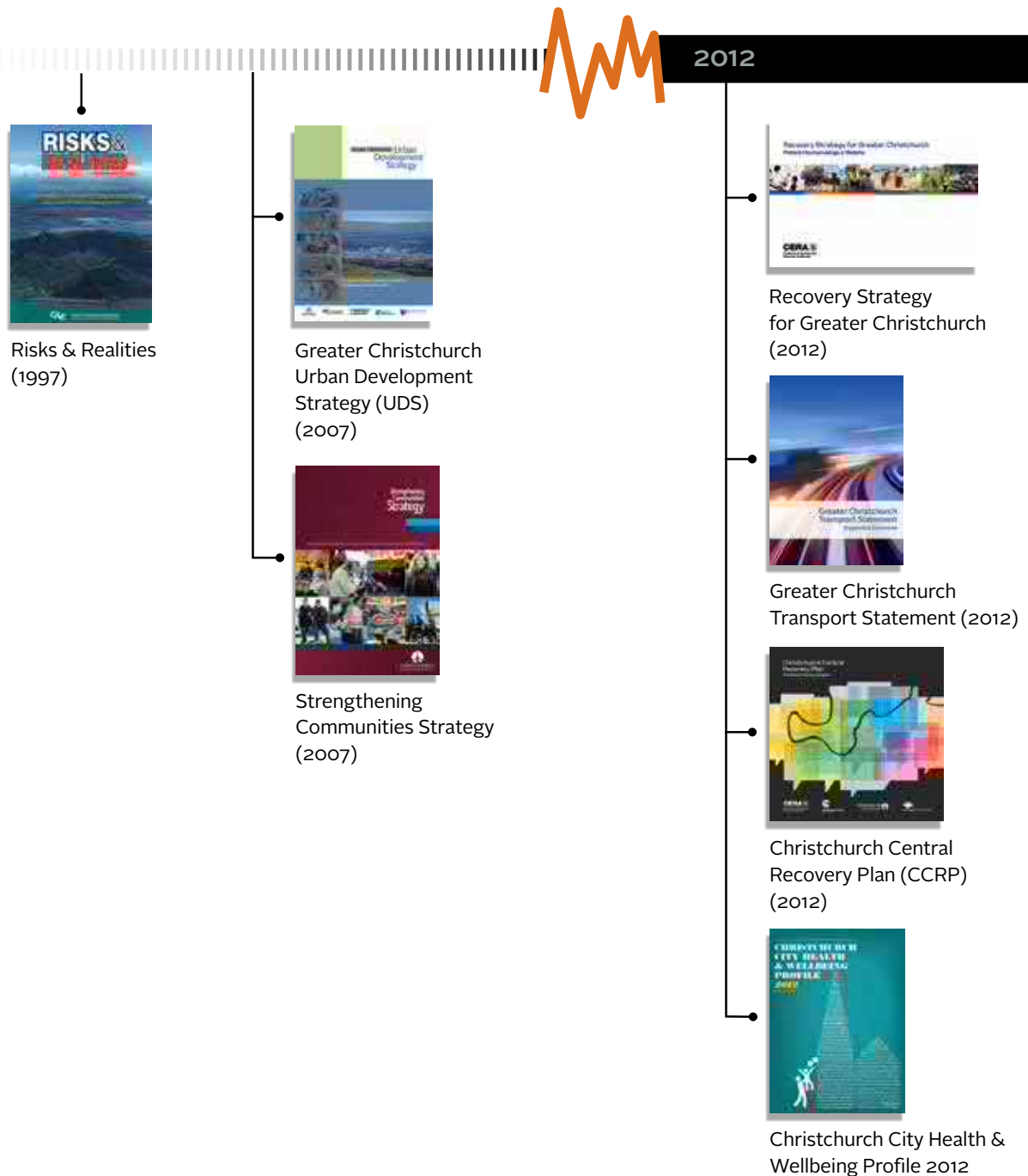
- The National Science Challenges are Central Government initiatives to focus science investment to tackle the biggest science-based challenges New Zealand faces. They provide opportunities for collaboration between research institutions, business and non-government organisations.
- The Natural Hazards Research Platform is a multi-party research platform dedicated to increasing New Zealand's resilience to natural hazards via high-quality collaborative research.



Building Resilience in
**GREATER
CHRISTCHURCH**

RESILIENT GREATER CHRISTCHURCH – THE STORY SO FAR

The past ten years have seen a rich foundation of strategic work to build resilience in Greater Christchurch.



PIONEERED BY THE
ROCKEFELLER FOUNDATION

100 RESILIENT CITIES



- MAY 2013
Rockefeller Foundation announces 100 Resilient Cities Challenge
- DECEMBER 2013
Christchurch selected
- JULY 2014
Chief Resilience Officer appointed
- SEPTEMBER 2015
Phase One of the Resilient Greater Christchurch Plan completed
- SEPTEMBER 2016
Resilient Greater Christchurch Plan released

2013

2014

2015

2016



Land Use Recovery Plan (LURP) 2013



Mahaanui Iwi Management Plan 2013



Canterbury Regional Policy Statement (CRPS) (2013)



Community in Mind Strategy (2014)



Canterbury Regional Economic Development Strategy (2015)



Council Long Term Plans 2015-2025 (2015)



Greater Christchurch Urban Development Strategy Update (2016)

HOW WE DEVELOPED THIS PLAN

100 Resilient Cities – Pioneered by The Rockefeller Foundation

(100RC) is dedicated to helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. 100RC supports the adoption and incorporation of a view of resilience that includes not just the shocks – earthquakes, fires, floods, etc. – but also the stresses that weaken the fabric of a city on a day-to-day or cyclical basis. Examples of these stresses include high unemployment; an overtaxed or inefficient public transportation system; endemic violence; or chronic food and water shortages. By addressing both our shocks and the stresses, we will be better able to respond to adverse events, and overall better able to deliver basic functions in both good times and bad, to all populations.

PHASE ONE

The first phase, starting in December 2014, was a consultative scoping exercise involving a broad range of stakeholder organisations. Workshop sessions explored the shocks and stresses facing Greater Christchurch, the experiences from the Canterbury earthquakes and the priorities to improve the future resilience of Greater Christchurch communities. The resulting **Preliminary Resilience Assessment**, published September 2015, identified **eight resilience challenges and opportunities** on which to concentrate.

PHASE TWO

Phase 2 – the development of this plan – is founded on **four Focus Areas** identified during the Preliminary Resilience Assessment. Project teams were set up for each of the four Focus Areas, led by individuals with subject expertise from the Canterbury District Health Board, Canterbury Development Corporation, Civil Defence and Emergency Management/NZ Transport Agency (jointly) and Christchurch City Council. Reports produced by each Focus Area team identified key issues, responses and identified actions related to the eight challenges and opportunities.

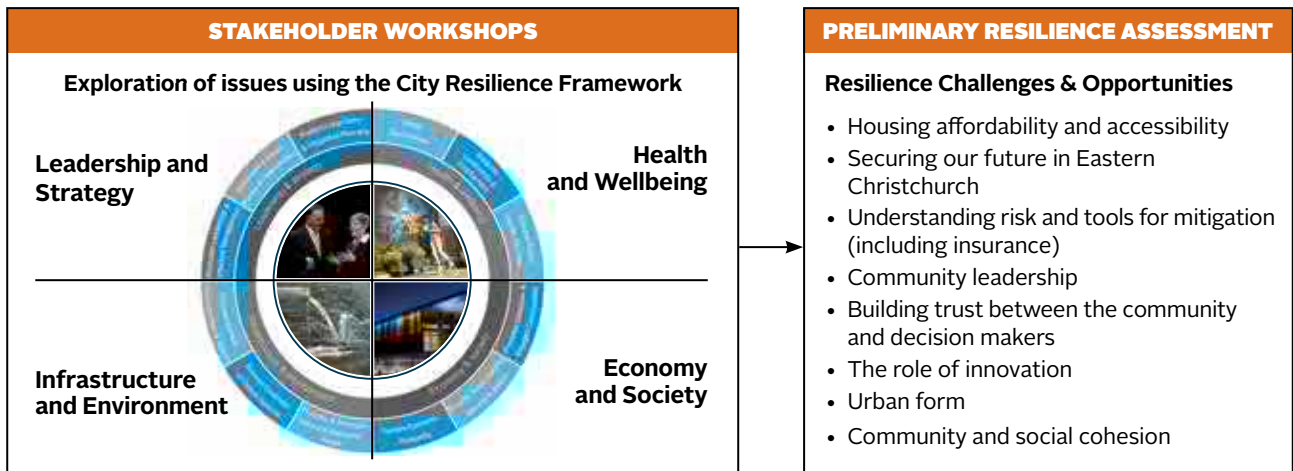
A long list of over 150 actions emerged from the Focus Area reports. Actions included current initiatives with the potential to be expanded, projects in the planning stage and other actions that could be developed further. This long list was subjected to a **multi-criteria evaluation**, with filters including specific benefits to vulnerable groups, applicability across Greater Christchurch, resilience dividends (i.e. multiple benefits from programmes) and resilience qualities. A shortlist of around 70 actions emerged from this evaluation.

The Focus Area reports and shortlisted actions were used to develop the direction of this plan. Content, concepts and emergent programmes of action were further explored through working groups, meetings and workshops with the Focus Area leaders and four **key influencers** who are profiled on the following pages.

The outcome of these discussions was the production of a draft plan in May 2016 which was presented to all the participants in the process for feedback prior to this plan – Resilient Greater Christchurch – being finalised and formally ratified by Christchurch City, Selwyn District and Waimakariri District councils and Environment Canterbury in July/August 2016.

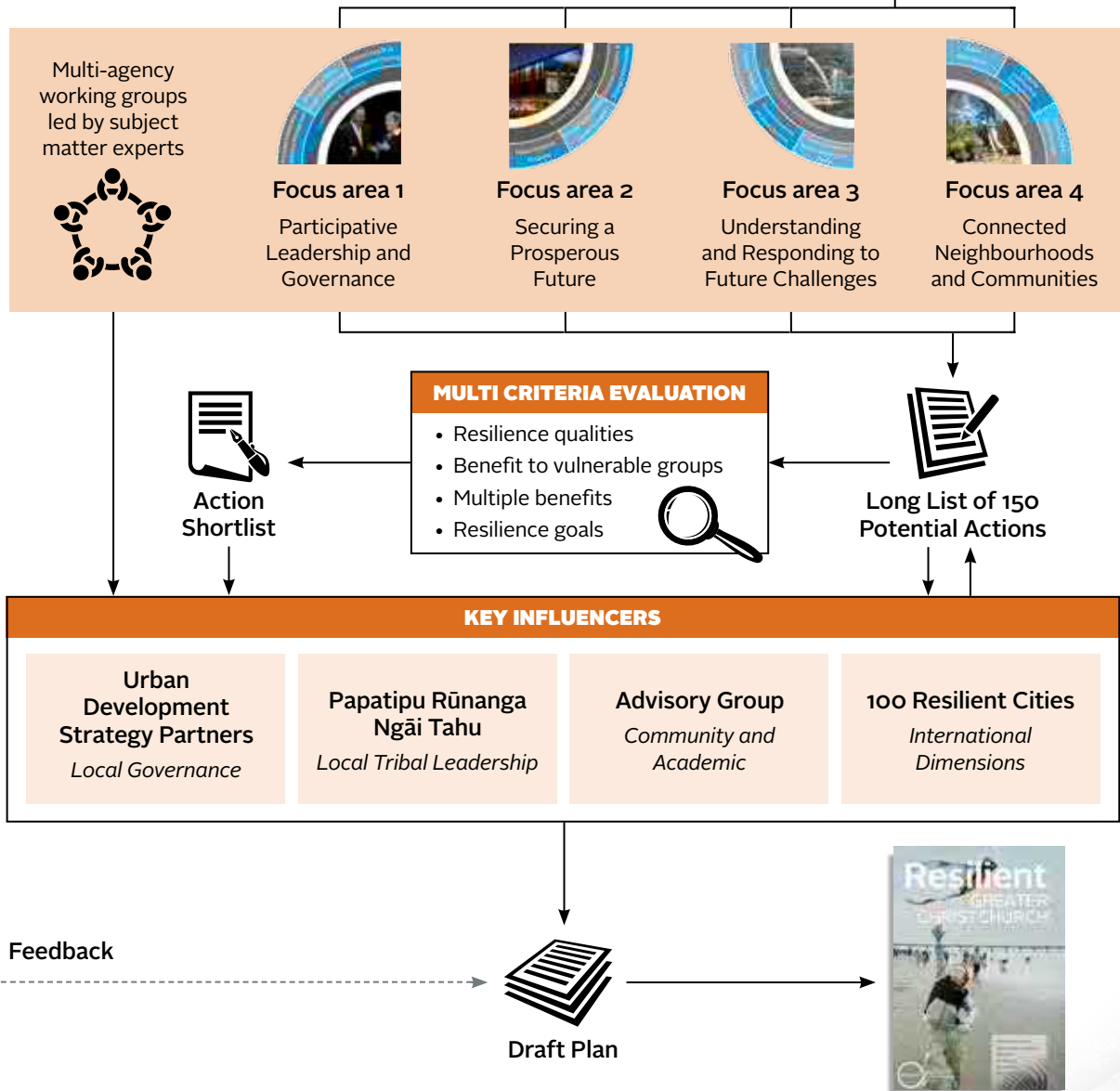
PHASE ONE

December 2014 – September 2015



PHASE TWO

September 2015 – July 2016



Mō tātou, ā, mō kā uri ā muri ake nei

For us and our children after us

— Te Rūnanga o Ngāi Tahu maxim

TIKANGA NGAI TĀHU (Cultural Values and Principles)

RANGATIRATANGA

Leadership through collaboration, maintaining a high degree of personal integrity and ethical behaviour in all actions and decisions.

KAITIAKITANGA

Working strategically to protect the environment for the use, enjoyment and prosperity of present and future generations.

MANAAKITANGA

The expression of reciprocity, hospitality and care for each other.

TŪRANGAWAEWAE

A place to stand, a right to speak, an obligation to contribute to wider community wellbeing.

TOHUNGATANGA

Recognising the value of experience, expertise and the ongoing pursuit of knowledge in strengthening and growing individuals, whānau and communities.

WHANAUNGATANGA

Respecting, fostering and maintaining relationships with each other.

KEY INFLUENCERS IN SHAPING THIS PLAN

Ngāi Tahu

Developing the Plan was a collaborative and shared journey involving community groups, the business sector, institutions and academics. To draw together the views from these interests, and to reflect different perspectives, the following key influencers have played a significant role in shaping the final content of this plan:

- Ngāi Tahu
- Greater Christchurch Urban Development Strategy Partnership
- Resilience Advisory Group
- 100 Resilient Cities

Ngāi Tahu is the largest tribe (iwi) in the South Island comprised of a number of related sub-tribes (hapū) and extended families (whānau).

In 1840, Ngāi Tahu leaders signed Te Tiriti o Waitangi (The Treaty of Waitangi). In 1849, Tiramorehu wrote a petition to Queen Victoria. The petition was signed by all the leading Ngāi Tahu chiefs of the time. They asked that the Crown put aside adequate reserves of land for the iwi, as agreed to under the terms of its land purchases. In the 20 years from 1844, Ngāi Tahu signed land sale contracts with the Crown for some 34.5 million acres, approximately 80% of the South Island, Te Waipounamu. The Crown failed to allocate one-tenth of the land to the iwi, nor did it pay a fair price, as it agreed. Following this, Ngāi Tahu devoted their lives in the pursuit of justice to Te Kerēme (the claim) to seek redress from the Crown for over seven generations, and in 1986 filed Wai 27 to the Waitangi Tribunal. After years of negotiations, Te Rūnanga o Ngāi Tahu Act 1996 was passed in Parliament, followed by the Ngāi Tahu Claims Settlement Act 1998 recognising the injustices to the Ngāi Tahu people and formalising the relationship between the Crown and Ngāi Tahu as Treaty partners in a new post-settlement era.

Today, Ngāi Tahu communities (hapū and whānau) are represented by 18 regional councils (papatipu rūnanga) and one tribal authority (Te Rūnanga o Ngāi Tahu). Te Rūnanga o Ngāi Tahu (TRONT) has statutory responsibility to manage collectively-held tribal assets and protect tribal interests, while regional rūnanga are responsible for local interests. Collectively, all Papatipu Rūnanga have responsibility to honour the deeds and values of Ngāi Tahu ancestors and to create an inheritance for future generations. This includes traditional responsibilities to manage our environment sustainably in order to protect and enhance mahinga kai values and socio-economic capital.

Engagement with Papatipu rūnanga in preparing this plan led to some important modifications.

- The first was in response to the fundamental Māori worldview that people are intrinsically related to their environment, and that resilient communities are built on resilient ecosystems.
- The second is the wider adoption of the concept of whānau as the primary building block of Māori society and centre of its strength.
- Finally, the importance of establishing and maintaining strong relationships between Treaty Partners was highlighted as the means by which the two aforementioned elements will best be recognised and provided for during the implementation of this plan.

The core cultural values and principles (tikanga) set out on the opposite page have been integrated throughout this Plan to guide and support its goals, programmes and actions.



Building Resilience in GREATER CHRISTCHURCH

The **UDS Partnership** is made up of the three territorial authorities (Christchurch City, Selwyn and Waimakiriri Districts), the Canterbury regional council, and local Māori leadership (Te Rūnanga o Ngāi Tahu). It is supported by the New Zealand Transport Agency, the Canterbury District Health Board and, from 2016, Regenerate Christchurch (a Government/City Council regeneration partnership). The Group also maintains dialogue with Central Government through the Department of the Prime Minister and Cabinet's Greater Christchurch Group.

The **Resilience Advisory Group** was chaired by Dr John Vargo, co-leader of the Resilient Organisations social enterprise. Membership of the group includes individuals from Ministry of Civil Defence and Emergency Management, Canterbury University, Massey University, Aviva, Canterbury Youth Worker Collective, Avon-Ōtākaro Network, Te Rūnanga o Ngāi Tahu and Environment Canterbury.

Greater Christchurch Urban Development Strategy Partnership

The Urban Development Strategy partnership was established in 2004 to address the challenges posed by the urban growth demands of Greater Christchurch, including co-ordinated transport and infrastructure delivery and the need for collaborative sub-regional leadership in the face of market-driven urban sprawl. Wide public engagement and joint working culminated in the publication of the Urban Development Strategy in 2007.

One of its guiding principles is resilience — defined then as **“managing risk and uncertainty through strategy and implementation frameworks that enhance how individuals, communities and organisations respond to hazards and the unexpected”**. This principle, alongside six others, continues to help the partnership frame its debates and discussions about future growth management.

Following the Canterbury Earthquake Sequence, the Urban Development Strategy partnership became the key reference body to guide the use of statutory powers granted under the 2011 Canterbury Earthquake Recovery Act. The Urban Development Strategy itself provided a ready-made, long-term strategic land use framework which was used by the government to guide earthquake recovery. The Partnership and its Strategy have been critical to shaping recovery of our communities and have demonstrated collaborative leadership that is both visionary and practical.

A key strand of the Partners' input has been the emphasis placed on strong relationships across different parts of government (central, regional and local) and with local tribal leaders (Ngā Papatipu Rūnunga). The direction is that these must be cornerstones for strategic resilience-building in Greater Christchurch.

Resilience Advisory Group

The Resilience Advisory Group was commissioned to provide subject matter guidance, process review input and to identify interdependencies and opportunities for collaboration across the range of initiatives identified in the emerging Resilient Greater Christchurch Plan. Central to its role was the requirement that it provide input into the plan and be available for discussion and feedback.

A key driver for this group was making the plan a living document – a plan with a clear direction, but not so rigid as to become irrelevant after a short while.

100 Resilient Cities pioneered by The Rockefeller Foundation

PIONEERED BY THE
ROCKEFELLER FOUNDATION

100 RESILIENT CITIES



The guidance and international best practice being gathered by 100RC and the experiences of other cities in the 100RC network has helped to shape this plan. The City Resilience Framework (page 35) helped us to develop our Stage 1 Preliminary Resilience Assessment, particularly in determining our challenges and opportunities. Sharing of experiences with other cities in the network and the ability to leverage international insights and expertise has also enhanced the development of this plan.

As the remaining city strategies are released, Greater Christchurch will continue to learn from other cities and lend them support. An important resource to assist in this is the access to the 100RC Platform Partners – non-governmental organisations, businesses and consultancies – which provide a global resource of resilience building tools and services. As we advance into the implementation stages of this plan there is the ability to use services like those showcased below to help us deliver action towards our goals.

Trimble provides geospatial technical solutions and domain to capture, measure, analyze, monitor, and share built and environmental information to help accomplish a City's resiliency goals and objectives.

<http://www.ecognition.com/essentials>



The **Streetwyze** app helps cities integrate community-generated data with predictive analytics they can track equity indicators, identify hot spots for equitable development, and predict future trajectories for vulnerable populations.

<http://www.streetwyze.com/>



The Nature Conservancy (TNC) provides cities with software tools and technical assistance to facilitate a standardized, science-based approach to watershed, coastal hazard, and ecosystem management, including visualization, forecasting, and investment portfolio design.

<http://coastalresilience.org/>



Swiss Re provides cities a natural hazard web tool, CatNet, which helps determine what types of hazards a city faces, and how often and how badly the city might be affected.

http://www.swissre.com/clients/client_tools/about_catnet.html



OUR LINKS TO THE 100RC NETWORK

As part of the global network of 100 cities dedicated to creating a resilient future, Greater Christchurch has already identified several actions within other cities' strategies, which have close alignment with programmes contained within this plan. The identified actions are not a finite list, they indicate shared challenges by our peer cities and illustrate the benefits of a global network.

	Resilient Greater Christchurch Programme	Aligned City	Aligned action within the released strategies
1	Connect people	Berkeley	Foster neighbour-to-neighbour connections to advance disaster readiness
		San Francisco	Build community readiness education and technology
2	Create adaptable places	Norfolk	Reinvest and revitalise neighbourhoods
3	Improve the quality, choice and affordability of housing	San Francisco	Strengthen Housing Now to Better Prepare Us for Tomorrow
4	Build participation and trust in decision-making	Semarang	Transparent public information and governance
		Byblos	Encourage civic engagement and participation in decision-making
5	Support community organisations and leaders	Melbourne	Community-based resilience compendium
6	Connect internationally	Rotterdam	Strong Shoulders Programme
7	Foster a culture of innovation	Norfolk	Nurture the city's entrepreneurial ecosystem
8	Sustain the vitality of the natural environment	Melbourne	Metropolitan Urban Forest Strategy
9	Improve community understanding and acceptance of risk	Medellín	Strengthening of Community Risk Management
10	Manage the risks we face	New Orleans	Incentivize property owners to invest in risk reduction



- Cities in the 100RC Network
- Cities with aligned actions to the Resilient Greater Christchurch Plan

OUR RESILIENCE CHALLENGES

The Preliminary Resilience Assessment identified nine interconnected resilience challenges. The following summaries distil these challenges and set the foundations for this plan. The icons introduced here are used later in this plan to link our actions to these challenges.



Community and social cohesion

Building and supporting community networks is key to our resilience. The earthquakes resulted in disruption to many existing communities and has seen a large increase in international migration as people come to Canterbury to take part in the rebuild. International migration to the Canterbury region has been steadily increasing since February 2011. Monthly net migration into the city has now been positive for 32 months in a row and that annual inflow is the highest level since at least 1991. Net migration into the wider Canterbury region is also at a record high. Of these new migrants, Canterbury's Employers' Chamber of Commerce has reported that the largest group is likely to be from the Philippines. The region needs to embrace this diversity, integrate the new workforce into the wider community and encourage new residents to remain once the rebuild winds down.



Securing our future in the eastern parts of Christchurch

Christchurch's eastern suburbs were severely affected by the earthquakes, with widespread liquefaction and land damage resulting in the creation of a "red zone" where 8,000 homes were demolished. The east is also home to some of the city's most socially and economically disadvantaged communities. The future challenge is to ensure community voices are heard and considered as significant land use and natural hazard planning decisions are made.



Understanding risks and tools for mitigation

Christchurch has always been at risk from hazards like earthquake, land slip, flooding, tsunami and pandemic. The earthquakes improved our understanding of some, but questions still remain on how we assess the risks and mitigate against them. These issues, and the consequent role of insurance in a post-earthquake environment, must be considered at all levels of community. Insurance as a tool has helped the resilience of Christchurch by enabling much of the rebuild, but is facing challenges, for example higher excesses and premiums in areas of high risk (especially flooding) and the new requirement for households to nominate a sum insured. Ensuring government, the private sector and local communities understand the issues is essential to engaging them in the decision-making process.

Toitū te marae o Tāne
Healthy Lands

Toitū te marae o Tangaroa
Healthy Waters

Toitū te iwi
Healthy Communities

Tribal statement of identity



Housing affordability and accessibility

House prices and rents have become more affordable in recent months because of growing incomes and housing stock numbers returning to pre-quake levels, bringing welcome news to renters and first home buyers. For example improved availability of housing and reduced demand from displaced households continues to push rents downward. Private sector mean rents in Christchurch were \$400 in March 2016, 4.7 percent lower than March 2015. Annual rent growth has remained negative in 2016, signalling a correction following strong rent growth in the 2012-14 period. However access to affordable, good quality, warm and healthy housing has always been an issue for the people of Christchurch. Damage and displacement caused by the earthquakes exacerbated the problem: around 16,000 properties were severely damaged and the number of people facing extreme housing deprivation has increased between 70 and 112 per cent since the earthquakes. Ensuring access to quality housing is important to future resilience.



Urban form of Greater Christchurch

Christchurch has a unique opportunity to rebuild better: for its urban form to reflect the needs and aspirations of the community. The city faces a growing population and changing demographic, significant residential redevelopment, and increased housing demand due to a reduction in the housing stock and immigration to support the rebuild. The population of Greater Christchurch grew from 414,000 in 2006 to 428,000 in 2013 and based on a medium growth projection is expected to rise to increase to 566,900 people in 2043. Effective urban planning could help mitigate future stresses such as homelessness, unemployment, traffic congestion, accessibility to services and environmental pressure.



The role of innovation

To stay competitive businesses need to innovate and workers need to develop skills to change and adopt new technology. In New Zealand in 2015, on average, innovating businesses made nearly twice as much annual profit (\$3m) as non-innovating businesses (\$1.6m); employed twice as many people as a non-innovating firms and made more profit per staff member.

Greater Christchurch is well positioned in terms of the education and training infrastructure. The area has a high quality supporting institutions such as 149 primary and secondary schools; three university campuses and a polytechnic; seven Crown Research Institutes; two Centres of Excellence and a solid core of high tech manufacturing and knowledge intensive service businesses. This is a good position from which to provide innovative education and training, and to continue to build an institutional framework that supports innovation and future competitiveness.

Understanding the specific impact of the technological changes on the Greater Christchurch community and economy, and then developing co-ordinated actions and growing the innovation ecosystem, are projects noted in the Actions section. Supporting innovation and using new technology to enhance innovation, will create new opportunities and make the region attractive to young people and migrants.

Building Resilience in GREATER CHRISTCHURCH



Community leadership

Widespread community-based responses played an important role in supporting Greater Christchurch immediately following the 2010/2011 Canterbury earthquakes and during the ensuing period of recovery. Responses included informal, spontaneous efforts and organised responses led by the community and iwi organisations. Most organised responses were initiated by existing community groups or leaders, with some new initiatives and leaders emerging, such as the youth-led Student Volunteer Army. The act of contributing is key to a community's resilience, however initiatives like this need ongoing support to survive. Maintaining and building this culture of community response and connectedness is important for Christchurch. A key challenge for Greater Christchurch will be to maintain and broaden the 'culture of possibility'.



Building trust between the community and decision makers

Residents want to be involved in the decisions that affect their neighbourhoods and communities. Concerns were raised about centralised decision-making processes immediately following the earthquakes and through the recovery. Now that both central and local government roles are changing, the shift in focus to regeneration offers an opportunity for a more deliberative and collaborative approach to decision-making. Community leaders in Christchurch commented that in the months after the earthquakes, the connections between organisations strengthened and new collaborations emerged. Communities felt positive and energised by the collaborative 'new normal' but special effort is required to maintain collaboration to a high standard.

Experiences from other disasters have indicated that recovery solutions should be multi-disciplinary and that there should be clear links between technological solutions and social solutions. Greater Christchurch can practice a multi-disciplinary approach in engagement with people and communities and can also advocate for the community in work with agencies.



Connection with our natural environment

Ngāi Tahu recognises that all things are interconnected and that the symbiotic relationship between land, water and people is at the heart of building resilient communities. The development of Greater Christchurch has impacted the health of land and water, particularly through the draining of wetlands and degradation of waterways which has seen extensive loss of biodiversity. Post-earthquake regeneration offers an opportunity to improve the vitality and resilience of our waterways and surrounding landscapes.

OUR APPROACH

From the outset of the preparation of this plan we have used the City Resilience Framework* as a tool to help us define what resilience means for Greater Christchurch. The framework, developed by Arup and The Rockefeller Foundation, is made up of four dimensions—Health & Wellbeing, Economy & Society, Infrastructure & Environment, and Leadership & Strategy—and is further defined by 12 drivers of resilience. We used the framework throughout the process to assess the connections between our challenges, identify critical areas of strength and weakness, and facilitate a comprehensive discussion of resilience with our stakeholders.

In consultation with our key influencers, we developed a more locally specific framework to embed resilience in our community through our goals, programmes and actions. The success of this plan relies on the ability to facilitate, promote and maintain connections between people and increase understanding and acceptance of our interdependency at all levels to build people’s capacity to be resilient.

By using this approach to evaluate and set priorities, Greater Christchurch will achieve the **Resilience Dividend**: Instead of investing to reduce impacts from a single hazard or improve a single metric, the city will make strategic decisions to improve its overall strength and endure multiple shocks and stresses. Investing in resilience can save money, save lives, and build a more equitable and prosperous city.



* **City Resilience Framework**
developed by Arup and The Rockefeller Foundation

WHAT DOES IT MEAN TO BE RESILIENT IN GREATER CHRISTCHURCH?

There are many definitions and meanings of resilience and over the past few years definitions of what it means to be resilient have been tested, reinforced or changed.

Managing risk and uncertainty through strategy and implementation frameworks that enhance how individuals, communities and organisations respond to hazards and the unexpected.

Definition from the 2007
GREATER CHRISTCHURCH
URBAN DEVELOPMENT
STRATEGY

“
A community is not the co-location of houses – that’s a suburb. Leadership is not a position you hold – it is a mark of your character. And resilience is not being strong in the face of adversity – that is stoicism. Resilience is about the capacity to plan and prepare for adversity, the ability to absorb the impact and recover quickly, but more importantly it’s about the ability as a community to adapt to a new environment, to thrive in the face of adversity and co-create our new normal...”

LIANNE DALZIEL
Christchurch Mayor

The capacity of individuals, communities, businesses and systems to survive, adapt and grow, no matter what chronic stresses and acute shocks they experience.

100 RESILIENT CITIES

For local **Ngāi Tahu**, resilience is about maintaining connections between people, place and culture in a way that feeds mind, body and soul. It is inter-generational and promoted by three primary objectives:

- sustaining the vitality of our natural environment
- fostering stronger whānau
- building meaningful Treaty partnerships with civic leaders.

This plan contains actions that support the delivery of the Urban Development Strategy Partnership Vision for Greater Christchurch set out in the Foreword of this document. That vision was underpinned by seven guiding principles Leadership, Partnership, Innovation, Integration, Regeneration, Equity and Resilience. The goals and programmes contained within this plan will encourage wider strategic thinking about resilience when the Urban Development Strategy is fully reviewed in coming years.

We are resilient

This plan places people at the heart of a Resilient Greater Christchurch. When people are supported by whānau, communities and organisations, collectively we form a more resilient Greater Christchurch. For this reason, throughout this plan the term 'we' is used widely and is intended to be inclusive as we all have roles to play in resilience building.

The success of this plan relies on the ability to facilitate, promote and maintain connections between people, and increase understanding and acceptance of our interdependency at all levels, to build people's capacity to be resilient. The icons introduced below are used later in this plan. They link our actions to our actors.



WHĀNAU

is a Māori term which can loosely be translated to mean extended family. In the strict sense, Māori use this term to define those related by whakapapa (genealogical ties). However, in today's ever-changing world (te ao hurihuri), the term 'whānau' is often applied to other closely-connected groups of people, the members of which work for the collective benefit of the whole. This is an important nuance within the context of this plan, which recognises that in times of need it is our ability to work together for the greater good to withstand, bounce back from, or adapt to shocks and stresses.

COMMUNITIES

in the context of this plan, takes the broadest meaning. It includes groups of people living or working in the same geographic area, such as a neighbourhood or suburb, and a group of people who have common interests, attitudes, business or socio-economic characteristics. In working with this plan, you are encouraged to think inclusively about the different communities you belong to and what contributions each can make to resilience.

ORGANISATIONS

refers to all forms of organisation including Central Government, councils, iwi, businesses, schools, colleges and universities, charities and non-governmental bodies, churches and sports clubs.

OUR PLAN

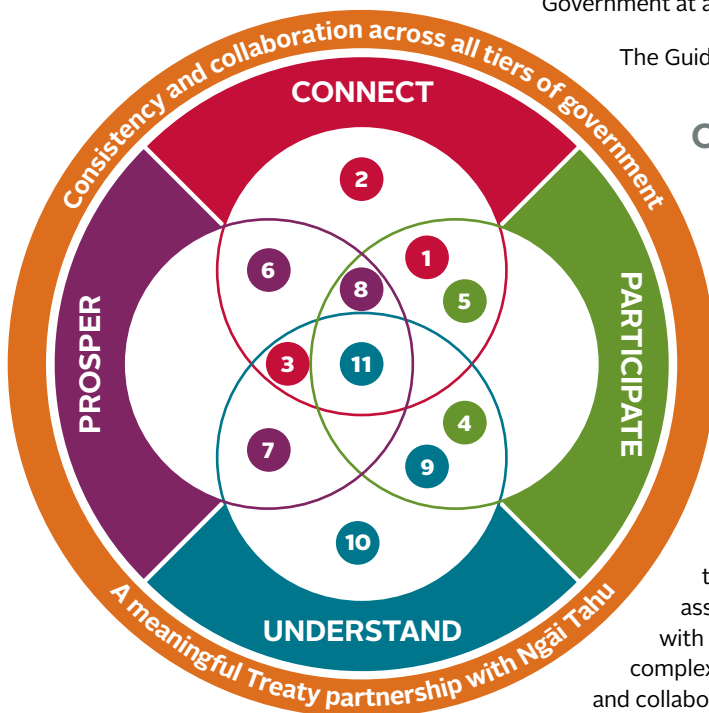
The rest of this document sets out our plan, the things we intend to do to continue building resilience across Greater Christchurch. The plan is structured as follows:

Our Guiding Principles

Two guiding principles that cut across our goals. 'Cross-cutting' in nature, they are symbolically wrapped around the adjacent diagram reflecting that they should be implicit to a greater or lesser degree in each programme. The principles emerged from background work and dialogue with our Key Influencers.

Fundamentally they reflect, firstly that Greater Christchurch needs to honour the bi-cultural governance arrangements agreed between Māori and European Settlers in the mid 1800s, and secondly, reflecting our experience since 2011, that Government at all levels need to work closer together.

The Guiding Principles are explored further on the following pages.



Our Resilience Goals

We have set **four goals** – Connect, Participate, Prosper and Understand – to help us structure our activity towards extending the resilience of Greater Christchurch. Each is framed around building capacity in our people, places, organisations and systems so we have confidence to face our challenges.

Our Resilience Programmes

Each goal contains a series of programmes which are the building blocks for improving our resilience. Collectively all **11 programmes** will strengthen our capacity to adapt and thrive in an uncertain future. The adjacent diagram illustrates this inter-connectivity highlighting that while programmes are assigned to a particular goal, they also contribute to, and align with other goals. This structure recognises the interconnected, complex nature of our challenges and encourages holistic, integrated and collaborative solutions.

Our Resilience Actions

Under each of the 11 programmes are action areas which outline what this plan proposes to do to tackle the challenges described at a programme level, and the outcomes we can expect. The action areas list out aligned projects or initiatives that have recently been delivered and confirmed projects.

However, the bulk of activity is contained within the implementation plan that sits towards the end of this plan. It contains a further 50 or so actions that local groups, voluntary organisations, business and governmental organisations have identified and will be committing resources to. This part of the plan will continue to evolve year on year as new ideas emerge.

CONNECT	PARTICIPATE	PROSPER	UNDERSTAND
<p>We are connected communities living in adaptable places</p>	<p>We are a community that participates in shaping our future</p>	<p>We are prosperous by sustaining the vitality of the environment, fostering innovation and attracting people</p>	<p>We understand risks to be better prepared for future challenges</p>
<p>1 Connect people</p> <p>A Develop events and local information resources to help new residents build connections with people in their immediate communities.</p> <p>B Develop, improve and sustain support programmes for vulnerable people as an enduring resilience-building activity.</p>	<p>4 Build participation and trust in decision-making</p> <p>A Experiment with alternative forms of public participation to promote awareness of issues and engage people in decision-making.</p> <p>B Develop tools, mechanisms and processes that enable individuals to be more active participants in the success of Greater Christchurch.</p>	<p>6 Connect internationally</p> <p>A Build strong national and international connections as foundations to attract people, develop markets and stimulate collaboration.</p> <p>B Future proof our physical infrastructure to safeguard our economic performance and overseas trading connections.</p> <p>C Invest in attracting and retaining workers from overseas to supplement our ageing workforce and stimulate new business ideas.</p>	<p>9 Improve community understanding and acceptance of risk</p> <p>A Develop and agree objective risk evidence and definitions in a non-technical language as starting points to engage the community about risks they face.</p> <p>B Openly engage the community to explore risk scenarios as a foundation for dialogue about risk reduction.</p>
<p>2 Create adaptable places</p> <p>A Consolidate and enhance our network of strategic and local centres to provide accessible focal points for communities.</p> <p>B Promote transport alternatives in everyday life to reduce car dependency.</p> <p>C Collaborate with communities to create healthy, safe and welcoming facilities and places.</p>	<p>5 Support community organisations and leaders</p> <p>A Provide support services that enable community groups and leaders to resolve administrative and regulatory processes.</p> <p>B Facilitate networking between community organisations as a means to develop shared direction and more efficient use of resources.</p> <p>C Strengthen funding arrangements to build confidence and stimulate investment in the community and voluntary sector.</p>	<p>7 Foster a culture of innovation</p> <p>A Support an environment that enables innovation and creativity as means to diversify our economy and add value to our production.</p> <p>B Commissioning of research and regular reviews of global and technological trends to maintain awareness of fast moving change.</p> <p>C Support the emergence of the social enterprise sector as partners in driving change in our communities.</p>	<p>10 Manage the risks we face</p> <p>A Develop a risk reduction framework to help us invest efficiently in interventions around our threats and hazards.</p> <p>B Review the role and use of insurance as a tool for risk transfer.</p> <p>C Support community preparedness in response to acceptance of risk.</p>
<p>3 Improve the quality, choice and affordability of housing</p> <p>A Continue to support and develop initiatives to improve the quality of new and existing housing.</p> <p>B Develop a consistent source of housing research to inform proactive planning for Greater Christchurch's future housing needs.</p>		<p>8 Sustain the vitality of the natural environment</p> <p>A Build capacity to source food from our local and urban environments to sustain our people and rediscover our relationships with nature.</p> <p>B Develop projects and initiatives that support restoration of indigenous biodiversity across an ecological network.</p>	<p>11 Securing our future in the eastern parts of Christchurch</p> <p><i>During 2016/17, the newly formed Regenerate Christchurch will set out an initial list of priorities and projects which the Implementation Plan (at the back of this document) will pick up.</i></p>

OUR GUIDING PRINCIPLES

A meaningful Treaty partnership with Ngāi Tahu

Why is this principle critical to resilience in Greater Christchurch?

The treaty is a partnership between Māori and the Crown, which requires the partners to act toward each other 'reasonably and with the utmost good faith'. — 1991 Waitangi Tribunal (Ngāi Tahu Report)

This principle acknowledges the mana (influence, prestige, authority, control) of both Ngāi Tahu and the Crown whose respective leaders signed Te Tiriti o Waitangi (the Māori language text) in 1840. They agreed to live together, the Crown taking responsibility for European settlers (kawanatanga), Ngāi Tahu communities (hapū) retaining their own autonomy (tino rangatiratanga). Incongruities across the two language versions of the Treaty gave rise to different interpretations and led ultimately to the enunciation of a series of Treaty Principles by the Waitangi Tribunal, Courts and Government in the last quarter of the 20th Century.

The principles focus on the broad sentiments, intentions and goals of the Treaty, not its words. The treaty partnership was expressed within the Ngāi Tahu Deed of Settlement and subsequently the Ngāi Tahu Claims Settlement Act 1998 formalising the relationship between the Crown and Ngāi Tahu as Treaty Partners. They include the principle of partnership and good faith which the Resilient Greater Christchurch Plan seeks to honour and give effect to.

What we will be doing?

Building on this, government agencies and councils will develop and enhance their existing relationships with local Papatipu Rūnanga. Through regular formal engagement between respective governors, annual programmes of action can be developed, prioritised and implemented in collaboration with Ngāi Tahu whānau and Papatipu Rūnanga.

What resilience value will this principle contribute?

The resilience value is in building a more inclusive and genuinely bi-cultural set of governance arrangements. This will lead to more meaningful and collaborative decisions and resilience building activities for Greater Christchurch.

The expression of Treaty Partnerships took a significant step forward following the enactment of the Canterbury Earthquake Recovery Act 2011. Te Rūnanga o Ngāi Tahu was recognised as a statutory partner alongside local and central government agencies, and invited to participate in all decisions relating to the recovery of Greater Christchurch governed by the Act. Such recognition and provision for Treaty partnership was unprecedented and has allowed each partner to understand each other better and make more meaningful decisions. This has confirmed a strong treaty partnership and examples of meaningful collaboration have resulted in positive outcomes for the Crown, Ngāi Tahu and the wider community.

Consistency and collaboration across all tiers of government

Why is this principle critical to resilience in Greater Christchurch?

Government agencies, public organisations and iwi leaders at the local, regional and national level have a role to play in building and delivering a Resilient Greater Christchurch. They are interdependent and it is critical that there is consistency of understanding of the issues involved, as well as collaboration in policy formulation, investment and activity.

What we will be doing?

Key pillars of consistency and collaboration are developing a common base of evidence and understanding, and the use of effective and positive relationships between agencies to find solutions that reflect specific local conditions. Beyond these, it is about taking opportunities to manage resources effectively, avoiding duplication and delivering in a cost-effective manner; making use of regulation as lightly, but as robustly as is needed to drive change or compliance; and most of all, furthering the health and prosperity of Greater Christchurch.

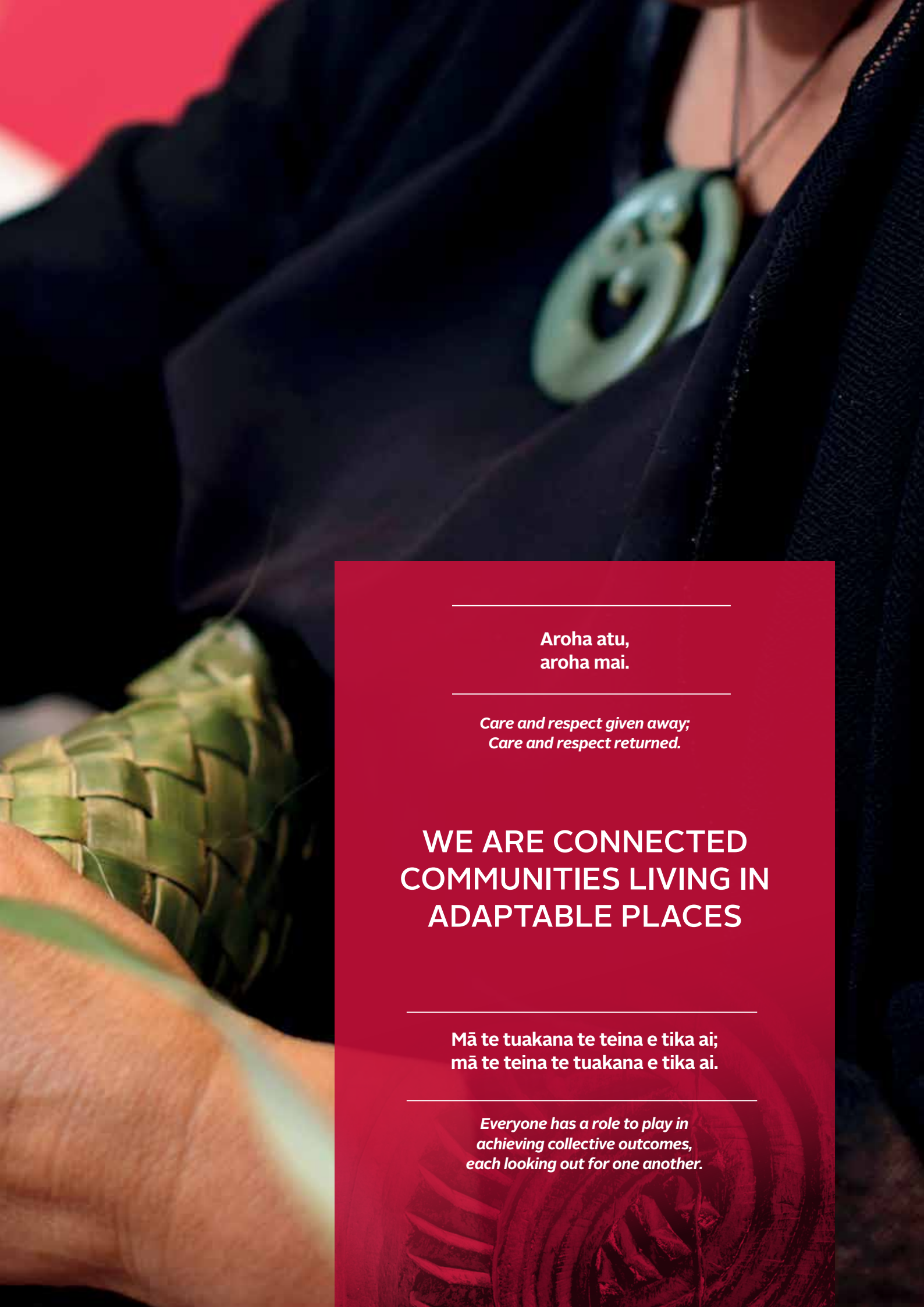
What resilience value will this principle contribute?

Within the New Zealand context, Greater Christchurch has many lessons to share from its earthquake experiences and a unique perspective on resilience. Often, the most powerful policy directives are mandated at a Central Government level. For this reason it is important that the affected councils co-ordinate efforts to share knowledge and insights. Collaboration and consistency plays a critical role in advancing the long-term integrated planning and initiatives that will ensure we are better prepared for the future.

Alongside the Greater Christchurch Urban Development Strategy Partnership, the Canterbury Natural Hazard Risk Reduction Group is another example of collaboration. Formed in 2016, its role is to develop and implement a regional approach to managing natural hazard risk across the Canterbury region. The Group is a collaborative approach across all councils and Civil Defence Emergency Management. The Group reports into the governance structures for both the Canterbury Civil Defence Emergency Management Group Joint Committee and the Canterbury Mayoral Forum.

Goal 1 **CONNECT**





**Aroha atu,
aroha mai.**

*Care and respect given away;
Care and respect returned.*

**WE ARE CONNECTED
COMMUNITIES LIVING IN
ADAPTABLE PLACES**

**Mā te tuakana te teina e tika ai;
mā te teina te tuakana e tika ai.**

*Everyone has a role to play in
achieving collective outcomes,
each looking out for one another.*

CONNECT



WE ARE CONNECTED COMMUNITIES LIVING IN ADAPTABLE PLACES

Why this goal is important to resilience in Greater Christchurch

Connections between people and the places they live create a sense of community. They are also critical components of resilience.

Greater Christchurch has strong communities but the earthquakes caused change. Some people were forced to move away from earthquake-damaged areas, and others used the repair of earthquake damaged homes as an opportunity to sell and relocate. There has also been a large inflow of migrants to take up work in Greater Christchurch to help rebuild the city.

The change has disrupted many community connections, and in growth areas has created new communities where networks between people need to be created. Without focus on **whānaungatanga**, or community building, we fail to learn from our post-earthquake experience. It was the power of people, through **manaakitanga**, that enabled us to cope and recover. Knowing our neighbours, having recognisable and accessible local leaders, and having people to turn to are critical to the resilience of our communities.

Kaitiakitanga emphasises that we must nurture the places we live in, as much as we nurture the relationships between people. Under this goal is the need to ensure our urban environments are inclusive and adaptable.

The availability of safe, communal places and spaces where people can meet is at the heart of a community and of **tūrangawaewae**. These places are a place to create memories, foster connections with people and generate a sense of belonging. More widely, the ability of our neighbourhoods to satisfy our needs is at the heart of resilience. Within parts of Greater Christchurch, local communities lack convenient access to local facilities, including sources of nutritious food, while in others people do not feel safe in their neighbourhoods.

Affordable, quality housing is also at the heart of community needs. One of the most chronic stresses present across Greater Christchurch is the lack of affordable and quality housing. Average incomes fall short of what households can afford to pay for housing, whilst the quality of rental housing can affect people's health. Taking positive steps to improve the quality of our housing stock and to encourage the development of the types and sizes of homes we need is a positive investment in a resilient future.

In addressing the two guiding principles, the key is for government agencies and councils to facilitate grassroots relationships and networks. These will become a more enduring way to help support people and reduce levels of dependency on public services. To build effective relationships with Ngāi Tahu, there needs to be wider acknowledgement of the enduring ancestral and cultural ties of Māori people that underpin their connectedness to places, and the social structures of whānau, hapu and iwi that offer lessons for wider community resilience.

WHĀNAUNGATANGA

Respecting, fostering and maintaining relationships with each other.

MANAAKITANGA

The expression of reciprocity, hospitality and care for each other.

KAITIAKITANGA

Working strategically to protect the environment for the use, enjoyment and prosperity of present and future generations.

TŪRANGAWAEWAE

A place to stand, a right to speak, an obligation to contribute to wider community wellbeing.

Under this goal, three programmes of action are focused on how we will:

- 1** CONNECT PEOPLE
- 2** CREATE ADAPTABLE PLACES
- 3** IMPROVE THE QUALITY AND CHOICE OF HOUSING

CONNECT

1

CONNECT PEOPLE

Our experience following the earthquakes underlines that people and whānau are the building blocks of resilient communities. Across our communities as a whole, people worked together to help each other, but it was notable that those with strong neighbourhood connections sprang into action faster. Building connections and relationships between members of the community is an important investment for the future at a local level.









Since the earthquakes, there has been widespread movement of people – some through displacement resulting from earthquake impacts, others as new arrivals taking part in

rebuild work. This has brought new people into many of our communities and resulted in rapid establishment of new suburban housing. Helping these people to integrate into existing communities, and nurturing the establishment of local networks in new communities, is a critical way we can support them and help build resilience.

Vulnerable people are present in all our communities. While neighbourhood connections can help support these people in response to sudden events and to prevent social isolation, it is the everyday stresses endured by these people that needs more careful attention.

Resilience Value

Strong communities are able to respond to change more rapidly and recover from unforeseen events. People who connect with each other are able to access support, resources and be part of informal support networks. This reduces dependency on public services. It will empower people to help themselves and others in times of crisis. Connectedness will better support individuals that may endure feelings of helplessness with consequential implications for mental health.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
	  	Government agencies Voluntary groups Community organisations	 
Links with actions/programmes of other 100RC network cities			
 	People and whānau are the building blocks of resilient communities and there are a number of ways to build and strengthen ties across groups. Greater Christchurch is eager to learn more about community building and preparedness initiatives from the Bay Area such as San Francisco's Digital Platform – SF72, and Berkeley's neighbour-to-neighbour connections programme		

ACTION 1A

Develop events and local information resources to help new residents build connections with people in their immediate communities.

What will we be doing? We will continue to create sources of local information and provide community activities to help new residents integrate into communities. This may include welcome packs and social media resources and, in newly-built communities, events that help to establish community networks. At a city, town or suburban level, cultural events and other activities aimed at particular communities of interest will be supported as ways of helping to assimilate people and to celebrate our diversity.

As well as connecting people, these activities and resources can raise awareness of sources of social support, employment, travel choice options, emergency procedures and local networks that can help individuals, communities and whānau build their own resilience.

What outcomes do we expect to see? Increased levels of community engagement and participation in all activities across Greater Christchurch with improved levels of empowerment and self-help. Supportive and welcoming neighbourhoods where diverse people know each other.

Successful current examples of activities include:

- Selwyn Newcomers and Migrants Strategy
- Meet Your Street
- Christchurch Migrants Centre, providing free advice to new migrants on services and community groups
- International cultural festivals including the Lantern Festival and Diwali

ACTION 1B

Develop, improve and sustain support programmes for vulnerable people as an enduring resilience-building activity.

What will we be doing? In the aftermath of the Canterbury Earthquake Sequence, government agencies, including the district health board, collaborated on the Community in Mind Strategy. This has stimulated community led-activity, innovative services and greater collaboration. Government agencies, community organisations and councils will seek funding to sustain and maintain these activities and services, with the aim of securing an enduring and evolving form of resilience-building for vulnerable people.

What outcomes do we expect to see? Vulnerable people are well-supported and participate in the community, which helps to decrease feelings of isolation and loneliness. All organisations are aware of vulnerable people in our communities. Mental health support initiatives provide support at a local level.

Successful current examples of activities include:

- The All Right? Campaign
- Community in Mind Strategy

Initial committed projects identified in the Implementation Plan

Psychosocial Initiatives Review
LEAD: Canterbury District Health Board
Committed (within 2 years)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

CREATE ADAPTABLE PLACES

Outside our own homes, the quality of the natural environment, buildings and the network of streets and spaces, defines the way we go about our daily lives. The convenience and safety of transport routes and travel modes determine our choice of travel. The ambience and functionality of a space encourages us to spend time there, in turn shaping our lifestyle choices and social engagement and ultimately our physical and mental wellbeing. In this respect, equity is important. Only by enabling people of different physical abilities, cultural beliefs or with other specific needs to access and share their local environment will our places and spaces become inclusive.

The growth and development of Greater Christchurch has created a pattern of commercial centres with roles and functions that are sometimes poorly defined, often to the detriment of their quality as places to spend time. Furthermore, our road-based transport network has become a dominant feature of the urban environment.





In looking to the future, strategic investment (commercial, public and transport) is now being channelled into 14 Key Activity Centres and a network of smaller suburban centres across Greater Christchurch. The key challenge is to mould the primary commercial functions of each centre into hubs of wider activity that draw in public, cultural and community services as well as being well-placed to accommodate different types of housing. More integrated local centres can reduce our need to travel. For everyday journeys – to work, to schools, to the shops – we need to encourage walking and cycling for short trips as part of a wider strategy to improve community health. For other journeys, alternatives to the private car need to be made more convenient if we are to avoid returning to pre-earthquake levels of congestion which will threaten the lifelines of our economy and the quality of our environment.

In making places more resilient, people must be a part of any process of change. Where local views are not

taken into account, people can become resistant to change and protective of their local public environments. This reaction can create bureaucratic drag, even on simple projects. The reverse is also true. Communities can be frustrated with the lack of ability to change things in their local environment because of rules, processes or other barriers – even when they have funding or know-how to deliver the work.

Resilience Value

Making the most of our places and spaces – including our urban centres, public buildings and reserves – will create inclusive, robust and safe places for people. Encouraging more intensive forms of housing around areas where social and community infrastructure is generally more concentrated, such as urban centres, will maximise use of infrastructure and public places. Integrated and inclusive urban planning can help improve community wellbeing by ensuring good connections between homes, workplaces, facilities and social and cultural activities.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Councils Business community Regeneration agencies Ngāi Tahu Community organisations, communities and users	
Links with actions/programmes of other 100RC network cities			
	Norfolk has also recognised this as a key strategy and in undertaking a range of initiatives to build neighbourhood level capacity to drive economic development and implement place-based revitalisation efforts. The strategy has strong parallels with Greater Christchurch's programme to create adaptable places that improve the quality, accessibility and amenity of neighbourhoods, enabling opportunities for collaboration and information sharing.		

ACTION 2A

Consolidate and enhance our network of strategic and local centres to provide accessible focal points for communities.

What will we be doing? Led by local councils, we will develop plans, encourage investment and deliver projects to make our centres become places that people enjoy spending time in, and from which they can satisfy multiple needs in a single convenient trip by foot, bicycle, bus and, as needed, using private cars. Around centres, opportunities will be explored to develop high-quality medium density housing developments.

What outcomes do we expect to see? Our centres prosper, containing a broader mix of uses including social venues, business hubs, different forms of housing, making efficient use of space (e.g. parking/servicing), and maximising the capacity of infrastructure networks.

Successful current examples of activities include:

- Central Christchurch Recovery Plan
- Suburban Centre Masterplans – Christchurch City Council
- Rangiora and Kaiapoi Town Centre Plans – Waimakariri District
- Lincoln and Rolleston Town Centre Plans – Selwyn District
- Kaiapoi Library
- Te Hāpua – Halswell Community Centre

ACTION 2B

Promote transport alternatives in everyday life to reduce car dependency.

What will we be doing? Led by local councils, we will strategically look at opportunities to extend our public transport network and improve the quality and perceptions of services. At a neighbourhood level we will look for opportunities to make walking and cycling the obvious choice for very short trips with a focus on making safe and convenient linkages using tools including Universal Design, Crime Prevention through Environmental Design (CPTED) and Health Impact Assessment.

What outcomes do we expect to see? Everyone in Greater Christchurch has access to a variety of travel options. There will be increased levels of public transport patronage with more local trips made on foot or by bicycle contributing to healthier lifestyles. The potential of local rail transport is explored.

Successful current examples of activities include:

- Christchurch Cycleways Network
- Central Christchurch Bus Exchange

ACTION 2C

Collaborate with communities to create healthy, safe and welcoming facilities and places.

What will we be doing? We are investing in post-earthquake facility rebuild projects that are creating new public environments where the input of communities and users are critical to their future success. Alongside these are funding streams focused on supporting delivery of community-led initiatives. A natural extension of this will be consideration of different models of ownership, including social enterprise. The physical assets of public facilities and reserves could be put into trusts or leased to a community organisation which can make its own decisions about fundraising and spending, and can harness the energy of local volunteers.

What outcomes do we expect to see? Spaces and facilities that are well-utilised for social gatherings and other activities, with a reduction in crime, vandalism and nuisance. Facilities run with community level support. Design of community facilities and spaces that have been informed and shaped by the community.

Successful current examples of activities include:

- Life in Vacant Spaces, Gap Filler and Greening the Rubble are successful Christchurch-based community driven initiatives that creatively define space and place
- Transition Programme
- Aranui Community Centre artwork – funding and delivery support for public art

IMPROVE THE QUALITY, CHOICE AND AFFORDABILITY OF HOUSING

Our homes are the most important places in the lives of our families. The quality of our living environment influences our wellbeing and the costs to maintain our standard of living. The choice of housing available, along with how much we earn, can restrict where we live.




The underlying quality of the existing housing stock in Greater Christchurch (and wider New Zealand) is poor, reflecting the age of the majority of properties. Limited insulation, lack of efficient heating, ventilation and security, combined with poor build quality, are common characteristics. Poor quality homes are most common in the rental and social housing

sectors where occupants are paying disproportionate running costs and can face consequent health problems.

As Greater Christchurch's population continues to grow it is imperative that people have access to a greater diversity of housing types and tenures at prices that they can afford. There is a mismatch between the supply and demand of particular types of housing, and supply is being driven from an investment-based perspective. Experience in parts of Europe has recognised that housing is an important resource where public policy can play a role to guide development and management.

Resilience Value

Better quality housing means a safer and healthier community. A safer and healthier community is better able to participate and respond to shocks. Planning our communities and neighbourhoods to accommodate diversity, including income, age and ethnicity, will minimise social displacement and disruption while building social cohesion and tūrangawaewae.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		<ul style="list-style-type: none"> Government agencies Ngāi Tahu Councils Housing providers Development industry 	<ul style="list-style-type: none"> 1 9 11
Links with actions/programmes of other 100RC network cities			
	<p>Households in Greater Christchurch felt the acute shock of lost housing supply following the earthquakes, and continues to experience the stress of disparity between incomes and housing costs. As we look to improve overall housing affordability, we are eager to learn from cities like San Francisco which are exploring a range of initiatives such as: inclusionary building requirements, affordable housing bonuses and reviving public housing areas to create thriving mixed-income communities.</p>		

ACTION 3A

Continue to support and develop initiatives to improve the quality of new and existing housing.

What will we be doing? We will develop detailed projects that help people to design better-quality forms of housing, using new construction techniques and modern resource-efficient materials, as well as working with government to incentivise retrofitting existing housing. Major programmes are also underway which will see substantial improvement and reconfiguration of social housing.

What outcomes do we expect to see? Improving standards of rental properties, fewer housing-related healthcare admissions, arresting the decline in levels of home ownership.

Successful current examples of activities include:

- Build Back Smarter
- Housing Exemplar Projects

ACTION 3B

Develop a consistent source of housing research to inform proactive planning for Greater Christchurch's future housing needs.

What will we be doing? In 2013, Government agencies and councils (working together under the Urban Development Strategy Partnership) commissioned a Greater Christchurch Housing Market Assessment that quantified trends and pressures on the housing market at the time, which drove policy changes. The focus will be on regularly updating of this type of information and, in response to trends, developing Greater Christchurch housing market policy interventions. Wider research and activity may include experimentation with different housing concepts including co-housing, co-living and the use of community-centred architecture.

What outcomes do we expect to see? Improved match of supply and demand in housing types, delivered with particular emphasis on affordable housing products for those on and below median incomes. Ahead of that, building more informed awareness of local housing market information and issues, including informed debate over particular interventions.

Successful current examples of activities include:

- 2013 Greater Christchurch Housing Market Assessment
- Christchurch City Council Housing Policy
- Christchurch Housing Accord

Initial committed projects identified in the Implementation Plan

Consistent Housing Monitoring
LEAD: Urban Development Strategy Partnership

Committed (within 1 year)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

CONNECT

1 Selwyn Gets Ready



The Selwyn Gets Ready website is a tool used to create stronger, safer and more connected communities in Selwyn. Households enter their contact details and any special needs, resources and skills they have which could be helpful to their community in an emergency situation. Communities can use the website to organise local activities within their neighbourhood and share information that affects their safety and wellbeing. The Selwyn District Council Emergency Management team also uses the website to send important safety messages to individual households, streets, townships or the whole district about topics including severe weather, warnings of uncontrolled fires, boil water notices or local police messages.

1 Meet Your Street/Summer in Selwyn



Meet Your Street and Summer in Selwyn also provide opportunities for people to meet their neighbours over coffee and games in local parks. Meet Your Street launched in 2015 in response to the Selwyn District's rapid population growth, at 4.5 per cent per year. Hosted by the Selwyn Youth Council and Selwyn District Council, Meet Your Street visited 40 different Selwyn streets and provided a fun, informal event with free coffee, tea and juice, to encourage residents to get to know their neighbours, feel welcome and connected. Summer in Selwyn offers free community events such as concerts and picnics in reserves across Selwyn.

1 Brave – A Daisy Poetry Promenade



This project involved the production of a promenade arts performance in East Christchurch where the audience moved between six different spaces and experienced art forms such as poetry, DJ's music, Pasifika dance, singing, rapping, photography and videography. The Brave team built on strong relationships with artists in the community to create this celebration of Samoan heritage, identity and talent and in doing so fostered belonging, connection and pride in cultural identity. This initiative has been supported by the LinC (Leadership in Communities) project in 2015/16.

1 ACTIS



The Aranui Community Trust Incorporated Society (ACTIS) takes a joined-up approach to support community-based recovery plans. ACTIS is locally and community driven and allows the community to assess its own needs, identify solutions to these needs and work towards implementation. ACTIS connects members of the community with social services including Housing New Zealand, community lawyers, New Zealand Police and budgeting and debt advice. ACTIS also runs events such as walking groups and sport events, and provides a public space in Aranui for drop-in sessions to assist members of the community.



1 Healthy Christchurch

Healthy Christchurch is led by the Canterbury District Health Board and is a multi-agency partnership based on the World Health Organization Healthy Cities model. Healthy Christchurch ensures all sectors and groups are acknowledged for their role in creating health-promoting environments in which we live, work, learn and play. Health services are one of the components of a health-promoting community; but the recreation, employment, youth, environmental enhancement, transport, and housing sectors are just as important to ensuring people are able to lead flourishing lives. Healthy Christchurch aims to:

- forge a common vision for a healthy city
- foster healthy relationships between diverse agencies and sectors, from 'grassroots' groups to government agencies
- enable flexible, collaborative and prompt responses to emergent health issues
- ensure all policy incorporates a health perspective.

2 Christchurch City Council Transitional Programme

What do you do when a central city has more vacant space than buildings? In Christchurch, the result has been both community- and Council-led initiatives to reimagine those spaces. Community groups such as Life in Vacant Spaces Trust, Gap Filler and Greening the Rubble work on projects to fill the spaces and engage with the community; the Council has created grant funding programmes and funded initiatives to improve public amenity. All are aimed at creating spaces which engage, delight and surprise residents and visitors.



The programme provides opportunities to test new ideas, explore new concepts and look at ways to bring people back to the city. As well as transforming under-utilised spaces, it provides opportunities for residents to be directly involved in the recovery of their city and showcase their creativity both nationally and internationally.

Now, as a more holistic approach to regeneration emerges, we all have a role to play in creating adaptable and resilient space – even if some of those are temporary.

2 You Me We Us Kaiapoi

You Me We Us is an exciting, grassroots community development initiative that gives the people of Kaiapoi, Kairaki and Pines Beach the opportunity to make great things happen in their communities. Together, they encourage and allow the community to identify priorities and work collectively and co-operatively to deliver outcomes.



This approach enhances the wellbeing of the community where there is increased participation in volunteer work and more people involved in events and projects, creating a strong, vibrant neighbourhood and community. You Me We Us has developed strong relationships with local schools, community groups, local businesses and organisations which results in increased support and involvement from the whole community.

The initiative was established in September 2013 and to date, You Me We Us has held or supported a large number of successful projects and events including: Kaiapoi River clean-ups, 'Pop up' cinema events, spy training events for children, Adopt a Planter, Welcome Bags, Under 7s-Over-70s artwork afternoon, community pathway and giant Os & Xs board project, Kaiapoi Invisible Choir, Gardening through Schools, Food Forest Planting, and the Kaiapoi Night Market.

You Me We Us is an initiative that supports and encourages the community to shape and lead its own recovery, welcome new residents, and connect as a community.

2 Christchurch Central Recovery Plan

The earthquake on 22 February 2011 resulted in the loss of 70 per cent of the buildings in Christchurch Central's core, causing large-scale displacement of commercial and public sector activity. Widespread demolition offered a unique opportunity to remodel the heart of a city. The Christchurch Central Recovery Plan was published in 2012, drawing on more than 100,000 contributions from the community captured in the 'Share an Idea' engagement process. Component parts of the Recovery Plan are now being delivered through a mix of public and private sector investment, with early recovery focused on large-scale public projects as a means to catalyse private investment. With people now returning to the city centre, the stages ahead will be about working with communities to identify and deliver regeneration opportunities that create the green, vibrant and liveable city that the Recovery Plan envisioned.





2 Nga Whāriki Manaaki – Woven Mats of Welcome

Ngā Whāriki Manaaki is a series of 13 public realm works of art that feature an arrangement of natural stone pavers of varying shades and colours positioned along the Ōtākaro/Avon River promenade. In sequence, they reference the Māori process of welcome (pōwhiri) and are intended as an expression of goodwill and hospitality for all visitors to the city of Christchurch.

2 Urban Cycleway Projects

Ongoing cycleway improvements in Greater Christchurch provide enhanced safety and improve transport choice for residents.

The Waimakariri Urban Cycleways Project provides connections for residents to schools, workplaces, retail and health centres in Rangiora, linking Woodend to Rangiora and providing a connection from Rangiora to Kaiapoi and beyond to Christchurch City.

Selwyn District's new nine kilometre off-road path for pedestrians and cyclists has provided an important link between Rolleston and Lincoln and is an important addition to the strategic cycling network which links the fast-growing townships in Eastern Selwyn and connects to Christchurch City.

Christchurch City has also made a strong commitment to generating a significant modal shift to cycling through its Major Cycleway programme. This programme is planned to provide an extensive and connected cycleway network comprising 13 Major Cycle Routes to provide safe and direct links between the Central City and suburbs, education facilities, business and shopping zones as well as popular recreation areas. The Christchurch City Council will deliver \$65 million of its \$156 million Major Cycle Routes network over the next three years, with a local investment of \$23.5 million.



3 Build Back Smarter

Build Back Smarter is a free service providing homeowners with face-to-face, no obligation, expert advice on making homes warmer, drier, healthier and cheaper to run. The Build Back Smarter service is available to all homes in Christchurch and neighbouring parts of Selwyn and Waimakariri districts. In 2015:

- 1400 homes received a Build Back Smarter assessment
- 82% of customers believe their home will be healthier and more efficient by following the advice provided
- 84% of customers were satisfied or very satisfied with the service received
- 53% have already made changes to their homes
- Over 2000 people visited each home on show through the Exemplar Homes Tour.



Goal 2 PARTICIPATE





Ko te kai a te Rangatira,
he kōrero.

Conversation is the food of chiefs.

**WE ARE A COMMUNITY
THAT PARTICIPATES
IN SHAPING OUR FUTURE**

Ehara taku toa I te toa takitahu,
engari he toa takitini.

*Our strength and success comes from
being together, not acting alone.*

PARTICIPATE



WE ARE A COMMUNITY THAT PARTICIPATES IN SHAPING THE FUTURE

Why this goal is important to resilience in Greater Christchurch

A community where people contribute ideas and participate in decision-making is one that cares about its future.

In the aftermath of the Canterbury earthquakes local councils, government agencies and community organisations were placed in an overwhelming situation that in some instances exceeded their capacity. In response, the Canterbury Earthquake Recovery Authority (CERA), was established by Central Government and was given resources and powers to drive the response and recovery phases. At a grassroots level, local communities, energised by the contributions they had made in the immediate aftermath of the disaster, felt empowered to express clear views about how their communities could be built back better. During 2011 and 2012, this community energy was harnessed by councils and government agencies to help shape plans for recovery, notably the Christchurch Central Recovery Plan.

However as time has passed, different opinions have emerged about leadership and the ability to contribute. For communities in Selwyn and Waimakariri, sudden rapid growth and recovery has required careful planning and investment which will, in time, improve the overall viability of these communities. For Ngāi Tahu, the earthquake recovery process has been a watershed period in establishing a stronger expression of *rangatiratanga*. Through legislation and positive influence, Papatipu Rūnanga have been empowered to inform, shape and embed cultural values, narratives and aspirations into the civic and private developments. Within Christchurch City, where the damage was most extensive, slow progress on major projects, wrangling over insurance and the draining experience of living in a damaged city have taken their toll. This is particularly true in the eastern suburbs. Community leaders have become exhausted while trust in governance has been eroded by decisions made using legislative powers, often behind closed doors.

This programme of action responds to the positive and negative experiences by looking to reinvigorate community *whanaungatanga*, particularly in the way that leaders, councils and government agencies engage communities and devolve responsibility, built on trust, to the community level.

In addressing the two guiding principles, government agencies and councils will work in a joined-up way to develop opportunities to actively engage and empower communities to drive change. This means supporting and building trust in the true spirit of civic partnership. Furthering effective relationships with Ngāi Tahu will build on the positive momentum that has emerged from earthquake recovery governance arrangements by co-creating structures, agendas and action that resolves outstanding grievances, but more positively helps forge shared direction for the future.

RANGATIRATANGA

Leadership through collaboration, maintaining a high degree of personal integrity and ethical behaviour in all actions and decisions.

WHANAUNGATANGA

Respecting, fostering and maintaining relationships with each other.

Under this goal, two programmes of action are focused on how we will:

- 4 BUILD PARTICIPATION AND TRUST IN DECISION-MAKING
- 5 SUPPORT THE COMMUNITY SECTOR AND COMMUNITY LEADERS

PARTICIPATE

BUILD PARTICIPATION AND TRUST IN DECISION-MAKING

People gain satisfaction from taking part in even small activities that give a sense of purpose and achievement. Lack of opportunities for participation can lead to a sense of powerlessness which compounds psychological stress and increases apathy with governance structures. Across Greater Christchurch, the community has become increasingly frustrated about the uncertainty of governance arrangements for long-term recovery and resilience, particularly in Christchurch City. The role of central government, both immediately post-disaster and through the recovery, has been a key issue along with concerns about turnover in leadership positions due to burn-out. Given the point in recovery that Greater Christchurch is approaching, such frustrations and concerns around trust, empowerment,




transparency, participation and governance must be addressed.

The challenge is to build a more trusting relationship between communities and decision-makers in Greater Christchurch. Central to this is changing the way in which governance engages with people, as all too often their processes rely on rigid and formulaic methods that are set up to be adversarial. These processes make engagement difficult, and are often protracted, meaning that people struggle to keep up with what is being decided.

Transparent and participatory governance empowers the community to collaborate on plans and initiatives in areas which affect their interests.

Resilience Value

Personal involvement, engagement and activism aid the recovery of individuals, especially following a sudden event. This enhances wellbeing and a sense of belonging for those in supporting roles and those being supported. Long-term, the collective participation of individuals builds a sense of place in a community and collective effort to get things done. It is important that the necessary tools and resources are available for citizens to feel empowered and effect change.

Challenge/Opportunity (see pages 32-34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Councils Ngāi Tahu Community groups Business community Individuals	

Links with actions/programmes of other 100RC network cities



BYBLOS



SEMARANG

Transparent, participatory and informed governance, empowers the community and leads to better decision-making. Semarang has recognised this through their action to increase the role of participatory community monitoring and information co-ordination. Byblos aims to improve relationships with communities and citizens to build an actively engaged and empowered community. Greater Christchurch is willing to reach out to these network cities to learn and understand techniques that successfully build participation and trust in decision-making.

ACTION 4A

Experiment with alternative forms of public participation to promote awareness of issues and engage people in decision-making.

What will we be doing? Councils and government agencies will seek alternative forms of public engagement and experiment with them to improve the quality of communication. To develop projects, policies or initiatives we will explore ways to involve people at the earliest stages so that more inclusive and effective outcomes can be achieved. Councils will look at how Community Boards, advisory groups and working parties involve members of the community across Greater Christchurch and share best practice.

What outcomes do we expect to see? People are more informed about the issues that community leaders have to make decisions on and there is greater engagement of the 'silent majority' on important issues, improving levels of confidence in decision-making. There is increased voting participation in local elections.

Successful current examples of activities include:

- Eastern Vision/Evo::Space
- Let's Plan – Waimakariri Red Zone engagement process

ACTION 4B

Develop tools, mechanisms and processes that enable individuals to be more active participants in the success of Greater Christchurch.

What will we be doing? Councils and government agencies will develop, trial and roll out initiatives to enable people to take ownership and/or leadership of issues that drive change. Areas under consideration include wider publication of regular Open Source data that could be developed for commercial or social enterprise purposes and alternative, inclusive plan-making processes. We will explore opportunities emerging through wider use of mobile technology.

What outcomes do we expect to see? More active participation and engagement in problem identification and solving stages of public service project development.

Successful current examples of activities include:

- Snap Send Solve
- Little River Community Plan – a community-initiated plan supported by Council staff and resources which is as much about local action as it is about longer-term infrastructure investment

PARTICIPATE

SUPPORT COMMUNITY ORGANISATIONS AND LEADERS

5

A study of community-based support during and following the earthquakes found it enhanced the wellbeing and sense of belonging of both those in the supporting role and those being supported. The act of contributing is crucial in adapting during and after disasters and in building resilience to adverse events. However, this phenomenon is not entirely self-sustaining. The support of external organisations, such as central government and councils, is essential to the ongoing success and sustainability of such community initiatives.

At a grassroots level, the key for external organisations is to limit the amount of precious volunteer-time tied up in complex bureaucracy, delays because of legal technicalities, or





hold-ups to the action because the right equipment cannot be provided at the right time. These types of barriers can be highly demotivating for people who are the driving force for making things happen. Similarly, community leaders who bring energy to drive local action can become overwhelmed and are vulnerable to fatigue by being overlooked and taken for granted.

At the community, voluntary and not-for-profit level, organisations rely on funding arrangements and contracts with government agencies, councils or other service providers. As a result business models and project plans can be very short-term in nature, while the scale of activity can be unavoidably limited. Creating a more stable platform of funding and support for our community organisations

and voluntary sector means they can continue to deliver existing programmes and invest in bigger projects with more confidence.

Resilience Value

With strong grassroots connections, community organisations can be leaders and natural partners with government agencies and councils in driving social, environmental, cultural and economic wellbeing. Whether as part of everyday support systems, or in times of crisis, community and voluntary organisations are a vital source of support, energy and knowledge. Supporting these community organisations as partners in maintaining the wellbeing of our communities is an investment in our future resilience.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Councils Ngāi Tahu Community groups Private sector (philanthropic) Individuals	
Links with actions/programmes of other 100RC network cities			
	There are dozens of local groups and individuals demonstrating leadership in making communities stronger and more effective at building resilience. Melbourne is developing a single resource for understanding, promoting and sharing the efforts that are occurring across the city. Greater Christchurch is eager to work closely with the Resilient Melbourne Delivery Office to understand leading practices and lessons learnt to support our local community organisations and leaders.		

ACTION 5A

Provide support services that enable community groups and leaders to resolve administrative and regulatory processes.

What will we be doing? Together we will design and develop support frameworks that simplify bureaucratic processes, provide appropriate technical expertise and otherwise enable community groups to focus on the delivery of outcomes. Support arrangements and training programmes that build the capability of community leaders will also be reviewed.

What outcomes do we expect to see? The community sector reduces expenditure of effort on processes. Groups are able to access readily identifiable sources of support to build more confident and skilled community leaders.

Successful current examples of activities include:

- Lyttelton Time Bank
- Life in Vacant Spaces Trust
- Student Volunteer Army

Initial committed projects identified in the Implementation Plan

Place Based Planning Framework
LEAD: Christchurch City Council
In Progress (within 1 year)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 5B

Facilitate networking between community organisations as a means to develop shared direction and more efficient use of resources.

What will we be doing? We will develop and maintain open databases of community organisations, encourage networking and host forums around complex or strategic issues. We will also encourage cross-sector collaboration to develop integrated solutions to community issues and better sharing of resources.

What outcomes do we expect to see? Stronger community voices able to articulate wider perspectives on particular issues with more effective resource sharing, joint commissioning of projects and leveraging of private sector funding to reduce dependency on public services.

Successful current examples of activities include:

- Christchurch Housing Forum – an open forum involving council, community and voluntary sector interests concerned with housing related issues
- Ministry of Awesome – ‘Canterbury Innovation Ecosystem Map’

Initial committed projects identified in the Implementation Plan

Community Group/
Resource Mapping
LEAD: Urban Development
Strategy Partners
In Progress (1-2 years)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 5C

Strengthen funding arrangements to build confidence and stimulate investment in the community and voluntary sector.

What will we be doing? Councils, government agencies and community organisations will develop and enhance funding arrangements by establishing new models of funding agreements, longer-term service contracts and funding roundtables. These approaches will have collaboration and cooperation at their core, looking at ways to grow the community and voluntary sector and, as opportunities arise, support the establishment of social enterprises.

What outcomes do we expect to see? Closer partnering arrangements between government agencies, councils and the community and voluntary sector. Longer-term investment in staff, assets and resources with links to business where opportunities arise.

Successful current examples of activities include:

- LinC Project

Initial committed projects identified in the Implementation Plan

Funding Roundtables/Multi Year
Agreements/Alliance models
LEADS: Councils/Govt Agencies
To Develop (1-3 years)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

PARTICIPATE



4 Snap Send Solve

Snap Send Solve is a free smartphone app used by the Waimakariri District, Selwyn District, and Christchurch City councils to help make reporting issues easy, thereby facilitating participation and empowering community members. If residents spot something in the district such as a pothole, vandalism, litter or a damaged footpath, it can be instantly reported from a mobile phone. The report is then allocated to the relevant Council department.

4 Eastern Vision



Eastern Vision is a group of community leaders focused on the regeneration of the eastern flatland suburbs of Christchurch. It advocates for community participation in regeneration decisions which is informed by robust science and technical information and integrated planning. The organisation established a website EVO::SPACE which provides a one-stop-shop platform to engage members of the public, collate and map proposals for the east, and generate an analysis report and map of community aspirations. The website acts as a forum for community empowerment by providing information which supports a greater understanding of the ongoing ideas for the regeneration of the eastern suburbs of Christchurch. The website was complemented by a seven-part TV series Eyes East which remains available for viewing online. Eastern Vision aims to help communities create a big-picture plan for the whole of the east that is widely supported and that will still work in 100 years' time. To support this, the organisation has developed, and will continue to develop, relationships with government and other agencies to make information readily and reliably available online for members of the community.

5 LinC Project



The LinC Project (Leadership in Communities) is facilitated by Leadership Lab to support local leaders and recognised change agents drawn from the voluntary, non-governmental organisations, and central and local government sectors across Greater Christchurch. Objectives of the LinC Project include increasing knowledge, skills and confidence as well as strengthening collaborations at a community level, including projects and initiatives that build local connections and wellbeing.

During 2015, this 10-month, strengths-based leadership programme worked with 40 leaders from diverse communities of interest across Greater Christchurch. A second group of 45 leaders began the programme in December 2015, 35 of these from community organisations and 10 from government organisations.

Funding and other support for the LinC Project have been contributed by the New Zealand Red Cross, Rātā Foundation (formerly Canterbury Community Trust), Ministry for Social Development, Canterbury Earthquake Recovery Authority (Community in Mind Strategy), the Wayne Francis Charitable Trust, the Tindall Foundation, Christchurch City Council, Selwyn District Council, Waimakariri District Council, Ara Institute of Canterbury (formerly Christchurch Polytechnic Institute of Technology and Aoraki Polytechnic) and the University of Canterbury.



5 Student Volunteer Army (SVA)

The Student Volunteer Army was created in 2010 through a Facebook page for those wanting to volunteer in response to the September earthquake. Throughout all the major earthquakes, more than 11,000 students were mobilised to clear liquefaction and offer support for other organisations and for residents.

The movement has spread to more than eight countries and is focused on young people being involved in volunteering as a way to inquire, problem solve and contribute to the community. In 2016, the Student Volunteer Army launched 'Serve For NZ' to mobilise people to volunteer on public holidays, instead of just waiting for a disaster.

5 Friday Night All Stars (Rangiora)



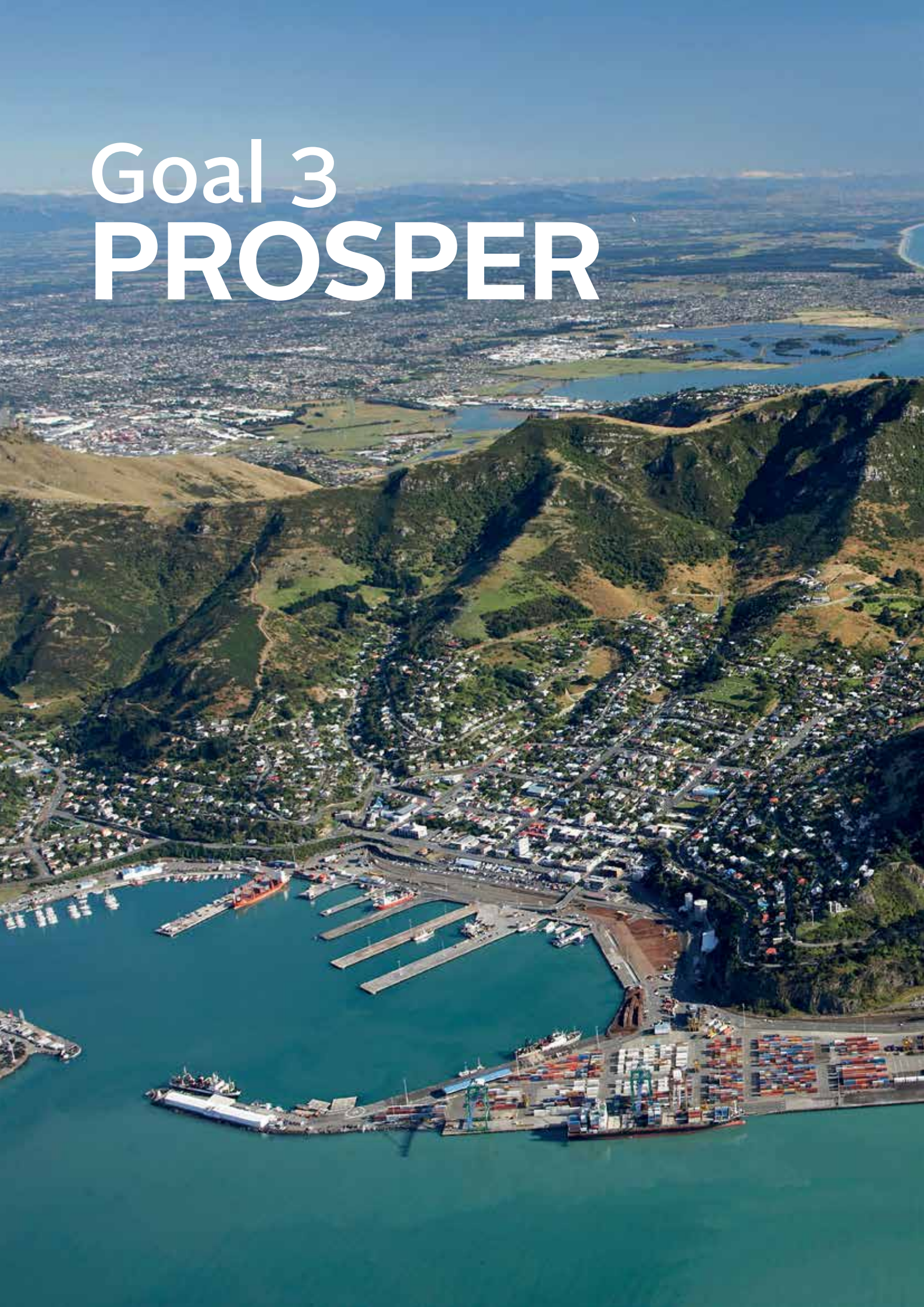
This recently-created basketball All Stars event, developed as part of the North Canterbury Basketball league, aims to create an avenue for deeper community engagement and provide a public platform where participants can realise their dreams. The All Stars event involves a large public sporting fixture which features key young and emerging players from "north and south". This event has created strong interest and participation from the wider community and has had a very positive impact on community connection and celebration. This initiative was supported by the LinC (Leadership in Communities) Project in 2015.

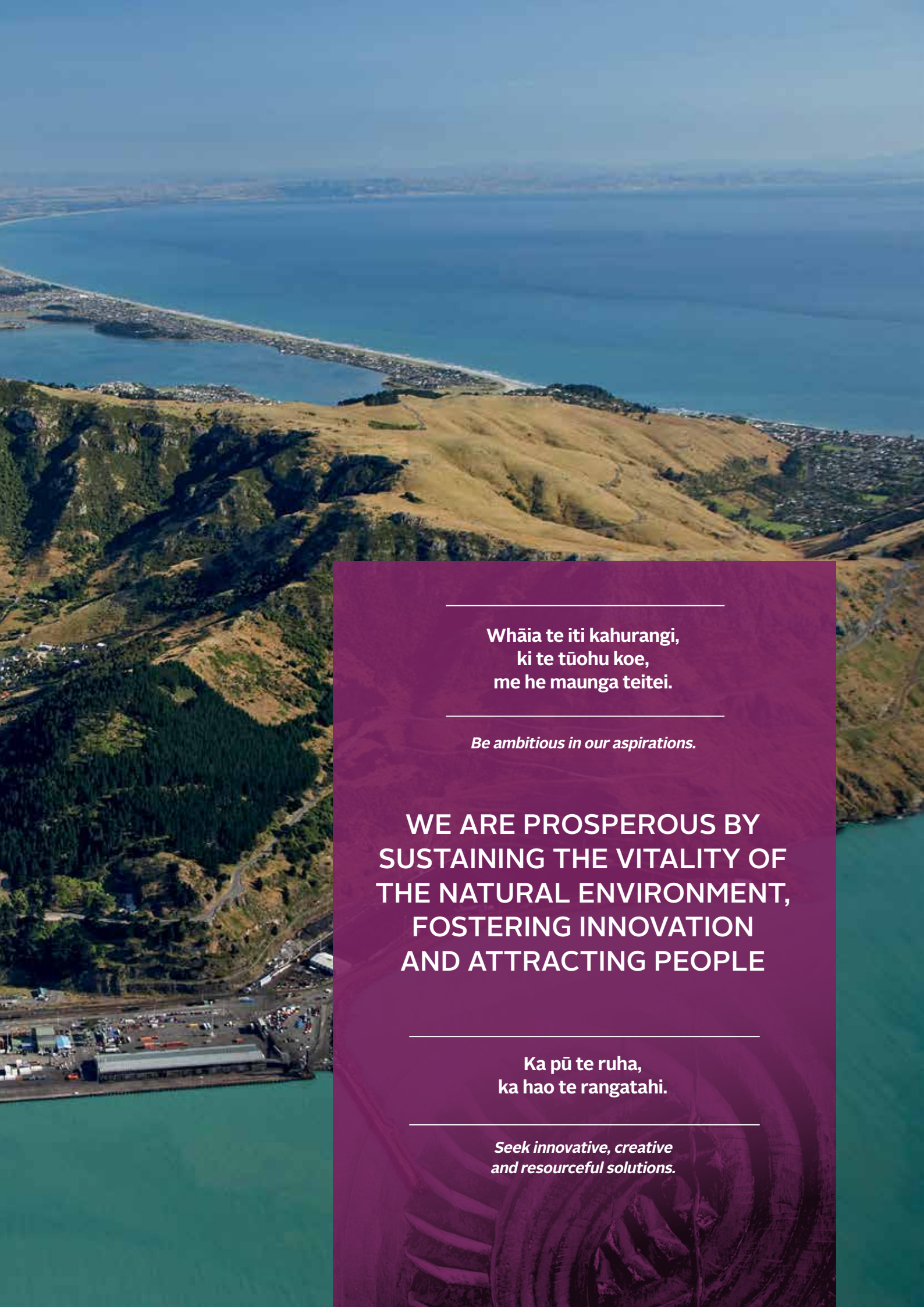
5 Lyttelton Harbour TimeBank



TimeBanks have worked very effectively in some communities and provide a means of both engaging with, and encouraging participation across a community. TimeBanking is a way of trading skills in a community that is not based on money, but rather on time as a measurement tool. TimeBanking can be used by individuals or groups to trade skills and fill in each other's gaps/needs through non-financial means. Project Lyttelton set up New Zealand's first ever TimeBank. Participants have built up a local marketplace of members' skills and abilities, creating a publicly-available community skills inventory. The Lyttelton Harbour TimeBank has been operating for 11 years and boasts more than 700 members.

Goal 3 **PROSPER**





Whāia te iti kahurangi,
ki te tūohu koe,
me he maunga teitei.

Be ambitious in our aspirations.

**WE ARE PROSPEROUS BY
SUSTAINING THE VITALITY OF
THE NATURAL ENVIRONMENT,
FOSTERING INNOVATION
AND ATTRACTING PEOPLE**

Ka pū te ruha,
ka hao te rangatahi.

*Seek innovative, creative
and resourceful solutions.*

PROSPER



WE ARE PROSPEROUS BY SUSTAINING THE VITALITY OF THE NATURAL ENVIRONMENT, FOSTERING INNOVATION AND ATTRACTING PEOPLE

Why this goal is important to resilience in Greater Christchurch

Prosperity covers an array of values and wellbeings including tangible measures, such as material wealth, as well as measures of health and the notion of eco-system service benefits. The resilience of Greater Christchurch's prosperity is based on sustaining our environment, nurturing people to maximise their potential, diversifying our output (particularly by embracing innovation to generate higher value output) and making connections nationally and internationally.

Whānaungatanga remains as important as ever to establish and develop trading partnerships. Our ability to contribute quality products, skills and knowledge in international partnerships can help protect us from global economic changes. At a strategic level, building relationships with global consumers is essential in attracting tourism, people and ideas that support a modern innovative economy.

Attracting new people, while still supporting and nurturing our own people, is essential to rebalance our ageing population and workforce. Investing in community, recreational, environmental and cultural facilities and services, as well as being able to offer good jobs and a safe healthy environment, helps retain existing residents and attract young skilled migrants.

Tohungatanga is at the heart of innovation and our ability to respond to the pace of technological change. The world is experiencing rapid inter-connected technological, societal, environmental and geo-political change which creates both opportunities and challenges for individuals, businesses and cities. Greater Christchurch is well-positioned to respond to these challenges and opportunities with strong education and research infrastructure that can support and foster innovation. Many ideas, businesses and social enterprises were borne out of the Canterbury Earthquake Sequence and provide an important foundation for building prosperity.

Underpinning a prosperous economy is **kaitiakitanga**. Greater Christchurch is situated among a stunning backdrop of hills, mountains, rivers and beaches. Centuries ago, it was this rich, natural abundance that first drew people to our region. Today, our natural environment remains our most important asset, underpinning our regional agricultural economy, attracting visitors and new residents from around the world, and providing essential ecosystem services.

Government agencies and councils support the two guiding principles by working together to build confidence and invest in people and enterprises. Taking steps to safeguard the restoration of our natural environment will support the foundation of our prosperity. Effective relationships with Ngāi Tahu will be founded on supporting growth and diversification of Māori business, improving skills, and collaborating in new ventures.

TOHUNGATANGA

Recognising the value of experience, expertise and the pursuit of knowledge and ideas that will strengthen and grow individuals, whānau and communities.

KAITIAKITANGA

Working strategically to protect the environment for the use, enjoyment and prosperity of present and future generations.

WHĀNAUNGATANGA

Respecting, fostering and maintaining relationships with each other.

Under this goal, three programmes of action are focused on how we will:

- 6 CONNECT INTERNATIONALLY
- 7 FOSTER A CULTURE OF INNOVATION
- 8 SUSTAIN THE VITALITY OF OUR NATURAL ENVIRONMENT

CONNECT INTERNATIONALLY

Building strong connections is essential for the flow of people, ideas and resources into and around Greater Christchurch. We already have good local business networks and support systems, which provide a foundation for further sharing of knowledge and the development of stronger commercial partnerships. Further improvement of the breadth and depth of our international connections can build more integrated trading and research partnerships. Without relationships, our products and opportunities are faceless, unknown and perceptually 'risky' to consumers around the world.




The number of people retiring will increase from 25,000 to 30,000 per year over the next decade. At the same time the proportion of people under 16 is projected to remain static over the next 20 years. While technology may take up some of this gap, employers may face increasing skill shortages and rapidly rising labour costs that may threaten our economic base.

The infrastructure that connects Greater Christchurch to the world is important to all sectors of our economy. Continued investment in our international airport and Lyttelton

Port are important for exporting businesses, tourism and provide opportunities to further leverage international connections.

Resilience Value

Our economy remains strongly influenced by our ability to export primary sector products and resources, and increasingly on tourism. Growing the flow of people, ideas, and resources to realise new opportunities can soften the impact from global economic shocks and maintain Greater Christchurch's relevance and competitiveness into the future.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Councils Business support agencies Private sector Christchurch International Airport Ltd Lyttelton Port Company Telecommunications companies	

Links with actions/programmes of other 100RC network cities



The volume and flow of people, ideas and resources into the city region is essential to growing prosperity in the twenty-first century. Rotterdam is aiming to increase the proportion of highly skilled and educated residents through communication and promotion, removing barriers, and developing an inventory of best practice. Greater Christchurch is eager to learn from the Strong Shoulders – Strong City programme to understand how we can remain relevant and competitive in the future.

ACTION 6A

Build strong national and international connections as foundations to attract people, develop markets and stimulate collaboration.

What will we be doing? Greater Christchurch needs to sell itself and its opportunities to individuals worldwide as a place of high-quality output, research and innovation, and natural beauty. We will develop initiatives that market Greater Christchurch to overseas investors, visitors and workers. We will also provide support to overseas investors and use people to match investors with opportunities.

What outcomes do we expect to see?

A clearer Greater Christchurch story being told overseas that articulates the investment opportunities and the attractions for visitors and talent. Better access to capital will help develop products and services, while international collaborations will be more common. The number of tourists using Christchurch as a gateway to the South Island and New Zealand will continue to increase.

Successful current examples of activities include:

- Ministry of Awesome
- Canterbury International Education Leadership Accord
- Antarctic Support Programme
- Sister Cities

Initial committed projects identified in the Implementation Plan

- Guangdong Strategy
LEAD: Christchurch City Council
Committed (1-2 years)
- Attraction Strategy
LEAD: Canterbury Development Corporation
In Progress (1-2 years)
- Antarctic Strategy
LEAD: Christchurch Antarctic Office
Committed (within 1 years)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 6B

Future proof our physical infrastructure to safeguard our economic performance and overseas trading connections.

What will we be doing? Continued investment in the growth of Lyttelton Port through the Lyttelton Port Recovery Plan, and maximising the numbers of passengers through Christchurch International Airport will help build connections to international markets. The sub-regional roll out of fibre broadband and ongoing dialogue around a South Island international data cable link will better connect our communities and businesses to the world. Beyond these, further evaluation of the risks to our infrastructure networks are important to maintaining our resilience.

What outcomes do we expect to see? Increasing use of our upgraded port and airport capacity as conduits for trade. Growth of business and service activity, particularly in more remote communities, using communication technology. Investment in alternative/backup digital capability.

Successful current examples of activities include:

- Lyttelton Port Recovery Plan
- Christchurch Airport Open Sky Policy

ACTION 6C

Invest in attracting and retaining workers from overseas to supplement our ageing workforce and stimulate new business ideas.

What will we be doing? Retaining the estimated 25,000 workers who came to Christchurch to work on the rebuild, and harnessing their skills in other industries, could be an important economic legacy of the earthquakes. The other key opportunity lies in retaining more of our own young people and attracting others from overseas through our universities and tertiary education institutes, which are building strong links to local businesses.

Actions, initiatives and projects contained within Programmes 1, 2 and 3 of this Plan are important to activities around skills and training. The availability of affordable, quality housing, attractive living environments and a sense of belonging are all important for young people and migrants considering a future in Greater Christchurch.

What outcomes do we expect to see?

Continued post-rebuild interest in migration to Greater Christchurch, higher levels of conversion of work visas to permanent resident visas and citizenship among rebuild workers, stability and decline in the outflow of younger people, further alignment of education and business to build the skills of the future.

Successful current examples of activities include:

- Starts with a Smile

PROSPER

FOSTER A CULTURE OF INNOVATION

Our economy has low wage and productivity rates relative to other cities in Australasia, and is dependent to a great degree on the regional agricultural industry which itself is strongly influenced by volatility in international commodity markets.

With a large, stable talent pool fed by three major tertiary institutions and seven Crown Research Institutes we can broaden the base of our economy, act as a magnet for talent and investment, and help our companies build stronger links into world markets. Developing higher value products is a key opportunity for our economy, as demonstrated by the agricultural research sector.

Creating environments which stimulate and enable innovation

and the commercialisation of ideas is an important part of developing our knowledge and creative sectors. Projects are already emerging in the form of Innovation Hubs which seek to co-locate research, businesses and commercialisation expertise to drive new product development and associated spin-offs.





The pace of change in technology, social trends and product development means that obsolescence is an increasing risk. For our companies, investment is precious and we need to ensure that the decisions we make today build in enough flexibility and adaptability to cope with change.

Social enterprises represent an underdeveloped part of our economy

that can create more sustainable employment, improve the quality of our environments and empower the community and voluntary sector to deliver services better.

Resilience Value

Becoming an urban region that champions imaginative, creative, innovative people can help transform our economy by developing higher value products, processes and new technologies. In turn, these can make us less reliant on supply chains that are forged around selling bulk products onto volatile world markets. Keeping abreast of technological change is also important in keeping our products and places relevant to people – local or international.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Private sector Business support agencies Councils	
Links with actions/programmes of other 100RC network cities			
	Greater Christchurch shares with Norfolk, the goal of closer collaboration across local, university, private and nonprofit sectors. Championing imaginative, creative, innovative people can help transform our economy, and nurturing the city's entrepreneurs is key to achieving this transformation. Norfolk has demonstrated this by their actions to launch a resilience lab and sustain a vibrant business community.		

ACTION 7A

Support an environment that enables innovation and creativity as means to diversify our economy and add value to our production.

What will we be doing? We will collaborate to further develop innovative and creative networks, simplify processes and procedures that stand in the way of commercial development of opportunities, and support research activities that can improve productivity or open new horizons. Showcase events bring people together in relation to particular fields of activity and provide opportunities to share ideas and develop collaborations.

The SMART City concept takes the idea of local innovation precincts further by embedding technology and enabling opportunities for commercial and public sector organisations to collaborate. For government agencies and councils this will allow better choices about resource uses in the urban environment, extend real-time control of city assets and make shared use of commercial systems.

What outcomes do we expect to see? An increasing diversity of employment activities, increases in productivity, national and international scale product development collaborations, emergence of national and international research capabilities, increasing wages/incomes, continued high levels of entrepreneurial activity and small business formation.

Successful current examples of activities include:

- Business Friendly Councils
- EPIC and the Innovation Precinct
- Powerhouse
- FoodSouth
- GreenHouse
- Creative Industries Support Fund
- AgResearch

Initial committed projects identified in the Implementation Plan

- SMART City
LEAD: Christchurch City Council
Committed (1-2 years)
- Regional Innovation Strategy Projects
LEAD: Canterbury Development Corporation
Committed (0-2 years)

(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 7B

Commissioning of research and regular reviews of global and technological trends to maintain awareness of fast moving change.

What will we be doing?

Government agencies, councils and the private sector will collaborate to understand how change will affect how we work, travel, communicate, access services and manage our environment to encourage smart choices and avoid wasteful duplication or inefficiencies in resource use.

What outcomes do we expect to see?

Informed private, public and community sector organisations, willingness to take up and experiment with new ideas, effective future-proof investment in innovation that exploits emergent technologies.

Successful current examples of activities include:

- Canterbury Development Corporation and Canterbury Employers' Chamber of Commerce speaker and events programmes

Initial committed projects identified in the Implementation Plan

Future Ready Programme of Action
LEAD: Christchurch City Council
To Develop (1-3 years)

(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 7C

Support the emergence of the social enterprise sector as partners in driving change in our communities.

What will we be doing? We will support the development of the embryonic social enterprise sector and host the Social Enterprise World Forum in 2017, exposing us to international best practice, stimulating collaboration and building global relationships.

What outcomes do we expect to see? Emergence of social enterprises as positive agents of change, adjustments in traditional markets, evolution of public services into the not-for-profit sector.

Initial committed projects identified in the Implementation Plan

Hosting of the 2017 Social Enterprise World Forum
LEAD: Akina Foundation
In Progress (within 1 year)

(NB. The implementation plan contains other proposed projects and ideas to be developed)

PROSPER

SUSTAIN THE VITALITY OF THE NATURAL ENVIRONMENT

8

Our prosperity is built on the quality of our natural environment. Settlement of the Greater Christchurch by Māori, and subsequently European colonists, relied on the quality and diversity of environmental assets, including fisheries, clean water, productive land and access to the coast. Today these assets remain critical to our economy, providing us with food, water, fibre, and timber, and regulation of climate and air quality.

Mahinga kai is a cornerstone of Ngāi Tahu identity that relates to the hunting and gathering of natural resources which fed whānau and kept them together. Urban development has reduced opportunities to access mahinga kai and impacted the quality of the natural environment from which it is sourced. As with other urban areas, Greater Christchurch relies on food supply chains which are dominated by external sources subject to national and global price and supply issues.

Without our natural environment we would have no prosperity. Over time the quality of our natural environment has deteriorated with loss of indigenous biodiversity, draining of wetlands and waterway pollution. For our natural environment to continue to support us we need to better understand our role within the ecosystem and continually care for the health and life of our surroundings.

Central to this programme is collaboration to align resources, build knowledge and develop consistent approaches which acknowledge the fact that we all have a stake in our environment and that everyone's piece of the environment has value.

Resilience Value

Resilient communities are rooted in resilient environments. Sourcing food locally reduces the cost, carbon footprint and dependency on global markets, supports local food

producers and improves accessibility to healthy food. Greater Christchurch is blessed with a variety of natural assets which are irreplaceable. Just as strong interpersonal relationships can assist in building resilience, close connections with our natural surroundings help us have perspective in facing everyday stresses and can sustain us in times of crisis and need.

Fostering closer connections between people and place will increase our 'urban awareness' of nature's ecosystem services. Strategic identification, protection and enhancement of 'blue' and 'green' corridors will help rebuild nature's resilience, supplement the costs of urban and rural infrastructure (e.g. stormwater management), and buffer us against acute shocks and chronic stresses.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Councils Ngāi Tahu Community groups Voluntary groups Business community Local people Individuals	

Links with actions/programmes of other 100RC network cities



MELBOURNE

Prosperity is not solely a transactional product of commerce economics. A thriving natural environment can return innumerable resilience dividends to a city and its residents. Melbourne has recognised this through their flagship action to develop and protect the city's green canopy through their Metropolitan Urban Forest Strategy. There is likely strong value in learning from the Strategy's principles and case studies to help sustain the vitality of the natural environment throughout Greater Christchurch.

ACTION 8A

Build capacity to source food from our local and urban environments to sustain our people and rediscover our relationships with nature.

What will we be doing? Within our natural environment, particularly our rivers, we will re-evaluate the modifications we have made and the maintenance programmes we use to encourage the restoration of their ecological functions. Beyond this we will develop public and community land, or temporarily lease private land, to develop community gardens, edible forests, rongoā (medicine gardens) and other projects involving local resource production.

What outcomes do we expect to see? Re-emergence of local food supply chains and a local food economy. Wider participation in community gardening that supplements local market gardening and larger-scale agriculture. More community gardens that act as productive and social hubs where people can build relationships and more healthy lifestyles.

Successful current examples of activities include:

- Christchurch Food Resilience Policy
- Whaka-inaka
- Food Resilience Network Action Plan
- Edible Canterbury – campaign to develop interest and collaboration

Initial committed projects identified in the Implementation Plan

Ōtākaro Orchard
LEAD: Food Resilience Network
Committed (1-3 years)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 8B

Develop projects and initiatives that support restoration of indigenous biodiversity across an ecological network.

What will we be doing? We will establish a partnership to drive co-ordinated action across the multitude of environmental interests (funders, regulators, academics, volunteers) across Greater Christchurch. This partnership can be a collective advocate for restoring biodiversity, driving short term activity, and helping identify strategic priorities for a sustainable ecological network.

What outcomes do we expect to see? Co-ordinated restoration and enhancement of indigenous biodiversity in Greater Christchurch to provide a sustainable ecological network and biodiversity corridors. An increase in indigenous biodiversity in Greater Christchurch.

Successful current examples of activities include:

- Mahinga Kai Exemplar

Initial committed projects identified in the Implementation Plan

Develop a Local Biodiversity Partnership
LEAD: Urban Development Strategy Partnership
To Develop (1-3 years)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

6 Ministry of Awesome



Ministry of Awesome connects awesome ideas with the resources to turn them into reality – people, funding, mentors, government entry points and enthusiasm, all with the aim of rippling awesome through our community to strengthen, encourage and inspire. Ministry of Awesome believes that an awesome city is by definition a compelling place to invest, create businesses, seek employment, as well as a place of love, laughter, and delight. Ministry of Awesome offers a variety of services including: start-up/idea mentorship, events, consulting, co-working spaces, and ecosystem development and engagement. It fosters the entrepreneurial ecosystem with regular events and educational workshops, runs two welcoming and inspiring Awesome HQ co-working spaces, and offers one-on-one support through the Start-Up Activator Programme.

One of the ways it has helped to engage, activate, and connect the community in Greater Christchurch is by partnering with Canterbury Development Corporation to create a web-based ecosystem map that connects entrepreneurs and innovators to the resources they need. Whether they are working on an idea, preparing to launch a new business, or seeking support for an existing venture, the Innovation Map can put entrepreneurs in touch with the people they need to talk to. Key partners include the Christchurch City Council and the Rātā Foundation.

6 Starts with a Smile



The Canterbury Employers' Chamber of Commerce campaign encourages the general public to make new migrants feel welcome and to stay by 'starting with a smile.' The campaign encourages Kiwi-born residents of Christchurch to interact with the new arrivals from overseas, many of whom have formed part of the migrant workforce for the Canterbury Rebuild and who will permanently migrate to New Zealand.

This collaborative project includes a wide range of partner and supporting organisations such as the Rātā Foundation, the Canterbury District Health Board, schools, construction companies, law firms, and Christchurch City Council. Marketing material appears on billboards, posters, media and social media, and through a travelling "Smile Couch" which visits different locations to get people from different ethnic backgrounds talking.

6 Christchurch Airport Open Sky Policy

This policy has removed regulatory access issues for foreign carriers to use more of the available air capacity into the South Island through Christchurch International Airport. Singapore Airlines, Air New Zealand, Virgin and Jetstar have increased their services or are using larger aircraft, while Qantas, China Airlines and China Southern are running new services. Passenger numbers now exceed pre-earthquake levels.

7 EPIC



EPIC recognises that “innovation is a major driver of economic growth in Canterbury, helping create high value jobs, pay for local services and raise our region’s quality of life.” The EPIC (Sanctuary) building was established to house local Canterbury businesses displaced by the Canterbury earthquakes. EPIC was the first commercial venture back into the Central City red zone, following the Re:Start Mall, and was a finalist in the 2013 Champions of Canterbury Business Awards. EPIC now has 30 information and communications technologies (ICT)/high-tech focused companies under its roof, and is home for between 250–300 full-time workers engaging in active collaboration with each other every day.

7 powerHouse



While great value is stored in the knowledge held by research-based organisations, it is internationally recognised that the process of transforming academic knowledge into successful business models, commercial operations and sales is extremely challenging. powerHouse is a company based in Christchurch that has developed a unique model resulting in a high rate of commercial “spin-out” companies from academic institutions.

In New Zealand last year, the 100 high-value Technology Investment Network manufacturing and technology companies (TIN100), some of which are based in Canterbury, grew by 5% to record revenues of NZ\$7 billion. Exports grew by 4% to over NZ\$5 billion. powerHouse’s purpose is to create more high-value technology companies like these. Canterbury Development Corporation was an establishment shareholder of powerHouse when the company was formed in 2008 to meet an identified market failure at that time, to provide a source of capital for intellectual property-based, early-stage ventures.

8 Edible Canterbury



Edible Canterbury evolved partly as a result of the Canterbury earthquakes when more people became aware both of how insecure our current food system is, and of the incredible opportunity presented through the availability of good land to grow more food locally.

A food resilience hui was held at the University of Canterbury in 2013, co-hosted by Soil and Health Canterbury and the Rangiora Earthquake Express. This resulted in a Food Resilience Network, which in 2014 established Edible Canterbury.

The agencies involved in Edible Canterbury include those focused on social, cultural and ecological issues, social enterprise, public health, and local government, enabling us to examine the question of food availability from a wide range of perspectives.

8 Mahinga Kai Exemplar Project

Te Rūnanga o Ngāi Tahu, Ngāi Tūāhuriri, the Avon Ōtākaro Network and the Canterbury Waterways Research Centre are working together to develop an exemplar project for the protection and enhancement of mahinga kai values along the Avon River/Ōtākaro corridor at Anzac Drive Reserve.



Mahinga kai is the Ngāi Tahu term for foods and other natural resources, the places where those resources are found, and the philosophies and practices that surround them. The abundance of mahinga kai is indicative of kaitiakitanga (good stewardship, sustainable management) values in action, and the effective collaboration of local community leaders, groups and individuals to act in respect of their environment.

The Mahinga Kai Exemplar project aims to increase understanding of mahinga kai and kaitiakitanga values along the river in the hope that others adopt these philosophies and practices in their own community projects and backyards. Relationships have been developed with schools, Canterbury University, community members and businesses, NGOs, politicians and local and central government agencies.

Project leaders want to bring local people together to help restore the natural heritage values of their neighbourhood and, in the process, help create a healthy, safe and welcoming environment that provides opportunities for education, learning, physical and spiritual sustenance.

8 Whaka-Inaka : Causing Whitebait

Inaka (*Galaxias maculatus*) is the South Island dialect for inanga (whitebait). It is one of the five whitebait species in NZ and the only one found in the Ōtākaro/Avon River. Whitebaiting in heartland New Zealand is one of our quintessentially “kiwi” pastimes. Year in, year out, whitebaiting draws fishers and their families to river mouths and has clear social, cultural, recreational and economic wellbeing outcomes for whānau and families throughout the country.



© EOS Ecology, www.eosecology.co.nz

The Whaka-Inaka : Causing Whitebait project was initiated in February 2016 in recognition of the degraded state of inaka habitat in Ōtautahi/Christchurch, and a strong desire to take a lead in promoting an improvement to this situation. The project aims ultimately to increase the number of inaka in local rivers, believing that this will have significant wellbeing outcomes for local whānau and families.

Our strategy has been to build greater awareness and understanding of the habitat needs of inaka, which require dense vegetation and shade along the margins of the river on the high ‘spring’ tides of late summer and autumn. “By laying their eggs in vegetation along the banks during the highest ‘spring’ tides, inaka can keep their eggs safe from predators in the river,” says Dr. Mike Hickford, research biologist at the University of Canterbury (Marine Ecology Research Group), and project partner for Whaka Inaka. “This however makes

them more vulnerable to changes to the riverbanks where they spawn. At the end of the day, if there is no habitat, then there will be no eggs and ultimately no fish.”

In February of this year, 192 straw bales were installed at 34 sites along the lower reaches of the Ōpāwaho/Heathcote River and around Lake Kate Sheppard on the Ōtākaro/Avon River. “The bales act like the Hotel Hilton for inaka,” says



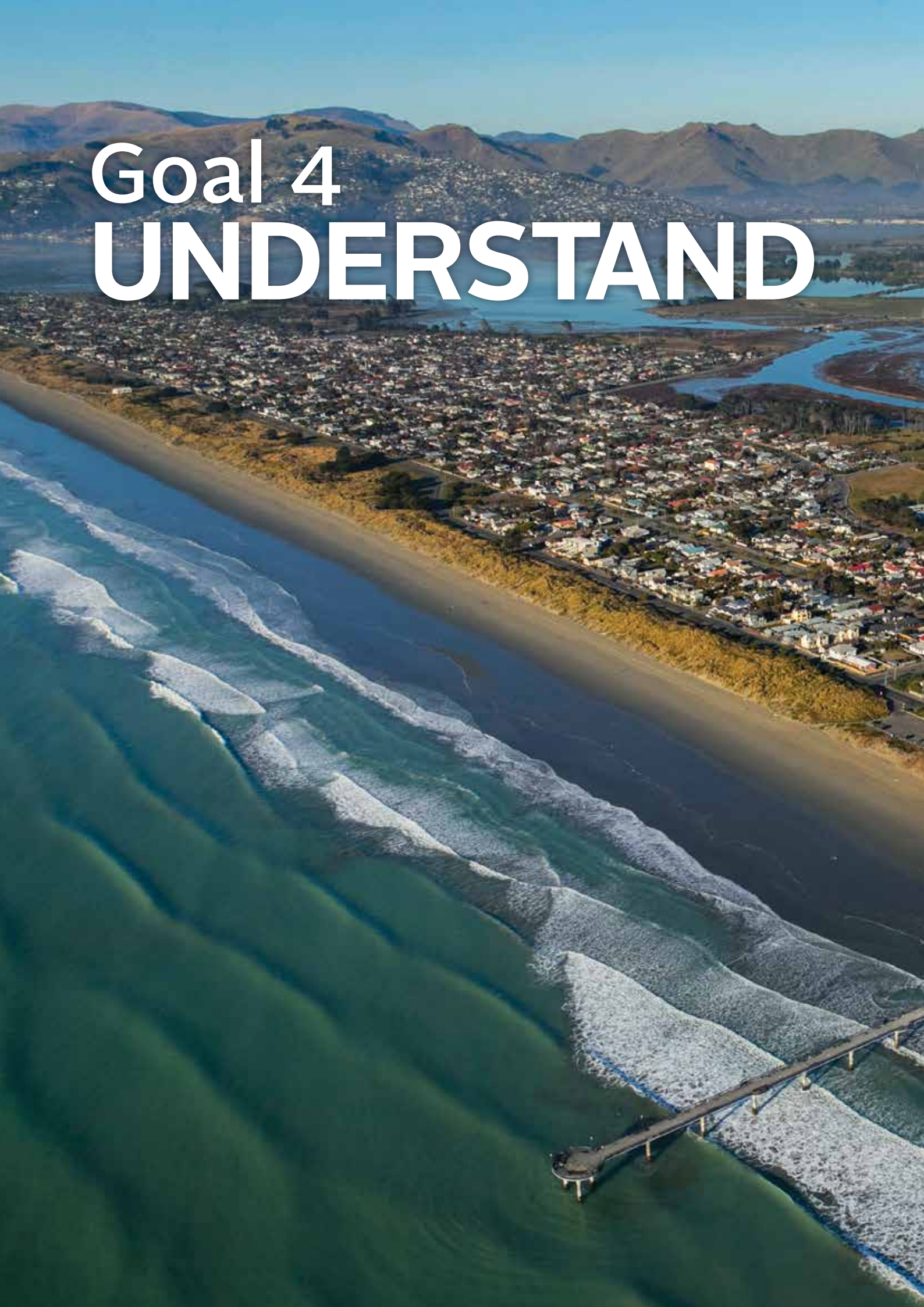
project leader and principal scientist at EOS Ecology, Shelley McMurtrie. “They provide much-needed spawning habitat for inaka and effectively highlight where they prefer to lay their eggs if the right conditions were present. Our monitoring and research will be able to paint a clear picture to the community and Council where whitebait spawn. We have monitored the bales for egg presence and abundance from February to June, and now have a much clearer understanding of where whitebait would spawn.”

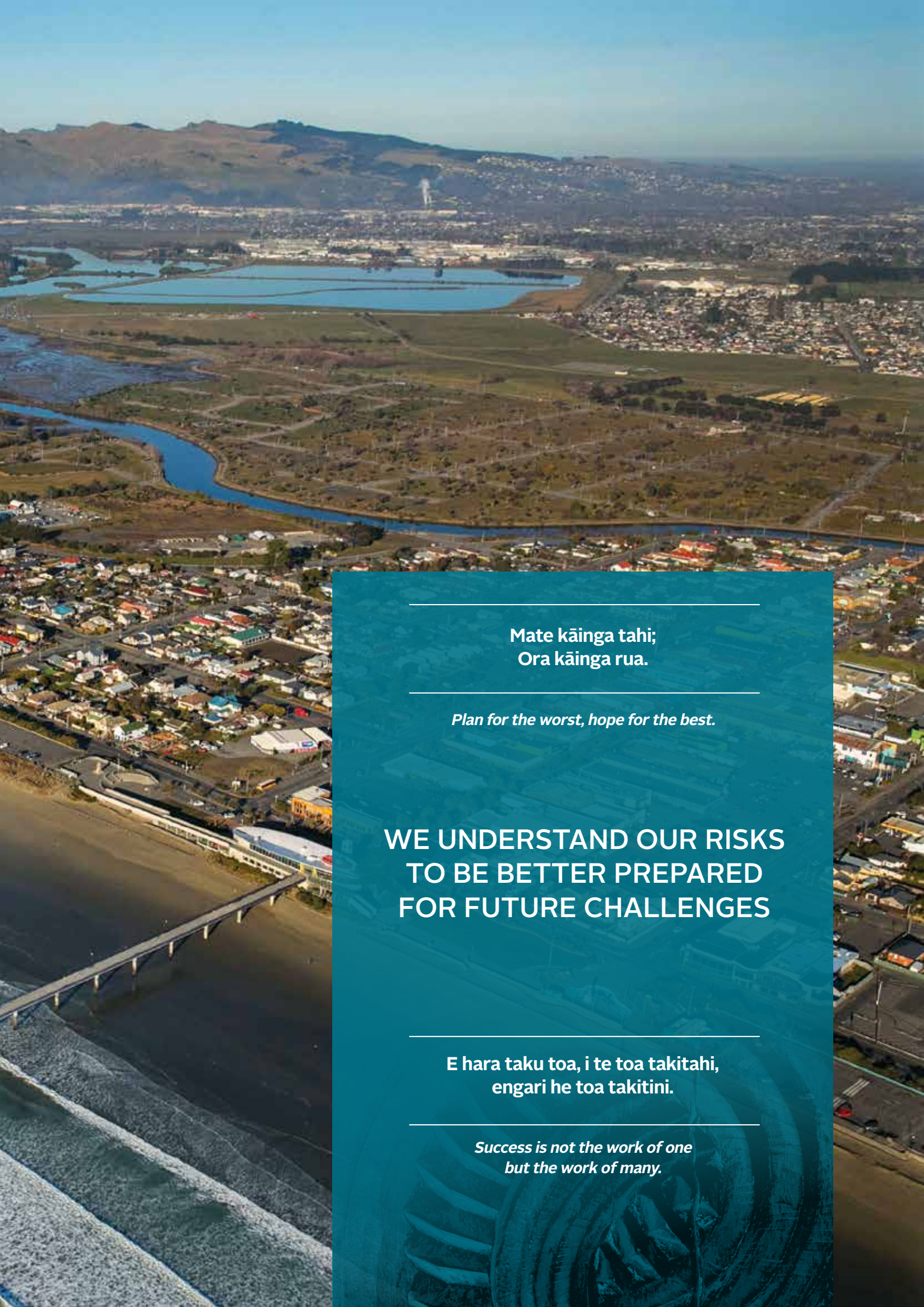
“The project is a model of collaboration between science, education, iwi, business, government and non-government organisations,” says Te Marino Lenihan, a customary fisheries representative for Ngāi Tūāhuriri and Whaka-Inaka project partner. “One of the greatest outcomes of our project is the number of local schools that have helped us monitor the straw bales every week from February to June. Our children are having fun in the field and learning by doing. I see them as the next generation of river guardians, and hope that our legacy for them is a river full of fish. Just imagine how well-off our city will be when that happens.”



Photos at left © EOS Ecology, www.eosecology.co.nz

Goal 4 **UNDERSTAND**





Mate kāinga tahi;
Ora kāinga rua.

Plan for the worst, hope for the best.

**WE UNDERSTAND OUR RISKS
TO BE BETTER PREPARED
FOR FUTURE CHALLENGES**

E hara taku toa, i te toa takitahi,
engari he toa takitini.

*Success is not the work of one
but the work of many.*

UNDERSTAND



WE UNDERSTAND OUR RISKS TO BE BETTER PREPARED FOR FUTURE CHALLENGES

Why this goal is important to resilience in Greater Christchurch

Following the Canterbury earthquakes, individuals, communities and agencies in Greater Christchurch have an improved understanding of the need to be prepared for emergencies, as well as the many impacts of earthquakes. The key to planning for the future resilience of the region is to help people draw on consistent knowledge about other risks and hazards that they can understand and relate to.

Understanding the risk from disaster is a worldwide issue. In 2013 the UN Secretary-General Ban Ki-moon warned that economic losses from disasters were out of control. The direct global financial costs of disasters from 2000 to 2013 amounted to an estimated US\$2.5 trillion. As a response, the 2015 World Conference on Disaster Risk Reduction approved the Sendai Framework which has four priorities for action to prevent and reduce exposure to disaster risks – understanding, managing/avoiding, mitigating and preparing.

For Greater Christchurch, **tohungatanga** is essential as a basis to be better prepared for future challenges, while **rangatiratanga** is needed to help our communities make complex decisions about how we prepare for the future. Strong leadership is needed to help us balance our responses, which will need to consider risk reduction, risk transfer and risk acceptance.

To truly understand and prepare for future risks, we will need to make informed decisions about our vulnerabilities, how much we are prepared to pay as communities and households to safeguard and offset those risks, and whether we can live with the residual risks. This approach applies to the risks of natural hazards, financial decisions, travel, sporting activities and even everyday activities like driving a car or crossing the road.

These decisions inevitably cross over into **kaitiakitanga** – how our generation makes important calls on the future use of land and resources, and safeguards our lives and livelihoods.

In addressing the two guiding principles, government agencies and councils have a central leadership role in developing a shared platform of knowledge and understanding. People need to know the risks and be involved in decision-making on responses that affect them and future generations. Effective relationships with Ngāi Tahu will be founded on joint decision-making around risk that takes a wider cultural perspective on the relationships between people and places, embedding the role of stewardship during our lifetimes.

TOHUNGATANGA

Recognising the value of experience, expertise and the pursuit of knowledge and ideas that will strengthen and grow individuals, whānau and communities.

KAITIAKITANGA

Working strategically to protect the environment for the use, enjoyment and prosperity of present and future generations.

RANGATIRATANGA

Leadership through collaboration, maintaining a high degree of personal integrity and ethical behaviour in all actions and decisions.

Under this goal, three programmes of action are focused on how we will:

- 9 IMPROVE COMMUNITY UNDERSTANDING AND ACCEPTANCE OF RISK
- 10 MANAGE THE RISKS WE FACE
- 11 SECURE OUR FUTURE IN THE EASTERN PARTS OF CHRISTCHURCH



IMPROVE COMMUNITY UNDERSTANDING AND ACCEPTANCE OF RISK

International debate around climate change over the last 30 years has demonstrated that complex science, vested interests, inconsistent messaging from governments and technical experts can combine to dilute debate about necessary change.

Greater Christchurch faces a range of risks that we collectively need to understand and make decisions about. Better conversations with the community to improve understanding and acceptance of risk is a key component of community resilience planning.

Every day we live with risks – when we cross the road, when we use electrical appliances, when we participate in sports and recreational pursuits. Risk does not stop us doing things but, consciously or sub-consciously, we consider how we go about those activities to minimise the risks involved. In facing decisions about how we respond to the threats and hazards that face our communities, people need to understand the available

information and then come to their own and collective conclusions about levels of risk they are prepared to accept and potentially take steps that lessen risks.

This level of understanding and acceptance is essential to better inform decisions across all types of risk – what is the expected impact, consequence, and the likelihood of that happening? Armed with this understanding people can then decide what they are willing to accept and the steps they need to make to minimise the exposure to effects, or the level of impact they can absorb or offset by other means.

The use of quantitative risk assessment in land use planning and resilience needs considerable discussion and community involvement. This approach has been applied in the Port Hills since the earthquakes. Even when the theoretical levels of risk were published, most people were prepared to accept the risk. Perhaps this was

because, intuitively, people recognised that such a low probability was “almost incredible”: theoretically possible but not expected to occur.

Resilience Value

By building capacity to understand and accept risk, everyone will have the same knowledge of the stresses and shocks that we are likely to face. Enabling engagement between the community and councils in responding to managing risk will help build trust between the community and decision-makers. Understanding risk is more than natural hazard risk, it includes the full spectrum of shocks and stresses, including financial, organisational, biological and technological threats, as well as opportunities for Greater Christchurch to achieve its aspirational goals, in particular prosperity. Improved understanding and acceptance of risk will improve the ability to manage risk and decisions around this, empowering individuals to make decisions.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Everyone	

Links with actions/programmes of other 100RC network cities

By building capacity to understand and accept risk, we can collectively build better knowledge of the stresses and shocks that we are likely to face, and in turn, be better prepared to face them. Medellín is running a community risk management pilot project aimed at social mapping of risk, early warning networks, co-ordination and information sharing, as well as prevention and mitigation strategies. Learnings and outcomes from the pilot would be valuable in helping Greater Christchurch communities improve their understanding and acceptance of risk.

ACTION 9A

Develop and agree objective risk evidence and definitions in a non-technical language as starting points to engage the community about risks they face.

What will we be doing? Our councils and government agencies will continue to work together to develop and gather an objective base of evidence about the risks we face, being open about the origin of data and assumptions that are used. In developing this resource, methodologies, data collection and analysis will be subject to robust peer review and challenge. A non-technical community focused review will take perspectives from a broad community viewpoint to frame subsequent debate using widely-understood language.

What outcomes do we expect to see? Accepted baseline sources of information about areas of risk that councils and Central Government can draw from; community confidence in and a firm understanding of risk; recognition of different perspectives about levels of risk acceptance.

Successful current examples of activities include:

- Canterbury Geotechnical Database

Initial committed projects identified in the Implementation Plan

Canterbury Natural Hazard Risk Reduction Group
LEAD: Canterbury Regional Council
Ongoing



(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 9B

Openly engage the community to explore risk scenarios as a foundation for dialogue about risk reduction.

What will we be doing? We will engage with communities so that people can understand their vulnerability to shocks and stresses, showing people realistic scenarios of how particular hazards might affect them. This information will be confronting and may cause anxiety, but only with such information can households and communities have meaningful discussions around risk management and what risk acceptance actually means.

What outcomes do we expect to see? Open and transparent engagement with people using understandable information to help them make decisions and balance the consequences of action or inaction in relation to risk management (explored under Programme 10) and preparedness and resilience.

Successful current examples of activities include:

- Dudley Creek and Flockton Basin Flood Mitigation Schemes

UNDERSTAND

MANAGE THE RISKS WE FACE

Existing and emerging threats impose risks on our communities, our infrastructure, our economy and our environment. Having understood these threats, making decisions about how we can manage risk can be challenging. Many decisions will be personal – threats to life, job security, level of stress. For others, particularly organisations, the main approaches used involve managing the financial risk of uncertainty. Spending money on protective mechanisms (from engineering works to stockpiling vaccines) to reduce the consequences of an event is a cost. For unlikely events this can be very expensive and may sit lower in lists of priorities for funding. But, for higher frequency events where the disruption and recovery costs are greater, a more balanced economic case can be made. This influences how

much we avoid or adapt to mitigate to protect ourselves.

There is uncertainty around the availability and cost of natural disaster insurance in the future. Following the earthquakes insurance policies have changed which may result in lower rates of cover (in California only 10% of residential properties have earthquake cover) and incomplete cover which will have consequential implications for recovery from future events.

Across the range of risks that people and communities in Greater Christchurch face, the steps we can take to manage risk are important to how we live our lives, go about our business and plan for the future. Where risks remain, building resilience into our homes, business and urban

areas is the way we can be prepared to face challenges and change.

Resilience Value

Planning to avoid, manage and mitigate risks from threats and hazards helps us maintain a stable economy, thriving communities and healthy environments. We cannot eliminate all the risks we face and must accept that in some cases, responses to future events might compromise the value we place on our current quality of life. Transferring risk and being prepared for the impact of an event, forecasted or unexpected, sudden or gradual, is the key to resilience. If these tools cannot reduce risk to acceptable levels then we need to make bold decisions for our future to avoid loss of life and livelihoods.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Councils Ngāi Tahu Community sector Business support groups Private sector Insurance industry Technical specialists	

Links with actions/programmes of other 100RC network cities

	<p>We cannot eliminate all the risks we face, and where tools cannot reduce risk to acceptable levels we must invest effectively to address threats and hazards. New Orleans has developed a program to assist property owners make improvements through low-interest loans and tax incentives. Christchurch's shared storm and flood risks mean there is strong interest in learning from successful storm resilience improvements in New Orleans to effectively manage risk.</p>
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ACTION 10A

Develop a risk reduction framework to help us invest efficiently in interventions around our threats and hazards.

What will we be doing? Led by councils and government agencies, we will develop risk reduction projects and programmes to feed into conversations with affected communities that highlight the compromises involved in managing risk. Stop-banks, stormwater pumping, seismic land strengthening and flood storage basins are examples where innovation continues to evolve, and there are opportunities to trial projects. We will draw knowledge from international experience including cities within the 100RC network. Where necessary, councils will look to put in place urban design responses that can be included today to cope with tomorrow, and regulation that ensures we avoid particular land uses in vulnerable locations, and standards to improve the safety and adaptability of structures will be pursued.

What outcomes do we expect to see? Well-framed risk reduction projects and initiatives are developed and proposed to help communities understand the options available to offset risk. In extreme cases, the range of options available may not be cost-effective to implement.

Successful current examples of activities include:

- Establishment of District Plan standards around minimum floor heights for new buildings in flood-prone areas
- Increase in Building Code seismic standards
- Dudley Creek and Flockton Basin Flood Mitigation Schemes

ACTION 10B

Review the role and use of insurance as a tool for risk transfer.

What will we be doing? With central government and council leadership, we will work together to inform the right balance of risk mitigation and risk transfer that keeps insurance premiums in an affordable range. Information and education about the value and types of insurance is also important to help people understand the extent to which they can protect their interests. This is particularly important for the small business sector.

What outcomes do we expect to see? The ongoing availability of understandable and affordable insurance products that give people clear understanding of how their interests are protected. In areas of higher risk, premiums may increase but insurance products with exclusions may still be appropriate for those able to accept particular risks.

Successful current examples of activities include:

- covered.org.nz – insurance industry education resource for consumers

Initial committed projects identified in the Implementation Plan

Resilience Scorecards
LEAD: Councils
To Develop (1-2 years)



(NB. The implementation plan contains other proposed projects and ideas to be developed)

ACTION 10C

Support community preparedness in response to acceptance of risk.

What will we be doing? We will encourage communities to get involved with planning for how they can be more resilient to respond to disruptive events. Civil Defence will continue to provide advice, while information and updates to recommendations on emergency supplies will continue to be issued to make whānau and businesses more resilient and adaptable. There are links to the neighbourhood and community building actions in Programme 1 (Connect People) and Programme 4 (Build Participation).

What outcomes do we expect to see? Communities understand the consequences of various events and know what to do whatever the event, including drawing on assistance from their immediate community and insurers.

Successful current examples of activities include:

- Selwyn gets ready
- Canterbury Civil Defence and Emergency Management (CDEM)
- Collaboration for Business Resilience

Initial committed projects identified in the Implementation Plan

Community Level Resilience Planning
LEAD: Councils and Civil Defence
Ongoing



(NB. The implementation plan contains other proposed projects and ideas to be developed)

UNDERSTAND

RISK TERMINOLOGY

Risk reduction draws together the measures we can take to limit our exposure to hazards or the impact of hazards should they affect us. There are three sub-strategies within this broad area.



Risk transfer is a form of risk reduction mitigation (typically in the form of insurance or contingency funding) that addresses the aftermath of an event rather than addressing the cause, but is important in underpinning our resilience.

The New Zealand Earthquake Commission (EQC) scheme underpins the availability of affordable insurance for residential property and assets in New Zealand. As a result around 70% of losses from the major earthquake events of the Canterbury Earthquake Series were covered. This compares to 20-30% in Japanese and Chilean earthquake events in 2010 and 2011, and 35% for the last major US earthquake at Northridge in 1994. Costed premiums will reflect the level of risk in the knowledge that losses suffered will be equivalently compensated.

Risk acceptance is a state of being that influences the level of risk reduction and risk transfer, and ultimately the level of preparedness, we are willing to invest in and it can change as we use other responses.

Preparedness describes the everyday steps we can take to bounce back from the impacts of an event in the knowledge that risk reduction cannot insulate us from all magnitudes of hazards, and that insurance will not be able to help us during and in the immediate aftermath of an event.

SECURING OUR FUTURE IN THE EASTERN PARTS OF CHRISTCHURCH

The population of Eastern Christchurch faces a range of challenging socio-economic issues including poorer educational attainment, below average incomes, higher levels of people on state benefits and poor quality social housing. The 2011 earthquake hit this area the hardest. Ground shaking led to widespread liquefaction and subsidence resulting in 6.3 square kilometres becoming so damaged that the government had to step in and buy nearly 7,300 homes.

Securing our future in the eastern parts of Christchurch will require a

multi-party collaboration to resolve a range of different issues that include social and economic problems, future risks from climate change, particularly sea level rise and the reuse of earthquake damaged land, and water management. Our response needs to consider the cost as well as the potential benefits for the community.

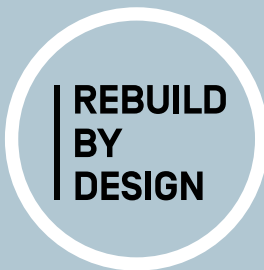
Resilience Value

This programme represents a meeting point of all the goals and programmes contained within the Resilient Greater Christchurch Plan. The future of Eastern Christchurch will be founded

upon a clear understanding of the risks that the area faces and from there a participative process can best determine how hazards are managed, new prosperity is built and how existing and new communities are connected.

Key strands of activity are summarised under each of the four themes of narrative below around which this plan's goals are framed.

Challenge/Opportunity (see pages 32–34)	Level of Resilience Building (see page 37)	Actors and Networks	Related Programmes
		Government agencies Regenerate Christchurch Councils Ngāi Tahu Community sector Business support groups Private sector Insurance industry Technical specialists	



Rebuild by Design provides innovative ways to connect design, funding, and implementation strategies for a more resilient future. Having set standards in post disaster planning following Hurricane Sandy, Rebuild by Design brings together global and local expertise, regional leadership and local vision to tackle multidimensional problems that harness and cultivate strong stakeholder support and government leadership to create processes that drive systemic change transforming our built environment in ways that are design-driven and equitable.

<http://www.rebuildbydesign.org/>

UNDERSTAND

PROFILE: EASTERN CHRISTCHURCH

Eastern Christchurch is a substantial area of the city lying between the Central City and the coast. These pages highlight some of the threats and challenges that the area faces.

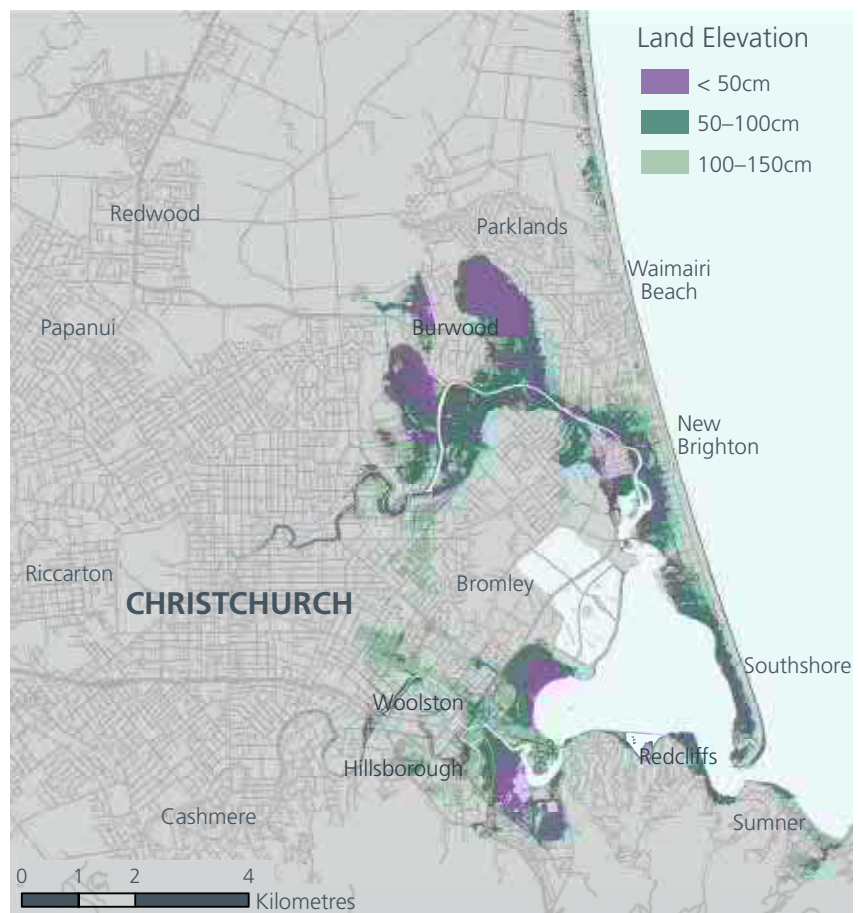
	East (as defined on map)	Christchurch City
Area Population	62,500	(20%)
% Māori and Pacific Populations	29% / 34%	8% / 3%
Number of most socially deprived* people	23,500	29,375
Average House Price	NZ\$335,000	NZ\$445,000
Households earning under	NZ\$100,000	84%
	NZ\$50,000	73%
		48%
% households renting their home	43%	35%
% of households drawing state financial support	28.5%	17%
Qualifications	% without qualifications	29%
	% university level qualifications	20%
		12%
% Households with internet access	70%	21%
		79%

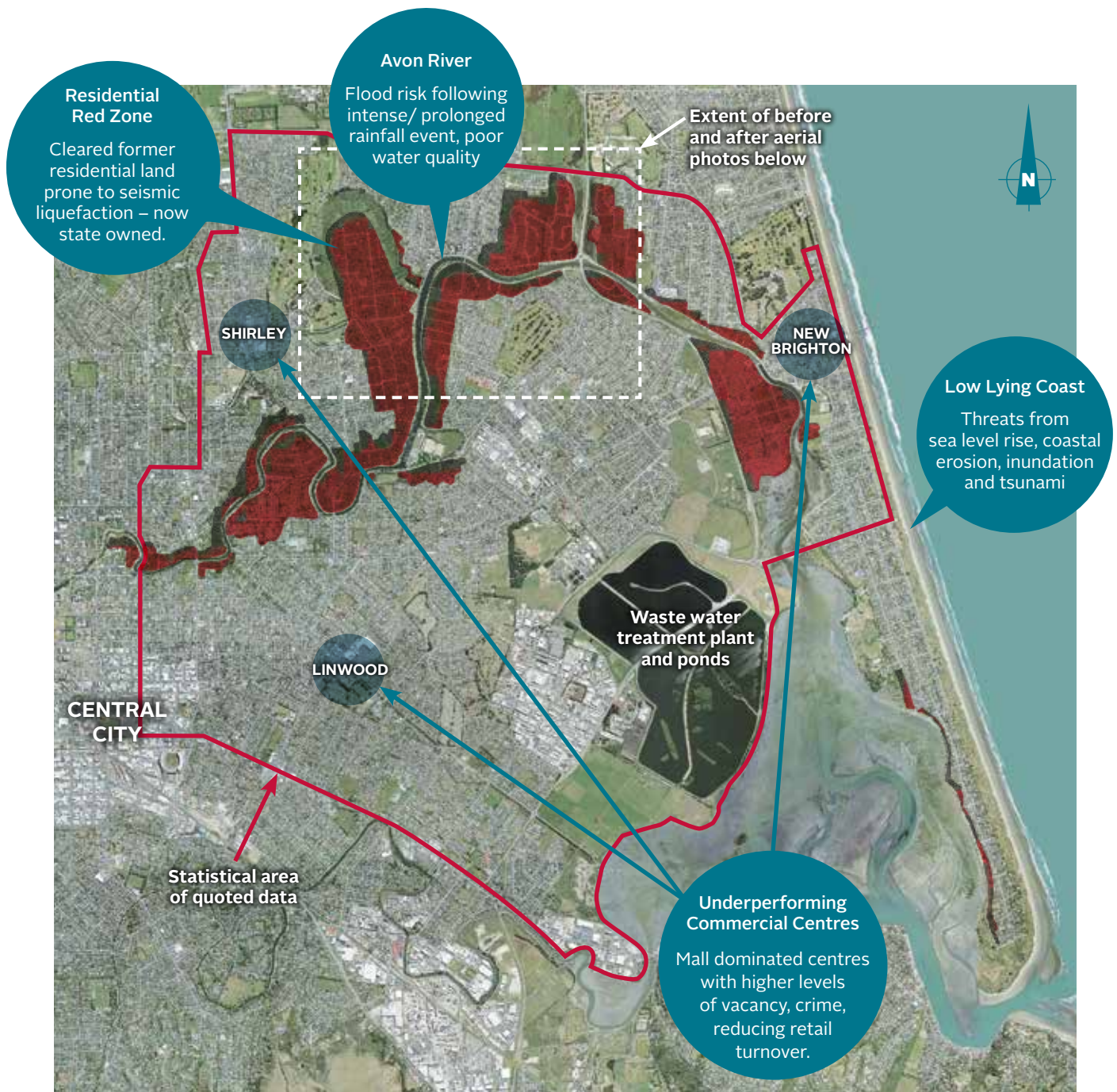
* Defined as falling within the lowest 20% of the New Zealand population according to the 2013 indices of multiple deprivation (*University of Otago*).

LAND ELEVATION

The elevation bands shown on the adjacent map are not hazard zones and should not be interpreted as such. This mapping may aid in identifying areas at risk as the sea rises. Local characteristics, such as coastal landforms or transport corridor embankments will influence the extent of areas at risk.

Source: *Preparing New Zealand for rising seas: Certainty and Uncertainty*. Parliamentary Commissioner for the Environment (November 2015).





CHANGE IN THE RESIDENTIAL RED ZONE 2011–2016



UNDERSTAND

Towards Regeneration

Since 2011 the worst affected areas in eastern Christchurch have been the subject of intervention by the Government. Homes on damaged land have been bought up and demolished leaving once flourishing riverside communities as vacant land with roads and garden trees being the only residual features.

Groups within the community have already taken the initiative in developing ideas for the future of these areas. These include:

- opportunities to integrate the river(s) and the ocean into the urban environment as part of a strategy to adapt to sea level rise
- large scale visitor attractions/ water-based sporting venues
- community-led plans and place-making initiatives
- resilience demonstration projects

In 2015, the Government and the Mayor committed to a new regeneration phase in for the city where more collaborative planning for the future would focus on building back places for people rather than just buildings. To drive this a new entity, Regenerate Christchurch, was created in April 2016.

Reflecting this context, actions under this programme are the least developed in this plan. During 2016/17, the newly formed Regenerate Christchurch will set out its initial list of priorities and projects which the living Implementation Plan (at the back of this document) will pick up.

Consistency and collaboration across all tiers of government

The governance structure put in place for Regenerate Christchurch is consistent with this plan's principle around driving **consistency and collaboration across tiers of government.**



Regenerate Christchurch is a body established by the Greater Christchurch Regeneration Act 2016 and jointly funded by the Crown and Christchurch City Council.

Overseen by an appointed board, it has a lifespan of five years, following which it may become a wholly City Council entity. Its purpose is to support a vibrant, thriving Christchurch that has economic, social and lifestyle opportunities for residents, businesses visitors, investors and developers.

Its objectives are to lead the regeneration of Christchurch City by engaging effectively with communities, stakeholders and decision-makers to achieve its purpose. In doing so it will work collaboratively with other organisations to achieve regeneration outcomes.

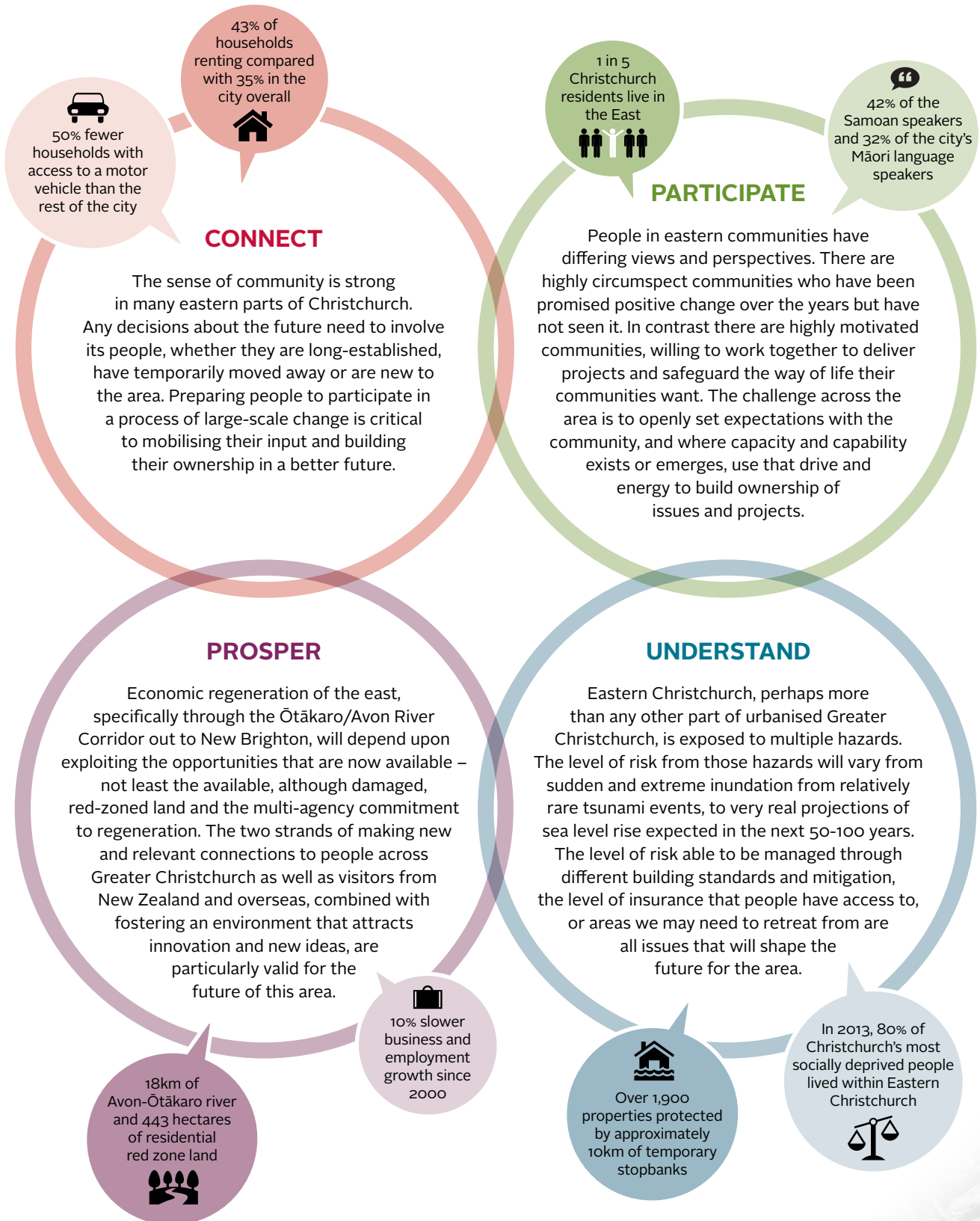
Its functions are to develop visions, strategies and Regeneration Plans to assist in achieving regeneration. It will provide advice to the Minister on planning instruments and changes, be an independent source of advice on regeneration activities to the City Council and the Minister and also facilitate increased investment. Regenerate Christchurch will also comment on regeneration outcomes, interventions and the contributions of Ōtākaro Limited and Development Christchurch Limited, giving them (and other organisations) advice on regeneration outcomes being sought.

A meaningful Treaty partnership with Ngāi Tahu

The future of Eastern Christchurch is a key area of focus for Papatipu Runanga. The majority of residential red zone land within Greater Christchurch sits beside waterways that have significant cultural value for local Ngāi Tahu. This programme therefore sits at the heart of the principle of **building a meaningful Treaty partnership with Ngāi Tahu.**

One longstanding issue for Papatipu Runanga relates to the taking of the **Te Ihutai (Māori Reserve 900)** fishing easement in 1956 in order to build the city's waste water treatment facility (see New Zealand Gazette, 1956, pp 364, 1179). The reserve and its fishery was considered so valuable that the owners would not accept the money offered by the Crown in consideration for its loss. The natural resources of Christchurch's wetlands and waterways were once so rich that there were seven significant pre-European settlements scattered strategically along the Ōtākaro/Avon River and its tributaries. The development of the Christchurch Residential Redzone presents an unprecedented opportunity to protect and enhance these habitats and species such that they may once again feed local communities and reinforce this 'cornerstone' of local culture.

How will our Resilience Goals influence this programme?



UNDERSTAND

9 Canterbury Natural Hazard Risk Reduction Group

The Canterbury Natural Hazard Risk Reduction Group was formed in 2016 to develop and implement a regional approach to managing natural hazard risk in Canterbury. In developing a regional approach to managing natural hazard risks, the Group will consider matters around facilitating communication on hazards, co-ordination of information-sharing, exploring opportunities to reduce hazard risk and identification of tools that can result in reduction of hazards in Canterbury.

10 Collaboration for Business Resilience

Following a disaster, businesses need to stay in business and keep contributing to the economic and social wellbeing of their local communities. Once this is achieved, they may also be able to assist the wider community's recovery by providing goods, services, facilities, skills or other resources. As the Canterbury recovery has progressed, the many different ways businesses can contribute have become evident.



Resilient New Zealand was formed by a group of like-minded organisations who want to help make New Zealand more resilient to natural disasters. Members of Resilient New Zealand include: BECA, BNZ, IAG, New Zealand Red Cross, and VODAFONE. Resilient New Zealand aims to encourage businesses to embed resilience in their existing planning structures and practices so they are better able to contribute to recovery. Resilient New Zealand is also aiming to work with central and local government to develop governance frameworks that enable the capabilities, resources and people of businesses to be better utilised in a recovery.

Resilient New Zealand's first project, *Contributing More: Improving the Role of Business in Recovery* (2015), looks at how businesses can:

- improve their own resilience and contribute towards community resilience
- play a greater leadership role in recovery
- collaborate with other parties to better enable recovery.

The report draws on discussions with more than 50 business, central and local government, and community leaders involved in the Canterbury earthquake recovery and highlights a number of lessons on business resilience, leadership in recovery and collaboration. It also includes recommendations to both the public and private sector on how they can help facilitate businesses contributing more to future natural disaster recoveries. Initially, the report will be used to engage with a range of stakeholders to publicise their findings and to promote their recommendations. Where possible, Resilient New Zealand would like to work in partnership with organisations to implement their recommendations.



10 Canterbury Civil Defence Emergency Management (CDEM) Group

Canterbury CDEM is a partnership of local authorities, emergency services and other organisations tasked with ensuring the effective delivery of civil defence emergency management in Canterbury. As well as preparing and co-ordinating responses, CDEM is tasked with preparing a Group Management Plan for the region which includes monitoring and evaluation of risks and hazards as well as delivering information and education to the public.

11 Ōpawahō Heathcote River Network

Ōpawahō Heathcote River Network is working to enhance and restore the whole of Ōpawahō-Heathcote River as an ecologically healthy river that people take pride in, enjoy and care for. Since its inception in 2015, the network has worked to connect stakeholders up and down the river to work toward this goal. The network has established sound relationships with other community groups, and has received support from Environment Canterbury and Christchurch City Council. In May 2016 the network co-ordinated (along with the Ihutai Estuary Trust and the Ōtākaro-Avon River Network) the first whole-of-river clean-up for the entire catchment. Current mid-term activities are focused on building the strength and capacity of the network itself (e.g. developing a charter and a website), mapping potential walkways, and supporting potential ecological restoration projects. This initiative was supported by the LinC (Leadership in Communities) Project in 2015.



Let's get to work! KITE HOE





KI TE HOE – LET’S GET TO WORK!

with Chief Resilience Officer Mike Gillooly

Everyone has a role to play in building a Resilient Greater Christchurch



Mike Gillooly

We are made up of many proud communities working together to recover from one of New Zealand's worst disasters in modern times. Resilience is what enables people to survive, adapt and thrive in the face of acute shocks and chronic stresses and thriving in these conditions is what offers us so much opportunity. We are an amazing region that is globally connected by sea and air, we have modern hospitals, quality academic institutions, a thriving regional economy grounded in agriculture, manufacturing, IT and tourism. We have many reasons to be optimistic about our future.

All participants in the development of this plan have contributed a wealth of expert knowledge and a ready understanding of the drivers and dependencies of factors of resilience. The contribution of the not-for-profit sector to this resilience plan, across all the dimensions of resilience, was recognised at all workshops. Specific issues raised during the development of this plan recognised the need to build a more trusting relationship between communities and decision-makers, nurture existing community networks and support systems and recognise the impact and opportunity that the migrant rebuild workforce brings to Greater Christchurch. Repeatedly, there was overlap of key issues – health, wellbeing, infrastructure, environment, economy and society – as interdependent dimensions of resilience, underpinned by the need for strong and effective leadership. Resilience for Greater Christchurch is a journey, not an end in itself. This plan provides a road map for us continue on the path to building a more resilient future.

IMPLEMENTATION

On the following page is an Implementation Plan which is not fixed.

The Implementation Plan contains an initial list of detailed projects and initiatives that actors and networks across Greater Christchurch may pursue in building resilience.

The listed projects and initiatives consist of those that were already being planned, could be developed or were identified as opportunities when this plan was being developed. Alongside each are identified actors and networks who will play a key role in delivering specific projects and initiatives.

This plan is designed to inspire and encourage people to lead or participate in resilience-building programmes, actions and initiatives. Over coming years the Implementation Plan will be reported on and republished containing new actions and initiatives. This will draw on involvement and engagement with the community identifying how we can all take steps to build our resilience.

Some new projects will be driven by the Chief Resilience Officer (CRO) and these are identified in the Implementation Plan, along with specific partners and timeframes.

The Greater Christchurch Urban Development Strategy Partnership will oversee the implementation of the wider plan while also leading some of the projects themselves. The partners are committed to leveraging and maximising existing sources of funding to achieve resilience benefits, including the estimated NZ\$40 billion of post-earthquake reinvestment that will go into our infrastructure, buildings and urban environments.

LEARNING FROM THE OTHER CITIES IN THE NETWORK

One of the benefits of our membership of the 100 Resilient Cities network is our ability to not only share what we have learned but also to learn from others. In this plan we have highlighted a number of cities with whom we share common goals and challenges. As we progress into implementation we will look to other cities in the network like Melbourne which has established “The Resilient Melbourne Delivery Office” to oversee the implementation of the Resilient Melbourne Strategy, and San Francisco which has established an Office of Resilience and Recovery, both tangible examples of initiatives being led by their own Chief Resilience Officer.

GETTING INVOLVED

The aim is that most of the new projects from here onwards are derived from community-level action, including ideas from individuals. Only by learning how we can help ourselves and others can we learn to become resilient.

A starting point for assistance and advice is our Chief Resilience Officer.

The Chief Resilience Officer will advocate for co-ordination across the Urban Development Strategy partners, broker solutions with different organisations, draw on technical support resources, negotiate funding and work directly with community representatives helping to develop and sustain initiatives.

Contact the Chief Resilience Officer if there are programmes, actions or new initiatives that you, your whānau, your community or your organisations could lead or have a role in.



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Implementation



RESILIENCE IMPLEMENTATION PLAN

This part of the plan is where detailed projects and activities are catalogued.

The Implementation Plan is the living part of this document. Over successive years projects and initiatives will be rolled out and in turn replaced by new ideas and activities.

Format

The Implementation Plan is in a table-based format that lists the individual projects and initiatives under each Goal and Programme, with each line then linking back to the actions contained in the preceding part of this plan.

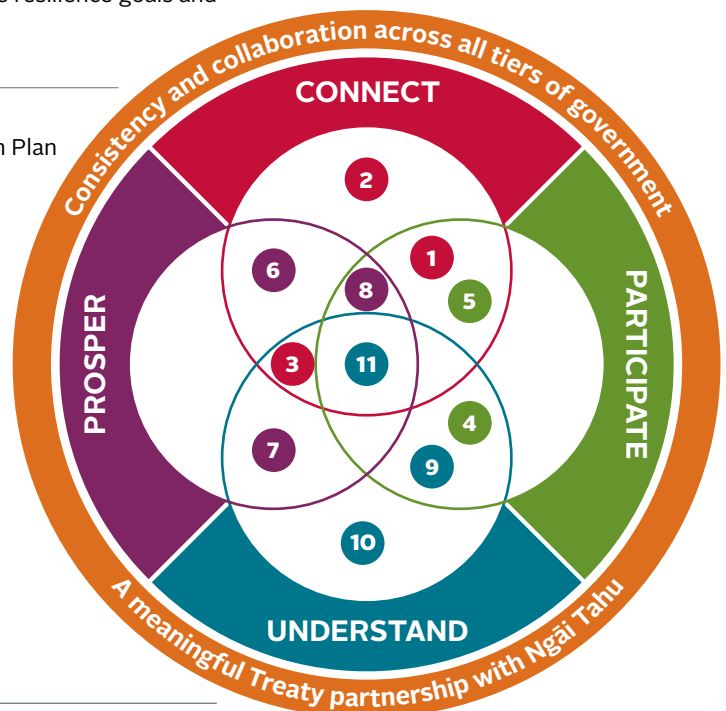
The shaded action lines are in progress or committed to and will be delivered in the stated timeframe.

Those that are unshaded will be commenced in the medium term and are either:

- existing successful initiatives that can be scaled to other areas or groups across Greater Christchurch, or
- new ideas or projects that require further scoping, development and funding sources.

All initiatives have the potential to contribute towards the resilience goals and involve a wide range of partners.

You will be able to access updates to this Implementation Plan and reporting of progress from our website.



The adjacent diagram, discussed further on page 38, is reproduced here to remind us of the inter-related nature of the programmes and activities. In delivering action under one programme we will typically expect there to be dividends across multiple goals.

CONNECT GOAL

We are connected communities living in adaptable places.

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
PROGRAMME 1. Connect People					
1A	Support Stocktake <i>Undertake a brief area wide review of resources, activities and sources of support (and the methods of their delivery) as a means to develop signposting information/wider use of activities to build community connections.</i>	To be confirmed	Councils UDSIC Mayoral Forum	To develop 1-2 years	9 Improve community understanding and acceptance of risk
1A/1B	Community Led Grants <i>Provides funds to organisations working to build resilience and to support community recovery and wellbeing in earthquake-impacted communities.</i>	Councils	Community groups Red Cross	In Progress/ Committed Ongoing	8 Foster a culture of innovation
1B	Create formal connections between the psychosocial work lead by CDHB and the Resilient Greater Christchurch Plan <i>Ensuring psychosocial work is embedded across organisations and is supporting communities' psychosocial wellbeing is seen as the core business of many so it remains sustainable in the long term.</i>	CDHB	UDSIC Communities Government agencies	Committed Within 2 years	4 Build participation and trust in decision-making 5 Support Community Organisations and Leaders 8 Foster a culture of innovation
1B	Psychosocial review <i>Review the success of psychosocial initiatives being pursued under the Community in Mind Strategy to identify further refinements and future funding by Ministry of Social Development.</i>	CDHB/ Healthy Christchurch	Government agencies Care organisations Community groups	To develop 1-2 years	4 Build participation and trust in decision-making 5 Support Community Organisations and Leaders
1B	Resilience Checklist for individuals <i>A comprehensive resource for individuals or households identifying actions people can take to support themselves and others in times of hardship.</i>	CCC	Community groups	To develop 1-2 years	2 Create adaptable places 9 Improve community understanding and acceptance of risk
PROGRAMME 2. Create adaptable places					
2A	Develop/implement new centre development plans <i>Develop plans for new centres that incorporate urban design principles to improve community connectedness and overall wellbeing.</i>	Councils (by district)	Communities Local business	In progress/ Committed Ongoing	1 Connect people 3 Improve the Quality, Choice and Affordability of Housing 8 Foster a culture of innovation 9 Improve community understanding and acceptance of risk
2A/2B	Urban Intensification plans <i>Develop bespoke area-based plans to advance and facilitate co-ordinated and high-quality residential intensification within urban Christchurch.</i>	Councils (by district)	CCC Ōtakaro Ltd Development Christchurch Ltd Private sector Communities Regional Council	To develop 2-5 years	3 Improve the Quality, Choice and Affordability of Housing 8 Foster a culture of innovation

CONNECT GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
2A/2B	UDS Review <i>Review of the sub-regional land use planning and wellbeing strategy to integrate high level resilience which will carry through into funding, service and regulatory planning processes.</i>	UDSIC	All Councils CDHB Ngāi Tahu NZ Transport Agency Government departments	Committed Commences 2017	4 Build Participation and Trust in Decision-Making 9 Improve community understanding and acceptance of risk
2B	Future Public Transport <i>Exploration of future options to extend and develop Greater Christchurch Public Transport networks.</i>	UDS Transport Group	All Councils NZ Transport Agency	Committed 1-2 Years	4 Build Participation and Trust in Decision-Making
2B	Transport Innovation Fund <i>Contestable fund to stimulate local ideas that can be developed to help encourage and improve use of sustainable transport modes.</i>	CCC	Individuals and entrepreneurs	Committed Initial Pilot in progress	4 Build Participation and Trust in Decision-Making 8 Foster a culture of innovation
2B	Accessibility Charter <i>Develop a charter with the goal of stimulating 'a recovery and rebuild of Greater Christchurch that results in a genuinely accessible and liveable city for all of its citizens to participate in and belong to.' Its purpose will be to get buy-in from the development industry to look at how to increase accessibility in building, particularly private commercial builds, and influence accessibility audits of designs and construction.</i>	Earthquake Disability Leadership Group	CCC Commercial developers Development industry	Committed 1-2 years	2 Create adaptable places
2C	Collaborate with communities to create healthy, safe and welcoming facilities and places <i>Promote the use of independent accessibility and crime prevention audits for all proposed major developments. (NB strong links to actions under 2A, 4B, 5B and 10)</i>	CCC SDC WDC	CPTED Universal Design	Ongoing	1 Connect People 5 Support Community Organisations and Leaders 7 Foster a culture of Innovation 8 Sustain the vitality of the natural environment
2C	Devolution of Local Public Assets <i>Review arrangements around devolved responsibility for public assets and facilities and looking at opportunities to partner with capable community groups who can take on decisions about fundraising and spending, and can harness the energy of local volunteers.</i>	Councils	Government agencies Community sector Voluntary sector Communities	To develop 2-3 Years	4 Build participation and trust in decision-making 5 Support Community Organisations and Leaders 7 Foster a culture of innovation

CONNECT GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
PROGRAMME 3. Improve the Quality, Choice and Affordability of Housing					
3A	Voluntary targeted rate for Home Insulation <i>Explore the use of a Voluntary Targeted Rate scheme to assist residents with upfront costs for insulating their home.</i>	Councils	EECA Private landlords CDHB	To develop 1-2 years	1 Connect people
3A 3B	Consistent monitoring of residential development across the Greater Christchurch Council administrative areas <i>Develop a consistent and comprehensive set of measures around the existing housing stock, newly built homes, land supply and the proposed development.</i>	Councils (through the UDS Partnership)	MBIE Housing New Zealand Community Housing providers EECA House builders	Committed Working Group to Commence 2017	4 Build participation and trust in decision-making
3B	Regular review of Greater Christchurch Housing Market Assessment (or equivalent cross partnership resource) <i>Regular periodic publication of an area-wide market assessment to inform housing planning and delivery.</i>	UDS Partners	Ministry of Social Development Housing New Zealand Community Housing providers CDHB Ngāi Tahu EECA House builders	To develop 1-3 years	2 Create adaptable places 4 Build participation and trust in decision-making
3B	Develop a Greater Christchurch Housing Policy <i>A Greater Christchurch Housing Policy could bring together strands of policy that unite the sub-region and help drive better co-ordination of different types of housing that more specifically address identified housing needs.</i>	UDS Partners	Ministry of Social Development MBIE Housing New Zealand Community Housing providers CDHB EECA House builders	To develop 1-3 years	2 Create adaptable places 4 Build participation and trust in decision-making

PARTICIPATE GOAL

We are a community that participates in shaping our future.

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
PROGRAMME 4. Build participation and trust in decision-making					
4A	<p>Research, develop and build on effective models and methods for community involvement in local governance</p> <p><i>Community Advisory Panels and Citizen's Juries are examples of ways in which opportunities can be created to help people participate and influence decision-making as well as build trust between the community and decision-makers.</i></p> <p><i>Other examples include co-creative planning, consultation portals where people can comment and offer feedback on comments in real-time.</i></p>	Councils	Community groups Interest groups SEWN	To develop 1-3 Years	<p>1 Connect People</p> <p>2 Create Adaptable Places</p> <p>5 Support Community Organisations and Leaders</p> <p>7 Foster a culture of Innovation</p>
4A	<p>Make decision-making accessible and inclusive for all communities of interest and identity</p> <p><i>Translation services, sign language interpreters, cultural sensitivity in the managing of meetings are all examples of how decision-making can be made accessible and inclusive for a range of communities. An inclusion lens can be applied to all stages of decision-making from planning and design to approval.</i></p>	CCC SDC WDC	Community boards	To develop 0-2 Years	<p>1 Connect People</p> <p>5 Support Community Organisations and Leaders</p>
4B	<p>Open Source Data</p> <p><i>Providing more public sector, private sector and academic data in Open Source formats proactively and allowing decision-making to become more transparent. Make Greater Christchurch data available to interests in the community to use data to inform their own initiatives or ideas and even spawn new innovations.</i></p>	Councils, Government and other public institutions	Canterbury Lifelines Utilities Group Department of Internal Affairs Statistics New Zealand Land Information New Zealand	In progress/ Committed Ongoing	<p>1 Connect People</p> <p>2 Create Adaptable Places</p> <p>5 Support Community Organisations and Leaders</p> <p>7 Foster a culture of innovation</p>
4B	<p>Devolve more responsibilities for local issues or facilities</p> <p><i>Identifying ways of empowering communities and users with a stake in decision-making and delivering change that affects the quality of community facilities and places. This may include more delegation, with governance agreements, to Christchurch's Community Boards.</i></p>	CCC SDC WDC	Community boards Community groups	To develop 1-3 years	<p>2 Create Adaptable Places</p> <p>5 Support Community Organisations and Leaders</p>

PARTICIPATE GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
PROGRAMME 5. Support Community Organisations and Leaders					
5A	Expand the use of Time Banks <i>TimeBanks are currently operating in Addington, Belfast, Eastern Bays, Lincoln, Lyttelton, New Brighton, Roimata, Sumner, Waimakariri. Assessing the wider applicability of TimeBanks to share and exchange local community skills and resources will benefit development of resilience in communities.</i>	Community groups	Government agencies Councils	In progress/ To develop Ongoing and 1-3 years	4 Build Participation and Trust in Decision-Making 7 Foster a culture of Innovation
5B	Place based planning framework <i>An emerging framework approach that proposes to empower community groups to drive localised planning exercises with council support being tailored to reflect community capacity and capability.</i>	CCC (City Council initiative)	Community groups	To develop 1-2 Years	2 Create Adaptable Places 4 Build participation and trust in decision-making
5B	Community Leadership Training <i>Review of current community leadership training courses and resources with a view to increasing opportunities and tailoring the content.</i>	Councils	Government agencies Community groups Tertiary institutions Rata Foundation Akina Foundation Red Cross	To Develop 1-2 years	1 Connect people 4 Build Participation and Trust in Decision-Making
5B	Community Group/Resource Mapping <i>Mapping of capacity-building support available to community groups and networks and volunteers would support existing and emerging communities, groups, and leaders. This would include valuable resources for organisations and individuals seeking training, upskilling or a place to connect and share skills and resources.</i>	UDS Partners	Ministry of Awesome CDHB Community organisations	In progress/ To develop Ongoing and 1-3 years	1 Connect People 4 Build Participation and Trust in Decision-Making
5C	Funding roundtables Multi-year service level agreements Alliance models <i>Closer working between funding institutions and community, charitable, not for profit and voluntary groups to work through difficult decision-making, longer term investment confidence and delivery of multiple outcomes are all ways in which the partnership between these sectors can be strengthened</i>	Councils and Government agencies	Community groups Charitable organisations and volunteers SEWN Philanthropy NZ Red Cross	To develop 1-3 years	4 Build Participation and Trust in Decision-Making 7 Foster a culture of Innovation

PROSPER GOAL

We are prosperous by sustaining the vitality of the environment, fostering innovation and attracting people.

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
PROGRAMME 6. Connect internationally					
6A	<p>Guangdong Strategy</p> <p><i>The purpose of the strategy is to establish a strategic city to city/region relationship with China and continue to support visits from Chinese investors.</i></p>	CCC	Multiple agencies NZTE ENZ Canterbury International Education Industry Accord CeCC CDC Business community CIAL	Committed 1-2 Years/ Ongoing	<p>1 Connect People</p> <p>4 Build Participation and Trust in Decision-Making</p> <p>8 Foster a Culture of Innovation</p>
6A	<p>Attraction Strategy</p> <p><i>CDC will build on work already underway (e.g. CDC's City of Opportunity booklet) and work with its partners to develop initiatives to attract skilled migrants, visitors and investment into the area.</i></p>	CDC	CCC and other Councils UDS CCT Development Christchurch CIAL Antarctic New Zealand Industry groups	In Progress/ To develop 1-2 Years	<p>1 Connect People</p> <p>8 Foster a Culture of Innovation</p>
6A	<p>Antarctic Strategy</p> <p><i>Enhance Christchurch as New Zealand's centre for the creation and delivery of Antarctic and Southern Ocean innovation, knowledge and information.</i></p>	The Antarctic Office	Antarctica NZ University of Canterbury Christchurch International Airport Canterbury Development Corporation Christchurch City Council Council of Managers of National Antarctic Programmes (COMNAP)	Committed 0-1 years	<p>4 Build Participation and Trust in Decision-Making</p> <p>8 Foster a Culture of Innovation</p>
6A	<p>Active connectors</p> <p><i>Internationally connected firms tend to be more productive, have higher growth rates and employ more people; however, making connections takes time and resources that smaller firms can struggle to find. This initiative involves working with stakeholders, including the Ministry of Awesome, to investigate opportunities to increase the capacity and services provided by active connectors in Greater Christchurch and to provide a 'landing pad' support to investors. This links with the Attraction Strategy.</i></p>	CDC	Ministry of Awesome Business community	In Progress/ To develop 1-3 Years	<p>1 Connect people</p> <p>8 Foster a culture of innovation</p>

PROSPER GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
6B	<p>Securing our Connections</p> <p><i>This project will identify key strategic locations across the sub-regional where an incident could compromise multiple infrastructure networks. Subsequent work may then promote investment in alternative more resilient capacity parallel that if compromised would result in multiple losses of service implications.</i></p>	Councils	Canterbury Lifelines Utilities Group (CLUG) Infrastructure providers (lines companies, energy providers, telecoms companies, Lyttelton Port and Christchurch Airport)	To develop	<p>2 Create adaptable places</p> <p>9 Improve community understanding and acceptance of risk</p> <p>10 Manage the risks we face</p>
6C	<p>Migrant Attraction and Settlement</p> <p><i>As one of the seven work streams of the Canterbury Regional Economic Development Strategy 2015 (CREDS), Migrant Attraction and Settlement aims to “make the most of the workforce we have now”. Over 2016–17 this work stream will establish an advisory group and develop a strategy to attract, train and retain skilled workers, including migrants and their families.</i></p>	Canterbury Mayoral Forum	CeCC CDC Business community	To develop/ Committed 1-3 years	<p>1 Connect people</p> <p>2 Create adaptable places</p> <p>3 Improve the Quality, Choice and Affordability of Housing</p> <p>7 Foster a culture of Innovation</p>
PROGRAMME 7. Foster a culture of innovation					
7A	<p>SMART City</p> <p><i>Smart City is a Christchurch City Council initiative launched in 2015. This initiative will use modern digital technologies to gather data about how the city is used and functions using sensor technology to greatly enhance our services, to reduce costs and environmental impact and to improve contact between citizens and government. The initiative can be expanded to Greater Christchurch, involving partners such as LINZ to implement proof of concept projects and to create a business model that enables further initiatives in the future.</i></p>	CCC	Land Information New Zealand	Committed 1-5 years	<p>1 Connect people</p> <p>2 Create adaptable places</p> <p>5 Support Community Organisations and Leaders</p> <p>9 Improve community understanding and acceptance of risk</p>

PROSPER GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
7A	<p>Implementation of the Regional Innovation Strategy</p> <p><i>To provide a distinctive value proposition and attraction advantage for business, investment and talent. The key priorities are to:</i></p> <ul style="list-style-type: none"> - <i>Develop strong leadership/co-ordination across the regional innovation system to make the most of our existing/emergent innovation assets.</i> - <i>Generate more economic value from our ideas and new technologies through different commercialisation models and support systems.</i> - <i>Develop a profile/brand that endorses the regional innovation system and is an attractor for business, investment and talent.</i> - <i>Develop an innovation friendly environment that makes it easy to do innovative and different things here, and for new people to engage with the innovation system.</i> - <i>Maximise the innovation and commercialisation from our regional Public Research Organisations.</i> 	Canterbury Development Corporation	CCC MBIE Ōtākaro MOA Tertiaries Research institutions Business community	To develop Committed 0-2 years	<p>1 Connect people</p> <p>5 Support Community Organisations and Leaders</p> <p>6 Connect Internationally</p>
7B	<p>Future Ready Programme of action</p> <p><i>Explore the opportunity to host a programme of projects and actions focused on the impact on the community and workplace of forecast technological, demographic and attitudinal shifts and produce briefing papers. This could include:</i></p> <ul style="list-style-type: none"> - <i>Business Futures project</i> - <i>Innovation Friendly City – explore how we leverage our city assets to stimulate innovation</i> - <i>Economic resilience of low-income households – how can knowledge, creativity and innovation lift the income floor for those working below the living wage threshold.</i> 	Chief Resilience Officer	CDC Business community Community groups	To develop 1-3 years	<p>1 Connect People</p> <p>5 Support Community Organisations and Leaders</p> <p>6 Connect Internationally</p> <p>9 Improve community understanding and acceptance of risk</p>
7C	<p>Social Enterprise World Forum</p> <p><i>The Social Enterprise World Forum which will be held in Christchurch in 2017 will provide a valuable opportunity to be exposed to best international practice, innovation and global relationships that will further accelerate the development of the social enterprise sector and place innovation in Greater Christchurch on the global stage.</i></p>	Akina Foundation	CCC University of Canterbury Ministry of Awesome CDC Rātā Foundation Philanthropy New Zealand Tourism New Zealand	Committed 2017	<p>5 Support Community Organisations and Leaders</p> <p>6 Connect Internationally</p>

PROSPER GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
7C	<p>Social Enterprise Promotion/Awareness/ Mentoring</p> <p><i>Making the most of the smaller scale and connected networks in Greater Christchurch to test innovative new initiatives alongside key stakeholders and the wider social enterprise sector. Such initiatives could involve investigating opportunities for Greater Christchurch local government to develop supportive policy alongside the social enterprise sector.</i></p>	Chief Resilience Officer	Akina Foundation Rata Foundation Business community Community sector Councils	To develop 0-2 years	<p>1 Create Adaptable Places</p> <p>2 Improve the Quality, Choice and Affordability of Housing</p> <p>5 Support Community Organisations and Leaders</p> <p>6 Connect Internationally</p>
PROGRAMME 8. Protect and Enhance the Vitality of Our Natural Environment					
8A	<p>Ōtākaro Orchard</p> <p><i>Development of a prime site within the heart of Christchurch's Central City as an edible orchard</i></p>	Canterbury Food Resilience Network	Community groups Soil and Health Association	Committed 1-3 years	<p>1 Connect people</p> <p>2 Create adaptable places</p> <p>5 Support Community Organisations and Leaders</p>
8A	<p>Grants and support</p> <p><i>A range of organisations will continue to review funding, access to land and other needs associated with the establishment of community gardens.</i></p>	Canterbury Food Resilience Network	Soil and Health Association EnviroSchools	In progress and Ongoing	<p>1 Connect people</p> <p>2 Create adaptable places</p> <p>5 Support Community Organisations and Leaders</p>
8A	<p>Mahinga Kai Network</p> <p><i>The showcased exemplar project is a first step in a wider restoration of the Avon River/Ōtākaro, Heathcote River/Ōpāwaho and the Avon Heathcote Estuary/Ihutai as naturally productive environments. Through collaborative community engagement successive projects will restore habitats, develop knowledge and build education resources to sustain these restored resources.</i></p>	Ngāi Tahu Avon Ōtākaro Network Ōpāwaho Heathcote River Network	CCC Community groups	In progress/ to develop Ongoing and 2-10 years	<p>1 Connect people</p> <p>2 Create adaptable places</p> <p>5 Support Community Organisations and Leaders</p> <p>11 Securing our future in Eastern Christchurch</p>
8B	<p>Develop a Local Biodiversity Partnership</p> <p><i>To ensure collective efforts of the wide spectrum of community environmental activists are better co-ordinated. This network will seek to bring together all interest groups to provide a new platform for supporting the wide range of projects that take place across Greater Christchurch.</i></p>	Community groups UDS natural environment group	Councils Ngāi Tahu Dept. of Conservation (DOC) Volunteers	To develop 1-2 years	<p>2 Create adaptable places</p> <p>4 Build Participation and Trust in Decision-Making</p> <p>5 Support Community Organisations and Leaders</p>
8B	<p>Determine Priority Issues/Sites</p> <p><i>Using the strategic content of existing Biodiversity Strategies, identify priority sites and/or issues around which work programmes and partnerships with private landowners can be framed.</i></p>	Councils/ Ecological Partnership	Community Groups Ngāi Tahu Dept. of Conservation (DOC) Private landowners Volunteers	To develop 1-2 Years	<p>1 Connect people</p> <p>2 Create adaptable places</p> <p>5 Support Community Organisations and Leaders</p>

UNDERSTAND GOAL

We understand our risks to be better prepared for future challenges.

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
PROGRAMME 9. Improve community understanding and acceptance of risk					
9A	<p>Government engagement</p> <p><i>Hazards and other urban development management issues relevant in Greater Christchurch are present in many other parts of New Zealand. The full engagement of government is essential to co-ordinated approaches around</i></p> <ul style="list-style-type: none"> - Risk literacy, risk management and risk transfer - Legislative and national policy directions - Central government funding for projects. <p><i>Work with Central Government should involve Greater Christchurch being a test bed to develop and trial national policy standards.</i></p>	Canterbury Natural Hazard Risk Reduction Group	Government departments and agencies	Committed and Ongoing	<p>4 Build Participation and Trust in Decision-Making</p> <p>10 Manage the risks we face</p>
9A	<p>Consolidated hazard and risk data source</p> <p><i>Develop and provide open access to a single source of high-quality hazard and risk information whose language is accessible to the public and technical experts, including insurers. Shared understanding and language are essential building blocks in allowing people and organisations to understand, accept and mitigate against risks. Will include consistent data-gathering standards and processes, definitions, language and clear associated public information.</i></p>	Canterbury Natural Hazard Risk Reduction Group	Insurers Technical advisors Councils Government agencies The wider community	To develop 1-2 years	<p>2 Create adaptable places</p> <p>4 Build Participation and Trust in Decision-Making</p> <p>10 Manage the risks we face</p>
9A	<p>Regional Risk Forum</p> <p><i>Establishing a Regional Risk Forum to develop a co-ordinated regional approach to risk will enable Canterbury to take the lead in developing a co-ordinated regional approach to risk and resilience, which may also be leveraged at the national level.</i></p>	Canterbury Natural Hazard Risk Reduction Group	Councils Government	Committed To develop 1-2 years	<p>2 Create adaptable places</p> <p>4 Build Participation and Trust in Decision-Making</p> <p>10 Manage the risks we face</p>
9A	<p>Embed risk literacy in Asset Management Programmes</p> <p><i>Christchurch City Council currently has a project to capture all the information on Council assets, including underground infrastructure assets. This project will include an asset register, a spatial view of all the assets, and information on the condition and criticality to improve the quality of asset management programming through improved risk literacy. This can be expanded to other Councils and business in Greater Christchurch.</i></p>	CCC WDC SDC	Councils Government	To develop 1-2 years	<p>4 Build Participation and Trust in Decision-Making</p> <p>10 Manage the risks we face</p>

UNDERSTAND GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
9B	<p>Risk literacy programme</p> <p><i>A media and information campaign to help people understand the language of risk and the main issues that communities will have to grapple with. Will need to identify people with key skills in the risk and public engagement areas and establishing a working party to develop a programme. This programme could leverage existing community-based initiatives including Safer Christchurch and Healthy Christchurch, use best practice examples from around the country.</i></p>	Canterbury Natural Hazard Risk Reduction Group		To develop 1-2 years	<p>4 Build Participation and Trust in Decision-Making</p> <p>10 Manage the risks we face</p>
PROGRAMME 10. Manage the risks we face					
10A	<p>Research on risk reduction measures</p> <p><i>Exploring and reporting on relevant risk reduction tools and projects across New Zealand and the wider world (including the 100RC Network) to leverage lessons learnt to inform next generation projects.</i></p>	Chief Resilience Officer	Canterbury Lifelines Utilities Group (CLUG)	To develop 1-3 Years	<p>2 Create adaptable places</p> <p>4 Build Participation and Trust in Decision-Making</p> <p>9 Improve community understanding and acceptance of risk</p>
10A	<p>Explore cost benefit analysis on options to reduce or mitigate risks of high frequency events from damaging buildings</p>	To be determined		To develop 1-3 Years	<p>2 Create adaptable places</p> <p>9 Improve community understanding and acceptance of risk</p>
10B	<p>Explore alternative risk transfer arrangements</p> <p><i>Explore alternative risk transfer arrangements, such as catastrophe bonds and parametric insurance, to raise capital for specific risk reduction works and/or to simplify claim handling.</i></p> <p><i>Continued funding and implementation of projects that reduce natural disaster risk and hence improve the risk profile and insurability of community assets is essential. The efficacy of raising capital for such projects through resilience or catastrophe bonds could be explored.</i></p>	Councils	SCIRT	To develop 1-2 Years	<p>2 Create adaptable places</p> <p>9 Improve community understanding and acceptance of risk</p>
10B	<p>Resilience scorecard for regeneration projects</p> <p><i>Develop a resilience scorecard which can be used in the procurement of infrastructure projects and other development activities.</i></p>	Councils	Technical advisors	To develop 1-2 Years	<p>2 Create adaptable places</p> <p>4 Build Participation and Trust in Decision-Making</p> <p>9 Improve community understanding and acceptance of risk</p>
10B	<p>Health Impact Assessments</p> <p><i>Health Impact Assessments can be used to inform and then refine projects to reduce and minimise potential health impacts of proposals.</i></p>	CDHB	Councils Government agencies	Committed/ In Progress	<p>2 Create adaptable places</p> <p>9 Improve community understanding and acceptance of risk</p> <p>10 Manage the risks we face</p>

UNDERSTAND GOAL *continued*

Action	Project or Initiative	Lead	Partners	Status/ Timeframe	Related programmes
10B	<p>Encourage small and medium-sized business enterprises (SME) to consider insurance as part of risk management</p> <p><i>The University of Canterbury has undertaken research on how SMEs best utilised insurance to get themselves back up and running following the Canterbury earthquakes. This was an important factor in the resilience of the Canterbury economy, and also provided employment continuity throughout the CES. This initiative would encourage SMEs to understand the role of insurance in risk management.</i></p>	To be determined	UC CDC ICNZ	To develop 1-3 Years	<p>1 Connect people</p> <p>9 Improve community understanding and acceptance of risk</p>
10B	<p>Improved understanding of insurance</p> <p><i>The Canterbury earthquakes highlighted that it is important that the community and business understands the role of insurance, what it covers and what it does not cover.</i></p>	Canterbury Natural Hazard Risk Reduction Group	ICNZ	To develop 1-3 Years	<p>1 Connect people</p> <p>9 Improve community understanding and acceptance of risk</p>
10C	<p>Facilitate and encourage community resilience plans</p> <p><i>Community emergency response plans focus on building community from regular day-to-day use of community groups (e.g., the Lyttelton Community Emergency Response). Develop (where lacking) community emergency response plans.</i></p>	CCC SDC WDC	Community boards Community Groups	In progress/ Committed Ongoing	<p>1 Connect people</p> <p>2 Create Adaptable Places</p> <p>5 Support Community Organisations and Leaders</p> <p>9 Improve community understanding and acceptance of risk</p>
10C	<p>Risk planning for non-profit organisations</p> <p><i>Investigate the extent to which non-profit organisations have planned for risk, both for continued service delivery and for their own continuity and sustainability, and what support may be required in the event of a disaster.</i></p>	Canterbury Natural Hazard Risk Reduction Group	ICNZ	To develop 1-3 Years	<p>9 Improve community understanding and acceptance of risk</p>
10D	<p>Christchurch City will join the UN Compact of Mayors</p> <p><i>Joining the UN Compact of Mayors will require measuring and public reporting, target setting, and action planning/ continual improvement for greenhouse gas emission reduction.</i></p>	CCC		Committed and Ongoing	<p>2 Create adaptable places</p> <p>6 Connect Internationally</p> <p>8 Sustain the vitality of the natural environment</p>
PROGRAMME 11. Secure our Future in the Eastern Parts of Christchurch					
—	<p>Projects and initiatives under this programme will be developed as different agencies determine priorities for eastern parts of the city in consultation with the community.</p> <p><i>The Residential Red Zone and New Brighton areas may be the subject of Regeneration Plans although the mandate given to Regenerate Christchurch (the statutory Development Agency formed in 2016) allows for interventions in other locations which may be warranted in helping transform the area.</i></p>	To be confirmed	CCC, University of Canterbury Insurance Council New Zealand (ICNZ) EQC ECAN Ngāi Tahu Canterbury CDEM WDC Community organisations	Will commence 2017	All Programmes

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It takes
a village!

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ABBREVIATIONS

CCC	Christchurch City Council
CCHL	Christchurch City Holdings Limited
CDC	Canterbury Development Corporation
CDEM	Civil Defence Emergency Management
CDHB	Canterbury District Health Board
CERA	Canterbury Earthquake Recovery Authority
CIAL	Christchurch International Airport Ltd.
CRO	Chief Resilience Officer
DPMC	Department of the Prime Minister and Cabinet
EECA	Energy Efficiency and Conservation Authority
EQC	Earthquake Commission
ICNZ	Insurance Council of New Zealand
MBIE	Ministry for Business Innovation and Employment
MPI	Ministry for Primary Industries
NZTA	New Zealand Transport Agency
SCIRT	Stronger Christchurch Infrastructure Rebuild Team
SDC	Selwyn District Council
TRONT	Te Rūnanga o Ngāi Tahu
UC	University of Canterbury
UDS	Urban Development Strategy
WDC	Waimakariri District Council

GLOSSARY

'We'

Throughout this plan the term 'we' is used widely and is intended to be inclusive. The section '*what does it mean to be resilient in Greater Christchurch*' highlights that we all have a role to play in resilience-building. As the plan becomes more detailed within the programmes the 'we' becomes more specific as different actors are assigned.

Central Government

Her Majesty's government and associated agencies.

Community groups

Group formed, made up of and run by people in the community, whether geographically orientated or interest-orientated.

Councils

A collective term for Christchurch City Council, Selwyn District Council, Waimakariri District Council and the Canterbury Regional Council.

Government agencies

Agencies delegated to by government to administer services or functions. It includes ministries, state-owned enterprises, commissions.

Hapū

Genealogical decedents or sub-tribes.

Iwi

Wider tribe or collection of hapū.

Local authority

A territorial authority or regional council.

Mahinga Kai

Food and other resources, and the areas which they sourced from. Also the work (mahi), methods and cultural activities involved in getting foods and resources.

Marae

A Marae is a sacred meeting place home to those who whakapapa to that area. It is a place of refuge.

Mana Whenua

Hapū, those who have traditional/customary authority or title over land and the rights of ownership and control of use on the land, forests, rivers etc. Also the land area (and boundaries – rohe) within which such authority is held.

Ngāi Tahu

The iwi of Ngāi Tahu, consisting of the collective individuals who descend from the the primary hapū of Waitaha, Ngāti Mamoe and Ngāi Tahu, namely, Ngāti Kurī, Ngāti Irakehu, Kati Hurirapa, Ngāi Tūāhuriri and Kai Te Ruahikihiki.

Ōpāwaho River

A spring-fed river that runs through the southern parts of Christchurch City, also known as the Heathcote River.

Ōtākaro River

A spring-fed river that runs through the central business district of Christchurch City, also known as the Avon River.

Otāutahi

The Māori name for Christchurch (originally adopted in the 1930s).

pā harakeke

Distinctive Flax plant, used for weaving and also representative of Whānau connection.

Papatipu Rūnanga

The representative bodies of Ngāi Tahu whānui. The representative bodies within the Greater Christchurch area include the following: Te Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki) Rūnanga, Te Rūnanga o Koukourāata, Wairewa Rūnanga, Te Taumutu Rūnanga and Ōnuku Rūnanga.

Raupō

Native reeds commonly found in swamps and near rivers.

Resource Management Act

New Zealand legislation that governs the use of land and resources.

Tangata whenua

People of the land: the iwi or hapū who hold manawhenua over that area.

Te Rūnanga o Ngāi Tahu

Statutorily recognised as the representative tribal body of Ngāi Tahu whānui and was established as a body corporate on 20 April 1996 under section 6 of Te Runanga o Ngāi Tahu Act.

Territorial authority

A city council or district council. This is the second tier of local government in New Zealand below regional councils.

Tikanga

Culture, custom, ethics, the correct or right way of doing things.

Whakataūāki

Proverb or saying.

Whānau

Immediate and extended family.

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The content of this plan was founded on 4 in depth Focus Area Reports produced in March 2016. These can be accessed from the website shown on the back cover.

FOCUS AREA REPORT 1

Participative Leadership And Governance: How Can We Build Community Leadership And More Participatory Forms Of Decision-Making? (March 2016)

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FOCUS AREA REPORT 2

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FOCUS AREA REPORT 3

Understanding and responding to future challenges
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FOCUS AREA REPORT 4

Connected Neighbourhoods And Communities. What More Should We Be Doing To Ensure Communities Are Healthy, Affordable, And Safe? (March 2016)

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